

National Park Service
U.S. Department of the Interior
Kings Mountain National Military Park



GENERAL MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT



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**General Management Plan/Environmental Assessment
Kings Mountain National Military Park
York and Cherokee Counties, South Carolina**

SUMMARY

Congress established Kings Mountain National Military Park by legislative act, 46 Statute 1508, on March 3, 1931. The War Department administered it until transferred to the Department of the Interior, National Park Service, by Executive Order No. 6166 issued pursuant to the authority of Section 16 of the Act of March 3, 1933 (Public Law No. 428-47 Stat. 1517).

An Act of Congress (73 Stat. 108), approved June 23, 1959 adjusted the boundaries of the National Military Park. The legislation excluded a 200-acre parcel and included two parcels totaling 140 acres in the revised boundary.

This *General Management Plan / Environmental Assessment* provides comprehensive guidance for perpetuating natural systems, preserving cultural resources, and providing opportunities for quality visitor experiences at Kings Mountain National Military Park. The purpose of the plan is to decide how the National Park Service can best fulfill the National Military Park's purpose, maintain its significance, and protect its resources unimpaired for the enjoyment of present and future generations. It describes the overall path that the National Park Service would follow in managing the National Military Park during the next 20 years or more.

The document examines three alternatives for managing the National Military Park for the next 20 or more years and analyzes the impacts of implementing each of the alternatives.

Alternative A is the "no-action" alternative, which describes how the National Military Park (NMP) is managed now, providing a basis for comparing the other alternatives. Under **Alternative B**, Kings Mountain NMP would expand its interpretive program beyond the 1780 battle to the broader continuum of history at the site. Greater emphasis on Native American History and natural history as well as farming and commemoration of the site throughout its occupation would be included in the interpretation program. Under **Alternative C**, the National Park Service's preferred

alternative, the National Military Park would focus on enhancing and diversifying interpretation of the 1780 Battle of Kings Mountain. Approach routes used by the Overmountain Victory fighters would be interpreted to highlight the greater scope of the battle in relation to the surrounding park lands. The key impacts of implementing these alternatives are summarized in Table 9 and detailed in Chapter 4.

This *General Management Plan / Environmental Assessment* has been distributed to other agencies and interested organizations and individual for their review and comment. The public comment period for this document will last for 30 days. Readers are encouraged to submit their comments on this *General Management Plan / Environmental Assessment*. Please see "How to Comment" on the next page for further information.

HOW TO COMMENT ON THIS PLAN

Comments on this plan/study/statement are welcome and will be accepted for 30 days following the official public release. To respond, written comments may be submitted by any of the following means:

U.S. Mail:

Kings Mountain National Military Park – GMP
National Park Service
Southeast Regional Office
Planning & Compliance Division
100 Alabama St., 1924 BLDG
Atlanta, GA 30303

Or

Kings Mountain National Military Park
2625 Park Rd.
Blacksburg, South Carolina 29702

Internet Website:

<http://parkplanning.nps.gov/KIMO> Click on the “Open for Comment” link on the left side of the page to access the online document.

Hand Delivery:

Written and/or verbal comments may be made at public meetings. The dates, times, and locations of public meetings will be announced in the media following release of this document. Reviewers are encouraged to use the Internet if possible. Please submit only one set of comments.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment — including your personal identifying information — may be made publicly available at any time. Although you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

A GUIDE TO THIS DOCUMENT

1

2 This *General Management Plan / Environmental Assessment* is organized in accordance with
3 the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act (NEPA) and the National
4 Park Service's *Management Policies 2006*
5 (chapter 2), 2004 Park Planning Program Standards" and "Environmental Analysis" (NPS Director's Order #12).

11 **Chapter 1: Purpose and Need for the Plan**
12 sets the framework for the entire document. It
13 describes why the plan is being prepared and
14 what needs it must address. It gives guidance for
15 the alternatives that are being considered, which
16 are based on the National Military Park's mission, its purpose, the significance of its resources, special mandates and administrative
17 commitments, servicewide mandates and policies, and other planning efforts in the area.

21 The chapter also details the planning opportunities and issues that were raised during public
22 scoping meetings and initial planning team efforts. The primary goal of *scoping* is to identify
23 issues and determine the range of alternatives to
24 be addressed. During scoping, the NPS staff
25 provides an overview of the proposed project,
26 including purpose and need and alternatives.
27 The public is asked to submit comments, concerns, and suggestions relating to these goals.
28 The alternatives in the Chapter 2 address these
29 issues and concerns to varying degrees.

33 This chapter concludes with a statement of the
34 scope of the environmental impact analysis —
35 specifically what impact topics were or were not
36 analyzed in detail.

37 **Chapter 2: Alternatives, Including the Preferred Alternative**, begins by describing the
38 management prescriptions that will be used to
39 manage the National Military Park in the future.
40 The alternatives include continuation of current

42 management and trends in the park, alternative
43 A, the no-action alternative, alternative B, and
44 alternative C, the National Park Service preferred alternative. Mitigating measures proposed
45 to minimize or eliminate the impacts of some
46 proposed actions are described prior to the discussion of future studies and/or implementation
47 plans that will be needed. Summary tables of the
48 alternative actions and the environmental consequences of implementing those alternative actions follow the evaluation of the environmentally preferred alternative. The chapter concludes with a discussion of alternatives or actions that were dismissed from detailed evaluation.

57 **Chapter 3: Affected Environment** describes
58 those topics and resources that would be affected by implementing actions in the various alternatives: natural resources, cultural resources,
59 visitor use and experience, socioeconomics, and
60 national military park operations and facilities.

63 **Chapter 4: Environmental Consequences**
64 analyzes the impacts of implementing the alternatives on topics described in the "Affected Environment" chapter. Methods that were used for
65 assessing the impacts in terms of the intensity, type, and duration are outlined at the beginning
66 of the chapter.

70 **Chapter 5: Consultation and Coordination**
71 describes the history of public and agency coordination during the planning effort and any future compliance requirements; it also lists agencies and organizations who will be receiving
72 copies of the document.

76 The **Appendices** present supporting information
77 for the document, along with references, and a
78 list of the planning team and other consultants.

79



LIVING HISTORY PROGRAM

TABLE OF CONTENTS

SUMMARY	II
HOW TO COMMENT ON THIS PLAN	III
A GUIDE TO THIS DOCUMENT	IV
TABLE OF CONTENTS.....	VI
CHAPTER 1 — PURPOSE AND NEED FOR THE PLAN	1
INTRODUCTION	1
BACKGROUND.....	1
BRIEF DESCRIPTION OF THE PARK	1
PURPOSE OF THE PLAN	2
NEED FOR THE PLAN.....	6
THE NEXT STEPS	6
IMPLEMENTATION OF THE PLAN	6
FOUNDATION STATEMENT	8
Legislative Foundation	8
Purpose	9
Significance.....	9
Special Mandates.....	10
Fundamental Resources and Values	10
Other Important Resources and Values:.....	11
PRIMARY INTERPRETIVE THEMES	12
Relationship to General Management Planning	12
Kings Mountain NMP Interpretive Themes.....	12
OTHER PLANNING EFFORTS RELATED TO THIS GENERAL MANAGEMENT PLAN.....	19
Battle of Camden Special Resource Study	19
Southern Campaign of the Revolutionary War National Heritage Area Feasibility Study.....	19
South Carolina Statewide Outdoor Recreation Plan (SCORP)	19
Comprehensive Economic Development Strategy for the Catawba Region Catawba Regional Council of Governments	20
PLANNING ISSUES/CONCERNS	20
Overmountain Victory NHT	20

DECISION POINTS AND CONSIDERATIONS.....	20
CLIMATE CHANGE.....	21
RESOURCES AND VALUES AT STAKE IN THE PLANNING PROCESS.....	22
IMPACT TOPICS TO BE CONSIDERED	22
Cultural Resources.....	22
Natural Resources.....	23
Acoustic Environment and Soundscape	24
Visitor Use and Experience	24
Socioeconomic Environment	24
Park Operations	24
IMPACT TOPICS CONSIDERED BUT NOT ANALYZED IN DETAIL	24
Ethnographic Resources	24
Air Quality	25
Wetlands and Floodplains.....	25
Socially or Economically Disadvantaged Populations	25
Prime and Unique Agricultural Lands	25
Indian Sacred Sites.....	25
Transportation	25
CHAPTER 2 — ALTERNATIVES, INCLUDING THE PREFERRED ALTERNATIVE	27
INTRODUCTION	27
FORMULATION OF THE ALTERNATIVES	27
IDENTIFICATION OF THE PREFERRED ALTERNATIVE.....	28
ENVIRONMENTALLY PREFERABLE ALTERNATIVE.....	29
USER (CARRYING) CAPACITY	30
MANAGEMENT ZONES FOR KINGS MOUNTAIN NATIONAL MILITARY PARK	34
Visitor Services Zone	38
Park Services Zone	38
Historic Resource Zone	38
Natural Resource Zone	39
ACTIONS COMMON TO ALL ALTERNATIVES	39
ALTERNATIVE A - THE NO-ACTION ALTERNATIVE	40
Concept	40
General Theme	40
Visitor Experience	40
Resource Conditions	40
Trails	40
Visitor Center	40
Administrative Headquarters.....	41
Historic Structures.....	41
Fire Management	41
Boundary	41

Map of Alternative A.....	42
ALTERNATIVE B.....	43
Overall Concept.....	43
Visitor Experience	43
Resource Conditions	43
Trails	43
Maintenance Area	43
Visitor Center	43
Administrative Headquarters.....	43
Historic Structures.....	43
Fire Management	43
Boundary	43
ALTERNATIVE C (NPS Preferred Alternative)	46
General Theme	46
Visitor Experience	46
Resource Conditions	46
Trails	46
Maintenance Area	46
Visitor Center	46
Administrative Headquarters.....	46
Historic Structures.....	46
Fire Management	46
Boundary	46
DEVELOPMENT OF COST ESTIMATES.....	49
Initial One-Time Costs	49
Annual Costs.....	49
NPS Facilities Model.....	49
Implementation	49
MITIGATIVE MEASURES COMMON TO ALL ACTION ALTERNATIVES.....	54
Management Strategies to Address Climate Change	54
Strategy	54
Cultural Resources.....	55
Natural Resources.....	56
Visitor Safety and Experiences	58
Hazardous Materials	59
Noise Abatement.....	59
Scenic Resources	59
Socioeconomic Environment	59
Sustainable Design and Aesthetics.....	59
FUTURE STUDIES AND IMPLEMENTATION PLANS NEEDED	64
ALTERNATIVES AND ACTIONS CONSIDERED BUT DISMISSED FROM DETAILED EVALUATION	64
CHAPTER 3 — AFFECTED ENVIRONMENT	65
INTRODUCTION	65
Location and Setting	65
Nearest Cities to Kings Mountain National Military Park.....	65

Population	65
Regional Land Use and Projects	66
Climate	66
Access	67
CULTURAL RESOURCES	67
Archeological Resources	67
Historic Structures	68
Cultural Landscapes	69
Museum Collections	70
NATURAL RESOURCES	70
Geology and Soils	70
Plant Communities and Vegetation (Including Exotic, Nonnative, and Nuisance Species)	71
Fish and Wildlife	71
Special Status Species	72
Water Resources	74
Acoustic Environment and Soundscapes	75
Wetlands	75
Floodplains	76
VISITOR USE AND EXPERIENCE	76
Trails	76
SOCIOECONOMIC ENVIRONMENT	77
CHAPTER 4 — ENVIRONMENTAL CONSEQUENCES	79
INTRODUCTION	79
METHODS AND ASSUMPTIONS FOR ANALYZING IMPACTS.....	79
Identification of Impacts	79
CLIMATE CHANGE.....	80
IMPACT TOPICS	80
Cultural Resources	80
Natural Resources	82
Visitor Use and Experience	82
Socioeconomic Environment	82
Soundscape	82
NPS Operations and Management	83
CUMULATIVE IMPACT ANALYSIS	88
Past, Current, and Foreseeable Actions That Could Contribute to Cumulative Effects	88
Transportation	89
Public Health and Safety	89
IMPACTS OF IMPLEMENTING ALTERNATIVE A	89
Cultural Resources	89
Natural Resources	91
Visitor Use and Experience	93

Socioeconomic Environment	94
Park Operations	94
Effects on Energy Requirements and Conservation Potential	95
IMPACTS OF IMPLEMENTING ALTERNATIVE B.....	95
Cultural Resources.....	95
Natural Resources.....	97
Visitor Use and Experience	99
Socioeconomic Environment	99
Park Operations	100
Effects on Energy Requirements and Conservation Potential	100
IMPACTS OF IMPLEMENTING ALTERNATIVE C.....	101
Cultural Resources.....	101
Natural Resources.....	103
Visitor Use and Experience	105
Socioeconomic Environment	106
Park Operations	106
Effects on Energy Requirements and Conservation Potential	107
CHAPTER 5 — CONSULTATION AND COORDINATION.....	109
BRIEF HISTORY OF PUBLIC INVOLVEMENT.....	109
CONSULTATIONS WITH OTHER AGENCIES AND ORGANIZATIONS	109
APPENDIX A: SELECTED REFERENCES	111
APPENDIX B: SERVICEWIDE MANDATES AND POLICIES	115
OTHER LAWS AFFECTING NPS OPERATIONS	115
Accessibility	115
Cultural Resources.....	115
Natural Resources.....	115
Other	116
Management Policies 2006.....	116
Director's Order #12.....	117
Director's Order #13.....	117
Director's Order #24.....	117
Director's Order #28 (NPS 1998e)	117
Director's Order #28A.....	117
Director's Order # 47.....	117
Director's Order #75A.....	117
Directors Order #77-1	117
Directors Order #77-2	117
PREPARERS AND CONSULTANTS	118
INDEX	119

LIST OF TABLES

TABLE 1 - SERVICE MANDATES AND POLICIES PERTAINING TO KINGS MOUNTAIN NMP	13
TABLE 2 - ENVIRONMENTALLY PREFERABLE ALTERNATIVE ANALYSIS	30
TABLE 3 - USER CAPACITY INDICATORS AND STANDARDS	32
TABLE 4 - MANAGEMENT PRESCRIPTIONS TABLE - TYPES OF FACILITIES.....	34
TABLE 5 - MANAGEMENT PRESCRIPTIONS TABLE - TYPES OF VISITOR ACTIVITIES	35
TABLE 6 - MANAGEMENT ZONE DESCRIPTIONS AT KINGS MOUNTAIN NATIONAL MILITARY PARK	36
TABLE 7 - COSTS OF ALTERNATIVES	50
TABLE 8 - COMPARISON OF ALTERNATIVES.....	51
TABLE 9 - SUMMARY OF IMPACTS	61
TABLE 10 - NEAREST CITIES TO KINGS MOUNTAIN	65
TABLE 11 - HISTORIC PROPERTIES	68
TABLE 12 - INVASIVE PLANTS OF KINGS MOUNTAIN NATIONAL MILITARY PARK	71
TABLE 13 - STATE SPECIAL STATUS SPECIES (FAUNA).....	72
TABLE 14 - STATE SPECIAL STATUS SPECIES (FLORA)	73
TABLE 15 - FEDERALLY LISTED THREATENED AND ENDANGERED SPECIES	74
TABLE 16 - ANNUAL VISITATION FIGURES	76
TABLE 17 - IMPACT INTENSITY DEFINITIONS	84

CHAPTER 1 — PURPOSE AND NEED FOR THE PLAN

INTRODUCTION

This *General Management Plan/Environmental Assessment* presents and analyzes three alternative future directions for the management and use of Kings Mountain National Military Park. Alternative C is the preferred alternative of the National Park Service. The planning team has identified and assessed the potential environmental impacts of all alternatives. General management plans are long-term documents that establish and articulate a management philosophy and framework for decision-making and problem solving in the parks. This general management plan will provide guidance for the next 20 years or more.

BACKGROUND

Kings Mountain National Military Park commemorates a pivotal and significant victory by patriot forces over loyalists to the British Crown during the Southern Campaign of the Revolutionary War. The battle fought on October 7, 1780 destroyed the left wing of Cornwallis' army and effectively ended Loyalist ascendance in the Carolinas. The victory halted the British advance into North Carolina, forced Lord Cornwallis to retreat from Charlotte into South Carolina, and gave General Nathanael Greene the opportunity to reorganize the American Army. The park preserves the entire battlefield site in a natural setting evocative of the Carolina frontier of 1780.

Congress established Kings Mountain National Military Park by legislative act, 46 Statute 1508, on March 3, 1931. The War Department administered it until transferred to the Department of the Interior, National Park Service, by Executive Order No. 6166 issued pursuant to the authority of Section 16 of the Act of March 3, 1933 (Public Law No. 428-47 Stat. 1517).

An Act of Congress (73 Stat. 108), approved June 23, 1959 adjusted the boundaries of the National Military Park. The adjustments consisted of the exclusion of a 200-acre parcel and

the inclusion of two parcels totaling 140-acres within the revised boundary.

BRIEF DESCRIPTION OF THE PARK

Kings Mountain National Military Park (NMP) preserves the entire battlefield and part of the approach route used by the Overmountain Victory fighters for the October 7, 1780 battle between Patriot and Loyalist Militias during the Southern Campaign of the American Revolutionary War. Thomas Jefferson referred to the decisive Patriot victory as "The turn of the tide of success."

Kings Mountain National Military Park is located between Charlotte, North Carolina, and Spartanburg, South Carolina, about 18 miles northeast of Gaffney, South Carolina, along Interstate 85. The site contains 3,945 acres in York County and Cherokee County, South Carolina. The park is administratively managed as part of the Southern Campaign of the American Revolution Parks Group, which, in addition to Kings Mountain National Military Park, includes:

- Cowpens National Battlefield, about 30 miles to the west near Chesnee, South Carolina;
- Ninety-Six National Historic Site, about 110 miles southwest near Greenwood, South Carolina; and
- the Overmountain Victory National Historic Trail, which runs 270 miles from Abingdon, Virginia, through North Carolina, Tennessee, and South Carolina to its terminus at Battleground Ridge at Kings Mountain.

Within this rural setting, the national military park contains a broad range of significant historic and natural resources.

Kings Mountain National Military Park encompasses the entire field of battle from the Battle of Kings Mountain that occurred October 7, 1780. Because its appearance has changed little

1 in the last 230 years, the landscape provides the
2 visitor with a historic scene that greatly enhanc-
3 es the appreciation of the battleground. This
4 includes 1,200-foot Battleground Ridge, forest-
5 ed slopes, and stream branches that retain the
6 historic setting of the battle. In the park, visitors
7 can view monuments to several commanding
8 officers and other historical figures associated
9 with the Battle of Kings Mountain and the
10 park's commemorative development period.

11
12 The National Register of Historic Places lists
13 Kings Mountain National Military Park as a
14 historic battleground. The park also contains
15 numerous historic structures that include build-
16 ings, monuments, markers, and roads. In addi-
17 tion, there are significant archaeological sites.
18 These are listed in detail in Table 11 in Chapter
19 3. Interpretive exhibits display weapons, cloth-
20 ing, and household artifacts of rural South Caro-
21 lina during the Revolutionary War.

22
23 Kings Mountain National Military Park's 3,945
24 acres contain multiple trails for interpretation of
25 the battlefield and recreation. Kings Mountain
26 State Park adjoins Kings Mountain National
27 Military Park on its southeastern boundary, sig-
28 nificantly expanding the recreational access to
29 visitors.

30
31 Kings Mountain National Military Park pre-
32 serves substantial wildlife habitat within its
33 boundaries. Many forest dependent species
34 permanently reside or frequently pass through
35 the park. Kings Mountain National Military
36 Park along with Kings Mountain State Park,
37 Crowders Mountain State Park in North Caroli-
38 na, and the Overmountain Victory National His-
39 toric Trail provide a network of important re-
40 source areas for wildlife and wildlife viewing.

41
42 Annual recreational visitation to the park has
43 averaged around 264,363, since the year 2000.
44 The typical peak period of visitation at Kings
45 Mountain National Military Park is May
46 through October. The months with the lowest
47 visitation levels are January and February. Most
48 of the park's visitors participate in day use ac-
49 tivities such as hiking, walking, and educational
50 programs.



LIVING HISTORY REENACTORS

PURPOSE OF THE PLAN

52
53
54 The approved general management plan will be
55 the basic document for managing Kings Moun-
56 tain National Military Park for the next 20 years.
57 The purposes of this general management plan
58 are as follows:

- 59
60 • Confirm the purpose, significance, and
61 special mandates of Kings Mountain Na-
62 tional Military Park.
- 63
64 • Clearly define resource conditions and vis-
65 itor uses and experiences to be achieved in
66 the National Military Park.
- 67
68 • Provide a framework for Kings Moun-
69 tain's managers to use when making deci-
70 sions about how to best protect park re-
71 sources, how to provide quality visitor us-
72 es and experiences, how to manage visitor
73 use, and what kinds of facilities, if any, to
74 develop in/near the park.
- 75
76 • Ensure that this foundation for decision-
77 making has been developed in consultation
78 with interested stakeholders and adopted
79 by the NPS leadership after an adequate
80 analysis of the benefits, impacts, and eco-
81 nomic costs of alternative courses of ac-
82 tion.

83
84 Legislation establishing the National Park Ser-
85 vice as an agency and governing its manage-
86 ment provides the fundamental direction for the
87 administration of Kings Mountain National Mil-
88 itary Park (and other units and programs of the
89 national park system). This general management
90 plan will build on the laws that established

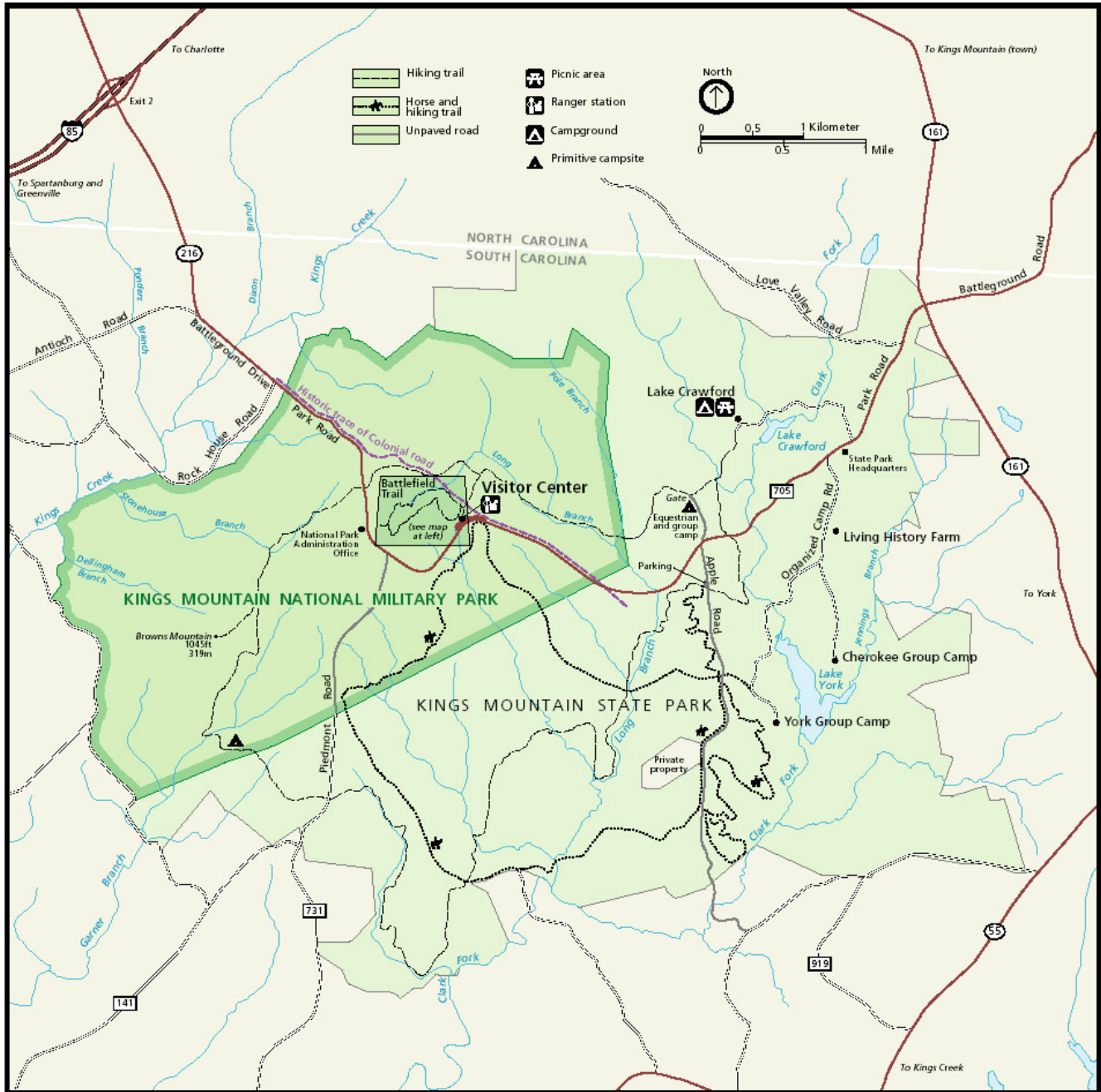
1 Kings Mountain National Military Park to provide a vision for the park's future.
2
3
4 The "Servicewide Mandates and Policies" section calls the reader's attention to topics that are
5 important to understanding the management
6 direction at the Military Park. The alternatives
7 in this general management plan address the
8 desired future conditions that are not mandated
9 by law and policy and must be determined
10 through a planning process.
11

12
13 The general management plan does not describe
14 how particular programs or projects should be
15 prioritized or implemented. Those decisions will
16 be addressed in more detail in future planning
17 efforts that will tier from the approved general
18 management plan.



ANNUAL BATTLE COMMEMORATION CEREMONY

KINGS MOUNTAIN NATIONAL MILITARY PARK



KINGS MOUNTAIN NATIONAL MILITARY PARK



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NEED FOR THE PLAN

A general management plan is needed to meet the requirements of the National Parks and Recreation Act of 1978 (P.L. 95-625) and the 1978 Redwood Act which specified that management of the national parks "shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established."

National Park Service policy, at Section 2.3.1.1 of *Management Policies 2006*, also mandates development of a general management plan for each national park system unit. Kings Mountain National Military Park has never had a general management plan prepared in conformance with the requirements of P.L. 95-625 and current management policies and guidelines. The 1974 Kings Mountain master plan does not address many of the issues facing the military park today. Therefore, this *General Management Plan/Environmental Assessment* has been prepared to comply with those legal and policy requirements.

This general management plan provides broad direction for the military park's future. It is needed to assist park managers in making purposeful decisions based on a deliberate vision of the park. In addition, because population growth and both residential and commercial development between I-85 and Kings Mountain National Military Park could increase commuter traffic on the main park road, adverse impacts on both commuters and park visitors and resources are possible.

General management planning is needed to

- Clarify the levels of resource protection and public use that must be achieved for the park, based on the park-specific purpose and significance, plus the body of laws and policies directing park management.
- Determine the best mix of resource protection and visitor experiences beyond what is prescribed by law and policy based on the:
 - Purpose of the park.
 - Range of public expectations and concerns.

- Resources occurring within the park.
- Effects of alternative management plans on existing natural, cultural, and social conditions.
- Long-term economic costs.
- Establish the degree to which the park should be managed to:
 - Preserve and enhance its cultural and natural resources.
 - Provide appropriate visitor experiences and recreation opportunities.

THE NEXT STEPS

The *General Management Plan/Environmental Assessment* will include a 30-day public review and comment period after which the NPS planning team will evaluate comments from other federal agencies, tribes, organizations, businesses, and individuals regarding the general management plan. After review and consideration of public comments on the GMP/EA, the NPS will finalize the GMP/EA and prepare a FONSI or issue a notice of intent to prepare an EIS, if warranted. If a FONSI is prepared, the NPS will make it available for public review for 30 days before making a final determination as to whether or not to prepare an EIS.

IMPLEMENTATION OF THE PLAN

The implementation of the approved plan will depend on future funding. The approval of a plan does not guarantee that the funding and staffing needed to implement the plan will be forthcoming. Full implementation of the approved plan could be many years in the future.

The implementation of the approved plan could also be affected by other factors. Once the general management plan has been approved, additional feasibility studies and more detailed planning and environmental documentation would be completed, as appropriate, before any proposed actions can be carried out. For example:

- Appropriate permits would be obtained before implementing actions that would affect wetlands.
- Appropriate federal and state agencies would be consulted concerning actions that

could affect threatened and endangered species.

- The State Historic Preservation Officer (SHPO) would be consulted.
- Appropriate documentation would be prepared under the National Environmental Policy Act of 1969 (NEPA).
- The park will comply with Sections 106 (requires federal agencies to consult with the Advisory Council on Historic Preservation) and 110 (requirements for the preservation and use of historic buildings by federal agencies).

The general management plan does not describe how particular programs or projects should be prioritized or implemented. Those decisions will be addressed during the more detailed planning associated with strategic plans, implementation, plans, etc. that will tier from the approved general management plan and will be based on the goals, future conditions, and appropriate types of activities established in the approved general management plan. Actions directed by general management plans or in subsequent implementation plans would be accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities could prevent immediate implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future.



"The Patriot Victory at Kings Mountain" by Richard Luce

FOUNDATION STATEMENT

The foundation statement is the basis for planning and management, and it concentrates on why a park was established. It describes a park's *purpose* and *significance*, focusing future management and planning on what is most important about a park's resources and values. Those park resources and values that are "fundamental" to achieving the park's purpose and significance have been identified, along with the legal and policy requirements that mandate a park's basic management responsibilities.

Legislative Foundation

A park's legislative history, including presidential proclamations and executive orders, may contain information about why it is significant. In addition, it may explicitly establish the mission and/or purpose of the area. Legislation also frequently modifies park boundaries.

The erection of a monument on the Kings Mountain Battleground* was authorized by an Act of Congress (34 Stat. 286) on June 16, 1906. Congress appropriated \$30,000 for this purpose. Furthermore, the legislation directed that the plans and specifications for the monument be approved by the Secretary of War, that the Kings Mountain Centennial Association of South Carolina secure title to not more than 50 acres of the battleground prior to the expenditure of any part of the appropriation, and that the care and upkeep of the monument remain with the Kings Mountain Battle Ground Association of South Carolina.

On April 9, 1928 Congress (45 Stat. 412), created a commission to inspect the Kings Mountain Battlefield to determine the feasibility of preserving the battlefield and marking it for historical and professional military study. The legislation directed the commission to submit a report of its findings and a list of its itemized expenses to the Secretary of War by December 1, 1928.

*The terms "*Battleground*", "*Battle Ground*", and "*Battlefield*" appear throughout this document in various contexts. Although in common usage, battleground and battlefield may be used interchangeably, the use of "Battle Ground" (two words) is used here only in the name of the "Kings Mountain Battle Ground

Association of South Carolina and later in the context of an interpretive theme which makes a distinction between "battlefield" and "battle ground". Two named features in the park, "Battleground" Road and "Battleground" Ridge will always use those terms. With respect to enabling legislation, the 1906 act referred to the Kings Mountain Battleground and the 1928 law referred to the Kings Mountain Battlefield and so this section reflects that difference. In most other cases, the narrative will refer to the more generic "battlefield".

Kings Mountain National Military Park in South Carolina was established by an Act of Congress, 46 Stat. 1508, on March 3, 1931. The act consisted of seven sections summarized below:

Section 1. Established the park and declared the purpose to be the commemoration of the Battle of Kings Mountain that occurred on October 7, 1780.

Section 2. Directed the Secretary of War* to determine on what lands the battle was fought and to acquire those lands and "such adjacent and contiguous lands" deemed useful and proper in carrying out the purposes of the act.

*The War Department became the Department of Defense in 1949, headed by the Secretary of Defense.

Section 3. Placed the park under the control of the Secretary of War and authorized the Secretary of War to prescribe appropriate regulations for the care and management of the park.

Section 4. Authorized the Secretary of War to permit persons living within the boundaries of the park to continue to do, but also authorized the revocation of such permits at any time.

Section 5. Authorized the Secretary of War to construct and repair roads within the park boundaries and to place historical markers at all battle lines or other points of interest in the park.

Section 6. Authorized any State which had troops engaged in the Battle of Kings Mountain to mark the lines of battle for those troops and to erect monuments to those troops with the approval of the Secretary of War.

Section 7. Authorized an appropriation of \$225,000 to carry out the provisions of the act.

Executive Order No. 6166, dated June 10, 1933 transferred the authority conferred on the Secre-

tary of War by the act of March 3, 1931 to the Secretary of the Interior.

On July 11, 1940, Secretary of the Interior Harold L. Ickes issued an order designating 4,012 acres of land in Cherokee and York Counties, South Carolina, to be within the boundaries of Kings Mountain National Military Park. Secretary Ickes issued this order under the authority of the act establishing the park and the Executive order that transferred the authority from the Secretary of War to the Secretary of the Interior.

In order to “consolidate the Federal ownership of lands in, and facilitate protection and preservation of Kings Mountain National Military Park”, Congress authorized (by Act of June 23, 1959, 73 Stat.108) the revision of the park boundaries by excluding one 200-acre parcel and including two parcels totaling 140 acres. The act also authorized the Secretary of the Interior to acquire lands within the revised boundaries by purchase, donation, with donated funds, or by exchange utilizing lands excluded from the park by this legislation. In addition, under current policy, the Federal Government shall acquire no lands or interests in lands without the consent of the owner.

Paragraph (23) of Section 5(c) of P.L. 95-625 established the Overmountain Victory National Historic Trail (NHT) to commemorate the route used by patriot militias in October of 1780 to gather forces and pursue loyalist troops under Major Patrick Ferguson to what is now Kings Mountain National Military Park in South Carolina where the decisive battle was fought. The Overmountain Victory NHT is a system totaling approximately 270 miles of trail with routes from the mustering point near Abingdon, Virginia, to Sycamore Shoals (near Elizabethton, Tennessee); from Sycamore Shoals to Quaker Meadows (near Morganton, North Carolina); from the mustering point in Surry County, North Carolina, to Quaker Meadows; and from Quaker Meadows to Cowpens National Battlefield, and from Cowpens to Kings Mountain National Military Park, South Carolina.

Purpose

Purpose statements are based on the establishing legislation, legislative history, and NPS policies. The statements reaffirm the

reasons for which the site was set aside as a unit of the national park system and provide the foundation for park management and use.

Kings Mountain National Military Park commemorates the Battle of Kings Mountain, the first major Patriot victory of the Southern Campaign of the American Revolution on October 7, 1780 in South Carolina. A relatively brief but decisive all militia battle, this victory helped solidify the spirit of independence in the Southern colonies.

Significance

Significance statements capture the essence of the park's importance to the country's natural and cultural heritage. Significance statements do not inventory resources; rather, they describe the site's distinctiveness and help to place it within its regional, national, and international contexts.

Kings Mountain National Military Park is nationally significant for the following reasons:

- The park preserves the entire battlefield site in a natural setting evocative of the Carolina frontier of 1780 and commemorates one of the most important Patriot victories of the American Revolution and the first major patriot victory of the Southern Campaign. This battle was recognized by both sides as a turning point in the war.
- The battle at Kings Mountain was one of the few battles of the war where the American long rifle (and the associated tactics) was the primary weapon of the Patriot troops and this fact was instrumental in the outcome of the battle.
- The Colonel William Chronicle Marker is the second* oldest battlefield monument (1815) in the United States.

*Completed on July 4, 1799, the Revolutionary Monument on the Common or Battle Green (Lexington, Massachusetts) is the nation's oldest Revolutionary War memorial and is the gravesite of those colonists slain in the Battle of Lexington.

- The park contains some of the best-preserved remnants of Colonial-era

roads and trails that are associated with the route traveled by the troops in the Battle of Kings Mountain campaign, which are Department of the Interior certified segments and it marks the southern terminus of the Overmountain Victory National Historic Trail.

- The park contains mixed hardwood forest resembling the upper piedmont during the 18th century. The forest in Kings Mountain National Military Park preserves several species of concern such as the Georgia aster (which exists in only two counties in South Carolina) and the northern bobwhite. The size of the total area (15,000 acres) preserved in a continuous band of national and state parks, including Kings Mountain State Park in South Carolina and Crowders Mountain State Park in North Carolina, is important in preserving critical ecosystems.

Special Mandates

Special mandates are legal directives specific to the park that expand upon or contradict a park's legislated purpose and commit park managers to identifiable actions. They may add another dimension to an area's purpose and significance (such as the designation of an area in the park as part of the national preservation system, the inclusion of a river in the national wild and scenic rivers system, a national historic landmark designation for part of a park, or a park's designation as a world heritage site or biosphere reserve).

In 1980 Congress established the Overmountain Victory National Historic Trail (OVVI) to commemorate the route used by patriot militias in their march to Kings Mountain, South Carolina, where on October 7, 1780; they defeated loyalist forces, marking a turning point in the Revolutionary War. The 1982 Comprehensive Management Plan for the OVVI notes that the Overmountain men, after entering the area that is now Kings Mountain National Military Park, fanned out to attack the loyalist positions on the mountain from all sides. Thus, there is no single historic route in the park. However, the National Trails System Act (P.L. 90-543, Section 7 (c)) requires the agency administering the trail (in

this case the National Park Service) to erect and maintain markers where the trail crosses federally administered lands.

Fundamental Resources and Values

Fundamental resources and values are systems, processes, features, visitor experiences, stories, scenes, etc. that warrant primary consideration during planning and management because they are critical to achieving the park's purpose and maintaining its significance. If these resources are allowed to deteriorate, the park's purpose and/or significance could be jeopardized.

The Battlefield Site, Including Routes to and from It

- The geography, topography, and forest of the region directly influenced the conduct and eventual outcome of the campaign and battle.
- Visitors have a visual experience similar to that of the battle participants with a scene that is reminiscent of the historic period.
- The presence of water on the site was one rationale for selecting the area to defend.
- The park possesses well-preserved archeological resources that help tell the story of the site.
- The park possesses cultural artifacts and museum collections directly associated with the Battle of Kings Mountain.
- The Colonial road system.

Weapons and Tactics

- The park maintains and displays a collection of weapons from the battle that illustrate the advantage of the long rifle in terms of range and accuracy over other weapons of the time.
- Visitors have the opportunity to see (on the ground) the advantages of the long rifle and the topography

Personalities and Motivations

- Stories that illustrate the fact that the Revolutionary War, was, in many circumstances, a civil war.

- Stories about the Ferguson threat and the Tarleton massacre that motivated Patriots who were previously neutral with regard to taking up arms and getting involved.
- Overmountain Men and other Patriot and Loyalist militia units.
- Stories of women's influence before, during, and after the battle.
- African American participation in the battle (on both sides).

Visitor Experience

- Opportunity for international visitors, particularly from the United Kingdom, to view the grave of one of their fallen commanders.
- Opportunity to learn about the history and significance of the cairn at the Ferguson grave.
- Kings Mountain is the southern terminus (last 3-4 miles) of the Overmountain Victory National Historic Trail.
- Visitors have the opportunity to understand the details of the approach of the Patriots and the Loyalists to the battle scene.
- Opportunity for visitors to understand the details of the approach of the Patriots and the Loyalists to the battle scene. Kings Mountain National Military Park plays a leadership role in telling the broader story of the Southern Campaign of the American Revolution.

Commemoration of the Event & Establishment of the Park

- The 1815 Commemoration. This was the first commemorative event to take place at Kings Mountain. It occurred on July 4, 1815 and was primarily a local effort led by Dr. William McLean, a former Continental Army surgeon.
- The 1880 Centennial Monument. Citizens from North Carolina, South Carolina, Virginia, and Tennessee formed the Kings Mountain Centennial Association, organized a centennial celebration, and erected a 28-foot high granite monument that was unveiled on October 7, 1880.
- The 1909 US Monument. This 83-foot tall granite-faced monument was the result of years of petitioning by local DAR groups and local and state representatives of North

and South Carolina. The celebration and dedication took place between October 6 and October 8, 1909 with estimates of from 8,000 to 10,000 attending.

- Stories about the Battle of Kings Mountain 1930 Sesquicentennial Commemoration featuring a speech by President Hoover.
 - Understanding that this was one of the major commemorative events that led to the establishment of the park.
- The Hoover monument. The Kings Mountain Chapter of the DAR erected this stone marker to identify the place where President Herbert Hoover spoke to an estimated crowd of 80,000 at the Sesquicentennial event.
- The Ferguson Cairn.
- Documents and artifacts from commemorative events.
- Annual commemorative events.
- Numerous markers recognizing the various participants in the battle.

Other Important Resources and Values:

Parks may also have other important resources and values that may not be fundamental to the park's purpose and significance but are nevertheless determined to be particularly important considerations for general management planning. Identifying other important resources and values is primarily done to separate those resources or values that are covered by the service-wide mandates and policies, from those that have important considerations to be addressed in the GMP.

Tangible Resources and Infrastructure

- Quantity and quality of land and water around the battlefield and in the State park that contribute to the visitor experience in terms of sights, sounds, etc.
- Civilian Conservation Corps (CCC) and Works Progress Administration (WPA) infrastructure that made the site accessible to the public and facilitated the commemoration of the historic event and preservation of the resources.

- The Henry Howser house and its surrounding cultural landscape (including stone terraces, etc.)
 - The continuing association with Howser descendants (ethnographic resource).
 - Artifacts from the Howser house.
- Documentary resources at the park.
- Kings Mountain National Recreation Trail (1981).

PRIMARY INTERPRETIVE THEMES

Interpretive themes are ideas, concepts, or stories that are central to the purpose, significance, identity, and visitor experience of the National Military Park. The primary interpretive themes define concepts that every visitor should have the opportunity to learn. Primary themes also provide the framework for the park's interpretation and educational programs, influence the visitor experience, and provide direction for planners and designers of the park's exhibits, publications, and audiovisual programs. Subsequent interpretive planning may elaborate on these primary themes.

Relationship to General Management Planning

- In general management planning, primary interpretive themes may form the basis for alternatives and management zones that prescribe resource conditions and visitor experiences.
- Primary interpretive themes provide the foundation on which the park's educational and interpretive program is based.
- Primary themes lead to the identification of services, resources, and experiences that should be accessible to visitors and the public.
- Primary themes help focus orientation services by identifying important experiences and resources that support themes.
- Identifying primary themes leads to recommendations for interpretive and educational facilities, media, and services that are core to park missions and facilitate emotional and intellectual connections with park resources and values.

- Primary interpretive themes guide the development of interpretive media and programs that help visitors connect tangible and intangible park resources and experiences to larger ideas, meaning, and values.
- The development and interpretation of primary themes provide a framework for shared perspectives among visitors, stakeholders, and publics.

Kings Mountain NMP Interpretive Themes

- The battle at Kings Mountain was one of the few battles of the Revolutionary War where the American long rifle (and the associated tactics) was the primary weapon of the Patriot troops and this fact was instrumental in the outcome of the battle.
- The battle at Kings Mountain was one of the only major battles of the American Revolution fought exclusively between Patriot and Loyalist militias.
- Kings Mountain is the only unit of the national park system that commemorates a Revolutionary War battle for which the entire battlefield is preserved and protected within the unit.
- The park contains a National Register building (the 1803 Howser House) that is an extremely rare example of this type of vernacular architecture in the region.
- The park is a unit of the national park system that preserves significant cultural resources associated with the American experience including several historical monuments. (There was an early recognition that preserving this place and the story was very important.) Kings Mountain is one of few Revolutionary War battlefields where the British commander of the forces on the field is buried on the field.
- The park contains some of the best preserved remnants of Colonial period roads and trails that are associated with the route marched by the troops in the Battle of Kings Mountain campaign and that are part of the Overmountain Victory National Historic Trail.

- The gathering of 75,000 to 80,000 people at Kings Mountain in 1930 to hear President Herbert Hoover on the occasion of the sesquicentennial celebration of the battle represents one of the largest crowds ever to hear a president speak at such a remote and inaccessible site with extremely limited facilities for food, water, and sanitation.
- The park contains mixed hardwood forest resembling the upper piedmont during the 18th century. Kings Mountain National Military Park preserves several species of concern such as the Georgia aster and the northern bobwhite. The size of the total area (15,000 acres) preserved in a continuous band of national and state parks, including Kings Mountain State Park in South Carolina and Crowders Mountain State Park in North Carolina, is important in preserving critical ecosystems.

The National Park System General Authorities Act (54 U.S.C. 100101) affirms that while all national park system units remain “distinct in character,” they are “united through their inter-related purposes and resources into one national park system as cumulative expressions of a single national heritage.” The act makes it clear that the NPS Organic Act and other protective mandates apply equally to all units of the system. Further, amendments state that NPS management of park units should not “derogate...the purposes and values for which these various areas have been established.”

The National Park Service also has established policies for all units under its stewardship.

These are identified and explained in a guidance manual entitled *NPS Management Policies 2006*. The “action” alternatives (alternatives B and C) considered in this document incorporate and comply with the provisions of these mandates and policies.

Public Law 95-625, the National Park and Recreation Act, requires the preparation and timely revision of general management plans for each unit of the national park system. Section 604 of that act outlines several requirements for general management plans, including measures for the protection of the area’s resources and “indications of potential modifications to the external boundaries of the unit and the reasons therefore.” *NPS Management Policies* adopted in 2006 reaffirm this legislative directive.

To truly understand the implications of an alternative, it is important to combine the service-wide mandates and policies with the management actions described in an alternative.

Table 1 shows some of the most pertinent service-wide mandates and policy topics related to planning and managing Kings Mountain National Military Park; each topic has desired conditions that NPS staff is striving to achieve. Appendix B expands on this information by citing the law or policy directing these actions and giving examples of the types of actions being pursued. The alternatives in this general management plan address the desired future conditions that are not mandated by law and policy and must be determined through a planning process.

TABLE 1 - SERVICE MANDATES AND POLICIES PERTAINING TO KINGS MOUNTAIN NMP

TOPIC	Current laws and policies require that the following conditions be achieved at Kings Mountain National Military Park
Relations with Private and Public Organizations, Owners of Adjacent Land, and Governmental Agencies	<p>Kings Mountain National Military Park is managed as part of a greater ecological, social, economic, and cultural system.</p> <p>Good relations are maintained with adjacent landowners, surrounding communities, and private and public groups that affect, and are affected by, the park. The park is managed proactively to resolve external issues and concerns and ensure that park values are not compromised.</p> <p>Because the National Military Park is an integral part of a larger regional environment, the National Park Service works cooperatively with others to anticipate, avoid, and resolve potential conflicts, protect National Military Park resources, and address mutual interests in the quality of life for community residents. Regional cooperation involves federal, state, and local agencies, neighboring landowners, and all other concerned</p>

TOPIC	Current laws and policies require that the following conditions be achieved at Kings Mountain National Military Park
	parties.
Natural Resources	
Acoustic Environment and Soundscapes	<p>An important part of the NPS mission is to preserve and/or restore the natural resources of the parks, including the natural soundscapes associated with units of the national park system. Natural sounds are intrinsic elements of the environment that are often associated with parks and park purposes. They are inherent components of "the scenery and the natural and historic objects and the wild life" protected by the NPS Organic Act. They are vital to the natural functioning of many parks and may provide valuable indicators of the health of various ecosystems. Intrusive sounds are of concern to the NPS because they sometimes impede the Service's ability to accomplish its mission.</p> <p>The National Park Service will restore to the natural condition wherever possible those park acoustic environments and soundscapes that have become degraded by unnatural sounds (noise), and will protect natural soundscapes from unacceptable impacts.</p> <p>Guidance: Director's Order 47: <i>Preservation of the Acoustic Environment and Noise Management in the National Park System</i>; and <i>Management Policies 2006, Section 4.9, Soundscape Management & Section 5.3.1.7, Cultural Soundscape Management</i>, National Park Service 2006.</p>
Air Quality	<p>The central goal of the Clean Air Act (CAA) for the entire nation is safe and acceptable ambient air quality through the attainment and maintenance of National Ambient Air Quality Standards (NAAQS) which air quality in the park meets for specified pollutants. The CAA also sets a national goal "to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic or historic value." (42 U.S.C. §7470(2)). This goal applies to all units of the National Park System. The 2006 NPS Management Policies clarify that the Service will seek to "perpetuate the best possible air quality in parks" (Section 4.7.1).</p>
Climate Change	<p>Climate change is expected to affect the park's weather, natural resources (e.g. vegetation and wildlife), cultural resources, and visitors (e.g. seasonal use patterns, hiking, camping, and other visitor opportunities). These changes will have direct implications on resource management and park operations and on the way visitors use and experience the park. Climate change is likely to affect the park during the life of this plan; the rate of change and severity of impacts cannot be predicted precisely and thus park management will need to be flexible and responsive to continuously changing conditions.</p> <p>Desired Condition: Kings Mountain National Military Park is a leader in its efforts to address climate change by reducing the contribution of NPS operations and visitor activities to climate change; preparing for and adapting to climate change impacts; and increasing its use of renewable energy and other sustainable practices. NPS staff proactively monitors and mitigates the climate change impacts on cultural and natural resources and visitor amenities. The park provides refuge for terrestrial species to increase their resilience to climate change. Education and interpretive programs help visitors understand climate change impacts in the park and beyond, and how they can respond to climate change. Partnerships with various agencies and institutions allow NPS staff to participate in research on climate change impacts.</p> <p>Sources: NPS Organic Act; Executive Order 13423 (includes requirements for the reduction of greenhouse gases and other energy and water conservation measures); Department of the Interior Secretarial Order 3289, Amendment 1, February 10, 2010 (ensures that climate change impacts be taken into account in connection with departmental planning and decision making); NPS <i>Management Policies 2006</i> (including sections on environmental leadership [1.8], sustainable energy design [9.1.1.6], and energy management [9.1.7]); NPS Environmental Quality Division's "Draft Interim Guidance: Considering Climate Change in NEPA Analysis"</p>
Ecosystem Management	<p>The park is managed holistically, as part of a greater ecological, social, economic, and cultural system.</p>
Exotic Species	<p>The management of populations of exotic plant and animal species, up to and including eradication, are undertaken wherever such species threaten park resources or public health and when control is prudent and feasible.</p>

TOPIC	Current laws and policies require that the following conditions be achieved at Kings Mountain National Military Park
Fire Management	<p>Kings Mountain National Military Park fire management programs are designed to meet resource management objectives prescribed for the various areas of the park and to ensure that the safety of firefighters and the public are not compromised.</p> <p>All wildland fires are effectively managed, considering resource values to be protected and firefighter and public safety, using the full range of strategic and tactical operations as described in an approved fire management plan.</p>
Floodplains	<p>Natural floodplain values are preserved or restored.</p> <p>Long-term and short-term environmental effects associated with the occupancy and modification of floodplains are avoided.</p> <p>When it is not practicable to locate or relocate development or inappropriate human activities to a site outside the floodplain or where the floodplain will be affected, the National Park Service</p> <ul style="list-style-type: none"> • Prepares and approves a statement of findings in accordance with DO 77-2. • Uses nonstructural measures as much as practicable to reduce hazards to human life and property while minimizing impacts on the natural resources of floodplains. • Ensures that structures and facilities are designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program (44 CFR 60).
General Natural Resources/ Restoration	<p>Native species populations that have been severely reduced in or extirpated from Kings Mountain National Military Park are restored where feasible and sustainable.</p> <p>Populations of native plant and animal species function in as natural condition as possible except where special considerations are warranted.</p>
Geologic Resources	<p>NPS will preserve and protect geologic resources as integral components of park natural systems. As used here, the term “geologic resources” includes both geologic features and geologic processes.</p>
Land Protection	<p>Land protection plans are prepared to determine and publicly document what lands or interests in land need to be in public ownership, and what means of protection are available to achieve the purposes for which the national park system unit was created.</p>
Native Vegetation and Animals	<p>The National Park Service will maintain as parts of the natural ecosystem, all native plants and animals in the park.</p>
Soils	<p>The National Park Service actively seeks to understand and preserve the soil resources of Kings Mountain National Military Park, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil, or its contamination of other resources.</p> <p>Natural soil resources and processes function in as natural a condition as possible, except where special considerations are allowable under policy.</p>
Threatened and Endangered Species and Species of Concern	<p>Federal and state-listed threatened and endangered species and their habitats are protected and sustained.</p> <p>Native threatened and endangered species populations that have been severely reduced in or extirpated from Kings Mountain National Military Park are restored where feasible and sustainable.</p>
Water Resources	<p>Surface water and groundwater are protected, and water quality meets or exceeds all applicable water quality standards.</p> <p>NPS and NPS-permitted programs and facilities are maintained and operated to avoid pollution of surface water and groundwater.</p>
Wetlands	<p>The natural and beneficial values of wetlands are preserved and enhanced. The National Park Service implements a “no net loss of wetlands” policy and strives to achieve a longer-term goal of net gain of wetlands across the national park system through the restoration of previously degraded wetlands.</p> <p>The National Park Service avoids to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and avoids direct or indirect support of new construction in wetlands wherever there is a practicable alterna-</p>

TOPIC	Current laws and policies require that the following conditions be achieved at Kings Mountain National Military Park
	<p>tive.</p> <p>The National Park Service compensates for remaining unavoidable adverse impacts on wetlands by restoring wetlands that have been previously degraded.</p>
Cultural Resources	
Archeological Resources	<p>Archeological sites are identified and inventoried and their National Register of Historic Places (National Register) significance is determined and documented. Archeological sites are protected in an undisturbed condition unless it is determined through formal processes that disturbance or natural deterioration is unavoidable. When disturbance or deterioration is unavoidable, the site is professionally documented and excavated and the resulting artifacts, materials, and records are curated and conserved in consultation with the South Carolina State Historic Preservation Office. Mitigation may include a variety of measures ranging from avoidance to data recovery, and is generally included in a memorandum of agreement. Artifacts, materials, and records resulting from data recovery are curated and conserved as provided for in 36 CFR 79. Some archeological sites that can be adequately protected may be interpreted to the visitor.</p> <p>These requirements are specified in Director's Order 28 (NPS 1998c) which directs the NPS to protect and manage cultural resources in its custody through effective research, planning, and stewardship and in accordance with the policies and principles contained in the NPS Management Policies (NPS 2006a).</p>
Historic Structures	<p>Historic structures are inventoried and their significance and integrity are evaluated under National Register of Historic Places criteria. The qualities that contribute to the listing or eligibility for listing of historic structures in the National Register are protected in accordance with the <i>Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation</i>. However, if it is determined through a formal process that disturbance or natural deterioration is unavoidable, mitigation measures and consultation are initiated as described for archeological resources, above.</p>
Ethnographic Resources	<p>The National Park Service will adopt a comprehensive approach towards appreciating the diverse human heritage and associated resources that characterize the national park system. The Service will identify the present-day peoples whose cultural practices and identities were, and often still are, closely associated with each park's cultural and natural resources.</p> <p>Ethnographic information will be collected through collaborative (with groups associated with Kings Mountain National Military Park) research that recognizes the sensitive nature of such information. Cultural anthropologists/ethnographers will document the meanings that traditionally associated groups assign to traditional natural and cultural resources and the landscapes they form. The park's ethnographic file will include this information, as well as data on the traditional management practices and knowledge systems that affect resource uses and the short- and long-term effects of use on the resources.</p> <p>The Service generally supports traditional access and use when reasonable accommodations can be made under NPS authorities to allow greater access and use. Park superintendents may reasonably control the times when and places where specific groups may have exclusive access to particular areas of a park.</p> <p>All ethnographic resources determined eligible for listing or listed in the National Register are protected. If disturbance of such resources is unavoidable, formal consultation with the SHPO, the Advisory Council on Historic Preservation, and with American Indian tribes as appropriate, is conducted.</p>
Cultural Landscapes	<p>Section 110 of the NHPA and National Park Service policies require parks to inventory and evaluate all cultural resources within the park boundaries. They must also produce adequate research to support informed planning and compliance with legal requirements prior to implementation of any work that will affect the identified resources. For cultural landscapes, the completion of the cultural landscapes inventory (CLI) and cultural landscape report (CLR) will satisfy these requirements.</p> <p>Cultural landscape inventories are conducted to identify landscapes potentially eligible</p>

TOPIC	Current laws and policies require that the following conditions be achieved at Kings Mountain National Military Park
	<p>for listing in the National Register, and to assist in future management decisions for landscapes and associated resources, both cultural and natural.</p> <p>The national CLI database serves as the evaluated inventory for cultural landscapes and is the analytical tool for assessing significance, impacts, condition, treatment and legal responsibilities. Kings Mountain National Military Park proposes to complete one or more certified CLI entries to inventory and evaluate the park's identified cultural landscape or landscapes, and will nominate to the National Register of Historic Places the significant landscapes, component landscapes, and landscape features present on the site as identified by the CLI.</p> <p>The management of cultural landscapes focuses on preserving the landscape's physical attributes, biotic systems, and uses when those uses contribute to its historical significance.</p> <p>A CLR is the approved document that fulfills the research need and provides treatment guidance to support cultural landscape planning. Although a CLR is not considered an implementation plan because it does not present defined alternatives and a NEPA assessment is not required, it will provide documentation for subsequent implementation planning and support informed management and treatment of cultural landscapes. The CLR for Kings Mountain was completed in 2003 and the CLIs for the park were completed in 2010. A CLR for the Henry Howser house cultural landscape is on-going.</p> <p>Treatments are based on sound preservation practices for the preservation, rehabilitation, restoration, or reconstruction of cultural landscapes is undertaken in accordance with the <i>Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes</i>.</p>
Museum Collections	<p>All museum collections (prehistoric and historic objects, artifacts, works of art, archival documents, and natural history specimens) are identified and inventoried, catalogued, documented, preserved, and protected, and provision is made for access to and use of items in the collections for exhibits, research, and interpretation in consultation with traditionally associated groups.</p> <p>The qualities that contribute to the significance of collections are protected in accordance with established standards.</p>
Visitor Use and Experience	
Visitor Use and Experience and Park Use Requirements	<p>Kings Mountain National Military Park resources are conserved "unimpaired" for the enjoyment of future generations. Visitors have opportunities for types of enjoyment that are uniquely suited and appropriate to the superlative natural and cultural resources found in the park. No activities occur that would cause derogation of the values and purposes for which the park was established.</p> <p>For all zones, districts, or other logical management divisions within Kings Mountain National Military Park, the types and levels of visitor use are consistent with the desired resource and visitor experience conditions prescribed for those areas consistent with the unit's purpose.</p> <p>Park visitors will have opportunities to understand and appreciate the significance of the park and its resources, and to develop a personal stewardship ethic by directly relating to the resources.</p> <p>To the extent feasible, programs, services, and facilities in the park are accessible to and usable by all people, including those with disabilities within an inviting atmosphere accessible to every segment of American society.</p>
Public Health and Safety	<p>While recognizing that there are limitations on its capability and constraints imposed by the Organic Act to avoid impairment of resources, the service and its concessioners, contractors and cooperators will seek to provide a safe and healthful environment for visitors and employees.</p> <p>The park staff will strive to identify recognizable threats to safety and health and pro-</p>

TOPIC	Current laws and policies require that the following conditions be achieved at Kings Mountain National Military Park
	tect property by applying nationally accepted standards. Consistent with mandates and non-impairment, the park staff will reduce or remove known hazards and/or apply appropriate mitigative measures, such as closures, guarding, gating, education, and other actions.
Other Topics	
Sustainable Design/ Development	<p>NPS facilities are harmonious with park resources, compatible with natural processes, aesthetically pleasing, functional, as accessible as possible to all segments of the population, energy-efficient, and cost effective.</p> <p>All decisions regarding park operations, facilities management, and development in the park — from the initial concept through design and construction — reflect principles of resource conservation. Thus, all park developments and park operations are sustainable to the maximum degree possible and practical. New developments and existing facilities are located, built, and modified according to the <i>Guiding Principles of Sustainable Design</i> (NPS 1993) or other similar guidelines.</p> <p>Management decision-making and activities throughout the national park system should use value analysis, which is mandatory for all Department of the Interior bureaus, to help achieve this goal. Value planning, which may be used interchangeably with value analysis/value engineering/value management, is most often used when value methods are applied on general management or similar planning activities.</p>
Transportation to and within the Park	<p>Visitors have reasonable access to the park, and there are connections from the park to regional transportation systems as appropriate. Transportation facilities in the park provide access for the protection, use, and enjoyment of park resources. They preserve the integrity of the surroundings, respect ecological processes, protect park resources, and provide the highest visual quality and a rewarding visitor experience.</p> <p>The National Park Service participates in all transportation planning forums that may result in links to parks or impact park resources. Working with federal, tribal, state, and local agencies on transportation issues, the National Park Service seeks reasonable access to parks, and connections to external and alternative transportation systems.</p>
Utilities and Communication Facilities	Neither Kings Mountain National Military Park resources nor public enjoyment of the park are denigrated by nonconforming uses. Telecommunication structures are permitted in the park to the extent that they do not jeopardize the park's mission and resources. No new nonconforming use or rights-of-way are permitted through the park without specific statutory authority and approval by the director of the National Park Service or his representative, and are permitted only if there is no practicable alternative to such use of NPS lands.

1 **OTHER PLANNING EFFORTS RELATED**
2 **TO THIS GENERAL MANAGEMENT**
3 **PLAN**

4 Kings Mountain National Military Park is located in York and Cherokee Counties in northwestern South Carolina. It is approximately midway between the city of Charlotte, North Carolina and Spartanburg, South Carolina, lying just a few miles to the east of the I-85 corridor.

11 Several plans have influenced or could be influenced by the approved *General Management Plan* for Kings Mountain National Military Park. The following highlights those plans most relevant to this general management plan.

19 **Battle of Camden Special Resource Study**

22 The National Park Service, in September 2010, initiated a Congressionally authorized special resource study of the Revolutionary War Battle of Camden site in Camden, South Carolina. On August 16, 1780, an American army under General Horatio Gates, victor at Saratoga (1777) and a favorite of the Continental Congress, was routed by a British army half its size led by Lord Charles Cornwallis. The battle of Camden, in which General DeKalb was killed, climaxed a series of disasters for the Continental Army and brought General Nathanael Greene to the American Southern command. Less than two months later American patriots travelling from Virginia, North Carolina, and Tennessee defeated a superior force of loyalists under British commander Patrick Ferguson at the Battle of Kings Mountain.

41 In 1969, the Secretary of the Interior designated Camden Battlefield as a National Historic Landmark. The study was completed in September of 2015 and the NPS study team concluded that despite being nationally significant, Historic Camden and Camden Battlefield did not meet the feasibility criterion for inclusion in the national park system. For resources to be considered feasible for inclusion in the national park system, the National Park Service must be capable of ensuring resource protection and public enjoyment at a reasonable cost. As a result of the negative feasibility finding, the team

54 did not evaluate the need for direct NPS management, and the study process was concluded.

57 **Southern Campaign of the Revolutionary War National Heritage Area Feasibility Study**

61 The National Park Service, in 2014, completed a study to determine the suitability and feasibility of designating parts of North and South Carolina a National Heritage Area (NHA) dedicated to the Southern Campaign of the Revolutionary War. Congress authorized the study through Public Law 109-338 on October 12, 2006. A national heritage area is a locally managed place designated by Congress where natural, cultural, historic, and/or scenic resources combine to form a cohesive, nationally distinctive landscape arising from patterns of human activity shaped by geography. Although the study area covers a substantial portion of the Carolinas, the focus of the study was on specific thematically related sites and landscapes—not the entire geographical area. Kings Mountain National Military Park would be an obvious focus of the study, among others such as Cowpens National Battlefield, Guilford Courthouse National Military Park, Moores Creek National Battlefield, and Ninety-Six National Historic Site, to name just the existing National Park Service units in the two states that are Revolutionary War sites. The feasibility study team concluded that the study area meets each of the 10 criteria for designation as a national heritage area.

89 **South Carolina Statewide Outdoor Recreation Plan (SCORP)**

92 The 2014 State Comprehensive Outdoor Recreation Plan (SCORP) is South Carolina's official outdoor recreation plan. As such, this five-year plan serves as a guide to various Federal, State and local governmental agencies and the private sector entities involved in recreation and natural resources planning and development. The plan is scheduled to be updated at 5-year intervals.

Comprehensive Economic Development Strategy for the Catawba Region Catawba Regional Council of Governments September 2014

The Comprehensive Economic Development Strategy is a formalized planning process developed by the federal Economic Development Administration (US EDA) to promote an area-wide assessment of economic trends and infrastructure needs within multi-county districts such as the Catawba Region. The Council of Governments helps communities plan for and identify recreation needs and prepare grant applications. The Council has also assisted the various local governments with the nomination of sites to the National Register of Historic Places with Archives Development grants.

PLANNING ISSUES/CONCERNS

The NPS staff, members of the public, historians, local, state, and county government representatives, and other federal agency staff identified various issues and concerns during scoping (early information gathering) for this general management plan. An issue is an opportunity, conflict, or problem regarding the use or management of public lands. The planning team solicited comments at public meetings, through planning newsletters, and on the Kings Mountain National Military Park's Web site (see "Chapter 5, Consultation and Coordination").

Five principal issues were considered during the development of alternatives in this plan:

- Park infrastructure, specifically the 1975 visitor center and the 1940 park headquarters building do not provide adequate space or proper conditions for storing and preserving museum collections, office space for facilities management personnel, parking for buses and cars sufficient to accommodate school groups and special events, and research and meeting space for interpretive personnel.
- Public interest and demand for access to the Howser house for interpretive programs and events.
- Urban growth and the resulting potential for increased commuter traffic and noise on the main road through the park.

- Interest among equestrian groups and trail riders for more horse trails and other related facilities.
- Increased recreational activity in the park including hiking and the demand for mountain bike trails.

Overmountain Victory NHT

In 1980, Congress established the Overmountain Victory National Historic Trail (OVVI) to commemorate the route used by patriot militias in their march to Kings Mountain, South Carolina, where on October 7, 1780, they defeated loyalist forces. The 1982 Comprehensive Management Plan for the OVVI notes that the Overmountain men, after entering the area that is now Kings Mountain National Military Park, fanned out to attack the loyalist positions on the mountain from all sides. However, the National Trails System Act requires the agency administering the trail (in this case the National Park Service) to erect and maintain markers where the trail crosses federally administered lands.

DECISION POINTS AND CONSIDERATIONS

Many aspects of the desired future conditions of Kings Mountain National Military Park are defined in the establishing legislation, the park's purpose and significance statements, and established laws and policies. The resolution of questions or issues that have not already been addressed by legislation or laws and policies are the basis for developing different alternatives or approaches to managing the park into the future, because usually there is more than one way an issue could be resolved. As with any decision-making process, there are key decisions that, once made, will dictate the direction of subsequent management strategies. Based on public and partner comments and NPS concerns, the following six major decision points were identified for Kings Mountain National Military Park.

- Should equestrian access to the park be expanded beyond current trails?
- Should the number of multi-use trails be expanded?
- Should mountain bike trails be developed?
- Should the Howser house be open for public tours?

- How can potential impacts (such as increased commuter traffic on the main park road) from growth on the park boundaries be mitigated?
- Is the current park infrastructure (visitor center, headquarters, maintenance buildings) adequate for resource protection, visitor services, and staff needs?

CLIMATE CHANGE

Finally, the phenomenon of climate change has been included in the analysis and has resulted in the development of strategies common to all alternatives. Climate change presents significant risks to our nation's natural and cultural resources. Although climate change was once believed to be a future problem, there is now unequivocal scientific evidence that our planet's climate system is warming (IPCC 2007a). While many people understand that human emissions of greenhouse gases have significantly contributed to recent observed climate changes, fewer are aware of the specific impacts these changes will bring.

Kings Mountain National Military Park falls within the Eastern Woodlands and Forests bioregion, which is an expansive area with a diversity of forest types and associated ecosystems. Changes that have already been observed within this bioregion include warmer average annual temperatures, earlier dates of runoff, a longer frost-free period, and a longer growing season. Recent climatic conditions (past 10-30 years) in the park and surrounding landscape include extremely low precipitation (Monahan and Fisichelli 2014). During the 21st century, warmer temperatures and increased water stress may affect forest composition and health by changing the amount and distribution of suitable habitat for tree species. For example, 58% of tree species are projected to undergo major change in habitat suitability in the National Military Park and surrounding areas by 2100 ('major change' defined as > 50 % reduction or >100% increase; Fisichelli et al 2014). At the same time, these conditions may create suitable conditions for invasion of pests, pathogens, and exotic plant species. Climate changes may also affect wildlife species, including range shifts in mammals, birds, fish, and insects.

The locations of climatically ideal tourism conditions are likely to shift toward higher latitudes under projected climate change and, consequently, redistribution in the locations and seasons of tourism activities may occur. The effects of these changes will depend greatly on the flexibility demonstrated by institutions and tourists as they react to climate change (Amelung et al. 2007). Climate change is likely to affect the park during the life of this plan; the rate of change and severity of impacts cannot be predicted precisely and thus park management will need to be flexible and responsive to continuously changing conditions.

The National Park Service recognizes that the major drivers of climate change are outside the control of the agency. However, climate change is a phenomenon whose impacts throughout the national park system cannot be discounted. Some of these impacts are already occurring or are expected within Kings Mountain National Military Park during the life span of this management plan. Therefore, climate change is included in this document to recognize its role in the changing environment of the National Military Park and to provide an understanding of its impact; other factors driving environmental change include population growth in the area (subsidence of water table, increased visitation, pollution), and land-use changes and development around the National Military Park.

While scientists have a high certainty in the global trend, the future of a specific regional or local climate is not as certain. Scientists are working with state of the art computer models and new data collection methods to sharpen our picture of climate change from worldwide to local scales. We are likely to find that our future climate presents more challenges to parks and people alike. Animal migration patterns will shift. Plants that once thrived will struggle on the edges of their habitat. Storms may increase in intensity. Pests, pathogens, and invasive species will increase. While some places will experience increased drought, others will experience more pronounced flooding. Historic buildings once safe from river levels may be in jeopardy and park infrastructure will be at higher risk. The iconic views visitors enjoy from our national parks may look upon very different landscapes.

Because climate change is a long-term issue that may affect the park beyond the scope of this general management plan, this planning effort is intended to lay the initial groundwork to address climate change issues. In developing this planning document, three key questions were asked:

1. What would be the contribution of the alternatives to climate change, as indicated by the amount of greenhouse gases that would be emitted under each alternative (i.e., the park's carbon footprint)?
2. What management strategies could the park adopt to reduce greenhouse gas emissions and the impacts of climate change on climate-sensitive resources?
3. What are the potential impacts of climate change on the park's natural and cultural resources?

Because the contribution of the proposed project to climate change is negligible under any alternative, the issue number 1 has been dismissed. Issues 2 and 3, discussions of the park's strategies to reduce greenhouse emissions and the impacts of climate change on park resources have been carried forward.

IMPACT TOPICS - RESOURCES AND VALUES AT STAKE IN THE PLANNING PROCESS

An important part of planning is seeking to understand the consequences of making one decision over another. Environmental Assessments identify the anticipated impacts of possible actions on resources and on park visitors and neighbors.

Impact topics are specific natural, cultural, or socioeconomic resources or values (including visitor use and experience and park operations) that could be affected by implementation of any of the alternatives described in the GMP, including the no-action alternative. Impacts to these resources or values must be identified, and the intensity or magnitude, duration, and timing of the effect to each resource must be disclosed in the environmental consequences section of the EA.

The impact topics identified for this general management plan are outlined in this section;

they were identified based on federal laws and other legal requirements, Council on Environmental Quality (CEQ) guidelines, NPS management policies, staff subject-matter expertise, and issues and concerns expressed by the public and other agencies early in the planning process.

IMPACT TOPICS TO BE CONSIDERED

Cultural Resources

The NHPA and NEPA require that the effects of any federal undertaking on cultural resources be taken into account. Also, NPS *Management Policies 2006* and *Cultural Resource Management* guideline (Director's Order 28) call for the consideration of cultural resources in planning proposals, and taking into account the concerns of traditionally associated peoples and stakeholders when making decisions about the park's cultural resources. Actions proposed in this plan could affect archeological resources, historic structures, cultural landscapes, and museum collections. Therefore, this topic has been retained for analysis.

Archeological Resources. Regulations implementing the Archeological Resources Protection Act define archeological resources to be any material remains of human life or activities which are at least 100 years of age, and which are of archeological interest. Of archeological interest means capable of providing scientific or humanistic understandings of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques such as controlled observation, contextual measurement, controlled collection, analysis, interpretation and explanation. There are 26 registered archeological sites at Kings Mountain. These are primarily sites associated with the battlefield, the Howser house, the Howser quarry, the Goforth-Morris Norman farmstead, the Battleground Road, the Yorkville-Shelbyville Road, and several lesser known sites. This topic will be discussed in more detail in Chapter 4 of this document.

Historic Structures. Historic structures served and may continue to serve some form of human activity and are generally immovable. They include buildings and monuments, canals, bridges, roads, defensive works, and ruins of all structural types. At Kings Mountain, in addition to the

nine monuments and markers on the battlefield, there are the CCC Visitor Center (current park headquarters building), the historic Superintendent's residence (current resource and visitor protection office), the Howser house and associated structures, and the Goforth-Morris Norman farmstead. All historic structures are listed in the park's *List of Classified Structures (LCS)*. This topic will be discussed in more detail in Chapter 4 of this document.

Cultural Landscapes. Cultural landscapes are complex resources that range from large rural tracts covering several thousand acres to formal gardens of less than one acre. Natural features such as landforms, soils, and vegetation are not only part of the cultural landscape, they provide the framework within which it evolves. In the broadest sense, a cultural landscape is a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by uses that reflect cultural values and traditions. The Kings Mountain battlefield and the NPS Park Development landscape have been formally studied as cultural landscapes and a report recommending treatments and further studies was completed in 2003. This topic will be discussed in more detail in Chapter 4 of this document.

Museum Collections. Museum collections are material things possessing functional, aesthetic, cultural, symbolic, and/or scientific value, usually movable by nature or design. Museum objects include prehistoric and historic objects, artifacts, works of art, archival material, and natural history specimens that are part of a museum collection. Large or immovable properties, such as monumental statuary, trains, nautical vessels, cairns, and rock paintings, are defined as historic structures or features of sites. Kings Mountain National Military Park has an extensive museum collection comprised of archival collections, historic and archeological artifacts, and biological specimens. Therefore, for purposes of consultation pursuant to Section 106 of NHPA, this topic has been retained for further analysis.

Natural Resources

Geology and Soils. The geology and soils of Kings Mountain National Military Park reflect a somewhat varied environment and a complex history. The soils can be affected by construction, restoration, and visitor use. Geologic processes and formations can likewise be affected by these factors, as well as by off-site activities. Alternatives in this plan could have an adverse or beneficial impact on geology and soils, so this topic has been retained for analysis.

Plant Communities and Vegetation (Including Exotic, nonnative, and nuisance species).

Kings Mountain National Military Park has a wide variety of vegetation types and communities that are typical of Carolina Piedmont forests. Different combinations of soils, drainage, and aspect contribute to this variety. The park also has a significant amount of non-native invasive vegetation. Alternatives presented in this plan could affect native and invasive non-native vegetation, so this topic has been retained for further analysis.

Fish and Wildlife. Kings Mountain National Military Park is home to many species of fish, birds, and other wildlife. Alternatives presented in this plan could affect wildlife and fish species, or important habitat, so this topic has been retained for further analysis.

Special Status Species. Analysis of the potential impacts on special status species (federal or state endangered, threatened, candidate, or species of concern) is required by the federal Endangered Species Act, NPS management policies, NEPA, and other laws and regulations. The alternatives presented in this document have the potential to affect special status species or habitat, so this topic has been retained for analysis.

Water Quality. Effects on water quality are regulated by NPS policies and the Clean Water Act (33 U.S.C. 1344). *NPS Management Policies 2006* § 4.6.3 states that the NPS will "take all necessary actions to maintain or restore the quality of surface waters and groundwaters within the parks consistent with the Clean Water Act and all other applicable federal, state, and local laws and regulations..."

Surface water resources in the Kings Mountain area of interest include Kings Creek, Dellingham Branch, Upper Dellingham Branch, Garner Branch, Long Branch, and Stonehouse Branch. Implementation of any of the action alternatives could impact surface water resources in the park. Therefore, this topic has been retained for analysis.

Acoustic Environment and Soundscape

Director's Order #47 (Preservation of the Acoustic Environment and Noise Management in the National Park system), NPS Management Policies (§4.9) and NPS Management Policies (§5.3.1.7) require national park managers to preserve and restore the acoustic environment and soundscapes of park units. Acoustic resources include components of the cultural, physical and biological setting (for example, the sounds of birds and flowing water). The soundscape (i.e., natural quiet) at Kings Mountain is a special resource to park visitors. Implementing any of the action alternatives could alter the soundscape in one or more areas of the park, so this topic has been retained for analysis.

Visitor Use and Experience

The Organic Act and NPS *Management Policies 2006* direct the National Park Service to provide visitors with enjoyment opportunities appropriate to the superlative resources found in the park. Actions in the alternatives could affect the types of facilities available to park visitors, as well as the ability of visitors to engage in recreational activities. Actions in the plan could also affect the degree of visitor understanding and appreciation of park resources. Therefore, this topic has been retained for analysis.

Socioeconomic Environment

The NEPA requires an examination of social and economic impacts caused by federal actions as part of a complete analysis of the potential impacts of these actions on the “human environment.” York and Cherokee Counties in South Carolina and Cleveland and Gaston Counties in North Carolina make up the affected area for the socioeconomic analysis. Private sector businesses, including visitor service facilities and operators (e.g., restaurants and motels)

could be affected by the actions proposed in this management plan. Therefore, this topic has been retained for analysis.

Park Operations

Staffing, funding needs, and park priorities may change under some of the alternatives. Therefore, the impacts that each alternative may have on park operations will be analyzed.

IMPACT TOPICS CONSIDERED BUT NOT ANALYZED IN DETAIL

The following topics were dismissed from further analysis in this document, for the reasons indicated:

Ethnographic Resources

Ethnographic resources are landscapes, objects, plants and animals, or sites and structures that are important to a people’s sense of purpose or way of life. These peoples are the contemporary park neighbors and ethnic or occupational communities that have been associated with a park for two or more generations (40 years), and whose interests in the park’s resources began before the park’s establishment. There are several types of studies and research that the NPS uses to determine the extent of ethnographic resources in a particular park. The most comprehensive background study, the ethnographic overview and assessment, reviews existing information on park resources traditionally valued by stakeholders. The information comes mostly from archives and publications. Interviews with community members and other constituents—often on trips to specific sites—supply missing data. This study also identifies the need for further research.

There is an Ethnographic Study currently underway and near completion (Summer 2017). However, it is highly unlikely that any of the alternatives in this general management plan would have greater than negligible impacts on ethnographic resources, should the study document such resources. Therefore, this topic has been dismissed from further consideration.

Air Quality

The alternatives in this plan are expected to have only the most negligible and/or temporary effects on air quality. Therefore, this topic has been dismissed from further consideration.

Wetlands and Floodplains

Executive Order 11990, Protection of Wetlands, requires federal agencies to avoid, where possible, adversely impacting wetlands. Similarly, Executive Order 11988, Floodplain Management, requires all federal agencies to avoid construction within the 100-year floodplain unless no other practicable alternatives exist. Proposed actions that have the potential to have an adverse affect on wetlands and certain construction activities in the 100-year floodplain must be addressed in a Statement of Findings.

The proposed actions in this plan would have no effect on 100-year floodplains or on any freshwater wetlands. Therefore, a Statement of Findings for wetlands and floodplains will not be prepared. Because the proposed action would not affect wetlands or floodplains, this impact topic was dismissed from further consideration in this document.

Socially or Economically Disadvantaged Populations

Executive Order 12898 ("Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations") requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. None of the alternatives considered in this document would result in any identifiable adverse health effects, and none of the impacts to the natural and physical environment would significantly and adversely affect any minority or low-income population or community. Therefore, environmental justice was dismissed as an impact topic.

Prime and Unique Agricultural Lands

Council on Environmental Quality regulations require that federal agencies assess the effects of their actions on farmland soils classified by the U.S. Natural Resource Conservation Service (NRCS) as prime or unique. According to NRCS, none of the soils in the project area are classified as prime or unique. Therefore, this topic was dismissed from further consideration in this document.

Indian Sacred Sites

Executive Order 130007 ("Indian Sacred Sites") requires all federal agencies to determine whether their proposed actions would restrict access to or ceremonial use of Indian sacred sites by Indian religious practitioners or adversely affect the integrity of such sacred sites. None of the alternatives considered in this document would restrict access to any sites sacred to American Indians or limit ceremonial use of any such sites. Components of the plan designed to achieve enhanced management of cultural resources and a reduction in illegal relic hunting would have an overall beneficial effect on any Indian sacred sites. Therefore, this topic was dismissed from further consideration in this document.

Transportation

Providing access to Kings Mountain National Military Park is a public and park concern. None of the alternatives proposed in this plan would affect visitor access. Therefore, this topic was dismissed from further analysis.



Howser House

CHAPTER 2 — ALTERNATIVES, INCLUDING THE PREFERRED ALTERNATIVE

INTRODUCTION

Many aspects of the desired future condition of Kings Mountain National Military Park are defined in the establishing legislation, the National Military Park's purpose and significance statements, and the servicewide mandates and policies that were described earlier. Within these parameters, the National Park Service solicited input from the public, NPS staff, government agencies, and other organizations regarding issues and desired conditions for the National Military Park. Planning team members gathered information about existing visitor use and the condition of the National Military Park's facilities and resources. They considered which areas of the National Military Park attract visitors, and which areas have sensitive resources.

Using the above information the planning team developed a set of management prescriptions and two action alternatives to reflect the range of ideas proposed by the national park staff and the public.

This chapter describes the management zones and the alternatives for managing the National Military Park. The NPS planning process requires development of action alternatives (alternatives B, and C) for comparison with no change in current park management and trends (no-action, alternative A). The chapter includes tables that summarize the key differences between the alternatives and the key differences in the impacts that are expected from implementing each alternative. (The summary of impacts table is based on the analysis in Chapter 4, "Environmental Consequences.") This chapter also describes mitigative measures that would be used to lessen or avoid impacts, the future studies that would be needed, and the environmentally preferred alternative.

FORMULATION OF THE ALTERNATIVES

The building blocks for reaching an approved plan for managing a national park system unit are the management zones and the alternatives. The

alternatives in the GMP/EIS or EA must be consistent with the purpose of the park, its significance, its administrative and legal mandates, and its enabling legislation. They must be developed with the protection of the park's resources and values, including opportunities for visitor enjoyment, as the primary determinants. In other words, the alternatives should propose different approaches to achieving a park's purpose, while at the same time protecting or minimizing impacts to the park's resources and values. Management zones are descriptions of desired conditions for park resources and visitor experiences in different areas of the park. Management zones are determined for each national park system unit; however the management zones for one unit will likely not be the same for any other national park system unit (although some might be similar). The management zones identify the widest range of potential appropriate resource conditions, visitor experiences, and facilities for the park that fall within the scope of the park's purpose, significance, and special mandates. Four management zones have been identified for Kings Mountain National Military Park (see Table 6, page 36).

The alternatives in this general management plan are the different futures that could be created with the management zones available. Each of the action alternatives has an overall management concept and a description of how different areas of the park would be managed. The concept for each alternative gives the NPS staff the idea for what the alternative is going to look like. For example, perhaps one management zone is called "natural resource" and another zone is called "historic resource." An alternative whose concept is to keep most of the park in an undeveloped and natural/wild condition would have more of the natural resource than the historic resource zone. Both zones might also be larger or smaller and in different locations in different alternatives, depending on the overall concept for each alternative.

The alternatives focus on what resource conditions and visitor uses and experiences/ opportunities should be at the national park rather than on

1 details of how these conditions and uses/ experi-
2 ences should be achieved. Thus, the alternatives
3 do not include many details on resource or visitor
4 use management.

5
6 More detailed plans or studies will be required
7 before most conditions proposed in the alterna-
8 tives are achieved. The implementation of any
9 alternative also depends on future funding and
10 staffing and environmental compliance.

11
12 *This General Management Plan/ Environmental*
13 *Assessment* presents three alternatives for future
14 management of Kings Mountain National Mili-
15 tary Park. Alternative A, the “no-action” alterna-
16 tive that presents a continuation of existing man-
17 agement direction, is included as a baseline for
18 comparing the consequences of implementing
19 each alternative. The other “action” alternatives
20 are alternative B and alternative C. The action
21 alternatives present different ways to manage
22 resources and visitor use and improve facilities
23 and infrastructure at Kings Mountain National
24 Military Park. The two action alternatives em-
25 body the range of what the public and the Na-
26 tional Park Service want to see accomplished
27 with regard to natural resource conditions, cul-
28 tural resource conditions, visitor use and experi-
29 ence, the socioeconomic environment, and park
30 operations. The National Park Service would
31 continue to follow existing agreements and ser-
32 vicewide mandates, laws, and policies regardless
33 of the alternatives considered in this plan. How-
34 ever, actions or desired conditions not mandated
35 by policy, law, or agreements can differ among
36 the alternatives. These alternative actions are
37 discussed in this chapter.

38
39 The approval of a general management plan does
40 not guarantee that funding and staffing needed to
41 implement the plan will be forthcoming. Funding
42 for capital construction improvements is not cur-
43 rently shown in National Park Service construc-
44 tion programs. It is not likely that all potential
45 capital improvements arising from this plan will
46 be totally implemented during the life of the
47 plan. Larger capital improvements may be
48 phased over several years, and full implementa-
49 tion of the general management plan could be
50 many years into the future. Additionally, the Na-
51 tional Park Service is required to maintain all
52 new or acquired assets in a good condition so
53 they do not fall into disrepair. New and/or ex-
54 panded assets will only be provided relative to

55 the National Park Service’s ability to maintain
56 those facilities in good condition.

57 58 **IDENTIFICATION OF THE PREFERRED** 59 **ALTERNATIVE**

60 The alternatives were considered from a number
61 of different perspectives, including comments
62 received on the alternatives newsletter and during
63 public meetings, and a preliminary analysis of
64 potential impacts. With these and other elements
65 in mind, the preferred alternative was chosen by
66 the National Park Service through a process
67 called Choosing by Advantages. Choosing by
68 Advantages, or “CBA,” is a logical, trackable,
69 decision-making process that allows evaluation
70 of the relationship between results and costs to
71 identify the alternative with the greatest value in
72 accomplishing NPS functional goals and objec-
73 tives. Developed for use in the public agency
74 decision-making environment, CBA focuses on
75 the advantages between alternatives, and deter-
76 mines the importance of those advantages based
77 on the park’s purpose and related public interest.
78 In using the CBA process, the National Park Ser-
79 vice asks “What are the advantages of each alter-
80 native proposed for consideration? How im-
81 portant are these advantages?” and finally “Are
82 those advantages worth their associated cost?”

83
84 This process evaluated alternatives by identifying
85 and comparing the relative advantages of each
86 according to a set of criteria. The alternatives
87 were rated on how well they met following at-
88 tributes and factors or had an advantage in meet-
89 ing each attribute and factor:

- 91 1. Protection of natural resources
- 92
- 93 2. Protection of cultural resources
- 94
- 95 3. Provision of educational and interpretive op-
96 portunities
- 97
- 98 4. Provides recreational opportunities for camp-
99 ing, birding, bicycling, hiking, riding horses,
100 etc.
- 101
- 102 5. Provides for public health, safety, & welfare
- 103

104 Based on an evaluation of these factors and the
105 preliminary cost estimates for the different alter-
106 natives for one year (including one time capital

expenditures), Alternative C was determined to be the NPS preferred alternative.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferable alternative is defined as the alternative that would promote the national environmental policy as expressed in section 101 of NEPA. That section indicates that it is the continuing responsibility of the federal government to do the following:

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

A description of how each alternative would or would not achieve the requirements of sections 101 and 102(1) of the National Environmental Policy Act criteria is provided below and illustrated through a rating system in Table 2.

Criterion 1 — Kings Mountain National Military Park is a unit of the national park system and as the trustee of this area the National Park Service would continue to fulfill its obligation to protect this area for future generations. The no-

action alternative would provide less direction on important issues needed to successfully manage the military park; consequently it was ranked lower than the action alternatives. Alternatives B and C would provide a roughly equal level of protection for the military park over time.

Criterion 2 — All the alternatives would assure safe, healthful, productive, and culturally pleasing surroundings for all Americans.

Criterion 3 — Alternative C would provide slightly more opportunities for recreational use of the National Military Park's resources than the other action alternatives, while still ensuring their future protection. This difference would be due to expansion of the trail system along the trace of the historic Colonial Road. Therefore, alternative C scores the highest under criteria 3.

Criterion 4 — Alternative C provides the greatest opportunity for preserving important cultural aspects of our national heritage because it includes the restoration of cultural landscapes within the trace of the historic Colonial Road. The preservation of natural resources is equivalent across all alternatives.

Criterion 5 — There is no discernible difference between the action alternatives (B & C) in terms of the balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities.

Criterion 6 — There is no discernible difference between the action alternatives (B & C) in terms of enhancing the quality of renewable resources and approaching the maximum attainable recycling of depletable resources.

The environmentally preferable alternative for the military park's *General Management Plan* is alternative C. According to the ratings included in Table 2, this alternative would surpass the other alternatives in realizing the full range of national environmental policy goals in Section 101 of NEPA.

TABLE 2 - ENVIRONMENTALLY PREFERABLE ALTERNATIVE ANALYSIS

Criteria	ALTERNATIVES		
	A	B	C
1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.	4	5	5
2. Assure safe, healthful, productive, and aesthetically and culturally pleasing surroundings for all Americans.	5	5	5
3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.	4	4	5
4. Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and a variety of individual choices.	4	4	5
5. Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.	4	4	4
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.	4	5	5
Total Points*	25	27	29

* Five points were given to the alternative if it fully meets the criterion; four points if it meets nearly all of the elements of the criterion; three points if it meets more than one element of the criterion; two points if it meets only one element of the criterion; and one point if the alternative does not meet the criterion.

USER (CARRYING) CAPACITY

General management plans for national park system units must address user capacity management. The National Park Service defines user capacity as the type and extent of use that can be accommodated while sustaining the quality of a park unit's resources and visitor experiences consistent with the park unit's purpose.

User capacity management involves establishing desired conditions, monitoring, and taking actions to ensure the park unit's values are protected. The premise is that with any visitor use comes some level of impact that must be accepted; therefore, it is the responsibility of the National Park Service to decide what level of impact is acceptable and what management actions are needed to keep impacts within acceptable limits.

Instead of just tracking and controlling the number of visitors, NPS staff manage the levels, types, and patterns of visitor use as needed to preserve the condition of the resources and quality of the

visitor experience. The monitoring component of this process helps NPS staff evaluate the effectiveness of management actions and provides a basis for informed management of visitor use.

The foundation for user capacity decision making is the qualitative descriptions of desired resource conditions, visitor experience opportunities, and general levels of development and management described in the management zones. Based on these desired conditions, indicators and standards are identified. An indicator is a measurable variable that can be used to track changes in resource and social conditions related to human activity, so that existing conditions can be compared to desired conditions. A standard is the minimum acceptable condition for an indicator.

User capacity decision making is a continuous process; decisions are adjusted based on monitoring the indicators and standards. Management actions are taken to minimize impacts when needed. The indicators and standards included in this management plan would generally not change in

the future. However, as monitoring of the park's conditions continues, managers may decide to modify, add, or delete indicators if better ways are found to measure important changes in resource and social conditions. Information on the NPS' monitoring efforts, related visitor use management actions, and any changes to the indicators and standards would be available to the public.

This *General Management Plan* addresses user capacity in the following ways:

- The management zones (Visitor Services, Park Services, Historic Resource, and Natural Resource) described earlier in this chapter provide the basis for managing user capacity. Each zone prescribes desired resource conditions, visitor experiences, and recreational opportunities for different areas of the park. The zones also prescribe the types and levels of developments necessary to support these conditions, experiences, and opportunities. This element of the framework is the most important to long-term user capacity management in that it directs the National Park Service on how to best protect resources and visitor experiences while offering a diversity of visitor opportunities.
- A description of the park's most pressing use-related resource and visitor experience concerns, existing and potential, given the park's purpose, related desired conditions, and the vulnerability of specific resources and values. This helps NPS managers focus limited resources on the most significant indicators.
- Identification of indicators and standards that will be monitored in the future to determine if desired conditions are not being met due to unacceptable impacts from visitor use.
- Representative examples of management strategies that might be used to avoid or minimize unacceptable impacts from visitor use.
- Priorities for monitoring attention, if appropriate.

The user capacity indicators and standards for Kings Mountain National Military Park are presented in Table 3. The management zones for which each indicator is likely to be most relevant are also identified in Table 3 as well as the potential management actions to address resource and/or visitor experience concerns.

TABLE 3 - USER CAPACITY INDICATORS AND STANDARDS

Indicator	Applicable Zone	Standard and Monitoring Strategies	Management Strategies
Indicator Topic: Availability of adequate parking capacity			
Number of days parking lot is filled.* * Parking lot capacity is exceeded (full 10-12 times a year not including bus parking). This can result in visitors parking on the grass or on the shoulders of the road or deciding to go elsewhere. Controlled burn schedule – Fire module equipment and trailer takes up numerous spaces in the visitor center parking lot.	Visitor Services Zone	15 days per year exceeding parking capacity • General observation by park staff	<ul style="list-style-type: none"> • Staff assisted parking on shoulders • Expand parking • Market events off peak visitation times. • Offsite parking with shuttles
Number of days bus spaces are filled for several hours causing crowding in the visitor center and on the battlefield trail.* * Large numbers of visitors on buses (school groups, senior tours, etc.), both previously scheduled and anticipated as well as arriving unannounced, can overwhelm the visitor center capacity and limited staff more so than a full parking lot.	Visitor Services Zone	50 days per year exceeding visitor center and bus lot capacity. <ul style="list-style-type: none"> • Keep log & calendar of reservations by school groups, senior tours and others. • Visitor center staff and others report times when capacity has been reached. 	<ul style="list-style-type: none"> • Encourage and manage reservations at a variety of times • Split and rotate groups around exhibits.
Number of days cars are parked on grass for visitors to access wagon ride to Howser house for tours.* * Parking at Goforth-Morris Norman farmstead on grass for shuttling to Howser house during tours. Intrusion on cultural landscape and potential damage to natural resources	Historic Resource Zone	2 event days with 175 participants and 25-30 vehicles at peak times. <ul style="list-style-type: none"> • Observations of park staff. • Counts of participants. 	<ul style="list-style-type: none"> • Require reservations for Howser house tour days. • Add dates for Howser house tour days and spread dates throughout the year
Indicator Topic: Availability of restroom facilities			
Number of visitor complaints about lack of or quality of restrooms. One portable restroom is currently available for each tour day.* * No permanent restroom facilities at the Howser house.	Historic Resource Zone	5 complaints about lack of restroom facilities or more than 3-4 people in line at any time during one tour. <ul style="list-style-type: none"> • Count and log number of complaints. • Observe lines (if any) at portable restroom and note times and frequency. 	<ul style="list-style-type: none"> • Increase the number of portable restrooms at Howser house for each event. • Provide information to visitors about lack of bathrooms prior to tour (in promotional information, on website, etc.) • Require visitor check-in and orientation at visitor center before tour (restroom stop at visitor center).
Indicator Topic: Resource damage from unauthorized use			
Number of reported or	Historic Resource Zone	1 incident of inappropriate	• Visitor education (appropriate

Indicator	Applicable Zone	Standard and Monitoring Strategies	Management Strategies
<p>observed incidents.*</p> <p>* Inappropriate activity around monuments and on battlefield (football games, standing on monument bases, etc.).</p>		<p>ate activity.</p> <ul style="list-style-type: none"> • Observation by park staff during patrols, maintenance, other projects, etc. • Ranger Patrols • Interpretive tours • Complaints by park visitors 	<p>behavior on battlefield and around monuments)</p> <ul style="list-style-type: none"> • Increased monitoring of battlefield • Security camera • Sign for security camera
<p>Number of unauthorized trails.*</p> <p>* Unauthorized trails on battlefield (potential threat to archaeological resources).</p>	Historic Resource Zone	<p>1 unauthorized trail</p> <ul style="list-style-type: none"> • Observation by park staff during patrols, maintenance, other projects, etc. • Ranger Patrols • Interpretive tours • Complaints by park visitors • Barricades 	<ul style="list-style-type: none"> • Visitor education • Plantings • Signs • Study reason for unauthorized trail (possible unsuitable location for authorized trail)
<p>Number of reported or observed incidents of equestrian use outside of designated equestrian trails.*</p> <p>* Resource damage occurs and visitor conflicts are likely when horse riders go off of designated equestrian trails.</p>	Natural Resource Zone	<p>15-25 reported or observed incidents or observations per year.</p> <ul style="list-style-type: none"> • Observations by park staff • Reports by park visitors or hikers 	<ul style="list-style-type: none"> • Cooperating with Kings Mountain State Park management • Additional monitoring and enforcement
<p>Number of reported or observed incidents of camping in undesignated areas.*</p> <p>* Resource damage results from unauthorized camping in undesignated areas (such as the top of Brown's Mountain and Garner Creek).</p>	Natural Resource Zone	<p>1 incident per year</p> <ul style="list-style-type: none"> • Observations and reports by park staff and visitors 	<ul style="list-style-type: none"> • Visitor education • Signs • Increased monitoring and enforcement • Require backcountry permits • Closing area of park for regeneration

MANAGEMENT ZONES FOR KINGS MOUNTAIN NATIONAL MILITARY PARK

Management zones are descriptions of desired conditions for park resources and visitor experiences in different areas of the park. Management zones are determined for each national park system unit; however, the management zones for one unit will likely not be the same for any other national park system unit (although some might be similar). The management zones identify the widest range of potential appropriate resource conditions, visitor experiences, and facilities for the park that fall within the scope of the park's purpose, significance, and special mandates.

Four

management zones have been developed for Kings Mountain National Military Park: Visitor Services, Park Services, Historic* Resource, and Natural* Resource.

*The use of the terms *Historic* and *Natural* in this context should be understood to mean that either natural or historic resources may occur in both zones and that both will be protected and preserved in either zone.

In formulating the action alternatives (alternatives B & C), management zones were placed in different locations or configurations on a map of the park according to the overall intent (concept) of each of the alternatives. (Because alternative A represents existing conditions, and there are no existing management zones, alternative A maps do not show the management zones.)

TABLE 4 - MANAGEMENT PRESCRIPTIONS TABLE - TYPES OF FACILITIES

	VISITOR SERVICES ZONE	PARK SERVICES ZONE	HISTORIC RESOURCE ZONE	NATURAL RESOURCE ZONE
TYPES OF FACILITIES AND DEVELOPMENT				
Administrative office buildings	✓	✓		
Museum/Research Center	✓	✓		
Benches	✓	✓	✓	✓
Bike racks	✓	✓		
Comfort station (restrooms)	✓	✓		
Employee Housing		✓		
Hiking trails	✓		✓	✓
Equestrian trails	✓			✓
Mountain bike trails				
Primitive campgrounds				✓
Maintenance buildings		✓		
Paved parking areas	✓	✓		
Paved roads	✓	✓		
Sidewalks	✓			
Amphitheater	✓		✓	
Trails – natural surface	✓		✓	✓
Visitor centers	✓			
Wayside exhibits	✓	✓	✓	✓
Paved Trails	✓		✓	

TABLE 5 - MANAGEMENT PRESCRIPTIONS TABLE - TYPES OF VISITOR ACTIVITIES

	VISITOR SERVICES ZONE	PARK SERVICES ZONE	HISTORIC RESOURCE ZONE	NATURAL RESOURCE ZONE
TYPES OF VISITOR ACTIVITIES				
Backpacking (camping)				✓
Birdwatching	✓	✓	✓	✓
Camping				✓
Road Cycling (Main Park Drive only)	✓			
Dog walking	✓	✓	✓	✓
Group Interpretation	✓		✓	✓
Guided tours	✓		✓	✓
Hiking – day	✓		✓	✓
Horseback Riding				✓ ¹
Mountain biking				✓
Nature viewing	✓		✓	✓
Park orientation	✓	✓	✓	✓
Photography	✓		✓	✓
Picnicking (informal, non-facility based)	✓			✓
Scientific research (by permit only)	✓	✓	✓	✓
Viewing cultural resources	✓		✓	✓
Viewing programs	✓		✓	✓
Walking	✓	✓	✓	✓
¹ On designated equestrian trails only.				



Overmountain Victory Re-enactors – At Annual Battle Commemoration

TABLE 6 - MANAGEMENT ZONE DESCRIPTIONS AT KINGS MOUNTAIN NATIONAL MILITARY PARK

	VISITOR SERVICES ZONE	PARK SERVICES ZONE	HISTORIC RESOURCE ZONE	NATURAL RESOURCE ZONE
DESCRIPTION	Areas zoned for visitor services would provide for principal visitor access to the National Military Park, parking, restrooms, and orientation to and information about the park. Administrative offices could also be found in this zone.	Areas zoned for park services would provide for administrative and maintenance needs of the National Military Park.	This zone would emphasize the management of cultural resources for preservation and appropriate visitor enjoyment.	This zone would emphasize the management of natural resources for preservation and appropriate visitor enjoyment of the natural environment.
DESIRED RESOURCE CONDITIONS	<ul style="list-style-type: none"> Modification of the natural environment for visitor services or administrative purposes would be tolerated. Blends with the natural and cultural environment to the extent practical. 	<ul style="list-style-type: none"> Various kinds of buildings and facilities could be found here. Modification of the natural environment for administrative purposes would be tolerated. Native planting could be used to screen area from principal park resources. 	<ul style="list-style-type: none"> Reflects the historic resources' periods of significance as accurately as possible Minimal changes allowed for visitor safety and resource protection 	<ul style="list-style-type: none"> Reflects largely undisturbed natural environment Carefully protected from resource modification and degradation Allows for natural forces and natural ecosystem succession Visitor access is provided to be compatible with natural environment in a sensitive manner
DESIRED VISITOR EXPERIENCE	<ul style="list-style-type: none"> Interact with park staff and other visitors Obtain information about resources and programs 	<ul style="list-style-type: none"> Enter this area only for information or assistance Would encounter vehicles, park staff, machinery in operation 	<ul style="list-style-type: none"> Opportunities to see resources firsthand and learn about their history and significance Discover importance of people and events associated with the site 	<ul style="list-style-type: none"> Opportunities to enjoy and interact with a largely undisturbed natural environment
TYPES AND LEVELS OF DEVELOPMENT (see Table 4 [page 34] for details)	<ul style="list-style-type: none"> Visitor center with museum & restrooms & administrative offices Parking and walkways 	<ul style="list-style-type: none"> Administrative & maintenance buildings Parking areas Vehicle storage Utilities 	<ul style="list-style-type: none"> Existing commemorative monuments and appropriate displays and exhibits Signage Paths & walkways 	<ul style="list-style-type: none"> Minimal numbers and types of facilities that could include primitive trails and boardwalks
MANAGEMENT ACTIVITIES	<ul style="list-style-type: none"> Visitor contact and orientation Interpretive programs Maintenance of buildings and grounds 	<ul style="list-style-type: none"> Maintenance of buildings and grounds Staging of maintenance and resource protection activities 	<ul style="list-style-type: none"> Stabilization, restoration, and preservation of historic resources Prevention of resource deterioration Management may close areas as needed to protect sensitive resources 	<ul style="list-style-type: none"> Management activities to protect and restore natural areas/native species Cooperate with other agencies for natural resource management activities of mutual interest/benefit (e.g. fire management)

	VISITOR SERVICES ZONE	PARK SERVICES ZONE	HISTORIC RESOURCE ZONE	NATURAL RESOURCE ZONE
VISITOR ACTIVITIES (see Table 5 [page 35] for details)	<ul style="list-style-type: none"> • Entering park grounds • Obtaining information • Viewing films and interpretive programs • Picnicking • Walking/hiking 	Areas zoned for park services would provide for administrative and maintenance needs of the National Military Park.	<ul style="list-style-type: none"> • Viewing historic landscapes, commemorative monuments, markers, exhibits • Participating in interpretive programs 	<ul style="list-style-type: none"> • Limited to activities with minimal impact on resources • Use levels would be monitored to assure achievement of zone objectives

This section describes all of the management prescriptions that could be applied to Kings Mountain National Military Park under any of the alternatives. The management prescriptions define the desired resource conditions and visitor experiences, including the appropriate kinds and levels of management, use, and development. It then provides descriptions of each management alternative, using zoning to apply the management concepts to the park resources.

Management prescriptions are ways to integrate visitor use with resource management. They specify the desired resource conditions for different areas of the park and describe the desired visitor experiences for those areas.

Visitor Services Zone

Desired Resource Conditions. Areas zoned for visitor services would provide for principal visitor access to the National Military Park, parking, restrooms, and orientation to and information about the park. Administrative offices could also be found in this zone.

Desired Visitor Experience. This zone would provide for a high level of visitor activity and administrative operations. In this zone visitors would encounter the visitor center where they would receive information, interact with park staff and other visitors, and experience and learn about the National Military Park's physical resources and interpretive themes.

Appropriate Kinds and Levels of Development. A visitor center with restrooms, drinking water fountains, museum, parking, and walkways are the types of facilities found in this zone.

Appropriate Kinds and Levels of Management Activities. Management activities would include regular maintenance of both the structural and landscape elements in the zone, conducting interpretive programs, and staging commemorative events.

Appropriate Kinds and Levels of Visitor Activities. Visitor activities would include entering the battlefield, parking, obtaining information, viewing films, and receiving orientation to the resources and programs of the site.

Park Services Zone

Desired Resource Conditions. Non-historic elements such as maintenance facilities and administrative offices would predominate in this type of zone. Minimizing the impacts of these facilities on the natural and cultural resources of the park would be a high priority. A moderate level of native, non-invasive landscape plantings such as grass, shrubs, small trees, flowers and ground covers could be introduced and maintained to improve the visual appeal of the structures.

Desired Visitor Experience. Visitors would not typically enter this zone. Should they enter, either unintentionally or to obtain information or assistance, they might encounter maintenance or administrative buildings, equipment, machinery in operation, loud sounds, and park staff.

Appropriate Kinds and Levels of Development. The facilities found in this zone could include maintenance buildings, vehicle storage facilities, park offices, parking areas, utilities, and artifact storage buildings.

Appropriate Kinds and Levels of Management Activities. Moderate to intensive management in this zone would be directed toward maintenance of its buildings and grounds as well as staging and preparation for maintenance and resource protection activities in other zones.

Appropriate Kinds and Levels of Visitor Activities. Visitors would not typically enter this zone except to obtain information or assistance.

Historic Resource Zone

Desired Resource Conditions. The historic character represents the period of significance as accurately as possible. There would be minimal non-historic elements in the zone. Only very minor changes to the cultural landscape would be necessary to insure basic visitor safety and resource protection.

Desired Visitor Experience. Visitors would experience the historic quality and character defining features of the resource. There would be abundant opportunities for learning the history and significance of the battlefield, events and people associated with Kings Mountain.

Appropriate Kinds and Levels of Development.

The development in this zone would be limited to visitor access facilities such as pathways and signage to enhance interpretation of the cultural resources and promote visitor safety. Existing commemorative monuments and appropriate displays and exhibits could also be included.

Appropriate Kinds and Levels of Management

Activities. Moderate management in this zone would be directed toward the stabilization, restoration, and preservation of historic resources. Management may close areas as needed to protect sensitive resources.

Appropriate Kinds and Levels of Visitor Activities.

Visitor activities would include viewing the historic landscapes, commemorative monuments, markers, exhibits, and participating in interpretive programs.

Natural Resource Zone

Desired Resource Conditions. This area would provide opportunities for visitors to experience natural settings with minor impacts. The natural scene would remain largely intact. Natural conditions and processes would predominate. Sounds and sights of human activity might be apparent but are noticeably quieter than other zones. Additions to the landscape, including signs and markers, might be used to enhance visitor experience, public safety, and to protect resources.

Desired Visitor Experience. Visitors would experience a natural setting. Providing opportunities for people to interact with the resources in this area would be important. The probability of seeing or encountering other visitors or park staff would range from low to moderate most of the time. Levels of visitor use would vary depending on the season, time of day, and weather conditions.

Appropriate Kinds and Levels of Development.

There would be no specialized facilities or structures dedicated for recreational uses in this zone. There could be primitive trails or fire roads in this zone. The area would retain the existing character of its association with the historic resources of the park.

Appropriate Kinds and Levels of Management

Activities. Management actions would focus on en-

hancing visitor experience and safety, protecting resources, minimizing impacts from visitor use, and restoring disturbed areas. Appropriate management actions could include: 1. Determining types and levels of use (carrying capacity); 2. Managing access based on the determined carrying capacity; 3. Inventorying and monitoring resources; and 4. Conducting research and restoring and stabilizing resources.

Appropriate Kinds and Levels of Visitor Activities.

Appropriate visitor activities could include sightseeing, bird watching, photography, hiking, etc. Visitor activities might be self-directed or they might use interpretive services to plan their activities.

ACTIONS COMMON TO ALL ALTERNATIVES

Other ongoing actions common to all alternatives include the following:

- The NPS continues to monitor and treat the National Military Park for a variety of exotic invasive plants.
- Removal of exotics and invasive species will continue.
- Controlled burn and other aspects of fire and woodland management would continue.
- The park will consider acoustic impacts when conducting park activities, purchases, processes, and maintenance.
- The NPS continues to monitor climate and related resource changes, develops appropriate management responses, and adjusts actions to remain effective under continuously changing conditions.
- Expansion of the visitor center and maintenance building would occur under both action alternatives but not under the no-action alternative.
- The National Park Service is endeavoring to combine the collections of several Revolutionary War parks within the region of Kings Mountain National Military Park in a single storage facility focused on the Southern Campaign of the Revolutionary War. Such a facility would provide professional

1 museum storage that is up to current American As-
2 sociation of Museums (AAM) and NPS standards
3 for environmental controls, appropriate storage
4 cabinets, accountability, security, fire suppression,
5 and access. A combined museum storage facility
6 would be a destination for Revolutionary War re-
7 searchers. With appropriate staffing and support,
8 the collections would be managed professionally
9 and made accessible for use.

- 11 • Current planning for the Overmountain Victory
12 National Historic Trail (OVNHT) includes the
13 construction of a trail along the route of the
14 OVNHT from Chesnee, SC , through Cowpens
15 National Battlefield to Kings Mountain National
16 Military Park.

19 **ALTERNATIVE A - THE NO-ACTION**
20 **ALTERNATIVE (For a side-by-side**
21 **comparison of all alternatives see**
22 **Table 8, page 51)**

24 **Concept**

26 The primary purpose of the no-action alternative,
27 required by NEPA, is to serve as a baseline for com-
28 paring the effects of the action alternatives to the ef-
29 fects of the status quo. The no-action alternative is
30 the continuation of current management actions and
31 direction into the future, i.e., continuing with the pre-
32 sent course of action until that action is changed.
33 “No action” does not mean that the park does noth-
34 ing. Rather, the no-action alternative should present
35 how the park would continue to manage natural re-
36 sources, cultural resources, and visitor use and expe-
37 rience if a new GMP was not approved and imple-
38 mented.

40 The no-action alternative is a viable course of action
41 and must be presented as an objective and realistic
42 representation of continuing the current park man-
43 agement direction otherwise it will not be an accurate
44 baseline against which to compare action alternatives
45 and their potential impacts.

47 The park’s enabling legislation and NPS management
48 policies would provide guidance for all of the alterna-
49 tives. The park would continue to be managed as it is
50 today, with no major change in management direc-
51 tion (see Alternative A map). Visitors would continue

52 to enjoy the Battleground Ridge Trail with the vari-
53 ous monuments and wayside exhibits that commemo-
54 rate the battle and the participants on both sides.
55 They would also continue to enjoy other trails in the
56 park and the Garner Creek backcountry campsite as
57 well as the film and exhibits in the visitor center at
58 the base of the Kings Mountain ridge. Park managers
59 would preserve and maintain both the natural envi-
60 ronment and the park’s principal cultural resources
61 fully according to applicable laws and policies,
62 standards, and guidelines.

64 **General Theme**

66 The Kings Mountain Battlefield would be interpreted
67 in the context of its setting in the natural environment
68 along Battleground Ridge. There would be minimal
69 alterations of the natural environment, current inter-
70 pretation, or visitor services.

72 **Visitor Experience**

74 The visitor would experience the open woodland set-
75 ting of the Battle of Kings Mountain on Battleground
76 Ridge through interpretive trails and exhibits. Peri-
77 odic living history demonstrations as well as museum
78 items and a film are part of the interpretive program.

80 **Resource Conditions**

82 The goal would be to preserve and maintain the natu-
83 ral environment.

85 **Trails**

87 No new trails are to be established.

89 **Maintenance Area**

91 No change

93 **Visitor Center**

95 No change

1 **Administrative Headquarters**

2
3 The park's administrative offices would continue to
4 be located in the historic visitor center and the adja-
5 cent historic superintendent's residence on the main
6 park road.

7
8 **Historic Structures**

9
10 Continue to maintain and stabilize Howser house, but
11 open only for researchers and special occasions.

12
13 **Fire Management**

14
15 Continue to implement the park's fire management
16 plan. Provide technical assistance to Kings Mountain
17 State Park to carry out controlled burning program.
18 Continue to assist State Park with controlled burns in
19 selected areas.

22 **Boundary**

23
24 No change.

25
26 **Map of Alternative A**

27
28 The map of Alternative A acts as a base map for
29 Kings Mountain National Military Park. Present
30 conditions are described, but no management zones
31 are displayed. Alternative A constitutes a 'no action'
32 alternative. Specific elements of the map include
33 roads, streams, wetlands, building locations,
34 campsites, and the park boundary

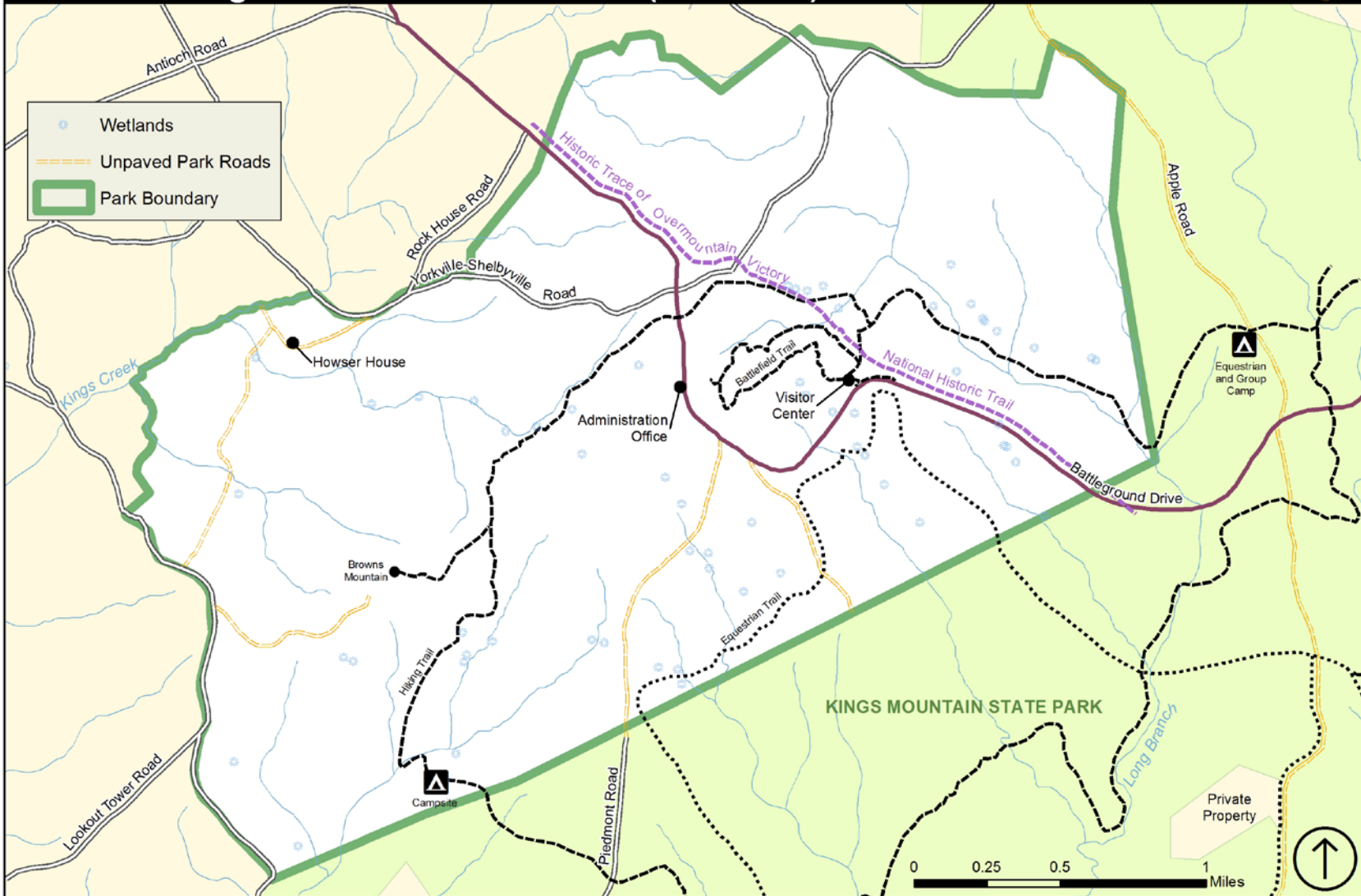


Battle of Kings Mountain Anniversary Ceremony

MAP OF ALTERNATIVE A

Kings Mountain National Military Park General Management Plan: Alternative A (No Action)

National Park Service
U.S. Department of the Interior



Source: NPS, Esri
Author: NPS SERO GIS

April 2017

ALTERNATIVE B (For a side-by-side comparison of all alternatives, see Table 8, page 51)

Overall Concept

The focus of this alternative is to expand interpretation of Kings Mountain Military Park beyond the period of the events leading up to and including the October 7, 1780 battle to the larger continuum of history at the site. Greater emphasis on Native American and natural history as well as farming and commemoration of the site throughout its occupation would be included in the interpretation program.

Visitor Experience

The Battleground Ridge interpretive trail in addition to museum items and the film in the visitor center would continue to be the primary interpretive elements. Interpretive elements would be added to hiking trails and/or the equestrian trail, markers would be added to expand the interpretation of the Colonial Road, and there would be increased interpretation of the natural and human history of the site. Interpreters from other parks, such as Cowpens National Battlefield, could be enlisted to provide a broader interpretive perspective on the Southern Campaign of the American Revolutionary War than under current conditions.

Resource Conditions

The goal would be to preserve and maintain the natural environment including the acoustic environment and soundscapes.

Trails

There would be no expansion of the equestrian trail, but there would be an examination of the feasibility of utilizing existing roads and trails for mountain bike trails as well as a bike connector trail from North Carolina and South Carolina state parks to the National Military Park.

Maintenance Area

The maintenance area would be enlarged to create work space for maintenance staff who are currently located in the park Administrative Headquarters.

Visitor Center

The visitor center would be expanded to accommodate a new library and conference room. The visitor center parking lot would be expanded by 25 spaces: 20 standard spaces, 3 bus spaces, and 3 accessible spaces.

Administrative Headquarters

The park's administrative offices would continue to be located in the historic visitor center and the adjacent historic superintendent's residence on the main park road.

Historic Structures

Open the Howser house for scheduled tours. The historic structure report would need to be updated with restoration recommendations implemented.

Fire Management

Fire is a potential threat, which the park has minimized through an ongoing fire management program that includes controlled burns of undergrowth. However, the adjacent Kings Mountain State Park has not yet begun a fire management program and the National Military Park's resources are somewhat threatened by a potentially devastating fire that could originate on the state side. Under Alternative B the National Military Park will continue to provide technical assistance to Kings Mountain State Park to carry out a controlled burning program and will continue to assist Kings Mountain State Park with on-the-ground controlled burns in selected areas.

Boundary

Kings Mountain State Park encompasses more than 6,884 acres adjacent to the eastern, southeastern, and northern boundaries of the National Military Park. Approximately 6,141 acres were conveyed to the State of South Carolina in the 1940's by the National Park Service as part of the Recreation Demonstration Area (RDA) program. The State Park acquired another 743 acres by donation and purchase. The Recreation Demonstration Area act contained a provision that requires grantees to use the recreational demonstration areas exclusively for public parks and recrea-

1 tional and conservation purposes. In the event that a
2 grantee is unable to fulfill this obligation, the proper-
3 ty could possibly revert to the federal government.

4
5 Under this alternative, the National Military Park
6 would evaluate the ability of the State to continue
7 fulfilling its responsibility under the program and
8 would explore the possibility of activating the RDA
9 reversion provision with respect to Kings Mountain
10 State Park. This scenario would include the possibil-
11 ity of the National Park Service assuming

12 management and operation of the State park as part
13 of the National Military Park.

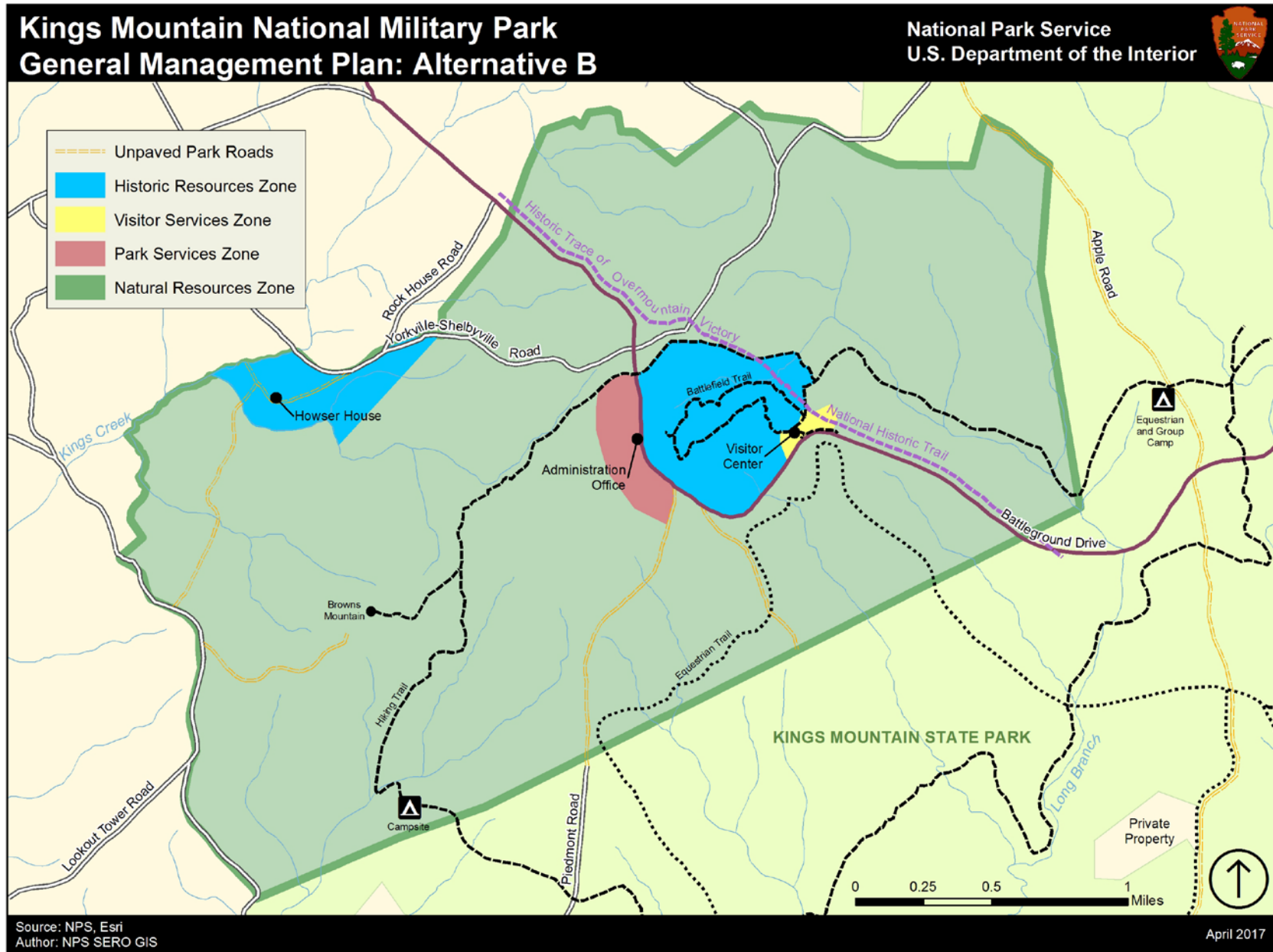
14
15 The Alternative B map displays the management
16 zones described in Alternative B. The management
17 zones correspond to features found in a Visitor Ser-
18 vices Zone, Park Services Zone, Historic Resources
19 Zone, and Natural Resource Zones previously de-
20 scribed. Alternative B utilizes Historic Resource
21 zones around the Kings Mountain battlefield and the
22 Howser house. A Visitor Services Zone is placed
23 around the Visitor Center, parking lot, and amphithe-
24 ater. The Park Services zone encompasses the Ad-
25 ministration Office and maintenance areas. The re-
26 mainder of park land is a Natural Resource Zone.

27



Howser House – Source: Kings Mountain Herald (November 16, 2011)

MAP OF ALTERNATIVE B



ALTERNATIVE C (NPS Preferred Alternative) (For a side-by-side comparison of all alternatives see Table 8, page 51)

General Theme

The overall focus of this alternative is on enhancing and diversifying interpretation of the 1780 Battle of Kings Mountain. Approach routes used by the Overmountain Victory fighters would be interpreted to highlight the greater scope of the battle in relation to the surrounding parklands.

Visitor Experience

There would be expanded trails, enhanced entrance corridors, and a system of visitor management that maximizes visitor exposure to both natural and cultural resources.

Resource Conditions

Some modification of the natural environment including the acoustic environment and soundscapes is allowable to accommodate new trails, expand the visitor center, and provide accommodations for interpretation throughout the park.

Trails

Develop a trail along the former Colonial Road that would connect the Battleground Ridge and battlefield trail to the Overmountain Victory Trail. There would be no expansion of the equestrian trail, but there would be an examination of the feasibility of utilizing existing roads and trails for mountain bike trails as well as a bike connector trail from North Carolina and South Carolina state parks to the National Military Park.

Maintenance Area

The maintenance area would be enlarged to create workspace for maintenance staff who are currently located in the park Administrative Headquarters.

Visitor Center

The visitor center would be expanded to accommodate a new library and conference room. The visitor center parking lot would be expanded by 25 spaces: 20 standard spaces, 3 bus spaces, and 3 accessible spaces.

Administrative Headquarters

The park's administrative offices would continue to be located in the historic visitor center and the adjacent historic superintendent's residence on the main park road.

Historic Structures

Open the Howser house for tours on a limited or periodic basis. The historic structure report would need updating with restoration recommendations implemented.

Fire Management

Provide technical assistance to Kings Mountain State Park to carry out controlled burning program. Continue to assist State Park with controlled burns in selected areas.

Boundary

Kings Mountain State Park encompasses more than 6,884 acres adjacent to the eastern, southeastern, and northern boundaries of the National Military Park. The National Park Service conveyed approximately 6,141 acres to the State of South Carolina in the 1940's as part of the Recreation Demonstration Area (RDA) program. The State Park acquired another 743 acres by donation and purchase. The Recreation Demonstration Area act contained a provision that requires grantees to use the recreational demonstration areas exclusively for public parks and recreational and conservation purposes. In the event that a grantee is unable to fulfill this obligation, the property may revert to the federal government.

Under this alternative, the National Military Park would evaluate the ability of the State to continue fulfilling its responsibility under the program and would explore the possibility of activating the RDA reversion provision with respect to Kings Mountain State Park. This scenario would in-

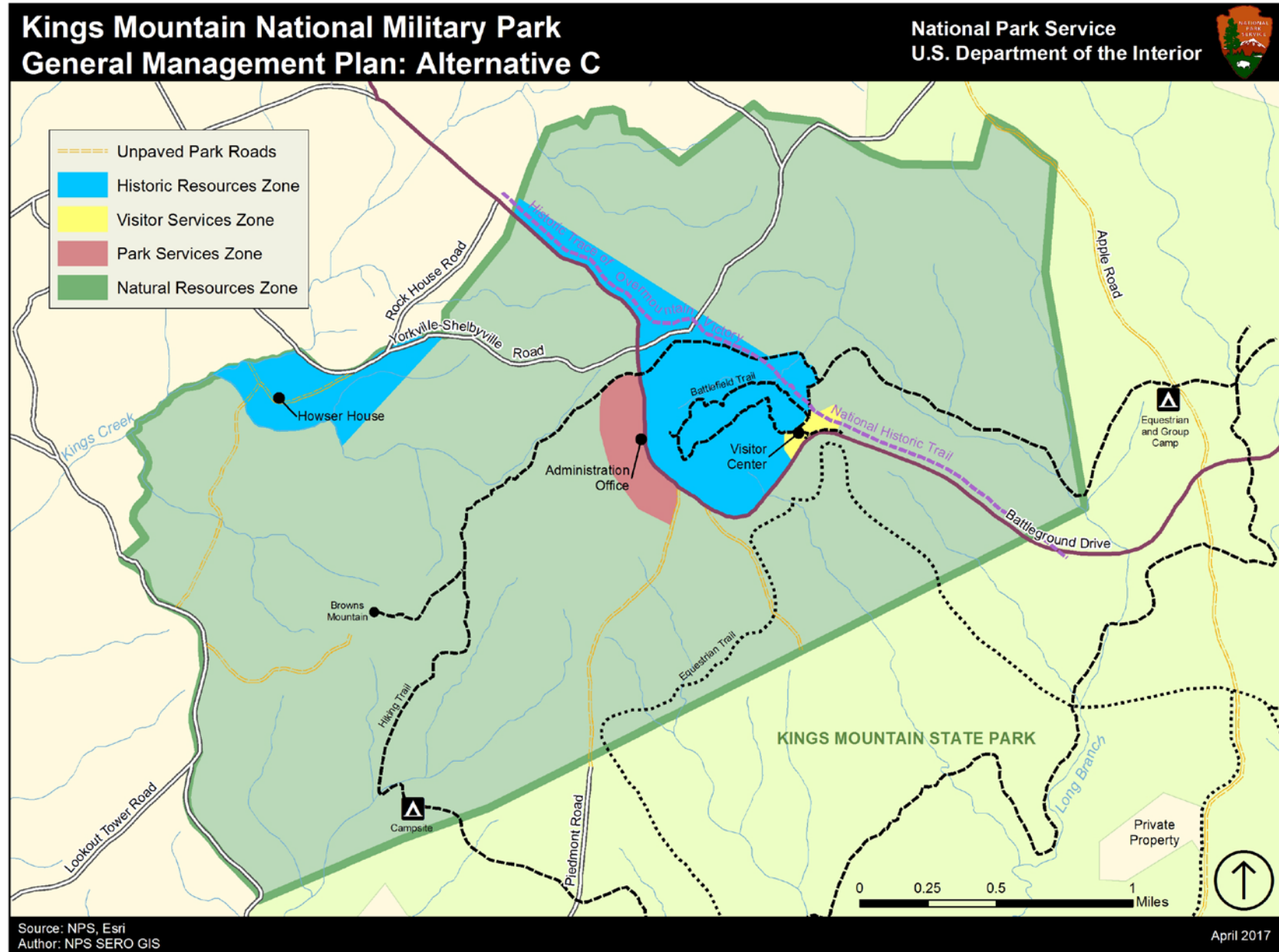
clude the possibility of the National Park Service assuming management and operation of the State park as part of the National Military Park. Interpretation could expand into state park lands. In addition, potential parcels along the Kings Mountain National Park boundary could be obtained for utilization of the OVVI approach trail. The Alternative C map includes the management zones described in Alternative C. The major difference in Alternative B and Alternative C is the expanded Historic Resource zone along the

historic trace of the Colonial Road formerly running across Kings Mountain. Alternative C would emphasize the Overmountain Victory Fighters approach to the Battle of Kings Mountain in October of 1780. The expanded Historic Resource Zone would include increased interpretation of the Overmountain Victory National Historic Trail. The other management zones including Park Services, Visitor Services, and Natural Resources would be identical to Alternative B.



Kings Mountain National Military Park Visitor Center

MAP OF ALTERNATIVE C



DEVELOPMENT OF COST ESTIMATES

NPS decision makers and the public must consider an overall picture of the complete costs and advantages of various alternatives, including the no-action alternative, to make wise planning and management decisions for the park. Such consideration can shed light on the cost of the no-action alternative and make possible a more legitimate comparison to the action alternatives.

Class C estimates are used which are rough, order-of-magnitude estimates based on NPS and industry standards to the extent available. These figures are not to be used for budgetary purposes or implementation funding requests. It is important that the cost estimates contain the same elements and that they be developed with the same general assumptions so that there can be consistency and comparability among alternatives. The main components of these cost estimates are as follows:

Initial One-Time Costs

- New development (including infrastructure costs)
- Major rehabilitation or restoration of existing facilities
- Interpretive media (audiovisual materials, exhibits, waysides, and publications)
- Resource management and visitor service costs (resource and visitor inventories, implementation planning, compliance)

Annual Costs

- Annual park operating costs (staff salary and benefits, maintenance, utilities, monitoring, contract services)
- Ongoing repair and rehabilitation of facilities

NPS Facilities Model

The National Park Service has developed facility models for several types of facilities, such as visitor centers and maintenance facilities, based on a number of factors unique to each national park

system unit. This model was used in estimating the costs for adapting existing facilities for new uses.

Implementation

The cost figures shown here and throughout the plan are intended only to provide an estimate of the relative costs of alternatives. NPS and industry cost estimating guidelines were used to develop the costs (in 2016 dollars) to the extent possible, but the estimates should not be used for budgeting purposes. Specific costs will be determined in subsequent, more detailed planning and design exercises, and considering the design of facilities, identification of detailed resource protection needs, and changing visitor expectations. Actual costs to the National Park Service will vary depending on which actions are implemented and when, and on contributions by partners and volunteers.

The implementation of the approved plan, no matter which alternative is selected, will depend on future NPS funding levels and servicewide priorities, and on partnership funds, time, and effort. The approval of a general management plan does not guarantee that funding and staffing needed to implement the plan will be forthcoming. Full implementation of the plan could be many years in the future.

Funding for capital construction improvements is not currently shown in National Park Service construction programs. It is not likely that all capital improvements will be totally implemented during the life of the plan. Larger capital improvements may be phased over several years.

TABLE 7 - COSTS OF ALTERNATIVES

ITEM	ALTERNATIVES		
	Alt. A	Alt. B	Alt. C
Annual Operating Costs (ONPS) ⁽¹⁾	\$1,144,000	\$1,341,600	\$1,341,600
Staffing - FTE ⁽²⁾	17	20 (+3)	20 (+3)
Total One-Time Costs	\$204,880	\$2,036,490	\$1,813,930
One-Time Facility Costs ⁽³⁾	\$18,010	\$1,942,734	\$1,720,174
One-Time Non-Facility Costs ⁽⁴⁾	\$0	\$93,756	\$93,756

(1) Annual operating costs are the total costs per year for maintenance and operations associated with each alternative, including utilities, supplies, staff salaries and benefits, leasing, and other materials. Cost and staffing estimates assume that the alternative is fully implemented as described in the narrative.

(2) The total number of FTEs is the number of person-years of staff required to maintain the assets of the park at a good level, provide acceptable visitor services, protect resources, and generally support the park's operations. The FTE number indicates federal government-funded NPS staff only, not volunteer positions or positions funded by partners. FTE salaries and benefits are included in the annual operating costs.

(3) One-time facility costs include those for purchase and placement of interpretive signs and wayside exhibits, expansion of the park's maintenance facility, and expansion of the existing visitor center to incorporate a conference room and a library. The visitor center parking lot would also be expanded by 25 spaces.

(4) One-time non-facility costs are for a historic furnishings report for the Howser House.

The following applies to costs presented throughout this GMP:

- The costs are presented as estimates and are not appropriate for budgeting purposes.
- The costs presented have been developed using NPS and industry standards to the extent available.
- Specific costs will be determined at a later date, considering the design of facilities, identification of detailed resource protection needs and changing visitor expectations.
- Actual costs to the National Park Service will vary depending on if and when the actions are implemented, and on contributions by partners and volunteers.
- Approval of the GMP does not guarantee that funding or staffing for proposed actions will be available.
- The implementation of the approved plan, no matter which alternative, will depend on future NPS funding levels and Service- wide priorities, and on partnership funds, time, and effort.

TABLE 8 - COMPARISON OF ALTERNATIVES

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C (NPS Preferred Alternative)	DIFFERENCES
Overall Concept	Alternative A would continue current management practices and policies.	Kings Mountain National Military Park, while continuing to focus its interpretive program on the 1780 battle, would expand interpretive programs and materials to include the continuum of human history at the site from Native American to early settlement through the battle and continuing to the aftermath, later settlement and farming, commemoration efforts, etc. In addition, more interpretation of the natural history and environment of the site would be included within the park's interpretation program.	This alternative would broaden the interpretive experience at the park beyond the immediate battleground ridge area to include the routes and approaches used by Overmountain Victory fighters and more exhibits and programs in the woods around the ridge.	There are 2 main differences between alternatives B and C . First, alternative C continues to focus almost entirely on interpretation of the 1780 battle. Second, the interpretive effort spreads geographically to include additional areas of the park, which means a difference in land management as well as interpretive programming. In addition, natural history interpretation would be part of the interpretive program. Alternative B expands the timeframe for which the interpretive program is expanded to include the entire continuum of human history at the site.
Visitor Experience	<p>Continue current programs and opportunities.</p> <ul style="list-style-type: none"> • Visitors enter the visitor center to obtain basic information and view orientation film, then walk to Kings Mountain and explore on their own. • Living history demonstrations and other interpretive programs would continue on a scheduled basis. • Access for walking and other appropriate activities would remain as currently available. 	<p>Same as A plus:</p> <ul style="list-style-type: none"> • Visitor Center would be expanded to include a research library and conference room. The Visitor Center parking lot would be expanded by 25 spaces. • Add interpretive elements and wayside exhibits to hiking trails and/or the equestrian trail to enhance visitor understanding and appreciation of the natural history and greater history of human occupation within the Kings Mountain boundary. • Open the Howser House to scheduled ranger-led interpretive tours. 	<p>Same as A plus:</p> <ul style="list-style-type: none"> • Visitor Center would be expanded to include a research library and conference room. The Visitor Center parking lot would be expanded by 25 spaces. • Enhance visitor understanding of the Battle of Kings Mountain and appreciation of the park's significance by restoring some historic site conditions and views from the Overmountain Victory Trail to Battleground Ridge • Expand recreational access by expanding the trail system along the trace of the Historic Colonial Road 	<p>Alternative B would immerse the visitor in a broader range of interpretive themes including natural history and human occupation of the Kings Mountain area</p> <p>Under Alternative C the visitor experience would be focused on the views and monuments that tell the story of the Battle of Kings Mountain from the approach of the Overmountain Victory Fighters to the Battle of Kings Mountain.</p>

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C (NPS Preferred Alternative)	DIFFERENCES
Natural Resources	<ul style="list-style-type: none"> • Vegetation would be maintained in its present condition with the exception of fuel removal in accord with the approved fire management plan • Wetlands: natural processes would continue. • Continue vital signs monitoring to evaluate species composition, richness, structure, and exotics. • Inventory, map, and continue treatment of invasive and exotic plants. 	<ul style="list-style-type: none"> • Same as Alt. A 	<ul style="list-style-type: none"> • Same as Alt. A except • Some vegetative clearing and soil disturbance would take place along the trace of the Historic Colonial Road to develop the Overmountain Victory Trail 	<p>The larger Historic Resources Zone in alternative C would provide for more restoration of historic views and landscapes than in alternative B. This would mean potentially more vegetative clearing than in Alternative B. Alternative C only proposes limited vegetative clearing in a narrow band forming the historic trace of the historic colonial road.</p> <p>Management of other natural resources would be identical across all alternatives.</p>
Cultural Resources	<ul style="list-style-type: none"> • Current management of cultural resources will continue. 	<p>Same as Alt. A Plus:</p> <p>Update historic structure report for the Howser house and open the house for scheduled interpretive tours.</p>	<p>Same as Alt. B plus:</p> <ul style="list-style-type: none"> • Larger Cultural Resource Zone in this alternative will permit restoration of cultural landscapes, within the trace of the Historic Colonial Road 	<p>The large Cultural Resources Zones in alternatives C would provide for more restoration of historic views and landscapes than in alternative B. Alternative A maintains existing conditions.</p> <p>Management of historic structures including monuments, markers, archeological resources, and collections, would be identical under all alternatives.</p>
Access	Continue current access	Same as Alt. A .	<p>Same as Alt. A plus:</p> <ul style="list-style-type: none"> • Trail access from the Overmountain Victory Trail would connect to Battleground Ridge from outside Kings Mountain National Military Park 	<p>All alternatives are the same with respect to maintaining automobile access to Kings Mountains National Military Park.</p> <p>Alternative C includes trail access from outside the park on the Overmountain Victory Trail</p>
Trails	<ul style="list-style-type: none"> • Maintain existing trail system. 	Same as Alt. A .	<p>Same as Alt. A plus:</p> <ul style="list-style-type: none"> • Work with partners to extend Overmountain Victory Trail to its terminus at the base of Kings Mountain 	<p>All alternatives maintain the existing trail system connecting Kings Mountain National Military Park to Kings Mountain State Park and Crowder's Mountain State Park (North Carolina) with a hiking trail.</p> <p>Alternative C provides for the development of the</p>

	ALTERNATIVE A	ALTERNATIVE B	ALTERNATIVE C (NPS Preferred Alternative)	DIFFERENCES
				Overmountain Victory Trail along the trace of the Historic Colonial Road
Interpretation	<p>Continue implementation of the park's approved Long Range Interpretive Plan.</p> <p>All persons who make use of the park's resources, whether visiting or not, should have the opportunity to:</p> <ul style="list-style-type: none"> • have access to readily available orientation information • get interpretive information and peruse and/or purchase interpretive materials • see an audiovisual production about the Battle of Kings Mountain. • know that the park is a unit of the National Park Service and why it is preserved 	<p>Same as Alt. A plus:</p> <ul style="list-style-type: none"> • Sites associated with natural history and human occupation of the Kings Mountain area would receive greater interpretation in addition to the events associated with the Battle of Kings Mountain. 	<p>Same as Alt. A plus:</p> <ul style="list-style-type: none"> • Expanded recreational opportunities through Overmountain Victory Trail development would create additional opportunities for interpreting historic and natural resources in Kings Mountain National Military Park. 	<p>A would continue current interpretive programs, themes, and emphases. B would increase the interpretive focus on natural history and human occupation of the Kings Mountain area. C would expand the range of interpretive themes surrounding the Battle of Kings Mountain to approach routes of the Overmountain Victory Fighters and other activities of the battle that took place in surrounding area.</p>

MITIGATIVE MEASURES COMMON TO ALL ACTION ALTERNATIVES

Congress charged the National Park Service with managing the lands under its stewardship “in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (NPS Organic Act, 54 U.S.C. 100101). As a result, the National Park Service routinely evaluates and implements mitigation whenever conditions occur that could adversely affect the sustainability of national park system resources.

To ensure that implementation of the action alternatives protects natural and cultural resources and the quality of the visitor experience, a consistent set of mitigative measures would be applied to actions proposed in this plan. The National Park Service would prepare appropriate environmental reviews (i.e., those required by NEPA, NHPA, and other relevant legislation) for these future actions. As part of the environmental review, the NPS would avoid, reduce or minimize adverse impacts when practicable. The implementation of a compliance-monitoring program would be considered to stay within the parameters of NEPA and NHPA compliance documents, U.S. Army Corps of Engineers Section 404 permits, etc. The NPS will comply with Section 106 and 36 CFR 800 and the 2008 Programmatic Agreement with the Advisory Council for Historic Preservation, and the National Conference of State Historic Preservation Officers (NCSHPO). The compliance-monitoring program would oversee these mitigative measures and would include reporting protocols.

The following mitigative measures and best management practices would be applied to avoid or minimize potential impacts from implementation of the alternatives. These measures would apply to all alternatives.

Management Strategies to Address Climate Change

Climate change has the potential to adversely affect the future resource conditions of the National Military Park. As global and regional climates continue to change, a management approach that enhances the protection and adaptive capacity of climate-sensitive resources is becoming increasingly important. The following outlines such a strategy that adapts to our growing understanding of cli-

mate change influences and the effectiveness of management to contend with them.

Climate change science and adaptation are rapidly evolving and advancing fields. Climate change includes both directional changes, such as warming temperatures, and multiple uncertainties, such as future occurrences of drought and storm events. Furthermore, no adaptation solution will work in all situations or is appropriate for all resources. As such, management actions and climate change adaptation must incorporate the flexibility to respond to rapid changes and surprises as they occur. This proposed management strategy does not provide definitive solutions or directions; rather it provides science-based and scholarship-based management principles to consider when implementing the broader management direction of the National Military Park.

Strategy

The NPS Climate Change Response Program aims to prepare the agency and its parks for the anticipated management needs that result from a changing climate, shifting resource conditions, and multiple uncertainties. The Climate Change Response Program serves to help park managers determine the extent to which they can and should act to protect the parks' current resources while allowing the parks' ecosystems and species to adapt to new conditions. Efforts of the NPS Climate Change Response Program focus on the following strategies:

Science

- Conduct scientific research and vulnerability assessments necessary to support NPS adaptation, mitigation, and communication efforts.
- Collaborate with scientific agencies and institutions to meet the specific needs of management as it confronts the challenges of climate change.
- Learn from and apply the best available climate change science.
- Pursue Climate Friendly Park certification and implement a park Environmental Management System (NPS Director's Order 13A) for park environmental leadership and greenhouse gas emission reduction from park op-

erations and visitor use. Practices may include alternative transportation options (e.g., shuttles and low-emission vehicles for the park's fleet) and biofuels and other renewable energy sources for visitor center and administrative buildings.

Mitigation

- Reduce carbon footprint of NPS.
- Promote energy efficient practices, such as alternative transportation.
- Enhance carbon sequestration as one of many ecosystem services.
- Integrate mitigation into all business practices, planning, and the NPS culture.

Adaptation

- Develop the adaptive capacity for managing natural and cultural resources and infrastructure under a changing climate.
- Inventory resources at risk and conduct vulnerability assessments.
- Prioritize and implement actions, and monitor the results.
- Explore plausible future scenarios, associated risks, and possible management options.
- Integrate climate change impacts into facilities management.

Communication

- Provide effective communication about climate change and impacts to the public.
- Train park staff and managers in the science of climate change and decision tools for coping with change.
- Lead by example.

With the guidance of the above strategies, Kings Mountain will use the following management approach to address climate change throughout the implementation of this general management plan. Many of these specific management strategies are adopted from the publication, "Some guidelines for helping natural resources adapt to climate change" (IHDP 2008). Further elaboration and adaption of these are anticipated as implementation of the general management plan proceeds.

- Identify key natural and cultural resources and processes that are at risk from climate change. Establish baseline conditions for these resources, identify their thresholds, and monitor for change. Increase reliance on adaptive management to minimize risks.
- Restore key ecosystem features and processes, and protect cultural resources to minimize undesirable effects of climate change.
- Use best management practices to reduce human-caused stresses (e.g., park infrastructure and visitor-related disturbances) that hinder the ability of species or ecosystems to withstand climatic events.
- Form partnerships with other resource management entities to maintain regional habitat connectivity and refugia that allow species dependent on National Military Park resources to better adapt to changing conditions.
- Reduce or mitigate greenhouse gas emissions associated with National Military Park operations and visitor use, such as alternative transportation options (e.g., shuttles and low-emission vehicles for the park's fleet) and biofuels and other renewable energy sources for visitor center and administrative buildings.
- Use the fragile environments of Kings Mountain National Military Park such as wetlands and wetlands-dependent plant and animal species an opportunity to educate visitors about the effects of climate change on the resources they are enjoying. Inspire visitors to take action through leadership and education.
- Manage National Military Park facilities and infrastructure (structures, trails, roads, drainage systems, etc.) in a way that prepares for and adapts to the effects of climate change.

Cultural Resources

The National Park Service would preserve and protect, to the greatest extent possible, resources that reflect the history, events, and people associated with Kings Mountain National Military Park.

Specific mitigative measures include the following:

- Continue to develop inventories for and oversee research about archeological resources, historic structures, cultural landscapes, and ethnographic resources to better understand, interpret, and manage the resources. Conduct any needed archeological or other resource specific surveys, National Register evaluations, and identify recommended treatments through completion of resource-specific treatment plans (historic structure reports, cultural landscape reports, collections management plans, etc.). Incorporate the results of these efforts into site-specific planning and compliance documents.
- Continue to manage cultural resources and collections following federal regulations and NPS guidelines. Inventory the park's collection and keep in a manner that would meet NPS curatorial standards.
- Subject projects to site-specific planning and compliance procedures. For archeological resources, by locating projects and designing facilities in previously disturbed (which may represent historical developments requiring treatment as cultural resources) or existing developed areas, make efforts to avoid resources and thus adverse impacts through use of the Secretary of the Interior's Standards for Archeology and Historic Preservation.
- Use screening and/or sensitive design that would be compatible with historic resources and cultural landscapes and not adjacent to ethnographic resources. If adverse impacts could not be avoided, mitigate these impacts through a consultation process with all interested parties.
- Conduct archeological site monitoring and routine protection. Conduct data recovery excavations at archeological sites threatened with destruction, where protection or site avoidance during design and construction is infeasible. Strictly adhere to NPS standards and guidelines on the display and care of artifacts. This would include artifacts used in exhibits in the visitor center.

- Mitigative measures for structures and landscapes include documentation according to standards of the Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/ HAER/HALS). The level of this documentation, including photography, archeological data, and/or a narrative history would depend on the degree of significance (national, state, or local) and individual attributes. It would be determined in consultation with the South Carolina Historic Preservation Officer and other parties with an interest in the effects of the undertaking on historic properties.

Natural Resources

Air Quality. Air quality has been dismissed from consideration as an impact topic for the reasons cited in Chapter 1.

Exotic, Nonnative, and Nuisance Plant Species. Exotic, nonnative, and nuisance plants can have severe effects on the integrity of native systems and habitats. Visitors can be agents for seed dispersal, increasing the threat to native plant communities. Some limited removal of exotics would take place as funding becomes available, but large-scale restoration would not be likely to take place in the near term.

Acoustic Environment and Soundscapes. Effects on the acoustic environment are most likely from short-term construction projects, regular maintenance such as using lawnmowers, chainsaws, etc. and from traffic noise on Park Road (also known as Battleground Road), which is the main access road into and through the National Military Park. Mitigation measures to reduce noise and protect the acoustic environment could include a) reducing noise from mechanized systems through retrofitting or acoustic barriers, b) changing the timing of noise-generating activities, c) purchasing quieter options for equipment, d) visitor outreach about noise and the effects of noise.

Soils.

- Build new facilities on soils suitable for development. Minimize soil erosion by limiting the time that soil is left exposed and by applying erosion control measures, such as ero-

sion matting, silt fencing, and sedimentation basins in construction areas to reduce erosion, surface scouring, and discharge to water bodies. Once work was completed, revegetate construction areas with native plants in a timely period.

- Place construction equipment in previously disturbed areas.
- Locate trails on soils with low erosion hazards small changes in slope, and develop proper signs to minimize social trails.
- Ensure proper drainage of parking areas.

Threatened and Endangered Species and Species of Concern. Mitigative actions would occur during normal park operations as well as before, during, and after construction to minimize immediate and long-term impacts on rare, threatened, and endangered species. These actions would vary by specific project and area of the National Military Park affected, and additional measures will be added depending on the specific action and location. Many of the measures listed below for vegetation and wildlife would also benefit rare, threatened, and endangered species by helping to preserve habitat. Mitigative actions specific to rare, threatened, and endangered species would include the following:

- Conduct surveys for rare, threatened, and endangered species as warranted.
- Locate and design facilities/actions to avoid adverse effects on rare, threatened, and endangered species. If avoidance is infeasible, minimize and compensate for adverse effects on rare, threatened, and endangered species as appropriate and in consultation with the appropriate resource agencies. Conduct work outside of critical periods for the specific species.
- Develop and implement restoration and/or monitoring plans as warranted. Plans should include methods for implementation, performance standards, monitoring criteria, and adaptive management techniques.

- Implement measures to reduce adverse effects of nonnative plants and wildlife on rare, threatened, and endangered species.

Vegetation

- Monitor areas used by visitors (e.g., trails) for signs of native vegetation disturbance. Use public education, revegetation of disturbed areas with native plants, erosion control measures, and barriers to control potential impacts on plants from trail erosion or unauthorized trails.
- Use barriers and closures to prevent trampling and loss of riparian vegetation.
- Develop revegetation plans for areas disturbed by construction or unauthorized visitor use and require the use of native species. Revegetation plans should specify seed/plant source, seed/plant mixes, soil preparation, etc. Salvage vegetation from construction activities should be used to the extent possible.

Water Resources

- To prevent water pollution during construction, use erosion control measures, minimize discharge to streams and wet areas and regularly inspect construction equipment for leaks of petroleum and other chemicals.
- Standard best management practices to limit erosion and control sediment release would be employed. Such measures would include but not be limited to the use of silt fencing, limiting the area of vegetative disturbance, use of erosion mats, and covering banked soils to protect them until they are reused. To avoid introduction of exotic plant species, no hay bales would be used to control soil erosion.

Wildlife

The Service will adopt park resource preservation, development, and use management strategies intended to maintain the natural population fluctuations and processes that influence the dynamics of individual plant and animal populations, groups of

1 plant and animal populations, and migratory animal
2 populations in parks.

3
4 In addition to maintaining all native plant and animal
5 species and their habitats inside parks, the
6 Service will work with other land managers to encourage
7 the conservation of the populations and
8 habitats of these species outside parks whenever
9 possible. To meet its commitments for maintaining
10 native species in the National Military Park, the
11 Service will cooperate with states, tribal governments,
12 the U.S. Fish and Wildlife Service, and
13 NOAA, as appropriate, to

- 14
15 • participate in local and regional scientific
16 and planning efforts, identify ranges of populations
17 of native plants and animals, and develop cooperative
18 strategies for maintaining or restoring these populations
19 in the parks;
- 20
21 • employ techniques to reduce impacts on
22 wildlife, including visitor education programs, restrictions
23 on visitor activities, and park ranger patrols;
- 24
25 • prevent the introduction of exotic, invasive,
26 or nuisance species into the National Military Park,
27 and remove, when possible, or otherwise contain
28 individuals or populations of these species that have
29 already become established in the park;
- 30
31 • and to include construction scheduling, biological
32 monitoring, erosion and sediment control, the use of
33 fencing or other means to protect sensitive resources
34 adjacent to construction, the removal of all food-related
35 items or rubbish, topsoil salvage, and revegetation.
36 This could include specific construction monitoring
37 by resource specialists as well as treatment and reporting
38 procedures.

39 Wetlands

40 The first priority for siting new facilities would be
41 to avoid wetlands and sensitive areas and to place
42 them as close to existing disturbances as feasible.
43 NPS will delineate wetlands and apply protection
44 measures during construction. Qualified NPS staff
45 or certified wetlands specialists would delineate
46 wetlands and clearly mark them before construction
47 work. Construction activities will be conducted in

48 a cautious manner to prevent damage caused by
49 equipment, erosion, siltation, etc.

50 Visitor Safety and Experiences

51 While recognizing that there are limitations on its
52 capability to totally eliminate all hazards, Kings
53 Mountain National Military Park and its contractors,
54 partners, and cooperators will seek to provide
55 a safe and healthful environment for visitors and
56 employees. The National Military Park will work
57 cooperatively with other federal, tribal, state, and
58 local agencies; organizations; and individuals to
59 carry out this responsibility. Kings Mountain will
60 strive to identify and prevent injuries from recognizable
61 threats to the safety and health of all visitors and
62 employees. The National Military Park will endeavor
63 to preserve the optimum condition of property by
64 applying nationally accepted codes, standards,
65 engineering principles, and the guidance contained
66 in Director's Orders #50B (Occupational Safety and
67 Health Program), #50C (Park Signs), #58 (Structural
68 Fire Management), and #83 (Public Health) and their
69 associated reference manuals.

70 The National Military Park recognizes that the
71 natural and cultural resources it protects are not
72 only visitor attractions, but that some may also be
73 potentially hazardous. Therefore, when practicable
74 and consistent with congressionally designated
75 purposes and mandates, Kings Mountain will reduce
76 or remove known hazards and apply other appropriate
77 measures, including closures, guarding, signing, or
78 other forms of education. In doing so, the National
79 Military Park's preferred actions will be those that
80 have the least impact on park resources and values.

81 Specific strategies with regard to mitigative
82 measures that are common to all alternatives for
83 visitor safety and experiences would include:

- 84 • Implementation of traffic control plans, as
85 warranted. Standard measures include strategies to
86 maintain safe and efficient traffic flow during any
87 construction period.
- 88 • Consideration of accessibility in each project
89 to understand barriers to programs and facilities.
90 Provide the maximum level of accessibility that is
91 consistent with law, regulation, and policy.

- Implementation of adaptive visitor use management, when resource and visitor experience conditions are trending towards or violating a user capacity standard. Management strategies may include visitor education, site management, visitor use regulations, rationing or reallocation of visitor use, and enforcement.

Hazardous Materials

Implement a spill prevention and pollution control program for hazardous materials. Standard measures could include hazardous materials storage and handling procedures; spill containment, cleanup, and reporting procedures; and limitation of refueling and other hazardous activities to upland/non-sensitive sites.

Noise Abatement

Mitigative measures would be applied to protect the natural sounds in the national park. Specific mitigative measures would include but not be limited to the following:

- Implement standard noise abatement measures during construction. Standard noise abatement measures could include the following elements: a schedule that minimizes impacts on adjacent noise sensitive uses, the use of the best available noise control techniques wherever feasible, the use of hydraulically or electrically powered impact tools when feasible, and the location of stationary noise sources as far from sensitive uses as possible.
- Implement standard noise abatement measures during park operations. Standard noise abatement measures could include, but are not limited to the following strategies: a schedule that minimizes impacts on adjacent noise-sensitive uses, use of the best available noise control techniques wherever feasible, use of hydraulically or electrically powered impact tools when feasible and appropriate, and location of stationary noise sources as far from sensitive uses as possible.
- Site and design facilities to minimize objectionable noise.

- Construct and use traffic-calming devices and strategies to reduce vehicle noise in the park.

Scenic Resources

Mitigative measures are designed to minimize visual intrusions. These include the following:

- Where appropriate, use facilities such as fences to route people away from sensitive natural and cultural resources, while still permitting access to important viewpoints.
- Design, site, and construct facilities to avoid or minimize adverse effects on natural and cultural resources and visual intrusion into the natural and/or cultural landscape.
- Provide vegetative screening, where appropriate.

Socioeconomic Environment

During the future planning and implementation of the approved management plan for Kings Mountain National Military Park, the National Park Service would work with local communities and governments to identify potential impacts and mitigative measures that would best serve the interests and concerns of both the National Park Service and these communities.

Sustainable Design and Aesthetics

Projects would avoid or minimize adverse impacts on natural and cultural resources. Development projects (e.g., buildings, utilities, roads, bridges, trails, etc.) or reconstruction projects (e.g., road reconstruction, building rehabilitation, utility upgrade, etc.) would be designed to work in harmony with the surroundings, particularly to blend with its natural surroundings. Projects would reduce, minimize, or eliminate air and water nonpoint-source pollution. Projects would be sustainable whenever practicable, by recycling and reusing materials, by minimizing materials, by reducing the impacts from artificial lighting through design, selection and operation, and by minimizing energy consumption during the project, throughout the lifespan of the project.



KINGS CREEK

TABLE 9 - SUMMARY OF IMPACTS

Topic	Alternative A	Alternative B	Alternative C
CULTURAL RESOURCES			
Archeological Resources	Permanent, negligible to minor, and adverse. <i>Cumulative:</i> Permanent, minor to moderate, and adverse.	Permanent, negligible to minor, and adverse. <i>Cumulative:</i> Permanent, minor to moderate, and adverse. The actions contained in Alternative B would contribute a negligible increment to this cumulative impact.	Permanent, negligible to minor, and adverse. <i>Cumulative:</i> Permanent, minor to moderate, and adverse. The actions contained in Alternative C would contribute a negligible increment to this cumulative impact.
Museum Collections	Permanent and beneficial. <i>Cumulative:</i> Permanent and beneficial. The actions contained in Alternative A would contribute a major increment to this cumulative impact.	Permanent and beneficial. <i>Cumulative:</i> Permanent and beneficial. The actions contained in Alternative A would contribute a major increment to this cumulative impact.	Permanent and beneficial. <i>Cumulative:</i> Permanent and beneficial. The actions contained in Alternative C would contribute a major increment to this cumulative impact.
Historic Structures	Short-term, negligible to minor, and adverse. <i>Cumulative:</i> Impacts to historic structures in the region are unknown. The actions contained in Alternative A would constitute a negligible increment to this cumulative impact.	Permanent, minor to moderate, and adverse. <i>Cumulative:</i> Impacts to historic structures in the region are unknown. The actions contained in Alternative B would constitute a negligible increment to this cumulative impact.	Permanent, minor to moderate, and adverse. <i>Cumulative:</i> Impacts to historic structures in the region are unknown. The actions contained in Alternative C would constitute a negligible increment to this cumulative impact.
Cultural Landscapes	Long-term and beneficial. <i>Cumulative:</i> long-term beneficial and minor to moderate adverse. Alternative A would contribute a minor increment to this cumulative impact.	Long-term and beneficial. <i>Cumulative:</i> long-term beneficial and minor to moderate adverse. Alternative B would contribute a major increment to this cumulative impact.	Long-term, beneficial and neutral. <i>Cumulative:</i> long-term beneficial and minor to moderate adverse. Alternative C would contribute a major increment to this cumulative impact.
NATURAL RESOURCES			
Geology and Soils	Short and long-term, negligible to minor, localized, and adverse. <i>Cumulative:</i> long-term, moderate to major, and adverse. The actions contained in Alternative A would contribute a negligible increment to this cumulative impact.	Localized, long-term, minor, and adverse. <i>Cumulative:</i> long-term, moderate to major, and adverse. The actions contained in Alternative B would contribute a negligible increment to this cumulative impact.	Localized, long-term, minor, and adverse. <i>Cumulative:</i> long-term, moderate to major, and adverse. The actions contained in Alternative C would contribute a negligible increment to this cumulative impact.

Topic	Alternative A	Alternative B	Alternative C
Plant Communities and Vegetation	Long-term, negligible to minor, localized, and adverse. <i>Cumulative:</i> long-term, moderate to major, and adverse. The actions contained in Alternative A would contribute a negligible increment to this cumulative impact.	Long-term, localized, moderate, and adverse. <i>Cumulative:</i> long-term, moderate to major, and adverse. The actions contained in Alternative B would contribute a negligible increment to this cumulative impact.	Long-term, localized, moderate, and adverse. <i>Cumulative:</i> long-term, moderate to major, and adverse. The actions contained in Alternative C would contribute a negligible increment to this cumulative impact.
Fish and Wildlife	Long-term beneficial and long-term, minor, and adverse. <i>Cumulative:</i> long-term, moderate, and adverse. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.	Long-term beneficial and long-term, minor, and adverse. <i>Cumulative:</i> long-term, moderate, and adverse. The actions contained in Alternative B would contribute a very small increment to this cumulative impact.	Long-term beneficial and long-term, minor, and adverse. <i>Cumulative:</i> long-term, moderate, and adverse. The actions contained in Alternative C would contribute a very small increment to this cumulative impact.
Special Status Species	Long-term, localized and beneficial and minor adverse. <i>Cumulative:</i> long-term, moderate, adverse cumulative impact on special status species. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.	Non-existent to negligible and adverse. <i>Cumulative:</i> long-term, moderate, adverse cumulative impact on special status species. The actions contained in Alternative B would contribute a very small increment to this cumulative impact.	Long-term, localized and beneficial. <i>Cumulative:</i> long-term, moderate, adverse cumulative impact on special status species. The actions contained in Alternative C would contribute a very small increment to this cumulative impact.
Water Quality	Long-term, negligible to minor, indirect, and adverse. <i>Cumulative:</i> long-term, adverse cumulative impact on water quality in the watershed. The intensity of the impact is unknown. The actions contained in Alternative A would contribute a negligible adverse increment to this cumulative impact.	Long-term, minor to moderate, localized, and adverse. <i>Cumulative:</i> long-term, adverse cumulative impact on water quality in the watershed. The intensity of the impact is unknown. The actions contained in Alternative B would contribute a negligible adverse increment to this cumulative impact.	Long-term, negligible to minor, localized, and adverse. <i>Cumulative:</i> long-term, adverse cumulative impact on water quality in the watershed. The intensity of the impact is unknown. The actions contained in Alternative C would contribute a negligible adverse increment to this cumulative impact.
Acoustic Environment and Sound-scape	Long-term, minor to moderate, and adverse. <i>Cumulative:</i> Long-term, moderate, and adverse impacts, especially during the winter, from traffic noise on I-85 and from trains on the rail line that runs through Blacksburg west of the park and to the north of I-85.	Long-term, minor to moderate, and adverse. <i>Cumulative:</i> Long-term, moderate, and adverse impacts, especially during the winter, from traffic noise on I-85 and from trains on the rail line that runs through Blacksburg west of the park and to the north of I-85.	Long-term, minor to moderate, and adverse. <i>Cumulative:</i> Long-term, moderate, and adverse impacts, especially during the winter, from traffic noise on I-85 and from trains on the rail line that runs through Blacksburg west of the park and to the north of I-85.
VISITOR USE AND EXPERIENCE			
Visitor Use and	Long-term and beneficial.	Long-term and beneficial.	Long-term and beneficial.

Topic	Alternative A	Alternative B	Alternative C
Experience	<i>Cumulative:</i> Long-term and beneficial. The actions contained in Alternative A would not contribute an appreciable increment to this cumulative impact.	<i>Cumulative:</i> Long-term and beneficial. The actions contained in Alternative B would not contribute an appreciable increment to this cumulative impact.	<i>Cumulative:</i> Long-term and beneficial. The actions contained in Alternative C would not contribute an appreciable increment to this cumulative impact.
Socioeconomic Environment	Long-term, negligible, and neutral. <i>Cumulative:</i> Long-term, localized and beneficial. Alternative A would contribute a negligible increment to this cumulative impact.	Short-term and beneficial. <i>Cumulative:</i> Long-term, localized and beneficial. Alternative B would contribute a negligible increment to this cumulative impact.	Short-term and beneficial. <i>Cumulative:</i> Long-term, localized and beneficial. Alternative C would contribute a negligible increment to this cumulative impact.
Transportation	None of the alternatives proposed in this general management plan would change transportation patterns inside the park to any significant degree.	Same as alternative A.	Same as alternative A.
NPS OPERATIONS AND MANAGEMENT			
NPS Operations and Management	Long-term, minor, and neutral. <i>Cumulative:</i> Long-term, minor to moderate, and adverse. Combined with other past, present, and reasonably foreseeable future impacts, the no-action alternative would result in minor to moderate, long-term, neutral cumulative impacts on NPS operations.	Long-term beneficial. <i>Cumulative:</i> Long-term, minor to moderate, and adverse. Combined with other past, present, and reasonably foreseeable future impacts, Alternative B would result in minor to moderate, long-term, neutral cumulative impacts on NPS operations.	Long-term beneficial. <i>Cumulative:</i> Long-term, minor to moderate, and adverse. Combined with other past, present, and reasonably foreseeable future impacts, Alternative B would result in minor to moderate, long-term, neutral cumulative impacts on NPS operations.

FUTURE STUDIES AND IMPLEMENTATION PLANS NEEDED

After completion and approval of a general management plan for managing the National Military Park, other more detailed studies and plans would be needed for implementation of specific actions. As required, additional environmental compliance (NEPA, NHPA, and other relevant laws and policies), and public involvement, would be conducted. Those additional studies include but would not be limited to the following:

- Completion of cultural landscape reports for the Howser house and the Goforth-Morris Norman farmstead — A cultural landscape report is the primary guide to treatment and use of a cultural landscape. Based on the historic context provided in a historic resource study, a cultural landscape report documents the characteristics, features, materials, and qualities that make a landscape eligible for the National Register.
- Resource stewardship strategy — As a program planning document, the resource stewardship strategy serves as a link between the military park's general management plan and its strategic planning, wherein the military park's personnel and financial resources are allocated to implement resource stewardship actions. The resource stewardship strategy identifies specific components of the military park resources to target for management during the next 20 years, establishes methods to evaluate the status of these components, determines measurable targets for resources, and evaluates whether

the resources are currently meeting targets. Subject matter experts review resource stewardship strategy documents before finalization; however, they are not publicly reviewed compliance documents.

- Ethnographic overview and assessment — The most comprehensive background study, this document reviews existing information on military park resources traditionally valued by stakeholders. This study also documents the need for further research on cultural affiliations, important events and associated places in the park, and traditional uses and ways of life.

ALTERNATIVES AND ACTIONS CONSIDERED BUT DISMISSED FROM DETAILED EVALUATION

During the planning process for Kings Mountain National Military Park, other alternative concepts and elements of concepts were presented and then dismissed from further consideration.

Boundary Expansion: Early issue scoping revealed a concern by park managers that urban growth on the park's western boundary could result in increased commuter traffic through the park with associated safety concerns and traffic noise concerns. Discussions about potential boundary expansions led to the conclusion that potential acquisition costs and lack of legislative support for acquisition of buffer zones would make such proposals highly unlikely to be successful. Therefore this proposal was dropped from further consideration.

CHAPTER 3 — AFFECTED ENVIRONMENT

INTRODUCTION

The Affected Environment and Environmental Consequences chapters comprise the Environmental Assessment (EA) for this General Management Plan. The descriptions, data, and analysis presented focus on the specific conditions or consequences that may result from implementing the alternatives. The EA should not be considered a comprehensive description of all aspects of the human environment within or surrounding the park.

A description of existing environmental conditions gives the reader a better understanding of planning issues and establishes a benchmark by which the magnitude of environmental effects of the various alternatives can be compared.

This chapter describes the existing environment of Kings Mountain National Military Park and the surrounding region. The focus is on park resources, visitor uses and experiences, socioeconomic environment, and park operations and facilities that proposed actions contained within the alternatives could impact. The planning team selected these topics based on federal laws and regulations, executive orders, NPS expertise, and concerns expressed by other agencies or members of the public during scoping for this management plan. The conditions described in this chapter establish the baseline for the evaluation of environmental consequences that appear in Chapter 4.

The Council on Environmental Quality (1987) guidelines for implementing NEPA requires that the description of the affected environment focus on describing the resources which implementation of the alternatives described in Chapter 2 might affect. To enhance reader understanding, the first section of this chapter gives a broad overview of the park, its resources, and its regional context. The following sections provide more detailed descriptions of the existing condition of these park resources.

Location and Setting

Kings Mountain National Military Park is located primarily in York County, South Carolina with additional acreage in Cherokee County, South Carolina. The park encompasses a total of 3945.29 acres. Kings Mountain State Park adjoins the southeastern border of Kings Mountain National Military Park, which in turn adjoins Crowders Mountain State Park in North Carolina, thus creating a continuous band of national and state parks that is important in preserving critical ecosystems. The immediate vicinity of Kings Mountain is relatively rural, but its location is within a one-hour drive of several larger population areas along the Interstate 85 corridor. Interstate 85 is less than three miles from the northern park boundary. The closest towns to the National Military Park, Blacksburg, Clover, and York, in South Carolina, and Kings Mountain, North Carolina, had a total 2014 population less than 27,000, but Gastonia, and metropolitan Charlotte, in North Carolina less than 35 miles to the east, had a total 2014 population greater than 1,000,000 and are growing toward this rural area.

Nearest Cities to Kings Mountain National Military Park

TABLE 10 - NEAREST CITIES TO KINGS MOUNTAIN

City	State	Distance from Kings Mountain National Military Park
Kings Mountain	NC	10 miles north
Shelby	NC	18 miles northwest
Gastonia	NC	18 miles northeast
Blacksburg	SC	8 miles west
Clover	SC	8 miles west
York	SC	17 miles southeast
Gaffney	SC	18 miles west
Charlotte	SC	30 miles east
Spartanburg	SC	35 miles west
Greenville	SC	65 miles west
Columbia	SC	80 miles south

Population

The population in Cherokee County, South Carolina according to the 2010 United States Census was 55,342. For York County, South Carolina the figure was 226,073. The population of Gaston County, North Carolina was 206,086 in

2010 and for Cleveland County, North Carolina it was 98,078 in 2010. For Mecklenburg County, North Carolina the 2010 census showed a population of 919,628, which includes Charlotte, the largest city in the state. So the total population within 30 or 40 miles of Kings Mountain National Military Park is well over a million people.

Regional Land Use and Projects

The immediate counties surrounding Kings Mountain National Military Park have a large impact on land development adjacent to park property. Currently, the surrounding land is rural and low-density rural residential, but due to the proximity of the Charlotte region, I-85, and I-77 these land uses could change. The primary impact to changing land uses on the edges of the park would be altered viewsheds and/or increased commuter traffic on the main park road.

Interstate Highways 85 and 77 influence ongoing development planning in the region occupied by the National Military Park. Interstate Highway 77 bisects York on its eastern side and I-85 bisects Cherokee County on its northern side. The State of South Carolina widened SC Highway No. 5 from two to five lanes a few years ago. This project connected I-85 west of the park and east of Blacksburg, South Carolina to I-77 southeast of the park through York and Rock Hill, South Carolina. Widening the Highway 5 corridor placed the park in a triangle of relatively undeveloped land surrounded by three major thoroughfares selected for industrial and commercial development.

Kings Mountain is located in north-central South Carolina at the western edge of the Piedmont physiographic province. The Piedmont is a zone of rolling to hilly terrain about 100 miles wide that extends from the fall line, where it where it meets the Atlantic Coastal Plain, to the Blue Ridge Mountain range, which begins about 20 miles to the northwest of Kings Mountain. The terrain of the Kings Mountain area has been shaped by water into a landscape of dissected ridges with narrow, irregular bottomlands. Streams and rivers begin on the slopes and flow toward the Broad River, which is located about 9 miles to the west. The Broad, like other rivers of the Piedmont, flows from the Blue Ridge

foothills southeastward toward the Atlantic Ocean following the overall slope of the land. United States Geological Survey (USGS) topographic maps series show that elevation within the park ranges from approximately 700 to 1,000 feet above mean sea level. Kings Mountain itself is a geological feature known as a monadnock – a remnant of rock that is more erosion-resistant than those around it. Over millions of years, weathering and erosion removed the softer materials, leaving an isolated mountain of stone that was probably once a spur of the Blue Ridge chain (Cornelison, 2006).

Climate

Kings Mountain National Military Park is located in the upper piedmont region of South Carolina. South Carolina's climate is considered humid subtropical with hot summers, average temperatures around 89 degrees Fahrenheit, and mild winters, average temperatures around 57 degrees Fahrenheit, although this pattern is affected by factors such as elevation and distance from the ocean. Average January temperatures in the Kings Mountain area are in the low 40s (Fahrenheit) while July averages are in the upper 70s (Fahrenheit).

Average rainfall is about 47 inches annually that is evenly distributed through the year. For example, eight months have a 30-year precipitation average that ranges from 3.9 to 4.2 inches. Statistically the wettest and driest months are March (4.7 inches) and April (2.9 inches), respectively (Weeks, 2002).

Climate change is expected to affect the park's weather, natural resources (e.g. vegetation and wildlife), cultural resources, and visitors (e.g. seasonal use patterns, hiking, camping, and other visitor opportunities). Climate change is likely to affect the park during the life of this plan; the rate of change and severity of impacts cannot be predicted precisely and thus park management will need to be flexible and responsive to continuously changing conditions.

Access

State Road 216, called Battleground Road outside the park boundary and Park Road inside the park, connects Kings Mountain National Military Park to Interstate Highway 85 and bordering Kings Mountain State Park. This is the main paved street access to park offices, maintenance facilities, and the National Military Park visitor center as well as Kings Mountain State Park. Park Road becomes Battleground Road, and York County Road 705, after exiting Kings Mountain State Park on the northeastern boundary. The park is most frequently accessed from Interstate Highway 85 Exit 2 in North Carolina, but county road connections and other I-85 exits can be used for Kings Mountain National Military Park access on the eastern and southern boundaries.

Unpaved Piedmont Road runs through the National Military Park and is used for fire management and maintenance activities. It continues into Kings Mountain State Park and becomes paved County Rd 731 outside the park boundary.

Historic, unimproved, and gated Yorkville-Shelbyville Road bisects the northern section of the park for 3.2 miles above Kings Mountain and merges with County Rd 2288 (Rock House Road) outside the National Military Park boundary.

Howser Road, a gravel road which runs east-west from Park Road to Stone House Road, provides access to the Howser house. Howser Road is currently gated and the Howser house is not open to the public without a special reservation.

Overgrown and unimproved historic Colonial Road runs across the battlefield from Park Road. The Overmountain Victory soldiers used this historic road at the Battle of Kings Mountain.

Bicycle racks are present at the Visitor Center at the base of Kings Mountain. No bicycle lanes or sidewalks are present along Main Park Road. A paved walking trail links the Visitors Center with the Kings Mountain Battlefield. Unpaved hiking trails allow visitors to traverse the National Military Park and Kings Mountain State Park on circuitous routes.

CULTURAL RESOURCES

Archeological Resources

Although Kings Mountain National Military Park contains several significant archeological sites within its boundary such as the Howser House grounds and cemetery, the principal archeological resource is the historic battlefield on which the Battle of Kings Mountain took place on October 7, 1780. Archeologists from the National Park Service's Southeast Archeological Center, used ammunition and other artifacts recovered from this site to determine troop locations, Patriot access routes up the mountain, and locations where Loyalist troops stood, fired, and died.

Yet, archeological evidence has also shown that many other humans have visited Kings Mountain National Military Park over thousands of years. Prehistoric evidence in the form of a Morrow Mountain Point, dating from 4700 to 4300 B.C., turned up while excavating a more recent structure from the late 19th century. Archeologists detected several possible burials from the battle of Kings Mountain in close proximity to the Major Chronicle and Major Ferguson monuments. Civil War ammunition and a button were uncovered accidentally. In addition, President Hoover's visit on October 7, 1930 left evidence of a one-day road, comfort stations, and stages.

During the archeological survey, researchers recovered 139 Revolutionary War period artifacts, including 81 fired and 54 unfired lead shot from the battle. The locations of these rounds clearly show the location of the assaults up Kings Mountain. The artifacts formed five clusters. The first cluster is located on the southwest end of the ridge. At the time of the survey this area was not considered to be part of the battlefield. Using the most accepted interpretation of troop positions, this southwest cluster represents Sevier's assault (Draper, 1971). Continuing northeast up the ridge, another cluster is located to the north. This cluster represents the assault of Shelby's men. These two areas are gentle slopes where the top of the ridge can be mounted without much difficulty. It is logical to assume that the assaulting Patriot force would

1 take the easiest route up the ridge and, in fact,
2 the physical evidence bore this out.
3
4 Preservation of archeological resources in the
5 earth depends on a delicate balance of condi-
6 tions. Alterations to these conditions resulting
7 from climate change may reduce the chance of
8 artifacts' survival. For example, periodic in-
9 creases in stream flow, resulting from more in-
10 tense storm events, may cause deterioration to
11 archeological sites because of greater erosion.
12 Both historic and prehistoric archeological re-
13 sources may be exposed and stability compro-
14 mised causing them to be subject to the ex-
15 tremes of temperature and precipitation that may
16 be anticipated with climate changes in the re-
17 gion. Exposure of archeological sites would also
18 make them more vulnerable to looting and van-
19 dalism. Land use types that exist in fixed places,
20 like national parks and Native American reser-
21 vations, are particularly vulnerable to the effects
22 of climate change because they cannot adapt by
23 relocating in response to changes in natural con-
24 ditions (Smith et al. 2001).

25 **Historic Structures**

26
27
28 Many historic resources are located within the
29 boundaries of Kings Mountain National Military
30 Park. The historical significance of the land-
31 scape within Kings Mountain is marked by evi-
32 dence of 18th century farming and backcountry
33 life in addition to the battlefield, monuments to
34 fallen soldiers, a presidential address, and Na-
35 tional Park Service management. The second
36 oldest monument in the United States, erected in
37 1815 to Major William Chronicle, stands on the
38 Kings Mountain Battlefield.

39
40 The Henry Howser house, built in 1803 and
41 listed in the National Register of Historic Places
42 in 1966, still stands to demonstrate the 18th cen-
43 tury stonemason's craft. The structure is unusual
44 in material and design for backcountry South
45 Carolina at the time. It demonstrates the gradual
46 assimilation of German immigrant families into
47 continental culture of the day. The design blends
48 German craftsmanship with a Continental floor
49 plan. The home's masterful stone construction is
50 the primary reason it still exists today. Addi-
51 tional structures associated with the Howsers
52 include the Howser Cemetery, Howser Terraces,
53 seven outbuilding foundations, and Howser
54 Road. The Howsers and their descendants occu-

55 pied the Kings Mountain area from the late 18th
56 century to the early 20th century (Blythe, Car-
57 roll, Moffson, 1995).

58
TABLE 11 - HISTORIC PROPERTIES

Contributing Historic Resources	Date of Origin
Battleground Road (Colonial Road)	Before 1780
Centennial Monument	1880
Chronicle Marker	1815
Ferguson Fell Marker	1909
Ferguson Grave Marker and Cairn	1909
Goforth-Morris Norman House	1902
Gordon Cemetery	1800-1860
Henry Howser house	1803
Howser Cemetery	1811-1900
Howser Outbuilding Sites (7)	1790-1882
"New" Chronicle Marker	1909
U.S. Monument	1909
Yorkville-Shelbyville Road	1808
Administration Building	1940-1941
Administration Building Flagstaff	1941
Administration Building Parking Area	1939-1943
Chronicle Fell Marker	1925
Colonel Asbury Coward Marker	1931
Colonel Frederick Hambright Marker	1939
Howser Terraces	1880-1920
Howser Road	1800
Kings Mountain Battlefield	1780
Main Park Road	1937-1941
"New" Ferguson Grave Marker	1930
Norman Shed	1940
President Hoover Marker	1931
Stone House Road (Dillingham Road)	1808-1827
Superintendent's Residence	1940-1941

59 (Blythe, Carroll, Moffson, 1995)

60
61 Another dwelling, the Goforth-Morris Norman
62 House, represents the more common design of
63 early 20th century South Carolina vernacular.
64 The home retains its original integrity. It faces
65 the Yorkville-Shelbyville Road, of historic sig-
66 nificance in itself. The historic Norman Shed is
67 a remnant of the Norman family farm (Blythe,
68 Carroll, Moffson, 1995).

69
70 Two cemeteries and the foundations of outbuild-
71 ings retain historical significance on NPS prop-
72 erty. The Gordon Cemetery and Howser Ceme-
73 tery both date to the 19th century. Several foun-
74 dations, a chimney, and other structural remains
75 lie along the historic Yorkville-Shelbyville Road
76 and other remaining portions of historic roads
77 that can still be observed as traces across the
78 landscape (Blythe, Carroll, Moffson, 1995).

From the period of 1936-1942, the National Park Service organized CCC workers with Public Works Administration (PWA) funding to develop plans and structures for the National Military Park. Progress started with construction of the Main Park Road. Main Park Road was designed to follow President Hoover's 1930 One-Day Road to the battlefield, but veered further south to avoid visually impacting the historic scene from the battlefield ridge. Completed in 1937, Main Park Road was accompanied by two parking areas under NPS design to allow visitors to access a foot trail to the battlefield ridge on the southeastern side of the battlefield. Currently, Main Park Road and the lowest parking area (the current administration building parking area) are listed as historically significant. The upper parking area was removed in the 1970s and only the lower parking area remains from the historic period (Blythe, Carroll, Moffson, 1995).

The next phase of development at Kings Mountain consisted of visitor facilities for interpretation and demonstration. In 1939, NPS built an amphitheater in a depression east of Main Park Road and used it for the 159th commemoration of the Battle of Kings Mountain on October 7. Construction began in 1940 for the Administration Building. Closely linked to the Colonial Revival style NPS design used at other eastern NPS parks, the Administration Building was built to house offices for rangers, a large common room, museum room, and restrooms. Many landscape design elements such as flagstone walks and a flagstaff are concurrent with the historic significance of the building. The amphitheater is not significant due to alterations over the years (Blythe, Carroll, Moffson, 1995).

The superintendent's residence followed a similar Colonial Revival style. Construction began in 1940, but due to labor shortages was not occupied until the end of WWII. The structure maintains historical significance (Blythe, Carroll, Moffson, 1995).

Cultural Landscapes

In September of 2010, the South Carolina State Historic Preservation Officer approved the Cultural Landscapes Inventory (CLI) for Kings Mountain National Military Park, which included all land within the park boundary as a cultural landscape. The site of the Battle of Kings

Mountain and associated commemorative monuments, around and upon Battleground Ridge, form the focus of Kings Mountain as a cultural landscape. Two other specifically recognized areas, the Howser Farmstead and Goforth-Morris Norman Farmstead are listed as cultural landscapes unrelated to the Battle of Kings Mountain, but are located within Kings Mountain National Military Park. Both of these properties date to periods after the battle, but retain integrity and are significant in their own right for their representation of local historic land use and architecture.

Kings Mountain National Military Park contains several historic roads, some of which were in use during the time of the Battle of Kings Mountain in 1780. Historic roads and road traces connect the approach of the Overmountain Victory Fighters to Battleground Ridge, the battle location. Battleground Ridge, as a high point among a landscape of rolling hills, acted as natural buffer before the Battle of Kings Mountain between groups of Native Americans, the Catawba and Cherokee. Colonial settlers moved into the area before the battle and growing farmsteads were visible from Kings Mountain in the years after the battle. The cultural landscape present at Kings Mountain is intricately linked to these historic roads.

Cultural association to Kings Mountain National Military Park is also linked specifically to the historic road traces used by Native Americans and later by the Overmountain Victory Fighters. The landscape within Kings Mountain National Military Park has retained a rural character associated with the landscape at the time of the Battle of Kings Mountain. Despite some new development outside park boundaries and modern park structures, the landscape greatly resembles the setting at the Battle of Kings Mountain on October 7, 1780.

The park's Administration Building (the original park visitor center) and Superintendent's Residence (now an administrative annex to the headquarters building) together with the surrounding flagstone contribute to a designed park development plan more fully expressed in the adjoining Kings Mountain State Park, but intact within the national military park. Combined with circulation systems, recreational facilities, and interpretive structures, the Administration-Museum Building and the Superintendent's Res-

idence represent one form of the rustic style of architecture and landscape design philosophy employed by the National Park Service from 1917 through World War II. These buildings represent the last phase in the development of the rustic style in the East and, under National Register Evaluation Criterion C, embody distinctive characteristics of a type, period, or method of construction.

Museum Collections

Kings Mountain National Military Park maintains a museum space inside the Visitor Center, built in 1975, at the base of Kings Mountain. Museum exhibits include clothing, weapons, and personal items from life during the late 18th and 19th century in addition to artifacts acquired from archeological investigation of the Kings Mountain Battlefield. The museum collection is displayed in the Visitor Center and stored in a second floor climate controlled room in the Park Headquarters building.

Specific museum items include muskets and rifles dating from the Revolutionary War that demonstrate how technology in weaponry affected the outcome of the Battle of Kings Mountain. An original Ferguson Rifle, an early rifle designed by Major Ferguson, a central figure at the Battle of Kings Mountain, is an important interpretive piece. Knives, bayonets, tomahawks, Colonel Hambricht's sword, and various musket balls complete the display of period weapons.

Costume and lifestyle items from beyond the Revolutionary War period and into the 18th Century are displayed to show rural South Carolina pioneer life. Dishes, axes, weaving tools, musical instruments, hunting horns, and period flags interpret the pioneer family's daily life.

Museum collections include:

- Ferguson Rifle.
- Weapons associated with the Revolutionary War including long rifles.
- All archives.
- Archaeology material gathered during excavations.
- Howser family objects.
- Natural history specimens.

In June of 2010 the National Parks Conservation Association published one of its "State of the Parks" series on Kings Mountain National Military Park. The following section is a direct quote from that report:

"Although the park does a good job managing its museum collections, additional curatorial and storage space and updated security measures are needed for collection items not stored in the recently renovated museum. According to the park's collection storage plan, at least 500 additional square feet of storage space are needed and Park Service project funds have been requested to address this need. Another potential solution would be to construct a facility to store collections from Kings Mountain and nearby parks pertaining to the American Revolutionary War and related themes. However, no plans are yet under way for such a facility." (National Parks Conservation Association, *State of the Parks® - Kings Mountain National Military Park, A Resource Assessment*, June 2010)

NATURAL RESOURCES

Geology and Soils

Kings Mountain National Military Park is located in the north-central Piedmont region of South Carolina. Rocks of the Piedmont region occur in belts in conform to the regional northeasterly trend of major structural features. The belts are delineated by gross differences in rock types, grade of metamorphism, and structure. In general there are broad bands, many miles wide, of rather coarsely crystalline granites, schists, and gneisses alternating with broad bands of finer grained rocks called slate, shale, phyllite, argillite, or sericite schist (Horton, 1981).

Kings Mountain National Military Park is located in the Kings Mountain belt, which is bounded on the northwest by the Inner Piedmont belt and on the southeast by the Charlotte belt. The Kings Mountain belt includes distinctive metasedimentary rocks such as quartzite, conglomerate, and marble associated with mica schists that are partly volcanic in origin (King, 1955). The belt begins near the Catawba River in North Carolina, extending southwest for 80 km through Gaffney, South Carolina (Butler, 1965).

The soils of Kings Mountain are classified in the Tatum-Nason-Manteo association in the soil descriptions given for the two counties where the park is located. The steeper ridge slopes and land along larger streams are typically Manteo, a shallow channery silt loam with the thin or discontinuous B horizon of clay or silty clay. The soil has developed from the weathered schist bedrock, which is very close to the surface, less than 60 cm, or even exposed in some areas. The Tatum soils occupy the gentler slopes around the battlefield ridge. These are deeper soils, but also developed from the underlying schist, which is typically 1-10 meters below the surface. Tatum soils are silt loam or silty clay loam with red silty clay subsoil. The Nason series, which is a minor type at Kings Mountain, is similar to Tatum and are typically found in lower areas. Nason soils consist of silt loam over mottled silty clay subsoils. All of the soils in the association are rated as low to very low in natural fertility and acidic (Camp, 1961).

Plant Communities and Vegetation (Including Exotic, Nonnative, and Nuisance Species)

Carolina Piedmont forests, like Kings Mountain, typically include both hardwoods such as oak and hickory plus shortleaf pines and red cedar in areas where forest succession is underway. Dogwood, red maple and sourwood provide the understory in older forests. Different combinations of soils, drainage and aspect create a mosaic of localized variations within the region. The result is many ecological zones and, therefore, variety of resources (Cornelison, 2006).

The specific vegetation at Kings Mountain National Military Park reflects a long history of anthropogenic disturbance and manipulation. Clear-cutting for farming took place as the area was settled in the latter part of the 18th century. In the early 19th century, cattle were raised until the land became overgrazed. In the 1890s, cotton became the cash crop, but due to the depletion of the land, cotton production steadily decreased in the 1930s. In addition to clearing the land, the early residents introduced many species of exotic plants. Many of these plants have become a permanent part of the vegetation community like yucca and honeysuckle. There are 21 known exotic and/or invasive plant spe-

cies in the park. Exotic or invasive plants can have severe effects on the integrity of native systems and habitats. Visitors can be agents for seed dispersal, increasing the threat to native plant communities. Exotic species are managed by the National Park Service Southeast Region Exotic Plant Management Team and park staff.

TABLE 12 – INVASIVE PLANTS OF KINGS MOUNTAIN NATIONAL MILITARY PARK

Scientific Name	Common Name
<i>Ligustrum sinensis</i>	Chinese privet
<i>Albizia julibrissin</i>	mimosa
<i>Ailanthus altissima</i>	tree-of-heaven
<i>Paulownia tomentosa</i>	princess tree
<i>Multiflora rose</i>	multiflora rose
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Pueraria montana</i>	kudzu
<i>Wisteria sinensis</i>	wisteria
<i>Microstegium sinensis</i>	Japanese stiltgrass
<i>Sorghum halepense</i>	Johnson grass
<i>Lespedeza cuneata</i>	Chinese lespedeza
<i>Carduus nutans</i>	nodding plumless thistle
<i>Verbascum thapsus</i>	woolly mullein
<i>Vinca minor</i>	periwinkle
<i>Hedera helix</i>	English Ivy
<i>Elaeagnus pungens</i>	silverthorn or thorny olive
<i>Dioscorea bulbifera</i>	air yam
<i>Nandina domestica</i>	nandina
<i>Ligustrum lucidum</i>	glossy privet
<i>Populus alba</i>	white poplar
<i>Pyrus calleryana</i>	Bradford Pear

Years of farming, before King Mountain National Military Park was established, shaped the present forest environment at Kings Mountain. As of 2010, Kings Mountain National Military Park contains four distinct forest communities including Piedmont/Low Mountain Alluvial forest, Mesic Mixed Hardwood Forest, Piedmont Monadnock Forest, and Chestnut Oak Forest. Forest composition at Kings Mountain is dependent more by soil moisture content than nutrient content due to nutrients being leached out of the soil and carried by rainwater to lower lying areas. Therefore lower elevation, moister floodplain areas, have a greater density and diversity of herbaceous and shrub layers (Kenne-more, 1995).

Fish and Wildlife

Common animal species in the Piedmont are white-tailed deer, turkey, squirrel, gray fox, opossum, skunk, black bear, bobcat, and wolf.

1 Freshwater species include bullhead, bowfin,
2 channel cat, largemouth bass and crappie (Cor-
3 nelison, 2006).
4
5 Four animal species listed as threatened or en-
6 dangered have habitat within Kings Mountain
7 National Military Park. The northern cricket
8 frog (*Acris crepitans crepitans*), Carolina darter
9 (*Etheostoma collis*), bald eagle (*Haliaeetus leu-*
10 *cocephalus*), and Pickerel frog (*Rana palustris*)
11 occur in York County (South Carolina Depart-
12 ment of Natural Resources, 2012). Due to exist-
13 ing habitat at the park, potential presence for
14 some of these species is high. For example, the
15 small streams in the National Military Park offer
16 prime habitat for the Carolina darter, according
17 to the South Carolina Department of Natural
18 Resources. There are no threatened or endan-
19 gered animal species specifically listed in Cher-
20 okee County (South Carolina Department of
21 Natural Resources, 2012).
22 [http://www.dnr.sc.gov/species/pdf/Cherokee201](http://www.dnr.sc.gov/species/pdf/Cherokee2014.pdf)
23 [4.pdf](http://www.dnr.sc.gov/species/pdf/Cherokee2014.pdf)
24 [http://www.dnr.sc.gov/species/pdf/York2014.pd](http://www.dnr.sc.gov/species/pdf/York2014.pdf)
25 [f](http://www.dnr.sc.gov/species/pdf/York2014.pdf)
26
27

28 **Special Status Species**

29
30 Numerous animal and plant species found in
31 both York and Cherokee counties are State
32 listed as threatened or endangered. See Table 12
33 for specific animal species and status and Table
34 13 for State listed plant species and status. See
35 Table 14 for Federally listed threatened and en-
36 dangered species in York and Cherokee Coun-
37 ties, South Carolina. None of the Federally
38 listed species have been documented to exist in
39 the park except for the Georgia Aster (*Symphy-*
40 *otrichum georgianum*). With regard to State
41 listed fauna, only the Carolina darter (*Etheosto-*
42 *ma collis*) (Source: Mark C. Scott, Ph.D., South
43 Carolina Department of Natural Resources, *In-*
44 *ventory of Fishes in Kings Mountain National*
45 *Military Park*, November 30, 2006) has been
46 documented to exist in the park. However, the
47 potential is also there for the Pickerel frog (*Ra-*
48 *na palustris*). (Source: Robert N. Reed, J. Whit-
49 field Gibbons, University of Georgia Research
50 Foundation, *Results of herpetofaunal surveys of*
51 *five national park units in North and South Car-*
52 *olina – Final Report*, Prepared for the National
53 Park Service under Contract H5028 020388,
54 September 16, 2005). Seven state-listed plants
55 have been documented in the park. They are
56 shown shaded grey in Table 14.

57
58
TABLE 13 - STATE SPECIAL STATUS SPECIES (FAUNA)

Scientific Name	Common Name	Legal Status
<i>Acris crepitans crepitans</i>	Northern Cricket Frog	SC
<i>Etheostoma collis</i>	Carolina Darter	SC
<i>Haliaeetus leucocephalus</i>	Bald Eagle	FT/SC
<i>Rana palustris</i>	Pickerel Frog	SC

59 South Carolina Threatened and Endangered Fauna Species for York County (South Carolina De-
60 partment of Natural Resources, 2012).
61
62

TABLE 14 - STATE SPECIAL STATUS SPECIES (FLORA)

Scientific Name	Common Name	Legal Status
<i>Agalinis auriculata</i> ¹	earleaf foxglove	SC
<i>Agrimonia pubescens</i> ¹	soft groovebur	SC
<i>Allium cernuum</i> ²	nodding onion	SC
<i>Amphianthus pusillus</i> ¹	pool sprite	FT/ST
<i>Aster georgianus</i> ³	Georgia Sprite	SC
<i>Aster laevis</i> ¹	smooth blue aster	SC
<i>Camassia Scilloides</i> ¹	wild hyacinth	RC
<i>Carex Scabrata</i> ²	rough sedge	SC
<i>Cyperus granitophilus</i> ¹	granite-loving flatsedge	SC
<i>Dasistoma macrophylla</i> ¹	mullein foxglove	SC
<i>Eleocharis palustris</i> ¹	spike-rush	SC
<i>Elimia catenaria</i> ¹	gravel elimia	SC
<i>Elymus riparius</i> ¹	wild-rye	SC
<i>Eupatorium sessilifolium var vaseyi</i> ¹	upland boneset	SC
<i>Helianthus laevigatus</i> ³	smooth sunflower	SC
<i>Helianthus Schweinitzii</i> ¹	Schweinitz's Sunflower	FE/SE
<i>Hexastylis naniflora</i> ²	dwarf-flower heartleaf	FT/ST
<i>Hydrangea cinerea</i> ²	ashy hydrangea	SC
<i>Hymenocallis coronaria</i> ¹	Shoals Spider-Lily	NC
<i>Isoetes piedmontana</i> ¹	Piedmont Quillwort	SC
<i>Juncus georgianus</i> ¹	Georgia Rush	SC
<i>Lilium canadense</i> ¹	Canada Lily	SC
<i>Lipocarpa micrantha</i> ¹	dwarf bulrush	SC
<i>Melanthium virginicum</i> ¹	Virginia Bunchflower	SC
<i>Menispermum canadense</i> ³	Canada Moonseed	SC
<i>Minuartia uniflora</i> ¹	one-flower stitchwort	SC
<i>Najas flexilis</i> ¹	slender naiad	SC
<i>Oxypolis canbi</i> ¹	Canby's Dropwort	FE/SE
<i>Panax quinquefolius</i> ¹	American Ginseng	RC
<i>Poa alsodes</i> ¹	blue-grass	SC
<i>Quercus bicolor</i> ¹	swamp white oak	SC
<i>Quercus oglethorpensis</i> ¹	Oglethorpe's Oak	SC
<i>Ranunculus fascicularis</i> ¹	early buttercup	SC
<i>Ratibida pinnata</i> ¹	gray-head prairie coneflower	SC
<i>Rudbeckia heliopsisidis</i> ¹	sun-facing coneflower	NC
<i>Scutellaria parvula</i> ¹	small skullcap	SC
<i>Silphium terebinthinaceum</i> ¹	prairie rosinweed	SC
<i>Solidago ptarmicoides</i> ¹	prairie goldenrod	SC
<i>Solidago rigida</i> ¹	stiff goldenrod	SC
<i>Thermopsis mollis</i> ¹	Allegheny Mountain Golden-banner	SC
<i>Tiarella cordifolia var cordifolia</i> ¹	heart-leaved foam flower	SC
<i>Torreyochloa pallida</i> ¹	pale mana grass	SC
<i>Verbena simplex</i> ¹	narrow-leaved vervain	SC
<i>Veronicastrum virginicum</i> ¹	Culver's-Foot	SC
<i>Xerophyllum asphodeloides</i> ²	eastern turkeybeard	SC

South Carolina Rare, Threatened & Endangered Flora Species for Cherokee and York Counties (South Carolina Department of Natural Resources, 2012). State listed species are shaded in gray.

NOTE: ¹ Species found in York County, ² Species found in Cherokee County, ³ Species found in York and Cherokee counties.

TABLE 15 - FEDERALLY LISTED THREATENED AND ENDANGERED SPECIES			
Scientific Name	Common Name	Federal Status	Federal Agency with Jurisdiction
Birds			
<i>Haliaeetus leucocephalus</i>	Bald Eagle	Recovery	USFWS
Clams			
<i>Lasmigona decorata</i>	Carolina Heelsplitter	Endangered	USFWS
Flowering Plants			
<i>Amphianthus pusillus</i>	Little amphianthus	Threatened	USFWS
<i>Hexastylis naniflora</i>	Dwarf-flowered heartleaf	Threatened	USFWS
<i>Helianthus schweinitzii</i>	Schweinitz's sunflower	Endangered	USFWS
<i>Symphyotrichum georgianum</i>	Georgia aster	Candidate	USFWS

Source: U. S. Fish and Wildlife Service website; accessed 7/7/2017
<https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=45091>
<https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=45021>

Water Resources

Kings Mountain National Military Park encompasses a variety of surface water resources, from floodplain habitat to mountain seeps and streams. The Kings Creek Drainage receives input from the northwest portion of the park. Dellingham Branch and Stonehouse Branch convey water toward the northwest into Kings Creek, which defines the park boundary in that area. The Long Branch drainage receives input for the eastern half of the park and conveys water toward the southeast out of the park. The Garner Branch drained receives input from the southwest sector of the park and conveys water toward the southwest and eventually into Kings Creek south of the park. All of the streams are part of the Broad River drainage (Weeks, 2002).

Kings Mountain is at the top of its watershed, resulting in minimal external influence on park water resources. This environmental setting appears ideal for an NPS unit with regards to protecting and preserving the water resources. Over half of the National Military Park's boundary (south and east) is shared with Kings Mountain State Park, providing additional protection to the natural systems. This is supported by a two-year study at Kings Mountain, where water quality data suggest that the water resources within the park boundary are relatively unimpacted. Kings Creek, which forms a small part of the park's northwest boundary, is the exception. Most of Kings Creek's watershed lies outside the protection of federal and state lands. Land use within this watershed includes agriculture, mining, and rural residential, which can contribute to water

quality impacts on both surface and ground water systems (Weeks, 2002).

The trails in the National Military Park cross Garner Branch, Stonehouse Branch, Long Branch, and unnamed tributaries. These stream crossings are particularly sensitive to bacteria contamination from horse and human sources. At these locations, management to buffer these areas may be warranted, in order to minimize the potential of animal or human wastes entering directly or within close proximity of a body of water (Weeks, 2002).

Kings Mountain National Military Park is located with a United States Geological Survey National Water-Quality Assessment (NAWQA) study basin' the Santee River Basin and Coastal Drainage established in 1994. The long-term goals of NAWQA are to describe the status of and trends in the quality of a large representative part of the Nation's surface- and groundwater resources, and to identify all major factors that affect the quality of these resources. NAWQA emphasis is on regional-scale water quality problems. Regional scale issues of concern in the Santee River Basin according to Hughes in 2001 include:

1. Enrichment by nitrogen and phosphorus. Determining the capacity of rivers to assimilate wastewater from treatment plants without causing environmental degradation and the contribution of point and non-point source pollution to nutrient enrichment has been a major task for environmental agencies.

2. Sediment erosion due to agricultural practices of the 19th and 20th centuries.
3. Runoff that includes trace elements and synthetic organic compounds from urban areas.
4. Pesticide and nutrient contamination. Although farming within the basin has steadily declined since the 1920s, agriculture accounted for 18 percent of land use in 1970.

(Weeks, 2002) According to Hughes (2001)

Acoustic Environment and Soundscapes

Natural soundscapes exist in the absence of human-caused sound. Some natural sounds are part of the biological or physical resources of the National Military Park. Examples of such natural sounds include:

- Sounds produced by birds, frogs, or insects to define territories or attract mates
- Sounds produced by physical processes such as wind in the trees, flowing water, or claps of thunder

In Kings Mountain National Military Park, human caused sounds are most noticeable along paved roads and in developed areas such as the visitor center, main parking lot, and picnic area. The level of noise varies by location and time of year according to scheduled events and visitation levels. Noise can affect the park unit by annoying visitors, interrupting interpretive programs, making verbal communication difficult, and affecting wildlife behavior.

Threats to natural soundscapes come primarily from activities on lands adjacent to the National Military Park boundaries, such as vehicle traffic, occasional construction, and some industrial activity. As of 2015, the most consistent threat to natural soundscapes occurs from motorcycle operators along Park Road/SR S 11 21.

Wetlands

NPS units are required to preserve natural wetland characteristics and functions, minimizing wetland degradation and loss, and avoiding new construction in wetlands. The NPS implements a “no net loss of wetlands” policy. Executive Order 11990 directs the NPS 1) to provide lead-

ership and to take action to minimize the destruction, loss, or degradation of wetlands; 2) to preserve and enhance the natural and beneficial values of wetlands; and 3) to avoid direct or indirect support of new construction in wetlands unless there are no practicable alternatives to such construction.

Hydrologists characterize wetlands by soil type and a diversity of vegetation, including trees, shrubs, and herbaceous ground covers. Wetlands provide a variety of beneficial functions from supplying habitat for a variety of wildlife, storage and attenuation of floodwaters, trapping silts and other sediments during floods, to biologically filtering contaminants from surface waters.

Wetlands are found throughout Kings Mountain National Military Park and occur in a variety of landscape positions from floodplains of streams to discharge points on steep slopes, with the most common association being stream drainages. The primary type of hydrology is groundwater discharge. Overbank flooding is not the primary source of hydrology for any wetland at Kings Mountain (Morgan, Roberts, Peterson, 2006).

Seventy-four individual wetlands have been located and characterized within the park boundaries. These wetlands totaled approximately 4.25 acres, with the average wetland size being approximately 0.06 acres. Based on the Cowardin system, forty-six wetlands were classified as palustrine, forested, and deciduous (PFO1) with varying hydrologic regimes. Forty-two wetlands were considered temporarily flooded (PFO1A) and four was considered seasonally flooded (PFO1C). Twenty-six wetlands were considered palustrine scrub-shrub (PSS). Of these, 22 were considered to be temporarily flooded and dominated by deciduous vegetation (PSS1A), while one was considered to be seasonally flooded (PSS1C). The remaining three PSS wetlands were temporarily flooded and dominated by evergreen vegetation (PSS3A). One wetland was considered a palustrine emergent system that was temporarily flooded (PEM1A). The remaining wetland was considered a riverine system that is intermittently flooded within a streambed dominated by rubble (R4SB2). Based on the Hydrogeomorphic (HGM) classification system, seventy-one of the sites were slope wetlands and three were riverine. (Morgan, Roberts, Peterson, 2006).

Floodplains

All federal agencies are required to avoid building in a 100-year floodplain unless no other practical alternative exists. The NPS has adopted guidelines pursuant to Executive Order 11998 stating that NPS policy is to restore and preserve natural floodplain values and avoid environmental impacts associated with the occupation and modification of floodplains. The guidelines also require that, where practicable alternative exist, Class I action be avoided within a 100-year floodplain. Class I actions include the location or construction of administration, residential, warehouse, and maintenance buildings, non-excepted parking lots, or other manmade features that by their nature entice or require individuals to occupy the site.

The upland topography of Kings Mountain National Military Park eliminates significant floodplains. Floodplains that encompass the streams originating or passing through Kings Mountain National Military Park are outside the federal park boundary.

VISITOR USE AND EXPERIENCE

TABLE 16 - ANNUAL VISITATION FIGURES

Fiscal Year	Recreational	Percentage Change*
2016	263,357	2.44%
2015	257,077	2.38%
2014	251,093	1.40%
2013	247,632	-6.80%
2012	265,713	-2.43%
2011	272,325	-1.17%
2010	275,555	-0.73%
2009	277,576	8.85%
2008	254,997	-2.78%
2007	262,283	1.16%
2006	259,287	-3.39%
2005	268,394	-0.04%
2004	268,504	-1.32%
2003	272,106	2.65%
2002	265,077	-0.87%
2001	267,402	3.85%
2000	257,499	1.31%
1999	254,158	0.35%
1998	253,283	6.61%
1997	237,579	4.33%
1996	227,709	-0.89%
1995	229,746	0.43%
1994	228,759	-1.69%

Fiscal Year	Recreational	Percentage Change*
1993	232,688	1.04%
1992	230,285	-1.56%
1991	233,941	7.80%
1990	217,011	-5.07%
*Percent change from previous year		

Total visitation at Kings Mountain National Military Park has increased by 30.91% since 1990. Recreation visitation and non-recreation visitation have been close in number since 1990, creating a total visitation range between 416,441 and 545,817. The population increase of the Charlotte, NC area combined with greater commuter traffic through Kings Mountain National Military Park can be attributed to an increase in both recreation and non-recreation visitation since 1990.

Trails

Kings Mountain National Military Park contains the final segment of the Overmountain Victory National Historic Trail, which is an integral part of the history of the Battle of Kings Mountain. The park also maintains both hiking and horse trails for visitors. Excluding the 1.5 mile Battlefield Trail located at the National Military Park Visitor Center, these trails run continuously between Kings Mountain National Military Park and Kings Mountain State Park. The Ridgeline Trail connects Kings Mountain National Military Park and Kings Mountain State Park with the Crowders Mountain State Park, a NC State Park.

Battlefield Trail – The 1.5 mile self-guiding trail allows visitors to see both perspectives on the battlefield. Wayside exhibits around the trail highlight battle events. The Centennial Monument, U.S. Monument, and Ferguson's Grave are key features along the trail.

This paved trail is open to foot travel only with the exception of motorized wheelchairs. Although the trail is paved, it is steep in places. Benches are located around the trail.

Backcountry Hiking Trails – together, the National and State parks offer 16 miles of backcountry hiking trails. Hikers must register at the visitor center before hiking on backcountry trails. There are three trails as well as equestrian access:

- Park Loop Trail: 16 miles loop passing through both parks
- The Park Loop Trail also connects to a 2.5-mile trail in the Kings Mountain State Park, which links, at the North Carolina/South Carolina state line, to the Crowder's Mountain State Park (North Carolina) Ridgeline Trail, a 6.2-mile trail that ends near the summit of Kings Pinnacle.
- Browns Mountain Trail: 2.5 mile trail from the visitor center to Browns Mountain Clarks Creek Trail: 3 mile trail from the visitor center to Lake Crawford located in Kings Mountain State Park
- Equestrian Access: A single equestrian trail passes through Kings Mountain National Military Park from Kings Mountain State Park with the trailhead located in the State Park where parking and animal handling facilities are available.

SOCIOECONOMIC ENVIRONMENT

The study area of Kings Mountain National Military Park is located along the Interstate 85 corridor that links major population centers along the Southeast Piedmont Region. From Birmingham, AL to Petersburg, VA, I-85 forms a chain of major metropolitan areas quickly growing together. Kings Mountain is centrally located along the I-85 corridor. Originally envisioned as a military memorial park, Kings Mountain has become a recreation destination for residents living in the growing communities along Interstate-85 nearby.

Kings Mountain NMP is located near the northern border of South Carolina within an hour's drive of Greenville, South Carolina and Charlotte, North Carolina. The park hosted 251,093 recreation visitors in 2014.

The local region was defined as a four county area covering Cherokee and York counties in South Carolina and Cleveland and Gaston counties in North Carolina. This region roughly coincides with the one hour driving distance for which visitor spending was reported in the visitor survey. The region had an estimated population of 629,281 in 2016, which is a 7.5% increase from the 2010 U.S. Census figure of

585,579. Source: U.S. Census Website, <https://www.census.gov> Accessed 7/7/2017.



U.S. Monument

CHAPTER 4 — ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

The National Environmental Policy Act (NEPA) requires that environmental documents discuss the environmental impacts of a proposed federal action, feasible alternatives to that action, and any adverse environmental effects that cannot be avoided if the proposed action is implemented. In this case, the proposed federal action would be the adoption of a general management plan for Kings Mountain National Military Park. The following portion of this document analyzes the environmental impacts of implementing each of the three alternatives on natural resources, cultural resources, the visitor experience, the socioeconomic environment, and park operations. The analysis is the basis for comparing the beneficial and adverse effects of implementing each of the three management alternatives. By examining the environmental consequences of all alternatives on an equivalent basis, decision-makers can evaluate which approach would provide the greatest beneficial results with the fewest adverse effects on the park.

Because of the general, conceptual nature of the actions described in the alternatives, the impacts of these actions are analyzed in general qualitative terms. Thus, this environmental assessment should be considered a programmatic analysis. If, and when site-specific developments or other actions are proposed for implementation subsequent to this *General Management Plan*, appropriate detailed environmental and cultural compliance documentation will be prepared in accordance with requirements of NEPA and the National Historic Preservation Act (NHPA).

This chapter begins with a description of the methods and assumptions used for analyzing impacts. The impact analyses follow next, organized by alternative and then by impact topic under each alternative. All of the impact topics are assessed for each alternative. The existing conditions for each impact topic are described in Chapter 3 (“Affected Environment”). For each impact topic, there is an analysis of the beneficial and adverse effects of implementing the alternative, a description of cumulative impacts (in which this plan is considered in conjunction with other actions occurring in the region), and a conclusion. The impacts of each alternative are

briefly summarized in Table 9 (Chapter 2, page 61).

METHODS AND ASSUMPTIONS FOR ANALYZING IMPACTS

The planning team based the impact analysis and the conclusions in this chapter largely on a review of existing literature and studies, information provided by experts in the National Park Service and other agencies, and park staff insights and professional judgment. The team’s method of analyzing impacts is further explained below. It is important to remember that all the impacts have been assessed assuming mitigation measures have been implemented to minimize or avoid impacts. If mitigation measures described in Chapter 2 (“Alternatives Including the Preferred Alternative”) were not applied, the potential for resource impacts and the magnitude of those impacts would increase.

Identification of Impacts

Director’s Order 12 and Handbook: Conservation Planning, Environmental Impact Analysis, and Decision Making presents an approach to identifying the impacts of a particular alternative. The analysis considers the duration (short or long-term), type (adverse or beneficial), context (the setting within which an effect would occur), and intensity or magnitude (e.g., negligible, minor, moderate, or major) of impacts. This is the approach that has been used in this document. Where quantitative data were not available, best professional judgment was used to identify impacts.

Unless otherwise described under a specific impact topic, the **duration** of an impact is defined as follows:

Short-Term – Impacts that would last less than one year and could be *temporary* in nature.

Long-Term – Impacts that would last one year or longer and could be *permanent*.

Impacts are evaluated by **type**, i.e., whether the impacts would be *beneficial* or *adverse*.

Beneficial impacts would improve park resources, the visitor experience, or park

operations. Adverse impacts would negatively affect park resources, the visitor experience, or park operations. Neutral impacts would be virtually undetectable or would be equally adverse and beneficial.

Direct and *indirect* impacts caused by an action are considered in the analysis. Direct impacts are caused by an action and occur at the same time and place as the action. Indirect impacts are caused by the action and occur later in time or farther removed from the place, but are still reasonably foreseeable.

The analysis also considers the **setting** of impacts for each impact topic. Unless otherwise indicated, the setting for each impact topic is Kings Mountain National Military Park.

In this document, the definition of impact **intensity** varies by impact topic. Individual intensity definitions can be found in Table 17.

CLIMATE CHANGE

The impacts of climate change on the National Military Park are not expected to differ among the alternatives, and the lack of quantitative information about climate change effects adds to the difficulty of predicting how these impacts will be realized within the boundaries of Kings Mountain National Military Park. For example, climate change may impact the park's cultural resources. Unprotected sites in both the National Military Park and the adjacent Kings Mountain State Park are especially vulnerable to increased erosion from increased storm frequency and intensity. Changes in the pH of precipitation (i.e., acid rain) due to greenhouse gases and other air pollution can degrade historic structures and monuments. The visitor experience may diminish as archeological and historic resources become compromised, lose integrity, and are lost due to climate change.

Climate change will also likely affect the vegetation and wildlife communities of the park because of the projected changes in annual temperature and precipitation, and increases in extreme weather events. Some models predict an increase while others predict a decrease in precipitation in this region of the country. However, the rate and magnitude of these changes to

specific populations of plants and animals is difficult to predict.

The range of variability in the potential effects of climate change is large in comparison to what we know about the future under an altered climate regime in the National Military Park in particular. Therefore, the potential effects of this dynamic climate on National Military Park resources were included in "Chapter 3, Affected Environment." However, they will not be analyzed in detail in "Chapter 4, Environmental Consequences" with respect to each alternative because of the uncertainty and variability of outcomes, and because these impacts are not expected to differ among the alternatives.

Although many specific effects of climate change, and the rates of changes, are not known at the present time, additional monitoring data and climate change modeling will become available during the life of this *General Management Plan*. The best available scientific climate change data and modeling and adaptation decision support tools will be incorporated into specific management planning, decisions, or actions that may be taken under any of the alternatives described in this plan.

IMPACT TOPICS

The following impact topics are addressed in this environmental assessment:

Cultural Resources

Method for Assessing Effects on Cultural Resources. This environmental assessment addresses the effects of the three plan alternatives on cultural resources – archeological sites, cultural landscapes, historic and prehistoric structures, and museum collections – that are proposed by actions in this General Management Plan. The method for assessing effects on cultural resources is designed to comply with the requirements of both NEPA and Section 106 of the NHPA, and with implementing regulations 40 CFR 1500 and 36 CFR 800, respectively, while considering the differences between NEPA and NHPA language and recognizing that compliance with one does not automatically mean compliance with the other. Accordingly, the assessment of effects discusses the following characteristics of effects:

- Direct and indirect effects
 - Duration of the effect (short-term, long-term)
 - Context of the effect (site-specific, local, regional)
 - Intensity of the effect (negligible, minor, moderate, major, both adverse and beneficial)
 - Cumulative nature of the effect
- In accordance with 36 CFR 800, the regulations implementing Section 106 of NHPA, effects on cultural resources are identified and evaluated by:
- Determining the area of potential effect (APE) [800.4(a)]
 - Identifying historic properties in the APE that are listed in or eligible for listing in the National Register of Historic Places [800.4(b)-(c)]. The results are either:
 - *No historic properties affected* – either there are no historic properties present or there are historic properties present but the undertaking will have no effect upon them [800.4(d)(1)]; or
 - *Historic properties affected* – there are historic properties that may be affected by the undertaking [800.4(d)(2)].
 - Applying the criteria of adverse effect to affected historic properties in the area of APE [800.5.(a)(1)], as follows:
 - An *adverse effect* is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner than would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all

- qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. [examples of adverse effect are provided in 800.5(a)(2)]
- A finding of *no adverse effect* is found when the undertaking's effects do not meet the criteria of 800.5(a)(1) [800.5.(b)].
- Considering ways to avoid, minimize, or mitigate or otherwise resolve adverse effects. The following are considered:
 - Consultation with the SHPO/THPO and others to develop and evaluate strategies to mitigate adverse effects [800.6].
 - CEQ regulations and Director's Order 12 call for the discussion of mitigating impacts and an analysis of how effective the mitigation would be in reducing the intensity of an impact, such as reducing it from moderate to minor intensity. Any resultant reduction in impact intensity is, however, an estimate of the effectiveness of mitigation under NEPA only.
 - Such reduction in impact intensity does not suggest that the level of effect as defined by Section 106 and 36 CFR 800 is similarly reduced. Cultural resources are non-renewable resources and adverse effects generally consume, diminish, or destroy the original historic materials or form, resulting in a loss of integrity that can never be recovered. Therefore, although actions determined to have an adverse effect under Section 106 and 36 CFR 800 may be mitigated, the effect remains adverse.

A Section 106 Summary is included in the impact analysis sections. The Section 106 summary provides an assessment of effect of the undertaking (implementation of the alternative), on historic properties, based on the Section 106 regulations cited above.

Definitions for impact intensity for archeological resources, cultural landscapes, ethnographic resources, historic and prehistoric structures, and museum collections are provided in Table 17.

Natural Resources

The natural resource impact topics analyzed in this document are *climate, geology and soils, plant communities and vegetation, fish and wildlife, special status species, and water quality*. Information about known resources was compiled and compared with the locations of proposed developments and other actions. The impact analysis was based on the knowledge and best professional judgment of planners and biologists; data from park records; and studies of similar actions and effects, when applicable. The planning team qualitatively evaluated the intensities of effects on all the natural resource impact topics.

Definitions of impact intensity with regard to climate, soils/geologic resources, plant communities/vegetation, fish and wildlife, water quality, floodplains, and wetlands are set forth in Table 17.

Visitor Use and Experience

This impact analysis considers various aspects of visitor use and experience at Kings Mountain National Military Park, including the effects on: the range of recreational opportunities; opportunities for solitude and getting in touch with nature; visitor access including access for visitors with disabilities; opportunities for orientation, education, and interpretation; and visitor safety. The analysis is primarily qualitative rather than quantitative due to the conceptual nature of the alternatives.

Impacts on visitor use and experience were determined considering the best available information regarding visitor use and experience. Information on visitor use and visitor opinions

was taken from data in park files. This information was supplemented by data gathered during the planning process for this management plan, including opinions from National Military Park visitors and neighbors and information provided by National Military Park staff.

Definitions of impact intensity as regards visitor use and experience are set forth in Table 17.

Socioeconomic Environment

Kings Mountain National Military Park primarily operates within the local social and economic environment of the surrounding communities in York County, South Carolina and Cherokee County, South Carolina. The Charlotte-Mecklenburg County, North Carolina Metropolitan Statistical Area is in close proximity to Kings Mountain National Military Park resulting in a regional influence of a large population center. As a result, actions proposed in the alternatives could have a direct effect on some parts of the social and economic environment of the region. In the socioeconomic analysis, the duration of effects is considered to be either short term (lasting less than one year), or long-term (lasting more than one year). Long-term effects could be considered as a permanent change in conditions.

Acoustic Environment and Soundscape

Effects on soundscapes are most likely from short-term construction projects, regular maintenance using lawnmowers, chainsaws, etc., from traffic noise on the main access road into and through the National Military Park, from traffic noise on I-85, and from trains on the rail line that runs through Blacksburg west of the park and to the north of I-85. Any management activities related to mitigating noise would be the same for all alternatives and would result in long-term beneficial impacts. None of the alternatives addressed in this GMP would change transportation patterns inside the park to any significant degree.

Definition of impact intensity as regards transportation projects are set forth in Table 17.

1 **NPS Operations and Management**

2
3 The impacts of the alternatives on park operations and facilities were determined by examining the effects and changes on staffing, infrastructure, visitor facilities, and services.

7
8 Definition of impact intensity as regards NPS operations and management are set forth in Table 17.

13 Duration: Long-term: Effects last more than 1
14 year. Short-Term: Effects last less than one
15 year.



BATTLE ANNIVERSARY COMMEMORATION

TABLE 17 - IMPACT INTENSITY DEFINITIONS

Impact Topic	Negligible	Minor	Moderate	Major
CULTURAL RESOURCES				
Archeological Resources	The effect would be at the lowest levels of detection, barely measurable, with no perceptible consequences	The effect is measurable or perceptible, but it is slight and affects a limited area of a site or group of sites.	The effect is measurable and perceptible. The effect changes one or more of the characteristics that qualify the site(s) for inclusion in the National Register.	The effect on the archeological site or group of sites is substantial, noticeable, and permanent.
Museum Collections	The effect would be at the lowest levels of detection, barely perceptible, with no measurable consequences.	The effect is measurable or perceptible, but it is slight and affects the integrity of a few items in the museum collection	The effect is measurable and perceptible, and would affect the integrity of many items in the collection	The effect on the collection is substantial, noticeable, and permanent, and would affect the integrity of most items in the
Historic Structures	The effect would be at the lowest levels of detection, barely measurable, with no perceptible consequences.	The effect is measurable or perceptible, but it is slight and affects a limited area of a structure or group of structures.	The effect is measurable and perceptible. The effect changes one or more of the characteristics that qualify the structure(s) for inclusion in the National.	The effect on the structure or group of structures is substantial, noticeable, and permanent. The action severely changes one or more characteristics that qualify the structure(s) for inclusion in the National Register.
Cultural Landscapes	The effect would be at the lowest levels of detection, barely measurable, with no perceptible consequences.	The effect is measurable or perceptible, but it is slight and affects a limited area of the landscape or few of its patterns or features.	The effect on the patterns and features of the landscape is measurable and perceptible. The effect changes one or more of the characteristics that qualify the landscape for inclusion in the National Register.	The effect on the cultural landscape, its patterns and features, is substantial, noticeable, and permanent.
NATURAL RESOURCES				
Geology and Soils	The action would result in a change in soils or a geologic feature but the change would be at the lowest level of detection, or not measurable.	The action would result in a detectable change, but the change would be slight and local. Soils or geologic resources might be slightly altered in a way that would be noticeable.	The action would result in a clearly detectable change in soils or geologic processes – soils would be obviously altered, or a few features would show changes.	The action would result in the permanent loss of an important soil or geologic resource or there would be highly noticeable, widespread changes in many soils or features.

Impact Topic	Negligible	Minor	Moderate	Major
Plant Communities and Vegetation (including exotic, nonnative, and nuisance plants)	The action might result in a change in vegetation, but the change would not be measurable or would be at the lowest level of detection.	The action might result in a detectable change, but the change would be slight. This could include changes in the abundance, distribution, or composition of individual species in a local area.	The action would result in a clearly detectable change in a vegetation community and could have an appreciable effect. This could include changes in the abundance, distribution.	The action would be severely adverse to a vegetation community. The impacts would be substantial and highly noticeable, and they could result in widespread change. This could include changes in the abundance, distribution, or composition of a nearby vegetation community or plant populations in the park.
Fish and Wildlife	The action might result in a change, but the change would not be measurable or would be at the lowest level of detection.	The action might result in a detectable change, but the change would be slight and have a local effect on population. This could include changes in the abundance or distribution of individual in a local area. Changes to local ecological processes would be minimal.	The action would result in a clearly detectable change in a population and could have an appreciable effect. This could include changes in the abundance or distribution of local populations. Changes to local ecological processes would be of limited extent.	The action would be severely adverse to a population. The effects would be substantial and highly noticeable, and they could result in widespread change and be permanent. This could include changes in the abundance of or distribution of a local or regional population. Important ecological processes would be altered, and "landscape-level" (regional) changes would be expected.
Water Quality	The action would have no measurable or detectable effect on water quality or the timing and intensity of flows.	The action would have measurable effects on water quality or the timing or intensity of flows. Water quality effects could include increased or decreased loads of sediment, debris, chemical or toxic substances, or pathogenic organisms.	The action would have clearly detectable effects on water quality or the timing or intensity of surface water flows and potentially would affect organisms or natural ecological processes. The impact would be visible to visitors.	The action would have substantial effects on water quality or the timing or intensity of surface water flows and potentially would affect organisms or natural ecological processes. The impact would be easily visible to visitors.
VISITOR USE AND EXPERIENCE				
Visitation of Historic Sites / Recreational Activities	Visitors would likely be unaware of any effects associated with implementation of the alternative. There would be no noticeable changes	Changes in visitor use and/or experience would be slight but detectable, but would not appreciably diminish or enhance critical charac-	Few critical characteristics of the desired visitor experience would change and/or the number of participants engaging in an	Multiple critical characteristics of the desired visitor experience would change and/or the number of participants engaging in

Impact Topic	Negligible	Minor	Moderate	Major
	in visitor use and/or experience or in any defined indicators of visitor satisfaction or behavior.	teristics of the visitor experience. Visitor satisfaction would remain stable.	activity would be altered. The visitor would be aware of the effects associated with implementation of the alternative and would likely be able to express an opinion on the changes. Visitor satisfaction would begin to either decline or increase as a direct result of the effect.	an activity would be greatly reduced or increased. The visitor would be aware of the effects associated with implementation of the alternative and would likely express a strong opinion about the change. Visitor satisfaction would markedly decline or increase.
SOCIOECONOMIC ENVIRONMENT				
Local Economy	<p>The effect would be below detectable levels or detectable only through direct means, with no discernable effect on the character of the social and economic environment.</p> <p>Effects identified as neutral would be actions that do not produce any changes at all to the social and economic environment.</p>	The effect would be detectable but limited in geographic extent or size of population affected and not expected to alter the character of the established social and economic environment.	The effect would be readily detectable across a broad geographic area or segment of the community and could have an appreciable effect on the social and economic environment.	The effect would be readily apparent, affect a large segment of the population across the entire community and region, and would have substantial effect on the social and economic environment.
NPS Operations and Management				
NPS Operations and Management	The effect would be at or below the level of detection, and would not have an appreciable effect on park operations and management.	The effects would be detectable, but would be of a magnitude that would not have an appreciable effect on park operations and management.	The effects would result in a change in park operations and management in a manner readily apparent to staff and possibly to the public.	The effects would result in a substantial and widespread change in park operations and management in a manner readily apparent to staff and the public.
Transportation	The impact on transportation patterns would be barely perceptible, not measurable.	The impact on transportation patterns would be perceptible and measurable.	The impact on transportation patterns would be clearly detectable and could have an appreciable effect.	The impact on transportation patterns would have a substantial, highly noticeable influence on a regional scale.
Acoustic Environment and Soundscapes	Natural sounds would prevail; (activity) noise would be very infrequent or absent, mostly unmeasurable.	Natural sounds would predominate in areas where management objectives call for natural processes to predominate, with (activity) noise infrequent at low levels. In areas where (activity) noise is consistent with park purpose and objectives, natural	In areas where management objectives call for natural processes to predominate, natural sounds would predominate, but (activity) noise could occasionally be present at low to moderate levels. In areas where (activity) noise is consistent with park purpose	In areas where management objectives call for natural processes to predominate, natural sounds would be impacted by (activity) noise sources frequently or for extended periods of time. In areas where (activity) noise is consistent with park

Impact Topic	Negligible	Minor	Moderate	Major
		sounds could be heard occasionally.	and objectives, (activity) noise would predominate during daylight hours and would not be overly disruptive to noise-sensitive visitor activities in the area; in such areas, natural sounds could still be heard occasionally.	purpose and zoning, the natural soundscape would be impacted most of the day; noise would disrupt conversation for long periods of time; and/or make enjoyment of other activities in the area difficult; natural sounds would rarely be heard during the day.

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ANNUAL BATTLE COMMEMORATION

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CUMULATIVE IMPACT ANALYSIS

A cumulative impact is described in the Council on Environmental Quality's regulation 1508.7 as follows:

Cumulative impacts are incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other action. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.

To determine potential cumulative impacts, other projects within and surrounding Kings Mountain National Military Park were identified. The geographic area of consideration included York County and Cherokee county in South Carolina and Gaston County and Cleveland County in North Carolina. Discussions with park staff and representatives of county and city governments and internet searches resulted in the identification of projects. Potential projects identified as cumulative actions included any past activities and any planning or development activity that was currently being implemented, or that would be implemented in the reasonably foreseeable future.

These past, current, and reasonably foreseeable actions are evaluated in conjunction with the impacts of each alternative to determine if they have any cumulative effects on a particular natural, cultural, or socioeconomic resource or visitor use. The qualitative evaluation of cumulative impacts was based on a general description of the project.

Past, Current, and Foreseeable Actions That Could Contribute to Cumulative Effects

Actions and Projects inside Kings Mountain National Military Park.

Ongoing development of the Overmountain Victory Trail, in conjunction with a master planning process for a trail from Chesnee, SC through Cowpens National Battlefield to Battleground

Ridge at Kings Mountain, would have both long-term and short-term effects on the park. The long-term effects would be beneficial to the visitor experience because of improved and increased interpretation of this story through way-side exhibits and opening up of views of the Colonial road. Short-term effects would be minor and adverse due to some vegetative clearing and soil disturbance would take place along the trace of the Historic Colonial Road to develop the Overmountain Victory Trail.

Greater commuter traffic through Kings Mountain National Military Park as a result of expanding residential, commercial, and industrial development in the communities around the park.

The ongoing wildfire management program which includes fuel (dead or live vegetation such as grass, leaves, needles, vines, logs, branches, etc. that are highly combustible) removal by controlled burns and mechanical means would have both long-term and short-term effects on the park. The long-term effects would be beneficial to plant communities and forest ecology by removing exotic species and providing for the regeneration of native species. Wildfire management would also have long-term beneficial effects on visitor experience by complementing the enjoyment of the park's historical resources through the protection and enhancement of the natural resources that are at risk to a high degree by catastrophic wildfire.

Actions and Projects outside Kings Mountain National Military Park.

Greater commuter traffic development around Charlotte, NC and the Interstate 85 corridor east and north of Kings Mountain National Military Park has and will continue to have an effect on the park.

Duke Power plans to construct a nuclear power plant in Cherokee County, SC, on a site west of Kings Mountain sometime after the year 2020.

The Catawba Indian Tribe has petitioned North Carolina and the U.S. Department of the Interior (Bureau of Indian Affairs) for permission to build a casino and hotel entertainment complex just off I-85 at the Dixon School Road exit near

(about 4-5 miles) Kings Mountain National Military Park.

IMPACTS COMMON TO ALL ALTERNATIVES

Transportation

Under all of the alternatives, existing transportation flows within the National Military Park would be maintained in essentially their current form. Visitation levels may increase under all of the alternatives, due primarily to rising population in the local area and new employment opportunities within the commuting area. Traffic may increase on the main park road, also known as Battleground Road and South Carolina Highway 216. Impacts to the park's natural resources (particularly soils and geologic resources, vegetation, and wildlife) would be negligible to minor, long-term and adverse. However, impacts to the soundscape and visitor safety and enjoyment would be minor to moderate, long-term and adverse.

Public Health and Safety

There are inherent safety risks with park use such as crossing park roads, parking on road shoulders and activity-based hazards associated with recreational (use of trails by hikers and horse riders) activities, which would continue under all alternatives as a minor, adverse effect.

IMPACTS OF IMPLEMENTING ALTERNATIVE A (Continue Current Management)

Cultural Resources

Archeological Resources. Under Alternative A, impacts on archeological resources could result from visitor activities such as hiking, picnicking, and exploring. Trampling or disturbance could result in a loss of surface archeological materials, alteration of artifact distribution, and a reduction of contextual evidence. Impacts related to these activities would be permanent, adverse, and of negligible to minor intensity. Archeological resources adjacent to or easily accessible from roads or trails could be vulnerable to looting and vandalism. Continued ranger

patrol and emphasis on visitor education would minimize adverse effects and any adverse effects would be anticipated to range in intensity from negligible to minor and be permanent. There is no potential for impacts on archeological sites resulting from facility development.

Cumulative Impacts. Ongoing park management and visitor use activities have resulted in little disturbance of archeological resources at the military park. When the permanent, negligible to minor adverse effects of implementing the actions contained in Alternative A are added to the minor effects of other past, present, and reasonably foreseeable actions as described above, there would be a permanent, minor to moderate, adverse cumulative impact on archeological resources. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative A, impacts on archeological resources would be permanent, negligible to minor, and adverse. Cumulative impacts would be permanent, minor, and adverse. The actions contained in Alternative A would contribute a slight increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, *Assessment of Adverse Effects*), the NPS has determined that the adverse impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative A would have no adverse effect on archeological resources.

Museum Collections. The museum collections would continue to be stored in an environmentally controlled room located in the park headquarters building. Impacts to museum collections would be permanent and beneficial.

Cumulative Impacts—The National Park Service's *Park Museum Management Program* proposed the following strategic goals and objectives for 2011-2015:

- Promote professionalization of the NPS museum workforce through recruitment,

training, retention, and networking opportunities that support appropriate preservation, protection, and use of museum resources.

- Share knowledge gained through decades of responsible stewardship and use of NPS museum collections with the American public and with NPS staff.
- Apply the best available science, scholarly research, and sustainable management practices to the long-term care and management of NPS museum collections.
- Integrate use of museum objects, specimens, archives, and information into NPS resource management, education, and interpretative programs service-wide.

Conclusion. Impacts to museum collections would be permanent and beneficial. The actions under alternative A would contribute an insignificant amount to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, *Assessment of Adverse Effects*), the NPS has determined that the beneficial impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative A would have no adverse effect on museum collections.

Historic Structures. Under Alternative A, impacts to historic structures would continue to occur due to aging of the historic fabric, normal wear and tear, and vandalism. Use of the historic visitor center and the adjacent superintendent's residence as park headquarters, offices, and other administrative space would continue. Impacts for the most part would be temporary, adverse, and of negligible to minor intensity. Continued ranger patrols and cyclic maintenance activities would minimize damage to historic structures. No historic structures would be modified or removed under this alternative.

Cumulative Impacts. No historic structures associated with the Battle of Kings Mountain sur-

vive in the immediate area surrounding the national military park. The Overmountain Victory Trail, the path of the Overmountain Victory Fighters to the Battle of Kings Mountain was reconstructed and very little evidence remains aside from the trace of colonial roads. Impacts to other historic structures in the region would depend on use, wear and tear, and maintenance and are unknown. Alternative A would contribute an insignificant increment to these cumulative impacts.

Conclusion. Under Alternative A, impacts to historic structures would be short-term, negligible to minor, and adverse, mostly due to normal wear and tear. Cumulative impacts would be moderate to major and adverse due to continued development in the local and regional area. The actions contained in Alternative A would constitute a trivial increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, *Assessment of Adverse Effects*), the NPS has determined that the adverse impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative A would have no adverse effect on historic structures.

Cultural Landscapes. Under alternative A, the cultural landscape of the military park would continue to improve through implementation of recommendations outlined in the Cultural Landscape Report. Impacts on the cultural landscape would be long-term, beneficial, and minor in intensity. No impacts would occur from facility development because no new development is planned under this alternative.

Cumulative Impacts. Development continues around the boundary of Kings Mountain National Military Park. On balance impacts to the cultural landscape of the area surrounding the military park are long-term beneficial and minor to moderate and adverse. When the long-term beneficial effects of implementing Alternative A are added to the minor to moderate effects of other past, present, and reasonably foreseeable actions as described above, there would be long-

term beneficial and minor to moderate adverse cumulative impacts to the cultural landscape. Alternative A would contribute a small increment to this cumulative impact.

Conclusion. Under Alternative A, there would be long-term, beneficial impacts on the cultural landscape due to reclamation of historic viewsheds. Cumulative impacts would be long-term beneficial and minor to moderate adverse. Alternative A would contribute a slight increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, Assessment of Adverse Effects), the NPS has determined that the adverse impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative A would have no adverse effect on cultural landscapes.

Natural Resources

Geology and Soils. Under Alternative A, geological, physiographical, and soil resources would continue be subject to current management practices and policies. Impacts to these resources would be due to soil erosion from existing roads and trails, soil compaction at trailheads and parking areas, and soil disturbance resulting from miscellaneous facility maintenance activities. Impacts to soils and geologic resources would be negligible to minor, local, short- and long-term, direct, and adverse.

Cumulative Impacts. Permanent soil loss resulting from regional growth and development would adversely impact soils. The impact of these efforts on soils is expected to be long-term, moderate to major, and adverse. When the likely effects of implementing the actions contained in Alternative A are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate to major, adverse cumulative impact on soils. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative A, impacts to soils and geologic resources would be long-term, negligible to minor, adverse, and localized. There would be a long-term, moderate to major, adverse cumulative impact on soils and geologic resources. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.

Plant Communities and Vegetation (Including Exotic, Nonnative, and Nuisance Species).

Kings Mountain National Military Park contains four distinct forest communities including Piedmont/Low Mountain Alluvial forest, Mesic Mixed Hardwood Forest, Piedmont Monadnock Forest, and Chestnut Oak Forest. Vegetation resources would continue to be subject to current management practices and policies. Impacts would be due primarily to removal of dead, diseased, or hazardous trees, as well as fuel removal in accordance with an approved fire management plan. Additional impacts would occur from the possible continued spread of exotic, non-native, and nuisance vegetation, as well as from trampling and other visitor use of existing facilities. Collectively, impacts on plant communities and vegetation from implementing Alternative A would continue to be negligible to minor, adverse, long-term, and localized.

Cumulative Impacts. Regional growth and development is expected to result in an increase in the disturbance or destruction of plant communities and vegetation. The impact of these activities on vegetation and vegetative communities is expected to be long-term, moderate to major, and adverse. When the likely effects of implementing the actions contained in Alternative A are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate to major, and adverse cumulative impact on plant communities and vegetation. The actions contained in Alternative A would contribute an inconsequential increment to this cumulative impact.

Conclusion. Under Alternative A, impacts on plant communities and vegetation would be long-term, adverse, negligible to minor, and localized. There could be long-term, moderate to major, and adverse cumulative impacts to vegetation and plant communities in the surrounding region. The actions contained in Al-

ternative A would contribute a very small increment to this cumulative impact.

Fish and Wildlife. Under Alternative A, minor adverse impacts to fish and wildlife would continue to occur, primarily from disturbance to soils and vegetation caused by ongoing visitor use and NPS management activities. Some limited vegetation management efforts, including hazardous vegetation removal and limited management of exotic vegetation, would improve habitat by decreasing competition from exotic plants and increasing the availability of native plants as food sources. Impacts from these management activities would be minor to moderate, beneficial, and park-wide. Overall, impacts on fish and wildlife from the continuation of current management (Alternative A) would be long-term, minor, and both beneficial and adverse.

Cumulative Impacts. Regional growth and development is expected to continue and result in an increase in the conversion of natural lands to development in the general area. The loss of natural areas and the increasing urbanization of the region have led to a loss of wildlife habitat. Continued urbanization will fragment remaining natural areas and increase the risks and threats to wildlife, including automobile collisions, exotic species, and pathogens. Rainwater runoff and industrial discharges from urban areas may lead to a deterioration of water quality, with corresponding impacts on fish species. Overall, the effects of the activities described above would likely be long-term, moderate, and adverse on fish and wildlife in the region. When the likely effects of implementing the actions contained in Alternative A are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate, adverse cumulative impact on fish and wildlife. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative A, impacts on fish and wildlife from the continuation of current management would be long-term beneficial, and minor and adverse. Minor adverse impacts to soil, water quality, and vegetation would result in minor adverse effects on some fish and wildlife species. In contrast, the removal of exotics would result in minor beneficial effects on some wildlife species. This alter-

native would result in long-term, moderate, adverse cumulative impacts on fish and wildlife. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.

Special Status Species (plant and animal).

Of all the Federal and state listed species in Tables 12, 13, and 14 (pages 72 & 74), only the Georgia aster (*Symphyotrichum georgianum*) on the Federal list, and the Carolina darter (*Etheostoma collis*) and seven vascular plant species on the state lists have actually been located, collected, and vouchered in the park. However, the Endangered Species Act of 1973 prohibits harming any species listed by the U.S. Fish and Wildlife Service as being either threatened or endangered. Harming such species includes not only directly injuring or killing them, but also disrupting the habitat on which they depend. Section 7 of the act also requires federal agencies to consult with the U.S. Fish and Wildlife Service when any activity permitted, funded, or conducted by that agency may affect a listed species or designated critical habitat or is likely to jeopardize proposed species or adversely modify proposed critical habitat.

Some of the impacts to threatened and endangered species from Alternative A (the no-action or no-change from current management alternative) would be related to ongoing monitoring, treatment, and removal of exotic and invasive species. Exotic and invasive species can displace native species and alter the local ecology. When invasive exotic plant species dominate an area, the populations of native animals, particularly sensitive threatened and endangered species can decline. Therefore, the impacts of treatment and removal of exotic and invasive species would be primarily beneficial.

The park's ongoing fire management program also has the potential to affect special status species and their habitats. The National Park Service schedules prescribed fire operations when conditions are favorable for fire personnel to conduct the burn for the desired effects. The benefits of prescribed fire are immeasurable. Prescribed fire greatly reduces heavy fuel loads and enhances the biodiversity of the forest that is beneficial to wildlife populations, including special status species, within in the park.

Cumulative Impacts. The loss of natural areas and the increasing urbanization of the region have led to a loss of wildlife habitat. Continued urbanization will fragment remaining natural areas and increase the risks and threats to wildlife, including automobile collisions, exotic species, and pathogens. Rainwater runoff and industrial discharges from urban areas may lead to a deterioration of water quality, with corresponding impacts on fish species. On the other hand, there are significant stands of protected lands in the area – Kings Mountain State Park in South Carolina and Crowders Mountain State Park in North Carolina. Together with Kings Mountain National Military Park these areas provide approximately 15,000 acres of contiguous habitat and protection for wildlife, including special status species and for special status plants. Overall, the effects of the activities described above would likely be long-term, moderate, and adverse on special status species in the region. When the likely effects of implementing the actions contained in Alternative A are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate, adverse cumulative impact on special status species. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative A, impacts on special status species from the continuation of current management would be long-term beneficial and minor adverse. Minor adverse impacts to soil, water quality, and vegetation would result in minor adverse effects on some fish and wildlife species. In contrast, the removal of exotics would result in beneficial effects on some special status species. This alternative would result in long-term, moderate, adverse cumulative impacts on fish and wildlife. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.

Water Quality. Alternative A would result in impacts to hydrology and water quality that are negligible to minor, long-term, indirect, and adverse. Impacts would be due to sedimentation from existing roads and trails, as well as from oil and grease discharges at parking areas and road crossings over waterways. Additional impacts could occur from the use of herbicides to control nonnative vegetation. To mitigate impacts from herbicide, NPS would use the appro-

priate class of herbicide for the vegetation setting in question, would strictly adhere to application directions, and would use appropriate best management practices.

Cumulative Impacts. Regional growth and development is expected to result in an increase in the conversion of natural lands to development and alter the hydrology of the general area. Water quality would be affected by inputs from urban and suburban development, including increases in organic compounds and chemical concentrations. Inputs would derive both from point sources (e.g., sewer outfalls) and non-point sources (e.g., storm water runoff). The impact on water quality within the watershed is expected to be adverse, but the intensity is unknown. When the likely effects of implementing the actions contained in Alternative A are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, adverse cumulative impact on water quality in the watershed. The intensity of the impact is unknown. The actions contained in Alternative A would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative A, impacts on water quality would be long-term, negligible to minor, adverse, and localized. There would be a long-term, adverse cumulative impact on water quality in the watershed. The intensity of the impact is unknown. The actions contained in Alternative A would contribute a trivial adverse increment to this cumulative impact.

Visitor Use and Experience

Analysis. The no-action alternative would not change the current management of the park. Visitors would continue to have access to the battlefield monuments, trails, visitor center, and other resources of the national military park. Park staff would continue to offer a variety of interpretive programs. Opportunities for hiking and picnicking would continue to be available. Overall, access to historic resources and the availability of varied recreational opportunities would result in long-term, beneficial impacts to visitor use and experience.

Cumulative Impacts. Regional growth is expected to result in increased development near

the national military park. Combining the likely effects of implementing the no-action alternative with the effects of other past, present, and reasonably foreseeable actions described above, the cumulative impact on visitor use and experience in the park would be long-term and beneficial. The actions contained in Alternative A would not contribute an appreciable increment to this cumulative impact.

Conclusion. Under the no-action alternative, impacts on visitor use and experience would be long-term and beneficial. The cumulative impact on visitor use and experience in the military park would be long-term and beneficial. The actions contained in the no-action alternative would not contribute an appreciable increment to this cumulative impact.

Socioeconomic Environment

Analysis. Analysis of economic impacts under Alternative A was based on projected visitation to the military park as well as estimated one-time capital expenditures due to construction activities, if appropriate. Because Alternative A would maintain the status quo, visitor spending is assumed to remain more or less as it is today, with some increase due to anticipated population growth in the local area.

Local Economy Employment. Cherokee and York Counties in South Carolina and Cleveland and Gaston Counties in North Carolina would continue to realize some gains in employment due to the growth of the greater Charlotte, North Carolina metropolitan area and the recovery of the economy from the recession of 2007-2009. Consequently, short-term impacts of Alternative A to employment in the region would be long-term, negligible, and neutral.

Housing. Because Alternative A would not entail hiring additional staff, demand for residential housing would remain unchanged. Short-term impacts resulting from Alternative A would be localized, negligible, and neutral.

Sales. Total sales of goods and services in York and Cherokee Counties in South Carolina and Gaston and Cleveland Counties in North Carolina, as a result of visitor spending, would remain more or less unchanged under Alternative A. Because Alternative A does not increase or de-

crease sales revenue, long-term impacts would be localized, negligible, and neutral.

Cumulative Impacts. The action area for evaluating cumulative impacts on the socioeconomic environment is York and Cherokee Counties in South Carolina and Cleveland and Gaston Counties in North Carolina. The implementation of Alternative A does not have a strong likelihood of attracting new visitors and locals to the military park. Relatively steady visitation would translate into more or less unchanged spending in the area, resulting in neutral impacts for York, Cherokee, Gaston, and Cleveland Counties in terms of employment, housing, and taxable annual sales. However, long-term economic activity in the counties appears likely to increase due to expansion of nearby Charlotte, NC metropolitan area. Combining the likely effects of implementing the no-action alternative with the effects of other past, present, and reasonably foreseeable actions described above, the cumulative socioeconomic impacts would be localized, and beneficial. Alternative A would contribute a very small increment to this cumulative impact.

Conclusion. Because there would be no changes to visitor spending or construction activity within York and Cherokee Counties in South Carolina and Cleveland and Gaston Counties in North Carolina under Alternative A, long-term and short-term impacts on the socioeconomic environment would be localized, negligible, and neutral. As a result, county employment, housing, and sales would remain constant. In terms of cumulative impacts, long-term and short-term impacts would be localized, and beneficial. Alternative A would contribute a very slight increment to this total cumulative effect.

Park Operations

Analysis. Alternative A would maintain the status quo with respect to park staff and facilities. Current staff levels are generally adequate to protect existing park resources and serve visitors. Thus, the no action alternative would result in minor, long-term, neutral impacts on NPS operations

Cumulative Impacts. Cooperation and coordination with neighboring agencies and entities regarding planning, land use, resources, and de-

velopment proposals near the military park would continue to require varying amounts of staff time and result in minor to moderate, long-term, adverse impacts. Combined with other past, present, and reasonably foreseeable future impacts, the no action alternative would result in minor to moderate, long-term, neutral cumulative impacts on NPS operations.

Conclusion. Operation of existing visitor and administrative facilities in the military park would result in continuing minor, long-term, neutral impacts on NPS operations. The cumulative impacts of the no-action alternative and other reasonably foreseeable future actions required of park staff would be minor to moderate, long-term, and neutral.

Effects on Energy Requirements and Conservation Potential

Under Alternative A, no new facilities would be developed, thereby eliminating any new energy requirements for facility construction. Public use of the military park would grow in response to the growth of the nearby Charlotte, NC metropolitan area. The fuel and energy consumed by visitors traveling to the military park would increase proportionally to increased visitation. Energy would still be consumed to maintain existing facilities and for resource management of the military park.

IMPACTS OF IMPLEMENTING ALTERNATIVE B

Cultural Resources

Archeological Resources. Impacts would include those from Alternative A (continue current management) plus the following discussion. Expansion of the visitor center and the maintenance facility would occur in previously disturbed areas where the probability of finding artifacts is extremely low. However, the National Park Service would survey these areas before beginning construction. Impacts would be permanent, adverse, and negligible. The visitor center parking lot would be expanded by 25 spaces. Ground disturbance and some clearing would occur but would be preceded by archeological investigations and surveys. Impacts would be permanent, adverse, and negligible to minor.

Cumulative Impacts. Cumulative impacts on archeological resources would be the same as Alternative A. The actions contained in Alternative B would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative B, impacts on archeological resources would be permanent, negligible to minor, and adverse. Cumulative impacts would be permanent, minor, and adverse. The actions contained in Alternative B would contribute a very slight increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, Assessment of Adverse Effects), the NPS has determined that the adverse impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative B would have no adverse effect on archeological resources.

Museum Collections. There would be no change from the current storage and treatment of museum collections under Alternative B. Impacts would be the same as under Alternative A, the no-action alternative. Impacts to museum collections would be permanent and beneficial. The actions under Alternative B would contribute an insignificant amount to this cumulative impact.

Cumulative Impacts. Cumulative impacts on museum collections would be the same as Alternative A. The actions contained in Alternative B would contribute a very slight increment to this cumulative impact.

Conclusion. Under Alternative B, impacts to museum collections would be permanent and beneficial. Cumulative impacts would be permanent and beneficial. The actions contained in Alternative B would contribute a very slight increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, Assessment of Adverse Effects) the NPS has determined that the beneficial impacts identified un-

der the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative B would have no adverse effect on museum collections.

Historic Structures. This alternative includes updating the historic structure report for the Howser house and opening the house to scheduled tours. Impacts on historic structures, including the Howser house, would be permanent, minor to moderate, and adverse.

Cumulative Impacts. No historic structures associated with the Battle of Kings Mountain survive in the immediate area surrounding the national military park. The Overmountain Victory Trail, the path of the Overmountain Victory Fighters to the Battle of Kings Mountain was reconstructed and very little evidence remains aside from the trace of colonial roads. Impacts to other historic structures in the region would depend on use, wear and tear, and maintenance and are unknown. The actions contained in Alternative B would constitute a small increment to this cumulative impact.

Conclusion. Under Alternative B, impacts to historic structures would be permanent, minor to moderate, and adverse, mostly due to normal wear and tear. Cumulative impacts would be minor to moderate and adverse due to continued development in the local and regional area. The actions contained in Alternative B would constitute a small increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, Assessment of Adverse Effects), the NPS has determined that the adverse impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative B would have no adverse effect on historic structures.

Cultural Landscapes. Alternative B would establish two historic resource zones that would permit restoration of some cultural landscapes in accordance with the Cultural Landscape Report.

Impacts would be local, long-term, direct and indirect, and beneficial. Periodic removal of non-native vegetation would continue to occur under this alternative through periodic employment of NPS exotic plant management teams. Impacts on the cultural landscape would be long-term and beneficial. Under Alternative B (and Alternative C) there would be an expansion of the current visitor center to accommodate a library and a conference room storage and there would be expansion of the maintenance building to add some office space. Impacts on the cultural landscape of the battlefield would be local, long-term, direct, negligible, and neutral. Impacts on the park's cultural landscape resulting from the maintenance building expansion would be negligible and neutral.

Cumulative Impacts. Development continues around the boundary of Kings Mountain National Military Park. On balance, impacts to the cultural landscape of the area surrounding the military park are long-term beneficial and minor to moderate adverse. When the long-term, beneficial effects and the long-term negligible to minor adverse effects of implementing Alternative B are added to the minor to moderate effects of other past, present, and reasonably foreseeable actions as described above, there would be long-term, beneficial cumulative impacts to the cultural landscape. Alternative B would contribute a large increment to this cumulative impact.

Conclusion. Under Alternative B, there would be long-term, beneficial impacts on the cultural landscape due to restoration of historic site conditions and views. Cumulative impacts would be long-term and beneficial. Alternative B would contribute a large increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, Assessment of Adverse Effects), the NPS has determined that the beneficial impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative B would have no adverse effect on cultural landscapes.

Natural Resources

Geology and Soils. Impacts would include those from Alternative A (continue current management). The potential establishment of new trails, addition of wayside interpretive exhibits, expansion of the visitor center, and expansion of a maintenance area building would add additional impacts to the geology and soils of the national military park. These impacts would consist primarily of erosion and compaction in the affected areas. Impacts to soils and geologic resources from Alternative B would be minor, local, short- and long-term, direct, and adverse.

Cumulative Impacts. Permanent soil loss resulting from regional growth and development would adversely affect soils. The impact of these efforts on soils would be long-term, moderate to major, and adverse. When the local, short- and long-term, direct, minor, and adverse effects of implementing the actions contained in Alternative B are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate to major, adverse cumulative impact on soils. The actions contained in Alternative B would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative B, impacts to soils and geologic resources would be localized, long-term, minor, and adverse. There would be a long-term, moderate to major, adverse cumulative impact on soils and geologic resources. The actions contained in Alternative B would contribute a very slight increment to this cumulative impact.

Plant Communities and Vegetation (Including Exotic, Nonnative, and Nuisance Species).

Impacts to plant communities and vegetation resulting from actions in Alternative B would include those associated with implementing Alternative A plus the addition and/or expansion of trails. Also, the continuing wildfire control program would have long-term beneficial impact on vegetation by simulating natural pre-settlement conditions for forests in the national military park. Under Alternative B, impacts to park resources from the growth and spread of

exotic, nonnative, and nuisance plants would continue to occur. Some limited removal of exotics would take place as funding becomes available, but large-scale restoration would not be likely to take place in the near term. Impacts from exotic, nonnative, and nuisance plants would be long-term, adverse, and minor to moderate. The impacts on plant communities and vegetation from Alternative B would be moderate, adverse, long-term, and localized.

Cumulative Impacts. Regional growth and development is expected to result in an increase in the disturbance or destruction of plant communities and vegetation. The impact of these activities on vegetation and vegetative communities is expected to be long-term, moderate to major, and adverse. When the likely effects of implementing the actions contained in Alternative B are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate to major, and adverse cumulative impact on plant communities and vegetation. The actions contained in Alternative B would contribute an insignificant increment to this cumulative impact.

Conclusion. Under Alternative B, impacts on plant communities and vegetation would be long-term, localized, moderate and adverse. There could be long-term, moderate to major, and adverse cumulative impacts to vegetation and plant communities in the surrounding region. The actions contained in Alternative A would contribute a trivial increment to this cumulative impact.

Fish and Wildlife. Impacts to fish and wildlife under Alternative B would include those impacts resulting from the implementation of Alternative A. In addition, actions associated with Alternative B that would add to these impacts include potential trail expansion and the expansion of the Visitor Center and a maintenance compound facility. These impacts would occur primarily due to the removal of vegetation and loss of habitat. These additional impacts would be long-term, negligible, adverse and localized. Overall, impacts on fish and wildlife from the implementation of Alternative B would be long-term beneficial, and minor adverse.

Cumulative Impacts. Regional growth and development is expected to continue and result in

an increase in the conversion of natural lands to development in the general area. The loss of natural areas and the increasing urbanization of the region have led to a loss of wildlife habitat. Continued urbanization will fragment remaining natural areas and increase the risks and threats to wildlife, including automobile collisions, exotic species, and pathogens. Rainwater runoff and industrial discharges from urban areas may lead to a deterioration of water quality, with corresponding impacts on fish species. Overall, the effects of the activities described above would likely be long-term, moderate, and adverse on fish and wildlife in the region. When the likely effects of implementing the actions contained in Alternative B are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate, adverse cumulative impact on fish and wildlife. The actions contained in Alternative B would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative B, impacts on fish and wildlife from both the continuation of current management activities and the expansion of trails, the visitor center, and the maintenance facility, would be long-term beneficial and minor adverse. Minor adverse impacts to soil, water quality, and vegetation would result in minor adverse effects on some fish and wildlife species. In contrast, the removal of exotics would result in beneficial effects on some wildlife species. This alternative would result in long-term, moderate, adverse cumulative impacts on fish and wildlife. The actions contained in Alternative B would contribute a very small increment to this cumulative impact.

Special Status Species (plant and animal).

Of all the Federal and state listed species in Tables 12, 13, and 14 (pages 72 & 74), only the Georgia aster (*Symphyotrichum georgianum*) on the Federal list, and the Carolina darter (*Etheostoma collis*) and seven vascular plant species on the state lists have actually been located, collected, and vouchered in the park. However, the Endangered Species Act of 1973 prohibits harming any species listed by the U.S. Fish and Wildlife Service as being either threatened or endangered. Harming such species includes not only directly injuring or killing them, but also disrupting the habitat on which they depend. Section 7 of the act also requires federal agen-

cies to consult with the U.S. Fish and Wildlife Service when any activity permitted, funded, or conducted by that agency may affect a listed species or designated critical habitat or is likely to jeopardize proposed species or adversely modify proposed critical habitat.

Some of the impacts to special status species from Alternative B (as in Alternative A) would be related to ongoing monitoring, treatment, and removal of exotic and invasive species. Exotic and invasive species can displace native species and alter the local ecology. When invasive exotic plant species dominate an area, the populations of native animals, particularly sensitive threatened and endangered species can decline. Therefore, the impacts of treatment and removal of exotic and invasive species would be primarily beneficial.

The park's ongoing fire management program (as in Alternative A) also has the potential to affect special status species and their habitats. The National Park Service schedules prescribed fire operations when conditions are favorable for fire personnel to conduct the burn for the desired effects. The benefits of prescribed fire are immeasurable. Prescribed fire greatly reduces heavy fuel loads and enhances the biodiversity of the forest that is beneficial to wildlife populations, including special status species, within the park.

Expansion of the visitor center and the maintenance facility would occur in previously disturbed areas where habitat for special status species has not existed for generations. Therefore, these projects would be expected to have non-existent to negligible adverse impacts on them.

Cumulative Impacts. The loss of natural areas and the increasing urbanization of the region have led to a loss of wildlife habitat. Continued urbanization will fragment remaining natural areas and increase the risks and threats to wildlife, including automobile collisions, exotic species, and pathogens. Rainwater runoff and industrial discharges from urban areas may lead to a deterioration of water quality, with corresponding impacts on fish species. On the other hand, there are significant stands of protected lands in the area – Kings Mountain State Park in South Carolina and Crowders Mountain State Park in North Carolina. Together with Kings

Mountain National Military Park these areas provide approximately 15,000 acres of contiguous habitat and protection for wildlife, including special status species and for special status plants. Overall, the effects of the activities described above would likely be long-term, moderate, and adverse on special status species in the region. When the likely effects of implementing the actions contained in Alternative B are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate, adverse cumulative impact on special status species. The actions contained in Alternative B would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative B, impacts on special status species from the continuation of current management would be non-existent to negligible and adverse. Minor adverse impacts to soil, water quality, and vegetation would result in minor adverse effects on some fish and wildlife species. In contrast, the removal of exotics would result in beneficial effects on some special status species. This alternative would result in long-term, moderate, adverse cumulative impacts on fish and wildlife. The actions contained in Alternative B would contribute a very small increment to this cumulative impact.

Water Quality. Impacts to water quality under Alternative B would include those impacts resulting from the implementation of Alternative A. In addition, the expansion of the visitor center and the visitor center parking lot and the expansion of the maintenance structure would be expected to have short-term, minor to moderate, and adverse effects on water quality and hydrology as a result of soil disturbance and runoff.

Cumulative Impacts. Regional growth and development is expected to result in an increase in the conversion of natural lands to development and alter the hydrology of the general area. Water quality would be affected by inputs from urban and suburban development, including increases in organic compounds and chemical concentrations. Inputs would derive both from point sources (e.g., sewer outfalls) and non-point sources (e.g., storm water runoff). The impact on water quality within the watershed is expected to be adverse, but the intensity is unknown. When the likely effects of implementing the actions contained in Alternative B are

added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, adverse cumulative impact on water quality in the watershed. The intensity of the impact is unknown. The actions contained in Alternative B would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative B, impacts on water quality would be long-term, minor to moderate, adverse, and localized. There would be a long-term, adverse cumulative impact on water quality in the watershed. The intensity of the impact is unknown. The actions contained in Alternative B would contribute a negligible adverse increment to this cumulative impact.

Visitor Use and Experience

Analysis. Under Alternative B, the visitor center expansion, including additional parking spaces, new interpretive elements on trails, and scheduled, ranger led tours of the Howser House would be expected to have long-term beneficial impacts on the visitor experience.

Cumulative Impacts. Regional growth is expected to result in increased development near the national military park. Combining the likely effects of implementing Alternative B with the effects of other past, present, and reasonably foreseeable actions described above, the cumulative impact on visitor use and experience in the park would be long-term and beneficial. The actions contained in Alternative B would not contribute an appreciable increment to this cumulative impact.

Conclusion. Under Alternative B, impacts on visitor use and experience would be long-term and beneficial. The cumulative impact on visitor use and experience in the military park would be long-term and beneficial. The actions contained in Alternative B would not contribute an appreciable increment to this cumulative impact.

Socioeconomic Environment

Three permanent jobs would be created under Alternative B for interpretation and maintenance needs. As a result, the local economy would realize very minor measurable long-term chang-

es to its employment levels and long-term impacts resulting from Alternative B would be localized and beneficial. In addition, there may be a realization of short-term hiring due to the expansion of the visitor center and visitor center parking lot and the maintenance facility. Short-term impacts of Alternative B would be localized and beneficial.

Housing. Because Alternative B would entail hiring additional permanent staff, demand for residential housing would likely increase subject to the new employees relocation. Short-term impacts resulting from Alternative B would be localized and beneficial.

Sales. Any increase in visitation to Kings Mountain National Military Park attributable to Alternative B would be unlikely to result in a measurable increase in the total sales of goods and services in York and Cherokee Counties in South Carolina and Gaston and Cleveland Counties in North Carolina. Because Alternative B does not increase or decrease sales revenue, long-term impacts would be localized, negligible, and neutral.

Cumulative Impacts. The action area for evaluating cumulative impacts on the socioeconomic environment is York and Cherokee Counties in South Carolina and Cleveland and Gaston Counties in North Carolina. The implementation of Alternative B could attract a relatively small number of new visitors and locals to the military park. This small increase in visitation would translate into a negligibly small increase in spending in the area, resulting in neutral impacts for York, Cherokee, Gaston, and Cleveland Counties in terms of employment, housing, and taxable annual sales. However, long-term economic activity in the counties appears likely to increase due to expansion of nearby Charlotte, NC metropolitan area. Combining the likely effects of implementing Alternative B with the effects of other past, present, and reasonably foreseeable actions described above, the cumulative socioeconomic impacts would be localized and beneficial. Alternative B would contribute a very slight increment to this cumulative impact.

Conclusion. Because there would be negligible changes to visitor spending or construction activity within York and Cherokee Counties in South Carolina and Cleveland and Gaston

Counties in North Carolina under Alternative B, long-term and short-term impacts on the socioeconomic environment would be localized, negligible, and beneficial. As a result, county employment, housing, and sales would remain constant. In terms of cumulative impacts, long-term and short-term impacts would be localized and beneficial. Alternative B would contribute an insignificant increment to this total cumulative effect.

Park Operations

Analysis. Alternative B would create two new positions for interpretation and one position for historic preservation maintenance. The result would be improved ability to create programs and materials for visitors, especially with respect to new opportunities for visiting and learning about the Howser house. The new historic preservation maintenance worker would also serve the objective of opening the Howser house to scheduled interpretive tours. Therefore, this alternative would result in long-term, beneficial impacts on NPS operations

Cumulative Impacts. Cooperation and coordination with neighboring agencies and entities regarding planning, land use, resources, and development proposals near the military park would continue to require varying amounts of staff time and result in minor to moderate, long-term, adverse impacts. Combined with other past, present, and reasonably foreseeable future impacts, Alternative B would result in minor to moderate, long-term, neutral cumulative impacts on NPS operations.

Conclusion. The addition of interpretive and historic preservation maintenance staff would result in continuing minor to moderate, long-term, beneficial impacts on NPS operations. The cumulative impacts of the no-action alternative and other reasonably foreseeable future actions required of park staff would be minor to moderate, long-term, and neutral.

Effects on Energy Requirements and Conservation Potential

Under Alternative B, the visitor center and a maintenance structure would be modestly expanded. In addition the visitor center parking lot would be expanded by 25 total spaces (approx-

imately 6,400 square feet). Construction and operation of these facility expansions would be in accordance with NPS sustainability guidelines in order to minimize energy consumption. Some fuel would be consumed during the course of the construction but the amounts would be minor. Public use of the military park would grow in response to the growth of the nearby Charlotte, NC metropolitan area. The fuel and energy consumed by visitors traveling to the military park would increase proportionally to increased visitation. Energy would still be consumed to maintain existing facilities and for resource management of the National Military Park.

IMPACTS OF IMPLEMENTING ALTERNATIVE C

Cultural Resources

Archeological Resources. Impacts would include those from Alternative A (continue current management) plus the following discussion. Alternative C includes the development of a trail along the former Colonial Road that would connect Battleground Ridge and the battlefield trail to the Overmountain Victory National Historic Trail. Some vegetative clearing and ground disturbance would occur in connection with this trail. Prior to commencing any trail construction activity, the National Park Service would conduct archeological surveys of the path to recover artifacts and record information that could be lost. Impacts would be permanent, adverse, and of negligible to minor intensity. Expansion of the visitor center and the maintenance facility would occur in previously disturbed areas where the probability of finding artifacts is extremely low. However, the National Park Service would survey these areas before beginning construction. Impacts would be permanent, adverse, and negligible. Finally, the visitor center parking lot would be expanded by 25 spaces. Ground disturbance and some clearing would occur but would be preceded by archeological investigations and surveys. Impacts would be permanent, adverse, and negligible to minor.

Cumulative Impacts. Cumulative impacts on archeological resources would be the same as Alternative B. The actions contained in Alter-

native C would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative C, impacts on archeological resources would be permanent, negligible to minor, and adverse. Cumulative impacts would be permanent, minor, and adverse. The actions contained in Alternative C would contribute an inconsequential increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, Assessment of Adverse Effects), the NPS has determined that the adverse impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative C would have no adverse effect on archeological resources.

Museum Collections. There would be no change from the current storage and treatment of museum collections under Alternative C. Impacts would be the same as under Alternative A, the no-action alternative. Impacts to museum collections would be permanent and beneficial. The actions under alternative C would contribute an insignificant amount to this cumulative impact.

Cumulative Impacts. Cumulative impacts on museum collections would be the same as Alternative A. The actions contained in Alternative C would contribute a trivial increment to this cumulative impact.

Conclusion. Under Alternative C, impacts to museum collections would be permanent and beneficial. Cumulative impacts would be permanent and beneficial. The actions contained in Alternative C would contribute a very slight increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, Assessment of Adverse Effects) the NPS has determined that the beneficial impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the

property for inclusion in the National Register and therefore concludes that implementation of Alternative C would have no adverse effect on museum collections.

Historic Structures. This alternative includes updating the historic structure report for the Howser house and opening the house to scheduled tours. Impacts on historic structures, including the Howser house, would be permanent, minor to moderate, and adverse.

Cumulative Impacts. No historic structures associated with the Battle of Kings Mountain survive in the immediate area surrounding the national military park. The Overmountain Victory Trail, the path of the Overmountain Victory Fighters to the Battle of Kings Mountain was reconstructed and very little evidence remains aside from the trace of colonial roads. Impacts to other historic structures in the region would depend on use, wear and tear, and maintenance and are unknown. The actions contained in Alternative C would constitute a small increment to this cumulative impact.

Conclusion. Under Alternative C, impacts to historic structures would be permanent, minor to moderate, and adverse, mostly due to normal wear and tear. Cumulative impacts would be minor to moderate and adverse due to continued development in the local and regional area. The actions contained in Alternative C would constitute a small increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, *Assessment of Adverse Effects*), the NPS has determined that the adverse impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implementation of Alternative C would have no adverse effect on historic structures.

Cultural Landscapes. Alternative C would establish the same two historic resource zones that appear on the map of Alternative B except that in Alternative C, the historic resource zone that surrounds the battlefield landscape and visitor center complex would be extended to the northwest along the historic trace of the Coloni-

al Road. These zones would permit restoration of some cultural landscapes in accordance with the Cultural Landscape Report. Impacts would be local, long-term, direct and indirect and beneficial. Periodic removal of non-native vegetation would continue to occur under this alternative through periodic employment of NPS exotic plant management teams. Impacts on the cultural landscape would be long-term and beneficial. Under Alternative C (and Alternative B) there would be an expansion of the current visitor center to accommodate a library and a conference room storage and there would be expansion of the maintenance building to add some office space. Impacts on the cultural landscape of the battlefield would be local, long-term, direct, negligible, and neutral. Impacts on the park's cultural landscape resulting from the maintenance building expansion would be negligible and neutral.

Cumulative Impacts. Development continues around the boundary of Kings Mountain National Military Park. On balance impacts to the cultural landscape of the area surrounding the military park are long-term beneficial and minor to moderate adverse. When these long-term beneficial effects and the long-term beneficial effects of implementing Alternative C are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be long-term, beneficial cumulative impacts to the cultural landscape. Alternative C would contribute a significant increment to this cumulative impact.

Conclusion. Under Alternative C, there would be long-term, beneficial, and neutral impacts on the cultural landscape due to restoration of historic site conditions and views. Cumulative impacts would be long-term and beneficial. Alternative C would contribute a large increment to this cumulative impact.

Section 106 Summary. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR part 800.5, *Assessment of Adverse Effects*), the NPS has determined that the adverse impacts identified under the NEPA analysis above would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register and therefore concludes that implemen-

tation of Alternative C would have no adverse effect on cultural landscapes.

Natural Resources

Geology and Soils. Impacts would include those from Alternative A (continue current management). The establishment of a new trail along the trace of the historic Colonial Road to connect Battleground Ridge with the Overmountain Victory Trail, addition of wayside interpretive exhibits, expansion of the visitor center, and expansion of a maintenance area building would add additional impacts to the geology and soils of the national military park through compaction and erosion. Impacts to soils and geologic resources from Alternative C would be minor, local, short- and long-term, direct, and adverse.

Cumulative Impacts. Permanent soil loss resulting from regional growth and development would adversely affect soils. The impact of these efforts on soils would be long-term, moderate to major, and adverse. When the local, short- and long-term, direct, minor, and adverse effects of implementing the actions contained in Alternative C are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate to major, adverse cumulative impact on soils. The actions contained in Alternative C would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative C, impacts to soils and geologic resources would be localized, long-term, minor, and adverse. There would be a long-term, moderate to major, adverse cumulative impact on soils and geologic resources. The actions contained in Alternative C would contribute a very slight increment to this cumulative impact.

Plant Communities and Vegetation (Including Exotic, Nonnative, and Nuisance Species).

Impacts to plant communities and vegetation resulting from actions in Alternative C would include those associated with implementing Alternative A plus the development of a new trail within the trace of the historic Colonial Road connecting Battleground Ridge with the Overmountain Victory Trail. Also, the continuing wildfire control program would have long-term

beneficial impact on vegetation by simulating natural pre-settlement conditions for forests in the national military park. Additional impacts would occur from the possible continued spread of exotic, non-native, and nuisance vegetation, as well as from trampling and other visitor use of existing facilities. Collectively, impacts on plant communities and vegetation from implementing Alternative C would be moderate, adverse, long-term, and localized.

Cumulative Impacts. Regional growth and development is expected to result in an increase in the disturbance or destruction of plant communities and vegetation. The impact of these activities on vegetation and vegetative communities is expected to be long-term, moderate to major, and adverse. When the likely effects of implementing the actions contained in Alternative C are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate to major, and adverse cumulative impact on plant communities and vegetation. The actions contained in Alternative C would contribute a trivial increment to this cumulative impact.

Conclusion. Under Alternative C, impacts on plant communities and vegetation would be long-term, adverse, moderate, and localized. There could be long-term, moderate to major, and adverse cumulative impacts to vegetation and plant communities in the surrounding region. The actions contained in Alternative C would contribute an insignificant increment to this cumulative impact.

Fish and Wildlife. Impacts to fish and wildlife under Alternative C would include those impacts resulting from the implementation of Alternative A. In addition actions associated with Alternative C that would add to these impacts include potential trail expansion and the expansion of the Visitor Center and a maintenance compound facility. These additional impacts would be long-term, negligible, adverse and localized. Overall, impacts on fish and wildlife from the implementation of Alternative C would be long-term beneficial and minor adverse.

Cumulative Impacts. Regional growth and development is expected to continue and result in an increase in the conversion of natural lands to development in the general area. The loss of natural areas and the increasing urbanization of

the region have led to a loss of wildlife habitat. Continued urbanization will fragment remaining natural areas and increase the risks and threats to wildlife, including automobile collisions, exotic species, and pathogens. Rainwater runoff and industrial discharges from urban areas may lead to a deterioration of water quality, with corresponding impacts on fish species. Overall, the effects of the activities described above would likely be long-term, moderate, and adverse on fish and wildlife in the region. When the likely effects of implementing the actions contained in Alternative C are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate, adverse cumulative impact on fish and wildlife. The actions contained in Alternative C would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative C, impacts on fish and wildlife from both the continuation of current management activities and the expansion of trails, the visitor center, and the maintenance facility, would be long-term beneficial and minor adverse. Minor adverse impacts to soil, water quality, and vegetation would result in minor adverse effects on some fish and wildlife species. In contrast, the removal of exotics would result in beneficial effects on some wildlife species. This alternative would result in long-term, moderate, adverse cumulative impacts on fish and wildlife. The actions contained in Alternative C would contribute a very small increment to this cumulative impact.

Special Status Species (plant and animal).

Of all the Federal and state listed species in Tables 12, 13, and 14 (pages 72 & 74), only the Georgia aster (*Symphyotrichum georgianum*) on the Federal list, and the Carolina darter (*Etheostoma collis*) and seven vascular plant species on the state lists have actually been located, collected, and vouchered in the park. However, the Endangered Species Act of 1973 prohibits harming any species listed by the U.S. Fish and Wildlife Service as being either threatened or endangered. Harming such species includes not only directly injuring or killing them, but also disrupting the habitat on which they depend. Section 7 of the act also requires federal agencies to consult with the U.S. Fish and Wildlife Service when any activity permitted, funded, or conducted by that agency may affect a listed

species or designated critical habitat or is likely to jeopardize proposed species or adversely modify proposed critical habitat.

Some of the impacts to special status species from Alternative C (as in Alternatives A and B) would be related to ongoing monitoring, treatment, and removal of exotic and invasive species. Exotic and invasive species can displace native species and alter the local ecology. When invasive exotic plant species dominate an area, the populations of native animals, particularly sensitive threatened and endangered species can decline. Therefore, the impacts of treatment and removal of exotic and invasive species would be primarily beneficial.

The park's ongoing fire management program (as in Alternatives A and B) also has the potential to affect special status species and their habitats. The National Park Service schedules prescribed fire operations when conditions are favorable for fire personnel to conduct the burn for the desired effects. The benefits of prescribed fire are immeasurable. Prescribed fire greatly reduces heavy fuel loads and enhances the biodiversity of the forest that is beneficial to wildlife populations, including special status species, within in the park.

Expansion of the visitor center and the maintenance facility would occur in previously disturbed areas where habitat for special status species has not existed for generations. Therefore, these projects would be expected to have non-existent to negligible adverse impacts on them.

Alternative C includes the development of a trail along the former Colonial Road that would connect Battleground Ridge and the battlefield trail to the Overmountain Victory National Historic Trail. Some vegetative clearing and ground disturbance would occur in connection with this trail. Prior to initiating any trail construction, NPS would implement mitigative actions spelled out in Chapter 2. Despite these mitigative measures the remote possibility exists that some adverse impacts to special status species and/or their potential habitats could occur. These impacts would likely be negligible, localized, long-term, and adverse.

Cumulative Impacts. The loss of natural areas and the increasing urbanization of the region

have led to a loss of wildlife habitat. Continued urbanization will fragment remaining natural areas and increase the risks and threats to wildlife, including automobile collisions, exotic species, and pathogens. Rainwater runoff and industrial discharges from urban areas may lead to a deterioration of water quality, with corresponding impacts on fish species. On the other hand, there are significant stands of protected lands in the area – Kings Mountain State Park in South Carolina and Crowders Mountain State Park in North Carolina. Together with Kings Mountain National Military Park these areas provide approximately 15,000 acres of contiguous habitat and protection for wildlife, including special status species and for special status plants. Overall, the effects of the activities described above would likely be long-term, moderate, and adverse on fish and wildlife in the region. When the likely effects of implementing the actions contained in Alternative C are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, moderate, adverse cumulative impact on fish and wildlife. The actions contained in Alternative C would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative C, impacts on special status species from the continuation of current management would be long-term, localized, and beneficial. Minor adverse impacts to soil, water quality, and vegetation would result in minor adverse effects on some fish and wildlife species. In contrast, the removal of exotics would result in minor beneficial effects on some special status species. This alternative would result in long-term, moderate, adverse cumulative impacts on fish and wildlife. The actions contained in Alternative C would contribute a very small increment to this cumulative impact.

Water Quality. Impacts to water quality under Alternative C would include those impacts resulting from the implementation of Alternative A. In addition, the expansion of the visitor center and the visitor center parking lot and the expansion of the maintenance structure would be expected to have short-term, negligible to minor, and adverse effects on water quality and hydrology as a result of soil disturbance and runoff.

Cumulative Impacts. Regional growth and development is expected to result in an increase in the conversion of natural lands to development and alter the hydrology of the general area. Water quality would be affected by inputs from urban and suburban development, including increases in organic compounds and chemical concentrations. Inputs would derive both from point sources (e.g., sewer outfalls) and non-point sources (e.g., storm water runoff). The impact on water quality within the watershed is expected to be adverse, but the intensity is unknown. When the likely effects of implementing the actions contained in Alternative C are added to the effects of other past, present, and reasonably foreseeable actions as described above, there would be a long-term, adverse cumulative impact on water quality in the watershed. The intensity of the impact is unknown. The actions contained in Alternative C would contribute a very small increment to this cumulative impact.

Conclusion. Under Alternative C, impacts on water quality would be long-term, negligible to minor, adverse, and localized. There would be a long-term, adverse cumulative impact on water quality in the watershed. The intensity of the impact is unknown. The actions contained in Alternative B would contribute an inconsequential adverse increment to this cumulative impact.

Visitor Use and Experience

Analysis. Under Alternative C, the visitor center expansion, including additional parking spaces, a new trail along the trace of the historic Colonial Road, and scheduled, ranger led tours of the Howser House would be expected to have long-term beneficial impacts on the visitor experience.

Cumulative Impacts. Regional growth is expected to result in increased development near the national military park. Combining the likely effects of implementing Alternative C with the effects of other past, present, and reasonably foreseeable actions described above, the cumulative impact on visitor use and experience in the park would be long-term and beneficial. The actions contained in Alternative C would not contribute an appreciable increment to this cumulative impact.

Conclusion. Under Alternative C, impacts on visitor use and experience would be long-term and beneficial. The cumulative impact on visitor use and experience in the military park would be long-term and beneficial. The actions contained in Alternative C would not contribute an appreciable increment to this cumulative impact.

Socioeconomic Environment

Three permanent jobs would be created under Alternative C for interpretation, and historic preservation maintenance needs. As a result, the local economy would realize very minor measurable long-term changes to its employment levels and long-term impacts resulting from Alternative C would be localized and beneficial. In addition, there may be a realization of short-term hiring due to the expansion of the visitor center and visitor center parking lot and the maintenance facility. Short-term impacts of Alternative C would be localized and beneficial.

Housing. Because Alternative C would entail hiring additional permanent staff, demand for residential housing would likely increase subject to the new employees relocation. Short-term impacts resulting from Alternative C would be localized and beneficial.

Sales. Any increase in visitation to Kings Mountain National Military Park attributable to Alternative C would be unlikely to result in a measurable increase in the total sales of goods and services in York and Cherokee Counties in South Carolina and Gaston and Cleveland Counties in North Carolina. Because Alternative C does not increase or decrease sales revenue, long-term impacts would be localized, negligible, and neutral.

Cumulative Impacts. The action area for evaluating cumulative impacts on the socioeconomic environment is York and Cherokee Counties in South Carolina and Cleveland and Gaston Counties in North Carolina. The implementation of Alternative C could attract a relatively small number of new visitors and locals to the military park. This small increase in visitation would translate into a negligibly small increase in spending in the area, resulting in neutral impacts for York, Cherokee, Gaston, and Cleveland Counties in terms of employment, housing,

and taxable annual sales. However, long-term economic activity in the counties appears likely to increase due to expansion of nearby Charlotte, NC metropolitan area. Combining the likely effects of implementing Alternative C with the effects of other past, present, and reasonably foreseeable actions described above, the cumulative socioeconomic impacts would be localized and beneficial. Alternative C would contribute a very small increment to this cumulative impact.

Conclusion. Because there would be negligible changes to visitor spending or construction activity within York and Cherokee Counties in South Carolina and Cleveland and Gaston Counties in North Carolina under Alternative C, long-term and short-term impacts on the socioeconomic environment would be localized, negligible, and neutral. As a result, county employment, housing, and sales would remain constant. In terms of cumulative impacts, long-term and short-term impacts would be localized and beneficial. Alternative C would contribute a very slight increment to this total cumulative effect.

Park Operations

Analysis. Alternative C would create two new positions for interpretation and one position for historic preservation maintenance. The result would be improved ability to create programs and materials for visitors, especially with respect to new opportunities for visiting and learning about the Howser house. The new historic preservation maintenance worker would also serve the objective of opening the Howser house to scheduled interpretive tours. Therefore, this alternative would result in long-term, beneficial impacts on NPS operations

Cumulative Impacts. Cooperation and coordination with neighboring agencies and entities regarding planning, land use, resources, and development proposals near the military park would continue to require varying amounts of staff time and result in minor to moderate, long-term, adverse impacts. Combined with other past, present, and reasonably foreseeable future impacts, Alternative C would result in minor to moderate, long-term, neutral cumulative impacts on NPS operations.

1 *Conclusion.* The addition of interpretive and
2 historic preservation maintenance staff would
3 result in continuing minor to moderate, long-
4 term, beneficial impacts on NPS operations.
5 The cumulative impacts of Alternative C and
6 other reasonably foreseeable future actions re-
7 quired of park staff would be minor to moderate,
8 long-term, and neutral.

9

10 **Effects on Energy Requirements** 11 **and Conservation Potential**

12

13 Under Alternative C, the visitor center and a
14 maintenance structure would be modestly ex-
15 panded. In addition the visitor center parking lot
16 would be expanded by 25 total spaces (approx-

17 imately 6,400 square feet). Construction and
18 operation of these facility expansions would be
19 in accordance with NPS sustainability guide-
20 lines in order to minimize energy consumption.
21 Some fuel would be consumed during the course
22 of the construction but the amounts would be
23 minor. Public use of the military park would
24 grow in response to the growth of the nearby
25 Charlotte, North Carolina metropolitan area.
26 The fuel and energy consumed by visitors trav-
27 eling to the military park would increase propor-
28 tionally to increased visitation. Energy would
29 still be consumed to maintain existing facilities
30 and for resource management of the National
31 Military Park.



CENTENNIAL MONUMENT

CHAPTER 5 — CONSULTATION AND COORDINATION

BRIEF HISTORY OF PUBLIC INVOLVEMENT

The *General Management Plan / Environmental Assessment* for Kings Mountain National Military Park represents thoughts of the national military park staff, state and local agencies and organizations, and the public. Consultation and coordination among the agencies and the public were vitally important throughout the planning process. Public meetings and newsletters were used to keep the public informed and involved in the planning process for the National Military Park. The planning team compiled a mailing list that consisted of members of governmental agencies, organizations, businesses, legislators, local governments, and interested citizens.

The consultation and civic engagement process began with a workshop at the lodge in the adjacent Kings Mountain State Park to develop the park's Foundation Statement. The workshop took place from October 16 to October 19, 2006 after the annual commemoration of the battle on October 7. Participants included NPS Regional Office staff, the park superintendent and chief ranger, a ranger from Cowpens National Battlefield near Gaffney, South Carolina, the superintendent and assistant superintendent for Kings Mountain State Park, representatives of the park's Brigade of Friends, the superintendent of the Overmountain Victory National Historic Trail, and several representatives of state and local agencies and tourism groups.

This workshop was also the first scoping meeting for the GMP project. Scoping is an early and open process for determining the scope of a proposed action or project and for identifying issues related to the project. During scoping, NPS staff provides an overview of the project, including purpose and need and preliminary issues. State and local agencies, private organizations and individuals, and the general public are asked to submit comments, concerns, and suggestions relating to the project and preliminary issues.

Additional scoping meetings were conducted in Kings Mountain, North Carolina on May 6, 2008 and in York, South Carolina on May 7, 2008. These meetings were conducted in an "open

house" style format in which a brief slide presentation was followed by questions, answers, and suggestions from the attendees.

In the fall of 2009, the National Park Service, based on the lack of major capital projects or controversy associated with this project, decided to terminate the Environmental Impact Statement in favor of an Environmental Assessment for the General Management Plan. A Federal Register Notice to this effect was published on April 7, 2010.

CONSULTATIONS WITH OTHER AGENCIES AND ORGANIZATIONS

U.S. Fish and Wildlife Service, Section 7 Consultation

In accordance with the Endangered Species Act and relevant regulations at 50 *Code of Federal Regulations* Part 402, the National Park Service determined that the management plan is not likely to adversely affect any federally threatened or endangered species and sent a copy of this general management plan and environmental assessment to the U.S. Fish and Wildlife Service office with a request for written concurrence with that determination. In addition, the National Park Service has committed to consult on future actions conducted under the framework described in this management plan to ensure that such actions are not likely to adversely affect threatened or endangered species.

State Historic Preservation Office of the South Carolina Department of Archives and History, Section 106 Consultation

Agencies that have direct or indirect jurisdiction over historic properties are required by Section 106 of the National Historic Preservation Act of 1966, as amended (54 USC 300101, et seq.) to take into account the effect of any undertaking on properties eligible for listing in the National Register of Historic Places. The National Park Service has determined that the actions proposed in the management plan are not likely to adversely affect cultural resources in the National Military

Park and would not alter or diminish, directly or indirectly, any of the characteristics of the National Military Park that qualify the property for inclusion in the National Register of Historic Places.

40

Under the terms of the 2008 Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers, “all undertakings that do not qualify for streamlined review [e.g., preparation of general management plans] ... will be reviewed in accordance with 36 CFR Part 800.” Therefore, this *General Management Plan/ Environmental Assessment* has been submitted to the South Carolina Historic Preservation Office for review and comment.

Tribal Consultations

NPS invited nine federally recognized Native American tribal organizations to consult on the general management plan. They were:

- Alabama-Quassarte Tribal Town
- Catawba Indian Nation
- Eastern Band of the Cherokee Nation
- Chickasaw Nation
- Seminole Tribe of Florida
- Kialegee Tribal Town
- Muscogee (Creek) Nation
- Seminole Nation of Oklahoma
- Poarch Creek Indians
- Thlopthlocco Tribal Town

No tribal government representative expressed an interest in consulting on this plan pursuant to 36 CFR 800.2.

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APPENDIX B: SERVICEWIDE MANDATES AND POLICIES

Laws and executive orders that apply to the management of Kings Mountain National Military Park are provided below.

KINGS MOUNTAIN SPECIFIC LEGISLATION AND EXECUTIVE ORDERS

Executive Order No. 6166 issued pursuant to the authority of Section 16 of the Act of March 4, 1933 947 Stat. 1517). Transferred Kings Mountain National Military Park from the War Department to the National Park Service.

Act of Congress (49 Stat. 1979), June 26, 1936 — Expanded the boundaries of the National Military Park.

NATIONAL PARK SERVICE ENABLING LEGISLATION

Act of August 25, 1916 (National Park Service Organic Act); Public Law 64-235; 54 United States Code 100101 et seq. as amended Reorganization Act of March 3, 1933; 47 Stat. 1517 General Authorities Act, October 7, 1976; Public Law 94-458; 90 Stat. 1939; 54 United States Code 100101 et seq. Act amending the Act of October 2, 1968 (commonly called Redwoods Act), March 27, 1978; Public Law 95-250; 92 Stat. 163; 54 United States Code 100101, 100902 National Parks and Recreation Act, November 10, 1978; Public Law 95-625; 92 Stat. 3467; 54 United States Code 100101 et seq.

OTHER LAWS AFFECTING NPS OPERATIONS

Accessibility

Architectural Barriers Act of 1968; Public Law 90-480; 82 Stat. 718; 42 United States Code 4151 et seq. Rehabilitation Act of 1973; Public Law 93-112; 87 Stat. 357; 29 United States Code 701 et seq. as amended by the Rehabilitation Act Amendments of 1974; 88 Stat. 1617

Cultural Resources

American Indian Religious Freedom Act; Public Law 95-341; 92 Stat. 469; 42 United States Code 1996

Antiquities Act of 1906; Public Law 59-209; 34 Stat. 225; 54 United States Code 320302; 43 CFR 3

Archeological and Historic Preservation Act of 1974; Public Law 93-291; 88 Stat. 174.

Archeological Resources Protection Act of 1979; Public Law 96-95; 93 Stat. 712; 54 United States Code 470aa et seq.; 43 CFR 7, subparts A and B; 36 CFR 79

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National Historic Preservation Act as amended; Public Law 89-665; 80 Stat. 915; 36 CFR 18, 60, 61, 63, 65, 79, 800

Protection of Historic and Cultural Properties, Executive Order 11593; 36 CFR 60, 61, 63, 800; 44 Federal Register 6068

Public Buildings Cooperative Use Act of 1976; Public Law 94-541; 90 Stat. 2505; 42 United States Code 4151-4156

Natural Resources

Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing the National Environmental Policy Act; E.S. 80-3, 08/11/80, 45 Federal Register 59109

Clean Air Act as amended; Public Law Chapter 360; 69 Stat. 322; 42 United States Code 7401 et seq.

Coastal Zone Management Act of 1972 as amended; Public Law 92-583; 86 Stat. 1280.

Endangered Species Act of 1973, as amended; Public Law 93-205; 87 Stat. 884.

Executive Order 11988: Floodplain Management; 42 Federal Register 26951; 3 CFR 121 (Supp 177)

Executive Order 11990: Protection of Wetlands; 42 Federal Register 26961; 3 CFR 121 (Supp 177)

Executive Order 11991: Protection and Enhancement of Environmental Quality

Executive Order 12898: Environmental Justice

1 Federal Caves Resource Protection Act of 1988
2 Federal Insecticide, Fungicide, and Rodenticide
3 Act; Public Law 92-516; 86 Stat. 973; 7 United
4 States Code 136 et seq.
5 Federal Water Pollution Control Act (commonly
6 referred to as Clean Water Act); Public Law 92-
7 500; 33 United States Code 1251 et seq. as
8 amended by the Clean Water Act; Public Law 95-
9 217
10 Fish and Wildlife Coordination Act of 1958 as
11 amended; Public Law 85-624; 72 Stat. 563.
12 Migratory Bird Conservation Act; Public Law
13 Chapter 257; 45 Stat. 1222.
14 Migratory Bird Treaty Act of 1918; Public Law
15 186; 40 Stat. 755
16 Magnuson-Stevens Fishery Conservation and
17 Management Act
18 National Environmental Policy Act of 1969; Pub-
19 lic Law 91-190; 83 Stat. 852; 42 United States
20 Code 4321 et seq.
21 National Park System Final Procedures for Im-
22 plementing Executive Order. 11988 and 11990
23 (45 Federal Register 35916 as revised by 47 Fed-
24 eral Register 36718)
25 Protection and Enhancement of Environmental
26 Quality; Executive Order 11514 as amended,
27 1970; Executive Order 11991; 35 Federal Register
28 4247; 1977; 42 Federal Register 26967)
29 Resource Conservation and Recovery Act; Public
30 Law 94-580; 30 Stat. 1148; 42 United States Code
31 6901 et seq.
32 Rivers and Harbors Act of 1899; 33 United States
33 Code Chapter 425, as amended by Public Law 97-
34 332, October 15, 1982 and Public Law 97-449; 33
35 United States Code 401-403
36 Water Resources Planning Act of 1965 (Public
37 Law 89-80; 42 United States Code 1962 et seq.)
38 and Water Resource Council's Principles and
39 Standards; 44 Federal Register 723977
40 Watershed Protection and Flood Prevention Act;
41 Public Law 92-419; 68 Stat. 666.
42 **Other**
43 Administrative Procedures Act; 5 United States
44 Code 551-559, 701-706
45 Concessions Policy Act of 1965; Public Law 89-
46 249; 79 Stat. 969.

47 Department of Transportation Act of 1966; Public
48 Law 89-670; 80 Stat. 931; 49 United States Code
49 303
50 Energy Supply and Environmental Coordination
51 Act of 1974
52 Executive Order 12003: Energy Policy and Con-
53 servation; 3 CFR 134 (Supp 1977); 42 United
54 States Code 2601
55 Executive Order 12088: Federal Compliance with
56 Pollution Control Standards
57 Executive Order 12372: Intergovernmental Re-
58 view of Federal Programs; 47 Federal Register
59 30959
60 Farmland Protection Policy Act PL-97-98
61 Forest and Rangeland Renewable Resources
62 Planning Act; Public Law 95-307; 92 Stat. 353.
63 Freedom of Information Act; Public Law 93-502;
64 5 United States Code 552 et seq.
65 Intergovernmental Cooperation Act of 1968; Pub-
66 lic Law 90-577; 40 United States Code 531-535
67 and 31 United States Code 6501-6508
68 Intergovernmental Coordination Act of 1969; 42
69 United States Code 4101, 4231, 4233
70 Noise Control Act of 1972 as amended; Public
71 Law 92-574; 42 United States Code 4901 et seq.
72 Outdoor Recreation Coordination Act of 1963;
73 Public Law 88-29; 77 Stat. 49
74 Payment in Lieu of Taxes Act; Public Law 94-
75 565; 90 Stat. 2662; 31 United States Code 6901 et
76 seq.

77 Surface Transportation Assistance Act of 1982;
78 96 Stat. 2097; 23 United States Code 101; and
79 many others
80 Wildfire Disaster Recovery Act; Public Law 101-
81 286

82 **Management Policies 2006**

83 This is an update to the *2001 Management Poli-*
84 *cies*. The policies are derived from the laws that
85 have been enacted to establish and govern the
86 NPS and the National Park System. This docu-
87 ment serves as the basic, Servicewide policy
88 manual used by park superintendents and other
89 NPS managers to guide their decision-making.
90 The manual prescribes policies that enable the
91 NPS to preserve park resources and values unim-
92 paired for the enjoyment of future generations, as
93 required by law. The policies have been updated

to keep pace with new laws that have been enacted, changes in technology and American demographics, and new understandings of the kinds of actions that are required to best protect the natural and cultural resources of the parks. The policies stress the importance of: using the parks for educational purposes; demonstrating environmental leadership in the parks; managing park facilities and resources in ways that will sustain them for future generations of Americans to enjoy; and working with partners to help accomplish the NPS mission. The new Management Policies is available on the NPS website at <http://www.nps.gov/policy/MP2006.pdf>.

Director's Order #12

Director's Order #12 describes the policy and procedures by which the NPS will comply with NEPA. The Council on Environmental Quality, part of the Executive Office of the President, is the "caretaker" of National Environmental Policy Act. The National Park Service is required to abide by all National Environmental Policy Act regulations (40 CFR 1500-1508) and any other procedures and requirements imposed by other higher authorities, such as the Department of the Interior.

Director's Order #13A

Director's Order #13A: Environmental Management Systems. together with accompanying Reference Manual (RM) 13A, provides guidance for implementing Environmental Management Systems at the facility and organizational levels Servicewide.

Director's Order #24

Director's Order #24: Museum Collections Management Director's Order 24 lays the foundation by which the NPS meets its responsibilities toward museum collections. This Director's Order provides policy guidance, standards, and requirements for preserving, protecting, documenting, and providing access to, and use of, NPS museum collections.

Director's Order #28 (NPS 1998e)

Director's Order #28, issued pursuant to 54 United States Code (100101 through 100303), addresses cultural resource management. The National Park Service will protect and manage cultural resources in its custody through effective

research, planning, and stewardship and in accordance with the policies and principles contained in the NPS Management Policies 2006.

Director's Order #28A

Director's Order #28A: Archeology provides a management framework for planning, reviewing, and undertaking archeological activities and other activities that may affect archeological resources within the National Park System.

Director's Order # 47

Director's Order #47, Soundscape Preservation and Noise Management, articulates NPS operational policies that will require, to the fullest extent practicable, the protection, maintenance, or restoration of the natural soundscape resource in a condition unimpaired by inappropriate or excessive noise sources.

Director's Order #75A

Director's Order #75A, Civic Engagement and Public Involvement, clarifies and strengthens the commitment of the NPS to legally require public involvement and participation as it relates to accomplishing its mission and management responsibilities under the NPS Organic Act of 1916.

Directors Order #77-1

Directors Order #77-1, Wetland Protection, establishes NPS policies, requirements, and standards for implementing Executive Order (E.O.) 11990: "Protection of Wetlands" (42 Fed. Reg. 26961). E.O. 11990 was issued by President Carter in 1977 in order "...to avoid to the extent possible the long and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative."

Directors Order #77-2

Directors Order #77-2, Floodplain Management, applies to all NPS proposed actions, including the direct and indirect support of floodplain development, that could adversely affect the natural resources and functions of floodplains, including coastal floodplains, or increase flood risks. This Director's Order also applies to existing actions when they are the subjects of regularly occurring updates of NPS planning documents.

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INDEX

A

administrative commitmentsiv
 Advisory Council on Historic Preservation....7,
 16, 89, 90, 96, 101, 102, 110
 Alternative A...ii, iv, 29, 51, 52, 61, 63, 89, 90,
 93, 99, 105
 Alternative Bii, iv, 1, 29, 51, 61, 96, 99, 100
 Alternative Cii, iv, 29, 51, 61, 102, 106
 alternatives ii, iv, 1, 13, 24, 29
 Antiquities Act115
 archeological resources82, 89, 117

B

boundaries1, 8, 9, 13, 16, 21, 43, 46, 67, 68,
 69, 75, 80, 115

C

climate change..... 14, 21, 54, 80
 costs.....49, 50
 cultural landscapes ...16, 17, 22, 23, 56, 61, 80,
 82, 84, 90, 96, 102
 cultural resources...ii, iv, 14, 16, 17, 28, 36, 38,
 39, 46, 52, 54, 55, 56, 58, 59, 61, 67, 79, 80,
 117

D

desired conditions.....13, 31

E

environmental consequences.....iv, 22, 79
 environmentally preferable alternative....29, 30
 ethnographic resources16, 56, 82
 Executive Order.....76, 115, **116**, 117
 exotic species...14, 71, 88, 92, 93, 98, 104, 105

F

Floodplains15, 25, 76
 funding and staffing.....6, 28, 49

H

historic structures90, 102

I

impact topics..... iv, 22, 24, 79, 80, 82
 implementation . iv, 6, 7, 64, 82, 85, 86, 89, 90,
 96, 102

N

National Historic Preservation Act.. 23, 64, 80,
 109, 115
 National Park and Recreation Act 13
 National Park System General Authorities Act
 13
 National Register of Historic Places..... 81, 109
 natural resources...6, 15, 16, 23, 28, 32, 36, 40,
 47, 52, 53, 55, 56, 117

no-action alternative iv, 29
 NPS Management Policies 13, 23
 NPS Organic Act 13, 117

P

park operations iv, 24, 86
 preferred alternative..... 1, 29

S

servicewide mandates iv, 13
 significance 8, 9
 socioeconomic environment iv
 soundscape..... 24, 43, 89, 117
 special mandates iv
 staffing 40, 50, 83

U

user capacity 31

V

visitor experience..... iv, 31, 85

W

water quality23, 85, 93, 98, 99, 105
 wetlands 15, 25, 58, 75