

CHAPTER SIX: ENVIRONMENTAL ASSESSMENT



PURPOSE & NEED FOR THE ENVIRONMENTAL ASSESSMENT

In accordance with the National Environmental Policy Act (NEPA), activities undertaken by federal agencies or through use of federal funding must be assessed for their potential to cause environmental impacts. Resources potentially affected that are typically factored into an analysis include natural and cultural resources, landscape and scenic resources, and socio-economic conditions. The goal of an Environmental Assessment (EA) is to identify an environmentally preferred means of undertaking an action through the formulation and analysis of alternative ways of conducting that action. The intention of the EA process is to reduce potentially adverse impacts while increasing the odds of beneficial impacts to the environment in which the activity is planned. Because the BRNHA was established through federal statute and because it receives appropriations and technical support from the National Park Service (NPS), this management plan is subject to NEPA.

The mission of the BRNHA is to protect, preserve, interpret and develop the unique natural, historical and cultural resources of Western North Carolina for the benefit of present and future generations, and in so doing to stimulate increased economic opportunity in the region. Over the last three years, the BRNHA has developed goals and objectives, program areas, and strategies and actions in pursuit of that mission. Potential exists that adverse or beneficial impacts could result from BRNHA efforts and that these could grow in significance when combined with other known activities in the region. An assessment of this management approach, henceforward referred to as the Status Quo or no action alternative, has been compared with four other hypothetical management alternatives constructed for this assessment to identify an environmentally preferred management option. The identification of that option does not necessitate its selection by the BRNHA as the approach to guide its efforts over the next 10 years.

The EA process has proven extremely valuable to the construction of this management plan. The exploration of other possible management approaches beyond what has been done over the last few years has yielded a number of management ideas and recommendations that, when integrated into the organizational structure of the BRNHA and its operations, should enhance the capacity of the BRNHA to more fully satisfy all aspects of its mission. The analysis of potential impacts has revealed some significant environmental issues that needed to be recognized and addressed by BRNHA and its partners if heritage-based economic development is not to occur at the expense of heritage resource capital. The analysis also revealed some deficiencies regarding local planning and preparations that are needed in certain areas to help ensure visitors' experiences match their expectations of Western North Carolina and that quality of life of residents in the region does not diminish over time as various activities are executed by BRNHA and its partners. It has been determined by the technical consultant, IDT, and BRNHA management and Board that Alternative E, the management approach selected by the BRNHA through the EA process and described in detail in Chapter 2, satisfactorily addresses these issues. After subjecting a draft of the EA to the public in November and December 2007, only one comment was received arguing against Alternative E. That comment did not alter the substance of the analysis or findings. The comment and the technical consultant's response to that comment is provided in Appendix 4.

ORGANIZATION OF THE ENVIRONMENTAL ASSESSMENT

A great deal of complex information is presented in this chapter. This document has been organized in an attempt to facilitate clearer comprehension and easier use by the reader. Methodologies are described first. These include the processes undertaken to formulate the five management alternatives, a description of

qualifications of those contributing to the EA, the criteria used in the analysis, and a list of those resources and conditions in the Heritage Area environment considered in the analysis. Next, each of the five different management alternatives is described in some detail, including a summary of the management structure and what the programs might look like under each alternative. The analysis of potential impacts for each alternative follows. The chapter ends with conclusion statements and a selection of an environmentally preferred management approach.

ENVIRONMENTAL ASSESSMENT METHODOLOGY

Assessment Process

The EA of this management plan is quite different from the assessment of a specific on-the-ground action that may be facilitated by this plan. Whereas an individual action is scheduled to occur at a specific place and point in time, this plan largely establishes strategic direction to guide organizational decision making over the next 10 years. Whereas site and timing information of a proposed action is key to identifying likely affected resources and formulating alternative means of executing the action, this plan provides limited information about site and time-specific strategies or actions. For this reason, explicit environmental impacts are difficult to predict with great confidence. It is only when programmatic decisions have been made that determine where and when action items recommended by the plan will be implemented that clear identification of impacts can be predicted with high confidence. Many of these decisions will materialize as the plan unfolds over the course of its 10 year life span. Depending upon a variety of factors, some of these projects may be subject to the NEPA process and require an EA.

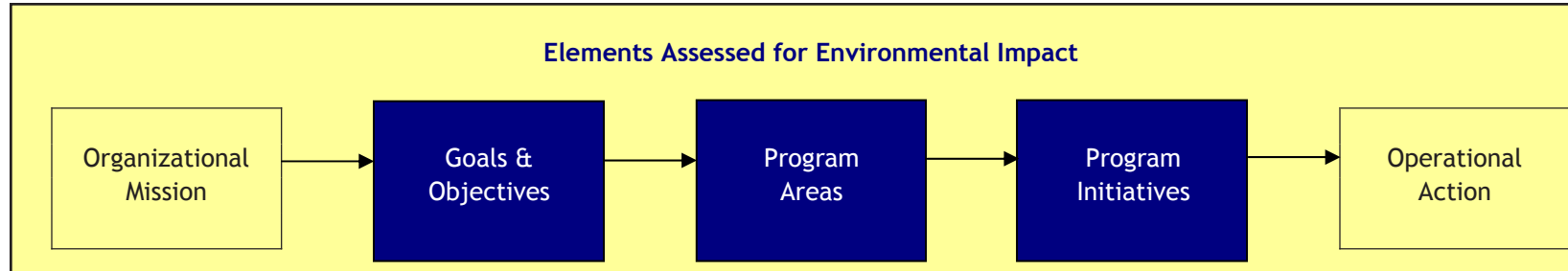
There are both benefits and drawbacks to having a management plan that prescribes concrete location and time-specific actions. The BRNHA has elected to create a management plan that affords flexibility in decision making that it may need over the next 10 years. The sheer size of the BRNHA, the enormous list of heritage

resources and their management needs, and the creativity of existing and potentially future partners all present opportunities that could be missed by too many up front commitments to location and time-specific actions.

Formulation of Management Alternatives

This environmental assessment is therefore primarily concerned with potential impacts that may result from a strategic direction - or management approach - charted by the BRNHA, illustrated by the blue boxes in Figure 6-1. This EA is not concerned with the organizational mission, which is firmly established as a statement of the organization as it exists right now and its vision for the foreseeable future. The mission is not going to change any time soon and will stay the same regardless of management alternative selected. This EA is certainly concerned with operational actions, primarily because it is at this point in the continuum of BRNHA's activities when environmental impact that is detectable is going to occur. However, due to the limitations in information that could be generated about site and time specific activities for each management alternative, four of which are largely hypothetical constructs, very little impact analysis could be reliably performed on operational actions. Recognizing this limitation, the EA process focused instead on those strategic elements that facilitate the transition of organizational vision to operational action. These include the goals and objectives, program areas, and programmatic initiatives. Like the mission, these strategic elements are static across all five management alternatives. However, the methods by which the goals are pursued through the various programs vary considerably across management alternatives. Due to the assessment being performed on strategic intent of the various management alternatives rather than site and time specific actions proposed by the alternatives, the analyses presented later in this chapter are largely of a conceptual or general nature.

Figure 6-1:
From Organizational Vision to Operational Outcomes: Five
Core Elements of Strategic Planning and Management



The goals and objectives of the BRNHA were discussed in Chapter 2. Preservation, interpretation, and development goals exist for each of the five heritage resource themes. The goals form the foundation upon which each of the management alternatives examined in this EA have been constructed. The management alternatives include:

- Status Quo or No Action Alternative (Alternative A)
- Alternative B: Management With a Preservation Emphasis
- Alternative C: Management With a Development Emphasis
- Alternative D: Management With an Interpretation Emphasis
- Alternative E: Management With Goal Integration

Each of the management alternatives is described in greater detail in the next section of this chapter. Each has been assessed and compared against the others for its potential to directly cause or indirectly contribute to adverse and beneficial environmental impacts.

Program areas were also discussed in Chapter 2. Four different program areas have been established by BRNHA that are intended to drive pursuit and achievement of each goal. Some program areas contain multiple program initiatives. Core program areas of the BRNHA include:

- grants
- marketing and promotions
- research
- partnership

This EA is informed primarily by the analysis of each of the four programs as they are utilized in the different management approaches to drive ground level action.

Contributors to the Environmental Analysis

In performance of this EA, the technical consultant has relied significantly upon both its own professional judgment and knowledge of the region and the technical expertise and knowledge of IDT members to predict likely impacts. Additionally, public notices were broadcast at various times throughout this project requesting agency and public input. Qualifications and credentials of the technical consultant and IDT members are discussed below along with the process employed to solicit and utilize public involvement.

Equinox Environmental Consultation and Design, Inc. (Equinox) of Asheville, NC was the technical consultant utilized for the EA and management plan. Equinox is a 9 year old for-profit environmental planning and design firm located in Asheville, NC. Equinox' mission is to facilitate resource conservation and sustainable development by providing private, public, and non-profit interests with high quality ecological, planning, and design services. Equinox fields a staff of 12 - including biologists, environmental scientists, land planners, and landscape architects. Staff assigned to this project include the firm's president and environmental planner Andy Brown; senior environmental scientist Jim Blöse; cultural resource and landscape designer, Victoria Partridge; and GIS technician Lindsay Majer. More information on the qualifications of the technical consultant can be found at www.equinoxenvironmental.com.

The IDT was created from state and federal agencies with management responsibilities in the region and from regional councils of government who service Western North Carolina's various counties and municipalities (Table 6-1).

Agency members were selected because they represent a pool of professional talent that is aware of important issues in the region affecting those heritage resources of which the BRNHA is concerned, and most are also familiar with the NEPA process. The amount of public land in Western North Carolina managed by state and federal agencies and the partnership potential that exists with these organizations also necessitated their involvement. Regional Councils of Government (COGS) were selected to serve as a surrogate for county and municipal governments in the region. It would be impossible to expect representation from all local governments in this IDT and it would be inefficient to try to coordinate their direct involvement in this planning process. The COGS service most of the local governments in the region in some capacity and are knowledgeable about many of the important issues facing local governments. The IDT met three times to discuss issues related to the management plan and reviewed various drafts of the document.

Table 6-1:
Interdisciplinary Team Members

Interdisciplinary Team		
Person	Interest-Affiliation	Organization
Penn Dameron	BRNHA	Blue Ridge National Heritage Area
Lynda Doucette	National Parks	National Park Service - GSMNP
Bambi Teague	National Parks	National Park Service - BRP
Dwayne Stutzman	State Parks	NC Division of Parks & Recreation
Mary Noel	National Forests	USDA Forest Service - National Forests in NC
Gary Peeples	Natural Heritage	US Fish & Wildlife Service
Bryan Tompkins	Natural Heritage	US Fish & Wildlife Service
Jennifer Cathey	Historical & Culture	NC State Historic Preservation Office
Virginia Faust	Local Government-Socio Economics	NC Division of Community Assistance
Phil Trew	Local Government	High Country Council of Government
Linda Giltz	Local Government	Land of Sky Regional Council
Russell Townsend	Tribal	Eastern Band of Cherokee Nation
Bill Gibson	Local Government	Region A Council of Government
Jim Edwards	Local Government	Region C Council of Governments
Sam Erwin	Local Government	Region E Council of Governments
Judy Francis	Resource Based Economic Dev.	NCDENR - One NC Naturally

The IDT also facilitated transfer of information generated through the EA process from the technical consultant throughout its agency and vice-versa.

Public outreach efforts included public notices posted on the Blue Ridge National Heritage Area webpage and in seven local newspapers throughout the counties within the BRNHA. Newspapers in which notices were run include the Hendersonville Times-News, Asheville Citizen-Times, Murphy Cherokee Scout, Sylva Herald, Watauga Democrat, Morganton Herald, and the Mount Airy News. These news media were selected because their combined distributions cover the entirety of the BRNHA. In both outreach efforts, notices briefed readers on the purpose and creation of the BRNHA, the Management Plan and EA effort taking place, and the availability of the working drafts for comment. Comments were received throughout the outreach process from a variety of sources. These included local historians who wished to ensure the inclusion of historic resources such as Revolutionary war data. Comments were also received from other heritage resource stewards who wished to ensure the inclusion of specific resources in their areas. All comments were reviewed and each received an individual reply addressing the issues or suggestions. All data presented in public comments was considered for inclusion or analysis in the management plan and EA, but was also subject to the same screening methodology employed throughout the planning process. The public input greatly assisted the technical consultants in creating a document that is both comprehensive and manageable.

The technical consultant, BRNHA Board and Staff, the IDT, local heritage councils, and the public at large were all invited to participate in a 30 day review of this completed EA and management plan in November and December 2007.

Assessment Criteria

A comprehensive analysis has been performed for each management alternative. Terminology and criteria used in the assessment are discussed below. An environmentally preferred management approach has been selected based on the analysis of each alternative using these criteria.

Adverse and Beneficial Impacts

The BRNHA's programmatic efforts may produce adverse and beneficial consequences to the area. Adverse impacts are harmful to the natural, cultural, historic, and socio-economic environment. Beneficial impacts are those that are advantageous to the environment. A management alternative may produce one type of impact or both.

Context, Intensity, and Duration

Potential environmental consequences could occur in either a Regional or Local context. Regional impacts are those that are expected to be experienced throughout the 10,000 square mile region as a whole. Local impacts are those that are expected to be experienced by a specific location, a community, or a finite area (such as a small group of adjacent counties) within the BRNHA. Potential local impacts have only been described where enough evidence of local activities or conditions and BRNHA programmatic actions exists to warrant a professional judgment. Overall conclusion statements per management alternative have been assigned only for the BRNHA region as a whole.

Environmental impacts vary in intensity among programmatic initiatives. Impact intensity is rated as either Negligible, Minor, Moderate, or Major.

- Negligible - Impact is barely or not at all detectible. Key resource characteristics would not be appreciably diminished or enhanced.
- Minor - Impact is measurable and perceptible but has limited effect on the resource.

- Moderate - Impact is readily detectable and is sufficient to affect key resource characteristics.
- Major - Impact on resource characteristics is substantial and highly noticeable.

Environmental effects from the different actions may be short term or long term in their duration. Short term impacts are those that are likely to be experienced within the next 3 to 5 years. Long term impacts are those likely to occur within 6 to 15 years. Short term impacts have potential to grow into long term impacts, though they may change either upward or down in intensity. Long term impacts may last beyond the 15 year period.

Direct and Indirect Impacts

Program areas and initiatives are assessed for their potential to produce direct and indirect impacts. Direct impacts are those for which a clear cause and effect relationship can be established between the activity undertaken by the BRNHA and the consequence. Direct impacts are immediately traceable to the causal activity. Indirect or secondary impacts are those consequences produced by a separate activity or event that was influenced in some way by BRNHA's programmatic efforts. There is typically a less clear cause and effect relationship between the BRNHA's activity and the consequence, and the impact is less immediately traceable to the BRNHA's activity. The majority of impacts identified in this analysis are of an indirect nature.

Cumulative Impact Assessment

Cumulative impacts are those produced by the combined effect of BRNHA's action with other past, present, and forecasted actions and circumstances in the area. Impacts forecasted to be minor for a program analyzed in isolation can become more severe when assessed collectively with other activities. Primary circumstances factored into this cumulative impact analysis include population growth, the status of local government planning, state transportation planning, other regional economic development initiatives, and conservation initiatives in the region. These issues were selected because of their ability to substantially compliment or confound the

direct or indirect impacts produced through BRNHA's efforts. Other circumstances contributing to cumulative impacts are discussed where appropriate.

NOTE - to determine local planning capacity for the cumulative impact assessment, only county level planning initiatives depicted in Table 5-1 are factored into the analysis. Appendix 2 provides a more comprehensive listing of local plans and studies that includes various municipal as well as county efforts.

Environmental Resources and Conditions Assessed for Potential Impact

Most of the heritage resources discussed in Chapter 3 and listed in Appendix 1 and aspects of the socio-economic conditions discussed in Chapter 4 form the essential resource base of the Heritage Area environment for which impacts have been assessed. There are other resources in the Heritage Area environment not described in this document that have also factored into the analysis. To reduce redundancy of text and facilitate easier comprehension, these specific resources have been combined into more general natural resource, cultural resource, landscape identity, and socio-economic categories that are typically analyzed in an EA. These general resource categories form the framework upon which a visitor use and experience resource category has also been assessed. Table 6-2 lists the specific resources per resource category used in the environmental analysis.

Table 6-2:
Environmental Resources and Conditions Included in the Environmental Assessment

	Natural Resources Considered in Environmental Analysis			
<i>Resource Group Assessed in EA</i>	<i>Land Resources</i>	<i>Water Resources</i>	<i>Biological Resources</i>	<i>Recreational & Scenic Resources</i>
Resources Described in Chapter 3 & Listed in Appendix 1	<ul style="list-style-type: none"> Geological Features National/State Parks & Forests Other Prominent Protected Lands 	<ul style="list-style-type: none"> Outstanding Resource Waters Wild & Scenic Waters Trout Waters 	<ul style="list-style-type: none"> Significant Natural Areas Critical Habitats Species of Conservation Significance 	<ul style="list-style-type: none"> Public Hunting & Fishing Opps. Trail Assets Scenic Attributes
Other Resources Factored in Analysis	<ul style="list-style-type: none"> Floodplains Highly Erodible Soils Steep Slopes 	<ul style="list-style-type: none"> Common Water Resources 	<ul style="list-style-type: none"> Common Wildlife & Vegetation 	
	Cultural Resources Considered in Environmental Analysis			
<i>Resource Group Assessed in EA</i>	<i>Cherokee Resources</i>	<i>Craft Resources</i>	<i>Music Resources</i>	<i>Other Resources</i>
Resources Described in Chapter 3 & Listed in Appendix 1	<ul style="list-style-type: none"> Cherokee Crafters & Musicians Publicly Accessible Cherokee Sites Cherokee Heritage Events 	<ul style="list-style-type: none"> Important People to Handcrafting Handcrafting Sites & Institutions Handcrafting Festivals & Events 	<ul style="list-style-type: none"> Important People to Music Heritage Musical Institutions, Media, & Other Music Festivals & Jam Sessions 	
Other Resources Factored in Analysis	<ul style="list-style-type: none"> Archaeological Sites 			<ul style="list-style-type: none"> Historical Sites Archeological Sites
	Resources Associated with Landscape Identity Considered in Environmental Analysis			
<i>Resource Group Assessed in EA</i>	<i>Agricultural Landscapes</i>	<i>Land Resources</i>		
Resources Described in Chapter 3 & Listed in Appendix 1	<ul style="list-style-type: none"> Farmers Markets Farming Communities Historic and Century Farms Agricultural Festivals 	<ul style="list-style-type: none"> Geological Features Scenic Attributes National & State Parks & Forests 		
Other Resources Factored in Analysis	<ul style="list-style-type: none"> Prime Agricultural Soils 			
	Socio-Economic Condition Considered in Environmental Analysis			
<i>Resource Group Assessed in EA</i>	<i>Transportation & Infrastructure</i>	<i>Socio-Economic Environment</i>		
Conditions Described in Chapters 4 and 5	<ul style="list-style-type: none"> NCDOT TIPS Enviro. & Infrastructure Plans 	<ul style="list-style-type: none"> Population Trends County Building Patterns Land Cover Change Economic Indicators Tourism & the Regional Economy 		
Other Conditions Factored in Analysis		<ul style="list-style-type: none"> General Quality of Life 		
NOTE - Impacts to Visitor Use and Experience Have Been Based Largely Upon Impacts Expected to the Above Resource Categories and Groups				

In addition to information presented in Chapters 3 and 4, the description of other planning efforts in Chapter 5 has also been used to inform the analysis. This information has proven particularly useful in the assessment of cumulative impacts in regards to the capacity of local communities to plan, accommodate, and manage outcomes facilitated by the BRNHA on its own and cumulatively with other activities ongoing or expected to occur in the region.

As mentioned, the environmental analysis of each management alternative focuses on the general resource groups. Also as mentioned previously, due to the assessment being performed on strategic intent of the various management alternatives rather than site and time-specific actions proposed by the alternatives, the analyses presented are largely of a conceptual or general nature. In some sections of the analysis, impacts to specific resources within those broad resource categories are described. This is done when illustrative examples of specific resource impacts can help demonstrate a point or when additional analysis by specific resource is helpful to the discussion about the impacts expected to a broad resource category. It is also done when variations in the degree of impact are likely to occur between specific resources that fall within the same resource group. The discussion of impacts expected to specific resources occurs more frequently in the description of natural and cultural resource impacts and in the Status Quo and B Alternatives.

DESCRIPTION OF MANAGEMENT ALTERNATIVES

The Status Quo - No Action Alternative

Summary

The Blue Ridge National Heritage Area is a non-profit organization governed by a nine member Board of Directors comprised of appointees made by the Governor, AdvantageWest Economic Development Group, Eastern Band of the Cherokee Indians, Education and Research Consortium, and HandMade in America. The Board exercises oversight of the organization and guides strategic direction in pursuit of the organizational mission. The organization

is managed by an Executive Director hired by the Board, and three core staff who are hired and managed by the Executive Director. Outreach with local communities in the BRNHA is performed in concert between BRNHA staff and five heritage tourism officers who are employees of the NC Department of Commerce. The partnership with the NC Department of Commerce is significant, providing an in-kind contributed service that has substantial monetary value and can be utilized to leverage federal funding and other grants when a non-federal match is required. The BRNHA has a local presence in each of the counties and on the Qualla Boundary through the establishment of 26 Local Heritage Councils (Councils). The BRNHA serves as a point of contact and central organizing and coordinating figure among these councils, the heritage tourism officers, and other heritage constituencies.

The BRNHA's programmatic emphasis is on five heritage themes that are present in a unique combination in the Western North Carolina region and include Natural, Cherokee, Agriculture, Craft, and Music resources. Three overarching goals drive the BRNHA's strategies and actions. They include preservation, interpretation/education, and development of each of the five heritage themes. There are no stated priorities or programmatic emphases in regard to either of the goals or heritage themes but it is the intention of the Status Quo management approach for all goals and themes to receive equal weight in decision making. However, the BRNHA is taking a more active approach in pursuit of the development goal by identifying in-house immediate action items and taking steps to bring those items to fruition. With regards to the preservation and interpretation/education goals, the BRNHA is generally taking a more reactive approach by encouraging ideas to filter up from the local level and then deciding whether to partner or allocate funding toward such initiatives. By default, there is incongruity between management intent and what is actually done and the heritage development goal receives most of the attention. Core program areas established by the BRNHA for pursuit of its mission and goals include grant making, marketing and promotions, research, and partnership development or facilitation. To make things happen, the BRNHA relies significantly

on diverse partnerships, including as many interests as possible associated with each of the heritage themes to provide technical advice and entrepreneurial creativity.

Currently, there is no approved management plan that establishes priorities or guides decision making, and the no action alternative assumes that the BRNHA would continue its efforts without a management plan. If this occurs, the level of effort undertaken in pursuit of goals and objectives would decrease over time due to an elimination of financial and technical support by the NPS which, by statute, requires all Heritage Areas to develop a management plan. The BRNHA may still exist as an entity, but likely with a different organizational structure and fewer staff.

Description of Programs

Under the Status Quo management approach, program initiatives are clearly intended to cultivate an environment that attracts more tourists, retains existing and new tourists for longer amounts of time, facilitates their travel within further reaches of Western North Carolina, and provides them with greater opportunities to spend more money. Very little attention has been given to unintended consequences that may result from the achievement of this overarching intent. While the effort invested in the grants and research programs may diminish due to the loss of federal funding, the marketing and promotions program will continue to stimulate tourism. Meanwhile, the evolution of the partnership structure will result in a diminished role of the NPS and other interests concerned with heritage preservation and interpretation. The influence of heritage development interests will grow.

Grants Program

A total of \$670,000 in grants has been awarded over the last two years. Without a management plan to guide decision making, it will be difficult to forecast if such grant expenditures in the future will be made in a manner that most effectively facilitates pursuit and achievement of all goals and objectives. Considering the dependency of the grants program on federal allocations and NPS

requirements that BRNHA operate from an approved management plan, this program could be eliminated or substantially reduced in the near future.

Marketing and Promotions Program

The marketing and promotions program is currently comprised of six different initiatives: 1) a signage campaign; 2) the creation of heritage trail guides; 3) a Go Blue Ridge card; 4) an I-Wall at the Blue Ridge Parkway Destination Center; and 5) marketing boot camps. While 6) the BRNHA web site serves multiple functions, it is also deliberately utilized as a marketing and promotions tool. The BRNHA has assumed direct responsibility for coordinating initiatives 1 - 4 and 6. The BRNHA assists in the facilitation of initiative 5, which was conceived by the NC Department of Commerce and held at the local level to teach heritage based marketing, promotions, and public relations. Excepting the website, each of these strategies is operational or nearing completion and should not be entirely dependent upon federal allocations for future implementation, maintenance, and upkeep. Because the loss of federal funding would equal reduced staffing, it will affect the ability of the BRNHA to evaluate the marketing program, adapt as necessary, and conceive of and coordinate the development of new initiatives. The website would probably lose some effectiveness as a marketing and promotions tool.

Research Program

The focus of research has been to gauge the vitality of the local tourism industry, assess visitor preferences, and quantify the economic impact of tourism to the region. Baseline studies have been performed. Future studies could still occur with support from three organizational partners (Advantage West, Cherokee Preservation Foundation, and NC Department of Commerce) that have a direct stake in the success of heritage related tourism, independent of federal allocations to the BRNHA. The groups would, however, miss the coordinating presence and ground level support currently provided by BRNHA.

Partnership Program

The importance of partnerships to organizational and operational functions was discussed in Chapter 2. Opportunities for potential future partnerships are discussed later in this document. The relationship with the NPS dedicates the Heritage Area to resource preservation and interpretation above all else. The organizational structure, with strong representation from economic development interests on the Board and in local councils in addition to the reliance upon the NC Department of Commerce to fill core operational needs, ensures a strong emphasis on heritage development and tourism.

Without an approved management plan, the NPS would vacate its position at the authorizing level and most probably act instead as other government and private partners in a consulting role, providing technical advice and other information to help inform organizational and operational activities. The Heritage Area designation may no longer apply, but the organization may still operate and function with the same intentions regarding heritage resources. The Board would probably assume more influence. With little financial incentive to stay involved due to the loss of federal funding, many of the local councils would probably disintegrate. Seeing the diminished role of the local councils and the loss of the grants program, other local implementation or operational partners might also step aside.

Alternative B: Management with a Heritage Preservation Emphasis

Summary

The BRNHA would remain a non-profit organization with essentially the same composition of its Board of Directors, Executive Director, staffing, partnership with the NC Department of Commerce, and partnership with the Councils. There are three key differences, however. One is that the Board would over time include some appointees who represent resource preservation interests. Secondly, a Preservation Task Force (PTF) would be created from among Board members, select council members, government entities, and private preservation groups to assist with strategic planning, local partner

outreach, and programmatic recommendations. Third, each local council would be required to have active representation by heritage preservation interests. Due to these structural changes, a more active approach to heritage preservation would occur, which would not be intended to supplant the BRNHA's existing proactive approach to heritage development. The grants, marketing and promotions, research, and partnership programs would continue as the vehicles for facilitating ground level action.

Sixty percent (60%) of programmatic emphasis would be allocated annually to heritage preservation efforts with the remaining 40% of effort reserved for interpretation and development of those resources. Links between heritage interpretation and development and how they facilitate heritage preservation would be more clearly established. A management plan would be developed and approved that establishes these strategic priorities and identifies programmatic initiatives and action items that reflect these priorities. With an approved management plan, the BRNHA would retain and continue to utilize financial and technical support from the NPS. The level of effort would increase somewhat over the next 10 years due the new role of the PTF, the staffing necessary to coordinate its actions, and the more active approach to preservation. The financial impact should increase due to substantial opportunities to coordinate with NC State government trust funds, governmental agency programs, and other funders dedicated to heritage preservation.

Description of Programs

Under the management approach emphasizing preservation, program initiatives would be constructed and executed with the primary purpose of identifying and protecting key resources and tracking the viability of those resources over time. Efforts already expended on heritage development would continue to stimulate tourism, and up to 40% of effort over the next 10 years would still be invested with that purpose in mind.

Grants Program

Up to \$210,000 annually or \$2.1 million over the next 10 years would be earmarked for resource preservation projects. This figure is based on 60% of average annual grant appropriations over the last

few years. The remaining 40% of grant funding would be allocated among heritage development and interpretation projects. To qualify for funding, proposals for development or interpretation would need to contain information that identifies key natural or historic resources at or in the vicinity of the project and describe how the project would help protect those resources. With oversight and participation from Board and management, the PTF would help to develop the application process, screen proposals, and recommend awards. Ultimate decisions would remain with management. The PTF would also help disseminate information about the grants program to potential partners at the local and regional level.

The grants program would continue to emphasize the need for matching contributions to potential grantees as a pre-requisite for its funding. Strategic partnerships would be explored with different NC trust funds that can be used to protect important resources. A total of \$182 million was available in 2007 from state trust funds that assist with heritage preservation. A BRNHA staff position would be dedicated to building these partnerships with a short term goal of helping to leverage 1% (\$1.82 million) of trust fund money that was available in 2007 to projects initiated by BRNHA and its partners. It is likely that this goal could be well exceeded through development of meaningful and attractive heritage preservation projects. The PTF would also play a role in helping to build and sustain a network among the trust funds, the BRNHA, and local heritage councils.

In addition to making use of federal and state funds, the grants program would establish its own heritage preservation fund with revenues generated from marketing and promotional activities.

Marketing and Promotions Program

Signage would continue to serve its primary function to promote the BRNHA brand and facilitate wider travel throughout the region by the touring public. However, signs not yet completely developed would be used to also inform the touring public about heritage preservation needs in and around sites where signs are scheduled for installation and to encourage voluntary contributions to either a heritage preservation fund established by the BRNHA or to other non-profit partners working to preserve those resources. The signs

would also be used to stress a 'low-impact' ethic among the touring public. Discussions would be held with the NCDOT to determine the feasibility of allocating a portion of the \$1,500 match they currently require per sign to the BRNHA heritage preservation fund.

Heritage Trail Guides would continue to help visitors find their way to the many heritage attractions throughout the region. In support of preservation efforts, the publications would feature a cover story informing the reader of the importance of sound management, sustainable use, and the reader's role in proper stewardship of heritage resources. A sponsorship form would be developed to occupy the back cover of the guides, encouraging voluntary contributions to heritage preservation groups or the BRNHA's own heritage preservation fund.

The Go Card would continue to promote area attractions. Preference would be given those public and private fee based attractions that actively promote preservation of heritage resources. Revenues generated through sales of the cards would continue to be used to perpetuate the Go Card over the long term. Any unused balances would be funneled into the BRNHA's own heritage preservation fund.

Sixty percent of the advertising space on the I-Wall would be reserved for organizations that actively promote heritage preservation. If not feasible due to the need for advertising revenue to pay for the I-Wall, an alternative would be to build an informational kiosk adjacent to the I-Wall that conveys a message about the need for heritage preservation and lists names and contact information for groups whose mission encompasses preservation of heritage resources.

Marketing Boot Camps would continue to be promoted but 60% of the agenda would stress means of preserving the heritage resources that are being advertised to stimulate greater tourism. The workshops would feature presentations by heritage preservation interests who can inform the attendees of important preservation projects in their localities and groups who are working to facilitate heritage preservation.

The BRNHA website would continue to serve its current informational role but would contain several new pages that emphasize heritage preservation. Links would be provided to heritage preservation partners. Preservation goals would be clearly articulated and promoted. A top 10 list of endangered heritage resources would be developed and on display with threats identified to the continued viability of those resources. Updates would be provided about projects designed to protect those resources and the status of those resources over time. Results from the research program, with its emphasis on heritage preservation, would be made available to visitors of the website. The electronic newsletter broadcast from the website would include heritage preservation articles.

Research Program

Research emphasis over time would include studies on the economic benefits of heritage preservation, a barometer to track recovery (or lack thereof) of endangered heritage resources, and inventories and prioritization of preservation efforts throughout the region. The inventory would help inform the both the grants and marketing and promotions programs of worthy projects and attractions to feature. Other research as described in the Status Quo would remain.

Partnership Program

With an approved management plan, the NPS would maintain its fundamental position of influence of the Heritage Area designation and controller of access to federal allocations, which would help ensure that preservation goals remain a high priority in the area's management. The addition of preservation interests on the Board, the requirement of preservation interests on all Councils, and the establishment of a PTF as part of the organizational structure would ensure that heritage preservation is emphasized in policy formulation, strategic planning, program development and decision making. The PTF would assist the BRNHA with outreach and communications with Councils, formulation of grant application procedures, screening grant applications, and networking with state trust funds and other prospective funders. Other partnerships as described in the Status Quo would remain.

Alternative C: Management with a Heritage Interpretation Emphasis

Summary

The BRNHA would remain a non-profit organization with essentially the same composition of its Board of Directors, Executive Director, staffing, partnership with the NC Department of Commerce, and partnership with local heritage councils. Two structural changes would occur however. One is that the Board would include appointees who represent resource interpretation interests. It could be argued that under the Status Quo, the Board already contains interpretation/education interests. While this may be true, these members also represent heritage development interests in a strong way and it was deemed that their representation would be most accurately categorized as development interests. Secondly, an Interpretation Task Force (ITF) would be created from among Board members, select council members, government entities, and private education groups to assist with strategic planning, local partner outreach, and programmatic recommendations. A more active approach to facilitating heritage interpretation should result, which would not be intended to supplant the BRNHA's existing proactive approach in pursuit of the heritage development goal. The grants, marketing and promotions, research, and partnership programs would continue as the vehicles for facilitating ground level action.

Sixty percent (60%) of programmatic emphasis would be allocated annually to heritage interpretation efforts with the remaining 40% of effort reserved for preservation and development of those resources. Links between heritage preservation and development and how they facilitate heritage interpretation would be more clearly established. A management plan would be developed and approved that establishes these strategic priorities and identifies programmatic initiatives and action items that reflect these priorities. With an approved management plan, the BRNHA will retain and continue to utilize financial and technical support from the NPS. The level of effort would increase somewhat over the next 10 years due the new role of the ITF and the staffing necessary to coordinate their

actions. An increase in matching grants may also occur due to the more active approach undertaken by BRNHA to facilitate heritage interpretation.

Description of Programs

Under the management approach emphasizing interpretation, program initiatives would be constructed and executed with the primary purpose of increasing awareness and appreciation for important heritage resources as an intrinsic value unto itself and securing funding that would perpetuate the pursuit of that objective. Efforts already expended on heritage development over the last three years would continue to stimulate tourism, and up to 40% of effort over the next 10 years would still be invested with that purpose in mind.

Grants Program

Roughly \$210,000 annually or \$2.1 million over the next 10 years would be earmarked for projects that emphasize interpretation or education about heritage resources. The remaining 40% of grant funding would be allocated among heritage development and preservation projects. To qualify for funding, proposals for resource development or preservation would need to contain a section that identifies key interpretive needs associated with the resource and how the project would help meet those needs. With oversight and participation from Board and management, the ITF would help to develop the application process, screen proposals, and recommend awards. Ultimate decisions would remain with management. The ITF would also help disseminate information about the grants program and its emphasis on interpretation to potential partners at the local and regional level.

The grants program would continue to emphasize the need for matching contributions to potential grantees as a prerequisite for its funding. Strategic partnerships would be explored with private and government funders of heritage education, though the relative dearth of these funding sources compared to funding sources that will pay for economic development or resource preservation probably does not warrant dedicated staffing to that effort. The ITF would

play a major role in helping to build and sustain a network among private and government heritage education grantors, the BRNHA, and local heritage councils.

In addition to making use of federal and state funds, the grants program would establish its own heritage interpretation fund with revenues generated from marketing and promotional activities.

Marketing and Promotions Program

The signage campaign would continue to serve its primary function to promote the BRNHA brand and facilitate wider travel throughout the region by the touring public. Each of the signs not yet finalized would receive some editorial modifications to ensure that pertinent information is presented about the host site rather than generic statements about the Heritage Area.

The Heritage Trail Guides would continue to serve the intended function of helping visitors find their way to the many heritage attractions throughout the region. The educational information presented about each site in the guide would remain. A sponsorship form would be developed to occupy the back cover of the guides, encouraging voluntary contributions to either the BRNHA's heritage education fund or to other non-profit partners working on heritage education efforts.

The Go Card would continue to promote area attractions. Preference would be given those public and private fee based attractions that have an active heritage education agenda. Revenues generated through sales of the cards would continue to be used to perpetuate the Go Card. Any unused balances would be funneled into the BRNHA's own heritage education fund.

Sixty percent of the advertising space on the I-Wall would be reserved for organizations that actively promote heritage education. If not feasible, an alternative would be to build an informational kiosk adjacent to the I-Wall that conveys a message about the need for heritage interpretation and lists names and contact information for groups whose missions encompass interpretation of heritage resources.

Marketing Boot Camps would continue to be promoted but 60% of the agenda would stress the need for means of interpreting those heritage resources that are being advertised to stimulate tourism. The workshops would feature some presentations by heritage interpretation interests who can inform the attendees of important education needs and opportunities in their localities and groups who are working to facilitate heritage education.

The website would continue to serve its current informational role but would contain several new pages that emphasize heritage education. Links would be provided to heritage education partners. Heritage interpretation goals would be clearly articulated and promoted. The electronic newsletter broadcast from the website would include articles on heritage interpretation projects underway.

Research Program

The same core research topics would remain. However, a concerted effort would be made to use the data from those studies to help craft strategies that not only increase tourism but to ensure that investments from tourism help fund important interpretation/education goals and objectives. In addition, research emphasis over time would transition to include studies on the economic benefits of heritage education and inventories and an inventory and prioritization of educational efforts in the region. The inventory would help inform both the grants and marketing and promotions programs of worthy projects and attractions that could be featured.

Partnership Program

With an approved management plan, the NPS would maintain its fundamental position of influence as the authority of the Heritage Area designation and controller of access to federal allocations, which would help ensure that interpretation goals remain a high priority in the management of the Heritage Area. The addition of interpretation interests on the Board and the establishment of an ITF as part of the organizational structure would ensure that heritage education is emphasized in policy formulation, strategic planning, program development and decision making.

Alternative D: Management with a Heritage Development Emphasis

Summary

There is little difference between the Status Quo and Alternative D. The Board composition and programmatic initiatives would continue to emphasize heritage resource development. The Board composition would not change. However, a Development Task Force (DTF) would be created to help ensure that at least 60% of effort is expended explicitly on development projects and that this trend continues over the next 10 years. While this currently does not appear to be of concern in the Status Quo approach, the reactive style of decision making in the grants program and the lack of a management plan affords no guarantee that heritage development would receive its due attention over time. The DTF would also help ensure that activities supported by or undertaken directly by the BRNHA are aligned with local council priorities. A management plan would be developed and approved that establishes these strategic priorities and identifies programmatic initiatives and action items that reflect these priorities. With an approved management plan, the BRNHA would retain and continue to utilize financial and technical support from the NPS. The level of effort would increase somewhat over the next 10 years due to the new role of the DTF, the staffing necessary to coordinate its actions, and the more active approach to heritage development. The financial impact should increase due to substantial opportunities to coordinate with state, federal, and private granting programs dedicated to economic development.

Description of Programs

Under the management approach emphasizing development, program initiatives would be constructed and executed with the primary purpose of increasing tourism and stimulating business growth and development based on heritage assets. New efforts undertaken in this approach would compliment and advance efforts expended over

the last three years. Preservation and interpretation goals would also be pursued, with BRNHA dedicating 40% of its efforts toward those ends.

Grants Program

Roughly \$210,000 annually or \$2.1 million over the next 10 years would be earmarked for heritage development projects. The remaining 40% of grant funding would be allocated equally among heritage preservation and interpretation projects. To qualify for funding, proposals for preservation or interpretation must contain a section that identifies how the project would be used to help stimulate tourism and economic development associated with those resources. With oversight and participation from Board and management, the DTF would help to develop the application process, screen proposals, and recommend awards. Ultimate decisions would remain with management. The DTF would also help disseminate information about the grants program and its emphasis on heritage development to potential local and regional partners.

The grants program would continue to emphasize the need for matching contributions to potential grantees as a prerequisite for its funding. Strategic partnerships would be explored with private and government funders of both heritage-based economic development initiatives and the facilities and infrastructure necessary to service an increasing number of tourists. A BRNHA staff position would be dedicated to these activities with a short term goal of helping to leverage at least \$1.82 million over the next three years (the same goal indicated in the preservation emphasis) on projects initiated by BRNHA and its partners. The DTF would also play a significant role in helping to build and sustain a network among the private and government funding programs, the BRNHA, and Councils.

Marketing and Promotions Program

Marketing and promotional efforts would continue essentially as developed under the Status Quo. However, more thought would be given to the strategic concentration of programmatic actions in certain areas to increase the odds of BRNHA's efforts delivering more substantial, targeted economic benefits.

Research Program

There would be virtually no change in the research program from the Status Quo management approach.

Partnership Program

The addition of a DTF would be the only significant change in the partnership program. The DTF would be charged with helping stimulate entrepreneurial activity, better business planning for those hoping to capitalize upon heritage based development initiatives, and with helping local governments plan for and better manage business, development, and growth in resident and tourist populations. This may include support for locally driven land use planning and infrastructure assessments, plans, and improvement projects.

Alternative E: Management With Goal Integration

Summary

Alternative E is somewhat of a hybrid management approach formulated by subtracting some elements of the Status Quo revealed to be problematic to future management direction while combining selected attributes of the other alternatives that were found to be conducive to desired management intent. The approach is described below.

The BRNHA would remain a non-profit organization with essentially the same composition as the Status Quo, including its Board of Directors, Executive Director, staffing, partnership with the NC Department of Commerce, and partnership with local heritage councils. Three new organizational items include:

- Board Appointees. While the power to appoint Board members would remain with the Governor and the other organizations authorized by the legislation to do so, appointments would be made that ensure fair representation over time from each of the heritage preservation, interpretation, and development goals.

- **Preservation Task Force.** A Preservation Task Force (PTF) would be created from among Board members, local heritage council members, government agencies and private preservation groups. The PTF would help buffer the very real threat that growth pressures in the region pose to the viability of the region's heritage capital even in the absence of BRNHA's own efforts to promote tourism.
- **Staffing.** While this approach would not necessitate adding staff, one additional person could prove beneficial at some point to facilitate and capitalize on certain funding opportunities and to coordinate the functions of the PTF. In the interim, these duties would be spread among existing staff and partners.

Due to these structural changes and the approval from NPS of this management plan a more active approach to each heritage preservation, interpretation, and development would occur, replacing the reactive style of decision making regarding heritage preservation and interpretation characterized by the Status Quo. This does not mean that BRNHA would always dictate action. It would still respond to good ideas initiated by local implementation partners, but 'good' ideas would be defined as those that are in line with goals, objectives, strategies, and actions highlighted in this plan.

The organization would continue to be managed as described in each alternative by an Executive Director hired by the Board, and three core staff who are hired and managed by the Executive Director. Outreach with local communities in the BRNHA would continue to be performed in concert between BRNHA staff and five heritage tourism officers who are employees of the NC Department of Commerce. The partnership with the NC Department of Commerce would remain significant as it currently is under the Status Quo approach, providing an in-kind contributed service that has substantial monetary value and can be utilized to leverage federal funding and other grants when a non-federal match is required. The BRNHA would continue to have a local presence in each of the counties and on the Qualla

Boundary through the 26 local heritage councils formed over the last few years. The PTF would also help fulfill local outreach needs by assisting with BRNHA's own strategic planning, relaying priorities of the BRNHA to potential local implementation partners, and helping to cultivate good local projects that are in line with BRNHA's goals and objectives. The BRNHA would serve as a point of contact and central organizing and coordinating figure among the councils, the heritage tourism officers, the PTF, and other heritage constituencies.

Description of Programs

Programmatic operations under Alternative E would be substantially different from the other management alternatives. Key differences include:

- roughly equal attention to all heritage goals in the grants program over the life of this plan;
- programmatic activities initiated with a direct correlation to management intent;
- use of the marketing and promotions program with the additional explicit purpose of generating revenues to help BRNHA as an organization sustain itself over time;
- use of the research program to advance agendas established for all goals - in particular to answer the question about whether heritage based tourism and development is over time successfully facilitating heritage preservation and interpretation; and
- more deliberate and strategic use of partners to accomplish the BRNHA's goals and objectives

Grants Program

It would be a goal of the BRNHA to allocate grant funds to preservation, interpretation and development-related projects at approximately equal levels over the next 10 years, which is quite different from the Status Quo approach or the alternatives that allocate a 60% investment on the particular goal featured in the approach. Where possible, the BRNHA would seek linkages between goals and would emphasize projects that attempt to address multiple goals. A high level of

interaction between BRNHA staff, the PTF and Councils would mean that the grants program is an intentional effort to fulfill preservation priorities established in the management plan. With oversight from the Board and management, the PTF would participate in the grants program by: a) helping to build and sustain a network among state trust funds, the BRNHA, and local heritage councils; b) assisting with the formulation of the grant application process; and c) providing feedback on proposals. The PTF would also help disseminate information about the grants program to potential partners at the local and regional level. Strategic partnerships would be explored with a variety of funding organizations and mechanisms to lay the groundwork for effective solicitation of matching contributions by implementation partners. A BRNHA staff position would be dedicated to building these partnerships.

Marketing and Promotions Program

Marketing and promotional activities would continue largely as they have under the Status Quo, though some activities would evolve to promote greater integration with interpretation and preservation objectives. Marketing would also be conducted with the intention of not only promoting the heritage of the region but also generating revenue to help sustain BRNHA as a viable organization over the long-term. Each of the other alternatives would utilize revenue primarily to strengthen programmatic capacity. Signage would continue to serve its primary function to promote the BRNHA brand and facilitate wider travel throughout the region by the touring public. However, to the extent feasible these would also be used for interpretive purposes and to inform the touring public about heritage preservation needs and environmental stewardship opportunities. Heritage Trail Guides would continue to help visitors find their way to the many heritage attractions throughout the region. A sponsorship form would be developed to occupy the back cover of the guides, encouraging voluntary contributions to the BRNHA. The Go Card and I-Wall would be used to promote area attractions. Revenues generated through sales of the cards and advertising space on the wall would be used to not only perpetuate these marketing initiatives but to fund the sustainability of BRNHA as an organization. If the NC Department of Commerce elects to conduct additional Marketing Boot Camps as they have in the past, the BRNHA would support this

practice. Heritage tourism officers would remain instrumental to the management intent - providing outreach and communication with local councils, local governments, and other in the public. The BRNHA website would be expanded to help fulfill each of the preservation, interpretation, and development goals.

Research Program

The research effort would continue to include studies emphasizing the tourism industry, such as research on the vitality of the industry, assessing visitor preferences, and quantifying the economic impact of tourism to the region. The research program would also include studies focusing on preservation and interpretation needs. For example, the BRNHA could develop a Top 10 List of Endangered Heritage Resources in Western North Carolina, considering all heritage themes, and a barometer to track recovery (or lack thereof) of those endangered heritage resources. Additionally, a concerted effort could be made to use the data from tourism studies to help craft strategies that not only increase tourism but to ensure that investments from tourism help fund important preservation and interpretation goals and objectives. Other research could include: studies on the economic benefits of heritage preservation; inventories and prioritization of preservation efforts throughout the region; studies on the economic benefits of heritage education; and an inventory and prioritization of heritage education efforts in the region.

Partnership Program

Many of the items associated with the partnership program under Alternative E were already discussed in the summary. The BRNHA would remain receptive to all potential partnerships that fulfill its mission, goals, and objectives and welcome proposals from organizations and individuals not yet defined who believe they have good ideas to do just this. However, the BRNHA would more actively recruit participation from among certain organizations it believes have a vital, strategic role to play in the region in stimulating heritage preservation, development, and interpretation.

Assumptions in the Analysis Regarding Management Alternatives

Analysis of the likely impacts of the management alternatives is based upon the assumption that each alternative will succeed in its broad intent. The broad intentions behind each management alternative are summarized below.

- **Alternative A - Status Quo Management.** The BRNHA will succeed in cultivating an environment that attracts and retains more tourists, facilitates their travel in the region, and provides them with greater opportunities to spend money.
- **Alternative B - Preservation Emphasis.** The BRNHA will succeed in its primary aim of protecting important heritage resources while still encouraging, albeit in a much limited manner, heritage based tourism and development and heritage education.
- **Alternative C - Interpretation Emphasis.** The BRNHA will succeed in its primary aim of increasing awareness and fostering a greater appreciation among the public and decision makers of heritage resources in the region while still encouraging, albeit in a limited manner, heritage preservation and development.
- **Alternative D - Development Emphasis.** The BRNHA will succeed in its primary aim of cultivating an environment that attracts and retains more tourists, facilitates their travel in the region, and provides them with greater opportunities to spend money while facilitating local capacity to plan and build infrastructure to accommodate expected increases in heritage tourism and development.
- **Alternative E - Goal Integration.** The BRNHA will succeed in its primary aim of simultaneously preserving and protecting important heritage resources while facilitating heritage based tourism and development.

IMPACTS ON NATURAL RESOURCES

Natural resource impacts are discussed according to land, water, biological, and recreational/scenic resource categories. Each resource category includes natural resources described in the heritage resource inventory presented in Chapter 3. As discussed earlier, these resources are widespread and prominent within the BRNHA area and a major reason for the region's distinction. There are other more common natural resources in the Heritage Area environment that are not listed in the heritage resource inventory but that may also be affected from BRNHA's management activities. Where appropriate, these resources are included in the analysis. See Table 6-2 for a list of all natural resources factored into the analysis of the different natural resource categories.

A summary of the impact analysis on natural resources for each management alternative is depicted in Table 6-3. The analysis that follows provides greater detail about the conclusions presented. The intensity of impact expected for each alternative has been assigned a rating (negligible, minor, moderate, and major). Both the duration (short term and long term) of impact and whether the impacts are expected to be beneficial or adverse have been factored into the assessment. Taking all information into account, an overall conclusion statement has been reached for each alternative about the intensity and type of impact expected to be produced. Using only impacts expected to natural resources, Alternative B would be the environmentally preferred approach.

Table 6-3:
Summary of Likely Impacts to Natural Resources

INTENSITY & DURATION OF LIKELY IMPACTS TO NATURAL RESOURCES				
Management Alternatives	Duration	Intensity		Overall Conclusion
		Adverse	Beneficial	
Status Quo	Short Term Long Term	MODERATE MODERATE	NEGLIGIBLE NEGLIGIBLE	MODERATE ADVERSE
Alternative B	Short Term Long Term	NEGLIGIBLE NEGLIGIBLE	MODERATE MAJOR	MODERATE BENEFICIAL
Alternative C	Short Term Long Term	MODERATE MINOR	MINOR MODERATE	NEUTRAL
Alternative D	Short Term Long Term	MODERATE MODERATE	MINOR MODERATE	MINOR ADVERSE
Alternative E	Short Term Long Term	MINOR MINOR	MINOR MODERATE	MINOR BENEFICIAL

Alternative A - Status Quo Management Approach

Direct and Indirect Impact Analysis

Adverse impacts to land, water, biological, and recreational/scenic resources from Status Quo management are most likely to come from the same two sources. Those include: 1) increased use of the land by tourists and others; and 2) construction and other development-related activities associated with the expansion and growth of commercial and residential enterprise to support the demands of increasing tourist and resident populations. Some of the more obvious adverse impacts expected to natural resources are described below. Since increasing tourism and development are goals within each management approach, impacts described below will be common to all management alternatives though in varying degrees of intensity. To reduce duplication of text, these are discussed only in the analysis

of the Status Quo. Beneficial impacts could result if the increasing numbers of tourists and residents, because of their experiences with these natural resources, become stewards or advocates of natural resources and their protection. However, no mechanism exists in the Status Quo approach to direct this outcome or track its evolution.

Land Resources

A larger tourist population would translate into increased use of public land by visitors - more drivers on the Blue Ridge Parkway, more campers at state and federal camping facilities, and more hikers on trails at these locations. More vehicles will produce some air pollution, which contributes to haze and disruption of viewing opportunities of mountain scenery. More hikers and campers will increase the likelihood of human and animal contact. Some visitors will actively seek this contact or seek to harvest wildflowers and other plants that are protected in the public lands. While the probability

of adverse impact may be moderated on public lands to some degree due to active management by government authorities, an increasing number of visitors combined with ongoing staffing deficiencies in the public land management agencies increases the probability of adverse impact.

Increasing numbers of tourists will also interact with common resources on both public and private lands. Tourists are more likely to visit the public lands for the expressed intention of interacting with natural resources. The national and state parks and forests are destinations for many members of the traveling public. Potential impacts were discussed above. These same impacts apply to common natural resources on private lands as well. However, without a dedicated management entity overseeing use and providing maintenance and upkeep, adverse impacts on private lands can grow to become major sources of trouble over time. Trespass laws and cantankerous private landowners are essentially the only restriction on tourist intrusion onto private lands. As many tourists transition into seasonal or permanent residents that purchase their own private mountain getaways, impacts to common land resources would grow more likely.

Some vacationers will probably elect to move here permanently or on a seasonal basis - satisfying the current home building market supply and fueling demand for more. Residential developments adjacent to the public lands pose several problems. Disturbed land associated with development is an important vector in the introduction and spread of invasive exotic species to parks and forests that oftentimes provide the habitat necessary for rare, threatened, or endangered species. Noise from homeowner activity can also be inconsistent with the backwoods environment sought by recreational hikers and hunters. A greater fire hazard also exists at the urban-wildland interface. Some of the more highly desirable land for residential purposes is also on steep slopes that are susceptible to erosion. Flatter terrain conducive to commercial and institutional development is often also the location of floodplains. Development can alter floodplain hydrology and contribute to streambank erosion.

Water Resources

Increasing numbers of outdoor recreation enthusiasts would come in direct contact with these waters. Concerns exist about direct discharge of sewage and other water pollutants; litter; trampling and destruction of streamside vegetation; sediment and erosion from trail overuse or ad-hoc construction of new trails; deliberate or incidental modification of in stream habitat; and over-fishing.

A growing tourist population will create expansion of existing business and growth of new ones. Some of these tourists will elect to become permanent residents. Construction activities directly attributable to both of these activities can intrude on and forever alter stream hydrology and habitat on mountainsides and in floodplains. Erosion, sedimentation and habitat fragmentation are of particular concern to high quality water resources.

Some degree of protection via regulation or planned management is afforded Outstanding Resource Watersheds, National Wild and Scenic Rivers, and Wild Trout waters. Many of them are located within public lands, which also afford a certain degree of protection. If rules are followed and enforced, then adverse impacts from tourism induced construction activities should be minimized. However, potential for adverse impact will never be eliminated. Upstream of wild or scenic designations, land use disturbances can deliver sediment and other pollutants to a high quality stream for which protective mechanisms exist. Activities on adjacent lands can overwhelm or bypass the protective capacity of riparian buffers. Without local sediment and erosion control planning and enforcement, the risk of damage from upstream and adjacent land use activities is higher.

While protective mechanisms exist that are intended to minimize or eliminate impacts on specially designated resources from land use activities, only minimal protection standards apply to common aquatic species, aquatic habitats, and water bodies. On private lands in those counties lacking strong natural resource planning initiatives, the minimal regulatory standards will not reliably protect common natural resources. Impacts from construction activities are projected to be more severe on common water resources for this reason.

Biological Resources

Increasing numbers of hunters, fisherman, hikers, campers, and boaters are apt to directly encounter important natural heritage elements during their interactions with the natural environment. Greater numbers of these enthusiasts can place strains on trail systems, camping facilities, and rivers and their riparian habitats. When established recreation areas become overused and overcrowded, experience suggests that many people will create new trails, access points, and campsites which may well be in sensitive natural heritage areas. Increasing visitor use poses a number of direct threats to natural heritage such as trampling of vegetation; picking of wildflowers or harvesting 'root and all' of certain plants; and introducing invasive exotic species.

Growing tourist and resident populations will create expansion of existing business and growth of new ones. Construction activities directly attributable to both of these activities can intrude on and forever alter significant habitats and vulnerable species. Erosion and sedimentation and habitat fragmentation that can occur with development are of particular concern to vulnerable species. While federally endangered species are legally protected by the Endangered Species Act, unregulated land use disturbances may inadvertently result in the elimination of a species occurrence or degradation of critical habitat.

While protective mechanisms exist to minimize or eliminate impacts on specially designated biological resources from land use activities, only minimal protection standards apply to common species and habitats. On private lands in those counties lacking strong natural resource planning initiatives, the minimal regulatory standards will not reliably protect common biological resources. Impacts from construction activities are projected to be more severe on common resources for this reason.

Recreational and Scenic Resources

The discussion above for each of the other natural resource categories applies directly to this category. Essentially, increasing numbers of tourists and increasing amounts of development will compete for the same habitats and natural resources that currently supply the

resource base used in recreational pursuits. The degradation that could result from over-use and human encroachment will adversely affect the quality of recreational and scenic resources over time.

Conclusion

The Status Quo should produce a net moderate adverse impact to natural resources in the Heritage Area as a whole. In some localities where planning capacity is limited or non-existent, some major adverse impacts should be expected. The elimination of federal funding in the Status Quo approach will reduce the role of the NPS and local heritage councils over time. As economic development interests who are independent of federal allocations fill the void, management efforts would likely stress heritage development to the near exclusion of heritage preservation. A serious danger exists in the Status Quo Management Approach that heritage capital may be expended or inadvertently sacrificed over time in pursuit of heritage development.

Cumulative Impacts

As discussed in Chapters 3 - 5, Western North Carolina is a dynamic and growing area. Tourism has been a major component of the regional economy for many years and some areas have experienced significant population growth for decades. Many public agencies and nonprofit organizations and private businesses work actively to promote tourism in the region - both heritage based tourism and tourism in general - as well as to further other aspects of economic development. Most of these efforts were initiated prior to the establishment of the BRNHA and, in aggregate, far exceed the tourism-promotion activities of the BRNHA itself. If these efforts are successful in significantly increasing the extent and duration of visitation or overall development and economic activity, adverse impacts to natural resources are likely due to increased contact with these resources and to construction and other development-related activities.

Other stressors to natural resources of the region include: 1) global climate change; 2) air pollution; 3) population growth and development; and 4) lack of local planning. When BRNHA efforts

to grow the tourism industry are combined with these conditions, adverse impacts are more likely to occur and be more pronounced at certain areas.

Global climate changes and air pollution are of concern, particularly to the viability of rare plants, animals, and natural communities in high elevation areas. Air pollution from coal fired power plants and automobiles has contributed to a 40% reduction in winter visibility and an 80% reduction in summertime visibility over the last 50 years in the southern Appalachians. These emissions have also contributed to an increase in nitrogen and sulfur in high elevation soils where a larger percentage of the public lands lie. Acid deposition is a significant threat to wild trout streams. Studies undertaken in the GSMNP and elsewhere in the southern Appalachians show average pH levels in many high elevation streams to already be well below the threshold at which eastern brook trout can thrive. Ground level ozone produced by a reaction among air pollutants is another stressor to vegetation, wildlife, and human health. The increasing amount of tourist traffic stimulated by BRNHA should produce more automobiles driving through the Heritage Area, more trucks delivering products for consumers living or vacationing in the area, and more demands for energy supplied from nearby utility companies - all of which magnify the adverse impacts discussed above.

Ongoing development in the mountains, independent of BRNHA management, is occurring at a rapid pace and is resulting in the increasing use of marginal lands such as floodplains and steep slopes to accommodate new housing and commercial activities. Private land is being sold and developed at such a rapid pace that many counties feel as if they cannot exercise proper oversight of the growth. Jackson County recently enacted a moratorium on new sub-divisions that lasted for nearly 6 months. The Land of Sky Regional Council developed and has been facilitating the meetings of a mountain ridge and steep slope development committee to help craft voluntary and regulatory protective recommendations for Transylvania, Henderson, Buncombe, and Madison Counties. The western regional offices of the NC Division of Land Quality and Division of Water Quality have expressed their agencies' difficulties keeping up with regulatory permitting and complaint response associated with new growth and

development in the region. New road networks can fragment habitat and culverts can prevent fish passage. Sediment from roads and home sites can enter streams, filling pools and smothering riffles. The placement of homes and roads and associated vegetative clearing can mar the scenic integrity of the landscape as viewed from wild and scenic rivers and other scenic byways.

A lack of organized effort in various localities to plan and prepare for growth and development will contribute to the likelihood of adverse impacts from tourism. Table 5-1 depicts the presence or absence of county planning initiatives that are typically used to help identify and protect key resources. While no guarantee can be made that planning will ensure avoidance, mitigation, or protection of natural resources, its presence does indicate that a locality has a structure in place to do so. Furthermore, it indicates that at least some level of financial capacity and political will exists in that locality to protect natural resources and guide growth and development in such a way that minimizes the potential for adverse impacts.

Alternative B - Management with a Preservation Emphasis

Direct and Indirect Impact Analysis

Adverse impacts identified in the Status Quo Management Approach would still be relevant in Alternative B but at less intensity due to a decreased effort invested in pursuit of the heritage development goal and 60% of effort being earmarked expressly for heritage preservation. Beneficial impacts to natural resources would be expected from: 1) direct annual expenditures to groups working to preserve natural resources; 2) deliberate marketing and promotional messages that produce more advocates and supporters of the region's natural resources; 3) the use of a PTF in helping to align BRNHA plans and activities with state and federal land managers' plans; 4) strong participation of preservation interests on all heritage councils and the use of the PTF in support of local initiatives that preserve important natural resources; and 5) deliberate use of programs to help build local capacity for planning that should help protect

natural resources. Alternative B would help ensure that visitors to the BRNHA will be able to experience over the long term the natural resources of Western North Carolina.

While the federal legislation authorizing the creation of the BRNHA forbids the use of federal funds for the acquisition of any interest in real property, a dedication of \$2.1 million in grant funding over the next 10 years can support locally driven land preservation efforts in other ways. This could be of great value in helping partners preserve land in the region that is important to water resources, habitat, species of conservation significance, and scenic integrity. One important caveat to this statement is that most funders of natural resource preservation who may participate as match partners typically dictate that higher quality or more threatened resources get primary emphasis. This may limit to some degree where BRNHA could focus its efforts - though in Western North Carolina, there is no shortage of outstanding natural resource values that could benefit from preservation.

A marketing and promotions program that simultaneously educates the public about important land resource preservation needs while enticing them to visit the area is more likely to produce advocates and supporters of heritage preservation than merely enticing potential tourists to visit the area without this message. In fact, a marketing message that stresses the unique qualities (sometimes endangered) of the region's natural resources might make Western North Carolina stand out to travelers compared to other vacation spots, furthering the heritage development goal. In Alternative B, it would be expected that the marketing and promotions program will satisfy these dual objectives.

The use of the research program to track attitudinal transitions among tourists and residents from awareness and appreciation to support for natural resource protection initiatives would help BRNHA gauge how successful it is over time at encouraging behaviors that help it preserve natural resource capital. The use of research projects to identify and track 'endangered' heritage resources would also

be used to inform both the marketing and grants programs so that decision making remains consistent with clearly identified natural resource preservation needs.

A partnership program that requires preservation interest membership in every heritage council and makes extensive use of a PTF would ensure that natural resource preservation needs remain at the forefront of BRNHA planning and decision making. The PTF networking efforts among private foundations, agency programs, and state trust funds should deliver substantially more financial resources to help address natural resource preservation needs. Its networking efforts among the local heritage councils and other potential implementation partners should ensure that local natural resource preservation projects are cultivated that match BRNHA's priorities and appeal to those organizations with potential matching contributions.

Land Resources

Land preservation efforts could over time reduce the amount of available in-holdings or properties adjacent to critical resource areas in the public lands, protect some of the steeper slopes in the region, and reduce erosion on those same highly erodible areas. Marketing messages that promote and educate the public about the importance of unobstructed views of slopes, peaks, and floodplains to visitor experience would resonate with some visitors and residents and facilitate behavioral changes such as the building of homes in less conspicuous areas and using site planning and landscaping techniques to reduce erosion and screen or buffer scenic impacts.

Water Resources

The use of the grants program to help fund local level planning initiatives in those seven counties lacking any watershed plan could set the stage for later partnerships with funding entities such as the NC Clean Water Management Trust Fund to help pay for preservation of water resources and greenway and park projects. Marketing messages that simultaneously promote the region's outstanding water resources while educating about the role of proper site planning and

sediment and erosion controls in preserving these water resources would resonate with some residents and newcomers and likely facilitate behavioral modifications at some level.

Biological Resources

The use of the grants program to help pay for natural heritage inventory needs that remain in almost half of the counties could set the stage for later partnerships with the NC Natural Heritage Trust Fund to preserve significant habitats. Grant funds could also be used by local governments in planning efforts that identify important habitats and species in their communities so that they can be acknowledged and protected as development occurs.

Recreational and Scenic Resources

The use of the grants program to help pay for local level planning initiatives in those 14 counties lacking greenway and park master plans could set the stage for later partnerships with the NC Clean Water Management Trust Fund and NC Parks and Recreation Trust Fund to help pay for preservation of lands in support of greenway and park projects. It would not be expected that marketing and promotional efforts would produce a substantial number of greenway and park advocates, in part because many tourists already recognize the exceptional numbers of recreational amenities already offered by the national and state parks and forests. However, such a promotional program that simultaneously encourages visitation but that also educates the public about threats to the scenic resources that they enjoy could produce advocates of scenic resource preservation.

Conclusion

Alternative B should produce a net moderate beneficial impact to natural resources in the Heritage Area as a whole. The BRNHA would fulfill a vital partnership role and at an opportune time, considering the different private and state partners in the region focused on natural heritage preservation, the State of NC's million acres initiative goal, and the availability of significant amounts of grant dollars dedicated by the State to heritage preservation. Because of the emphasis on higher quality natural resources such as those described in Chapter 3, there are valuable but more common streams, plants, animals, and habitat that may not receive as much

attention however and would therefore not benefit as greatly from this effort. Tourism and heritage based development initiatives would still occur under Alternative B, albeit at a much slower pace due to 60% of effort being invested on heritage preservation. The resource concerns discussed under the Status Quo about tourist and resident over-use and over-population still apply.

Cumulative Impacts

Adverse cumulative impacts identified in the Status Quo continue to exist in Alternative B. Tourism and heritage development stimulated under Alternative B can combine with these conditions to create more pronounced adverse impacts. However, the emphasis of Alternative B on preservation should moderate to some degree these cumulative impacts.

There are a number of other factors occurring in the region that should amplify the beneficial impacts of BRNHA activities. The private land trust community has a strong presence in western NC. The Blue Ridge Forever campaign aims to protect 50,000 acres in the next five years. The State of NC has embarked on an ambitious agenda to preserve 1 million acres of important habitats and open space by 2009 and is almost halfway toward this goal. Five trust funds exist at the state level that can be used to protect significant natural heritage. In year 2007, combined appropriations totaled \$182 million. Legislative efforts are also underway that, if successful, may commit the State of NC to \$200 million in conservation spending annually over the next five years, some of which would be dedicated to significant natural heritage protection. One NC Naturally is formulating a Statewide Conservation Plan and the NC Wildlife Resources Commission has a current Wildlife Action Plan both of which establish important preservation needs and priorities - some of which would be in the Heritage Area. Community led watershed partnerships exist in 20 of the counties in the Heritage Area, and they are working to preserve and restore high quality water resources. The NC Ecosystem Enhancement Program has formulated nine watershed plans in nine different counties. While restoration of degraded streams is their primary focus, they also attempt to facilitate preservation of high quality water resources. There are over 17 greenways and park planning initiatives undertaken by local

governments throughout the Heritage Area. Under Alternative B, opportunity exists for BRNHA to collaborate with any number of these partners and jointly preserve in a substantial way threatened significant natural heritage elements of Western North Carolina.

Alternative C - Management with an Interpretation Emphasis

Direct and Indirect Impact Analysis

Many of the adverse impacts to natural resources discussed under the Status Quo would still be relevant in Alternative C and at close to the same intensity. This is because heritage interpretation is likely to more immediately lead to heritage tourism and development than to heritage preservation. Additionally, some of the heritage interpretation activities would likely be of an experiential quality - thereby putting more tourists and residents in direct contact with natural resources. Some beneficial impacts to natural resources would be expected as awareness among tourists translates ultimately into their political and financial support for natural resource conservation. However, there are no programmatic mechanisms in place under Alternative C to encourage this behavior and track this as an outcome and the decision to support or advocate on behalf of natural resources would ultimately remain with the individual. There is a greater likelihood that this would occur under Alternative C than under the Status Quo due simply to the stress placed on education and that some of this would likely include natural resource issues. However, actions stimulated under Alternative C are still one step removed from the direct and tangible natural resource preservation initiatives that would be spurred by Alternative B.

A dedication of \$2.1 million in grant funding over the next 10 years to heritage interpretation in the national and state parks and forests would expose a great deal of people to natural resources - including water, natural areas, plants and animals, and habitats upon which species of conservation significance depend. While there is no guarantee that persons exposed to natural resources will become a steward of those resources or advocate/supporter

for resource protection, research does suggest that ample outdoor exposure is one of the more important components to developing 'environmental sensitivity' and that this sensitivity is critical to promoting environmentally responsible behaviors (Sivek, 2002). Research also suggests that experiential learning is a key variable to developing environmental sensitivity. It is important to stress however that damages could accrue from various experiential learning exercises that introduce more people to vulnerable natural resources but without mitigative measures in place to eliminate or minimize adverse affects.

Land Resources

The public lands would probably benefit from Alternative C. Private lands and common natural resources would probably not. Issues affecting the public lands, as a charismatic natural resource feature in the region, are more likely to galvanize attention and stimulate a desired response for political or financial action among visitors and residents. Many of the definitive geological features on the Western North Carolina landscape are located in the national or state forests or parks. The touring public and resident population at large is more apt to favorably respond to a call to action to protect an iconographic land resource over generic private land resources that do not occupy such a prominent niche in the mind. For example: an hypothetical proposal to 'Save Roan Mountain' would almost certainly attract more widespread attention and support throughout the BRNHA as a whole (and statewide) than a call to 'Save our Floodplains' or even 'Save Our Slopes'. In certain localities where land use issues affecting steep slopes and floodplains are important current topics, this may not be the case but in the region as a whole and considering the touring public in this analysis it probably is.

Whereas a number of unknown variables could affect the success of heritage interpretation on private lands and the intensity of environmental impacts, one can be reasonably assured that educational efforts on the public lands would likely be conducted by trained professionals or volunteers working in concert with park or forest service staff who have a practical working knowledge of the impact that experiential educational activities may cause on resources. Many educators at public facilities are also trained

in environmental education. For these reasons, the forecast for potential damages is reduced while the potential to develop environmental sensitivity among visitors remains high. The numbers of people who visit the parks expressly for the education they receive, combined with the relative permanency of these sites, also establishes a greater likelihood of reaching more people.

Water Resources

The high quality water resources discussed in Chapter 3 are typically found in the public lands. Educational activities conducted in the public lands as discussed above would likely produce few if any adverse impacts and provide outstanding opportunities to cultivate environmental sensitivity which should over time produce more advocates and supporters of the region's water resources. A very substantial and long-term educational effort would be needed however to stimulate a public response that would be necessary to generate the local political will needed in the region to enforce existing laws and promote local planning and infrastructure projects to protect water resources on the private lands. Facilitating this outcome would not be a primary goal under Alternative C.

Biological Resources

The more significant natural heritage elements in the region would probably draw attention and support through educational efforts - in part because many of these elements are located within or directly adjacent to the public lands. Additionally, these are charismatic resources that hold appeal to a certain constituency of citizens, government agencies, and private foundations. Private natural resource preservation groups often use information produced through biological inventories to educate and generate the support needed to purchase or obtain a conservation easement on a property. Common wildlife, vegetation, and habitats may not benefit as quickly or in as more pronounced a fashion from heritage education activities. When forced to choose between protecting land that contains significant habitat and rare species or a property that does not hold these types of assets, most funders will choose the former. Additionally, the common habitats and species occurrences located within or adjacent to urban areas typically do not get much protection in local planning or decision making about development and where it occurs.

Scenic and Recreational Resources

Much of the high elevation mountain scenery in Western North Carolina is of public land. Most of the rural, agrarian scenery is comprised of private land. The public lands are already protected from development, so it is not likely that activities undertaken by BRNHA in Alternative C would have any impact. Private farms are not protected. Growth pressures in the region discussed in Chapter 4 and included in other analyses of this chapter are rapidly consuming a significant amount of the agrarian landscape. This trend is too powerful to be reversed or slowed in any meaningful way through Alternative C.

Conclusion

Alternative C should produce a net neutral impact to natural resources in the Heritage Area as a whole. Benefits would come as tourists and residents grow in their environmental sensitivity and act to influence in a favorable way important natural resource issues in the region. The BRNHA would have to be diligent in its operations to ensure this outcome, however. Moderate adverse impacts would be equally as likely to occur in the short term, especially from promotional activities that produce more tourists without simultaneously increasing their awareness of their own potential impact and from experiential learning activities that directly introduce more people into sensitive resource areas. Without significant attention given to the threats to the Heritage Area environment, interpretation efforts would continue to produce moderate adverse impacts. The degree of impact and whether interpretation leads to adverse or beneficial consequences would essentially come down to execution of management intent. Intentions presented in Alternative C are good, but deliberate execution and a substantial amount of oversight would be needed to ensure that this intent is translated in on-the-ground actions that are favorable to natural resources.

Cumulative Impacts

Adverse cumulative impacts identified in the Status Quo continue to exist in Alternative C. Tourism and heritage development stimulated under Alternative C would combine with these conditions to create more pronounced adverse impacts.

There are a number of other factors occurring in the region that should amplify the beneficial impacts of BRNHA activities. An extraordinary number of organizations region wide have active environmental education programs. Private land trusts, the Appalachian Trail Conservancy, and 'Friends' groups of the state and national parks and forests all teach their members and others of the general public about the unique habitats and plant and animal species on their properties. The parks and forests themselves have interpretive programs. The US Fish and Wildlife Service and NC Wildlife Resource Commission have operated education and outreach programs for years. Environmental advocates in the region, such as the Western NC Alliance and Wild South (formerly Southern Appalachian Biodiversity Project), actively engage their memberships in hands-on learning and stewardship opportunities. The three state universities in the region and other private learning institutions have active ecology clubs who regularly spur their students to outdoor education. Some of these non-profit groups rely on grant funding while the agencies and schools operate from a dedicated state appropriation. With the exception of the grants program it is unclear how BRNHA would collaborate in these educational efforts. A real unmet need exists to educate substantial numbers of residents of the Heritage Area about the need for protection of natural resources in local planning, but this is a politically charged issue that could be difficult to address.

Alternative D - Management with a Development Emphasis

Direct and Indirect Impact Analysis

There are many similarities between the Status Quo and Alternative D. To reduce duplication of text, the details of the analysis presented in the Status Quo are not repeated here. A substantial difference between Alternative D and the Status Quo, however, is the creation and use of a Development Task Force that, as part of its duties, would be charged with identifying local planning and infrastructure needs and helping local implementation partners cultivate projects that would satisfy those needs. While these activities would be expressly intended to help local partners improve their capacity to

manage growth in tourist and resident populations and corresponding development, these types of projects could also serve a secondary function of facilitating aspects of natural resource preservation. This activity would create substantial opportunity to minimize adverse impacts to natural resources.

Land Resources

Local planning and infrastructure projects could help address issues with steep slope and floodplain development and erosion on private lands. Very little impact reduction or avoidance to public land resources would be expected.

Water Resources

Local planning and infrastructure projects could help address issues associated with water supply, wastewater treatment, subdivision and development, and sediment and erosion control - all of which could help minimize or reduce adverse impacts on water resources. This could beneficially affect both common and high quality water resources.

Biological Resources

Local planning and infrastructure projects such as those noted under water resources could help address issues associated with both aquatic and land based critical habitats and important species. Comprehensive land use and development plans could be used to help identify important habitat areas and locations of species of conservation significance so that protective mechanisms could be incorporated during development activities.

Recreational and Scenic Resources

Local planning and infrastructure projects such as those noted under both water and biological resources could help address greenway and park needs. Greenway and park planning initiatives are lacking in a number of counties of Western North Carolina. Additionally, steep slope ordinances could be used to serve a secondary function of helping to protect important viewsheds. Land use planning can be used to reduce automobile dependence, one factor in haze that obstructs views of mountain scenery.

Conclusion

Alternative D should produce a net minor adverse impact to natural resources in the Heritage Area as a whole. In localities where planning capacity is limited or non-existent, moderate to major adverse impacts should be expected unless BRNHA is successful partnering with local governments and other local constituencies to increase the capacity for planning, preparations, and management of increasing numbers of tourists. Otherwise, the danger that exists in the Status Quo approach that heritage capital could be expended or inadvertently sacrificed over time in pursuit of heritage development continues unabated. This is the more likely scenario considering the number of communities and counties lacking any meaningful planning efforts and the limits that do exist in BRNHA capabilities. Local land use planning is also a politically charged issue. Any meaningful impacts on this front would need to be locally driven with BRNHA assuming essentially a supportive role.

Cumulative Impacts

Cumulative impacts identified in the Status Quo Alternative continue to exist in Alternative D. Tourism and heritage development stimulated under Alternative D would combine with these conditions to create more pronounced adverse impacts.

Alternative E - Management With Goal Integration

Direct and Indirect Impact Analysis

Alternative E essentially incorporates the beneficial aspects of Alternatives B and D that are intended to protect and mitigate against adverse impacts while maintaining core heritage development activities that are fundamental to the BRNHA mission but that are acknowledged to possibly produce adverse impacts. To reduce redundancy, impacts to specific resources are not repeated here. To facilitate clarity, general statements about impact are repeated below.

Many of the adverse impacts to natural resources discussed under the Status Quo would still be relevant in Alternative E but at less intensity due to less emphasis on the heritage development goal and more emphasis on heritage preservation. Beneficial impacts would be expected from: 1) direct annual expenditures to groups working to preserve natural resources; 2) deliberate marketing and promotional messages that produce more advocates and supporters of the region's natural resources; 3) the use of a PTF in helping to align BRNHA plans and activities with state and federal land managers' plans; 4) deliberate use of funding and the PTF in aligning BRNHA strategy and actions in support of local initiatives that preserve important natural resources; and 5) deliberate use of programs to help build local capacity for both planning and infrastructure projects that meet the dual functions of improving local capacity to manage growth and development and protecting natural resources. Alternative E would continue the Status Quo intentions to promote heritage tourism and development but with simultaneous priorities on preserving the heritage capital upon which development and tourism depend. Alternative E would also help localities prepare for and manage well expected increases in tourist and resident populations, which would have benefits to natural resources and visitor experience.

Conclusion

Alternative E should produce a net minor beneficial impact to natural resources in the Heritage Area as a whole. The BRNHA would fulfill a vital partnership role, considering the different private and state partners in the region focused on natural heritage preservation and the availability of significant amounts of grant dollars dedicated by the State to heritage preservation. The resource concerns discussed under the Status Quo regarding tourist and resident over-use and over-population are still applicable but only minor adverse impacts are forecasted for Alternative E due to a somewhat reduced focus on heritage development, an enhanced focus on natural resource preservation and the increased capacity for local planning and infrastructure improvements.

Cumulative Impacts

Adverse cumulative impacts identified in the Status Quo continue to exist in Alternative E. Tourism and heritage development stimulated under Alternative E can combine with these conditions to create more pronounced adverse impacts. However, the significant emphasis of Alternative E on preservation should moderate these adverse effects to some degree.

Beneficial cumulative impacts identified in Alternative B and C continues to exist in Alternative E. Opportunity exists for BRNHA to collaborate with many partners to jointly preserve natural resources of Western North Carolina.

IMPACTS ON CULTURAL RESOURCES

Cultural resource impacts are discussed according to Cherokee, craft, and music resource categories (Table 6-2). The resources assessed for each category include important people, events, and sites or institutions. These are described in the heritage resource inventory presented in Chapter 3. As discussed earlier, these resources are widespread and prominent within the BRNHA area and a major reason for the region's distinction. There are other significant cultural resources in the Heritage Area environment - specifically historical and archaeological sites - that are not listed in the heritage resource inventory but that may also be affected from BRNHA's management activities. Where appropriate, these resources are included in the analysis.

A summary of the impact analysis on cultural resources for each management alternative is depicted in Table 6-4. The analysis that follows provides greater detail about the conclusions presented. The intensity of impact expected for each alternative has been assigned a rating (negligible, minor, moderate, and major). Both the duration (short term and long term) of impact and whether the impacts are expected to be beneficial or adverse have been factored into the assessment. Taking all information into account, an overall conclusion has been reached for each alternative about the intensity and type of impact expected to be produced. Using only impacts expected to cultural resources, Alternative D would be the environmentally preferred approach.



Table 6-4:
Summary of Likely Impacts to Cultural Resources

INTENSITY & DURATION OF LIKELY IMPACTS TO CULTURAL RESOURCES				
Management Alternatives	Duration	Intensity		Overall Conclusion
		Adverse	Beneficial	
Status Quo	Short Term Long Term	MINOR MODERATE	MINOR MODERATE	NEUTRAL
Alternative B	Short Term Long Term	NEGLIGIBLE NEGLIGIBLE	NEGLIGIBLE MINOR	NEGLIGIBLE BENEFICIAL
Alternative C	Short Term Long Term	NEGLIGIBLE MINOR	MINOR MODERATE	MINOR BENEFICIAL
Alternative D	Short Term Long Term	NEGLIGIBLE NEGLIGIBLE	MINOR MODERATE	MODERATE BENEFICIAL
Alternative E	Short Term Long Term	NEGLIGIBLE NEGLIGIBLE	MINOR MINOR	MINOR BENEFICIAL

Alternative A - Status Quo Management Approach

Direct and Indirect Impact Analysis

Adverse impacts to Cherokee resources and other historical and archaeological sites would likely come primarily from: 1) tourism pressures; and 2) construction activities associated with the expansion and growth of commercial and residential enterprise to support the demands of increasing tourist and resident populations. Adverse impacts to Craft and Music heritage would come essentially from tourism pressures alone. Beneficial impacts should arise from the economic stimulation of heritage based tourism and its ability to help sustain and perpetuate craft and music traditions. Cultural resources should also benefit from awareness raised by BRNHA in its marketing and promotional activities. However, under the Status Quo

Alternative no mechanism exists to ensure that a transition would occur from awareness to appreciation and ultimately to beneficial or desired behaviors in support of cultural resources.

While crafters, musicians, and other performers may appreciate the market opportunities that greater numbers of tourists present, it should be noted that there can also be 'too much of a good thing'. Some artists and performers may not appreciate increasing levels of attention, especially if it results in unmanageable demands on their time or competitive pressures on the resource base used in art, craft and music. In addition, while promoting music and craft, some artisans and performers may be recognized in marketing and promotional literature while others are left out. This may have the unintended adverse effect of taking potential clientele from one artisan and giving it to another. Additionally, publicly accessible

festivals and events may become overcrowded with tourists such that intangible qualities traditionally associated with these events become ‘lost in the crowd’. A danger exists in the Status Quo that the authentic qualities associated with traditional handcrafting and music may get sacrificed in the rush to enhance economic prosperity using these resources. As development increases under the Status Quo, another danger exists from escalating land values pricing many traditional crafters and musicians out of the ability to live and earn a living here in these mountains.

All that being said, many crafters and musicians do appreciate exposure and additional markets for their craft. The Status Quo should provide an increasing base of possible clientele to which crafters and musicians can sell their wares. Additionally, craft and music schools and institutions would likely benefit from greater pools of applicants as more people learn of these traditions and seek ways to incorporate them into their lives. If the survival of traditional craft and music depends to some degree on attracting and retaining people who will purchase traditional craft and music products and attend those types of institutions, then it must be recognized that the Status Quo should fulfill that need in some degree.

Other impacts more specific to Cherokee, Craft, Music, and Historic/ Archaeological sites are described below.

Cherokee Resources

Tourists can bring dollars to the region, but they can also come with cultural biases, insensitive attitudes and just plain ignorance. It would not be unexpected under the Status Quo that members of the touring public would intrude at times into those events traditionally reserved for tribe members only. It is also likely that some sacred sites will be profaned. An increasing level of tourist traffic may also result in overcrowding, increased wear and tear, and potential damage or theft at some Cherokee sites, especially where management oversight is limited or non-existent. Increasing recreational traffic in sensitive areas can also result in accidental damage or deliberate vandalism of historically important structures and artifacts. A number of sites are known and managed for public visitation by the Eastern Band of the Cherokee Indian and impacts

to those are discussed above. There remain a number of other sites that are off limits to public visitation and still other archaeological sites that have yet to be identified. Concerns exist about the potential disturbance (inadvertent or deliberate) of those sites during construction and other development related activities.

Craft & Music Resources

As discussed above, there is the possibility of the Status Quo creating too much of a good thing. It is doubtful that over the next 10 years, BRNHA efforts alone will cause substantial increases in most event attendance such that disruptions occur. However, this possibility stands a greater chance of happening to those small, weekly, impromptu jam sessions that occur throughout the region. Of benefit, more tourists should equate to more listeners of local radio programming. Most of these programs are on public radio venues that depend upon contributions of the listening public for their existence and contributions would be expected to increase. Some concern exists for both craft and music resources in regards to the dynamics of supply and demand. It is assumed that the Status Quo would stimulate greater demand for craft and music products and services. When demand exceeds supply, prices usually increase. This can be a good thing for most artisans and musicians producing these goods. However, if demand for other resources such as schools that provide instruction outstrips their capacity to instruct, then fees and tuition increases may occur. This could restrict some local residents’ ability to attend. While this unintended consequence is a remote possibility, it is worth mention - especially considering the desire of the BRNHA to use market forces to benefit local and regional populations.

Other Resources - Historical and Archaeological Sites

The same concerns discussed about Cherokee sites exist for other historical and archaeological sites in the Heritage Area. These potential impacts are most likely where local land use planning and historic/cultural inventories do not exist or are inadequate.

Conclusion

The Status Quo should produce a net neutral impact on cultural resources in the Heritage Area as a whole. Heritage based tourism efforts will provide a client base that crafters and musicians need

to purchase their products and wares. These are the people who hold the key to survival of the cultural heritage that is distinctive to Western North Carolina. If they can earn a decent living, they are more apt to continue to perpetuate these traditions, which is a huge step in the continued viability of these customs. This could have a major beneficial impact on these cultural resources. While great potential truly exists for this ideal outcome to occur, this is largely an assumption at this point, and no mechanisms or clear paths exist that are intended to ensure this outcome. Additionally, a craft and music business development strategy that relies essentially on bringing more people to the region is likely to produce unintended adverse consequences. For these reasons, only moderate benefits can be assigned. In addition, the threats discussed above about tourist pressures and development related activities are real and, if unaddressed, the resulting adverse consequences could eventually counter or limit the potential for beneficial outcomes. The beneficial and adverse consequences of this management approach largely cancel each other out.

Cumulative Impacts

Tourism has been a major component of the regional economy for many years and some areas have experienced heavy population growth for decades. Many public agencies and nonprofit organizations and private businesses work actively to promote tourism in the region - both heritage based tourism and tourism in general - as well as to further other aspects of economic development. Most of these efforts were initiated prior to the establishment of the BRNHA and, in aggregate, far exceed the tourism-promotion activities of the BRNHA itself. If the Status Quo efforts are successful in significantly increasing the extent and duration of visitation or overall development and economic activity, both beneficial and adverse impacts to cultural resources discussed above are likely to be increased.

If not planned well, business development and expansion that arises to service the demands of an increasing tourist population may intrude into historic or culturally important locations. This is more likely in those localities that lack land use and historic preservation planning to identify and protect key resources while guiding growth and development (Table 5-1). Increasing tourist traffic also increases

demand for road improvement projects. In the mountains, roads have traditionally followed streams and floodplains, which are areas more likely to host sites of archaeological importance due to Cherokee and historical agricultural settlement patterns. While no guarantee can be made that planning will ensure avoidance, mitigation, or protection of cultural resources, its presence does indicate that a locality at least has a structure in place to give attention to cultural resource issues. Furthermore, it may indicate that a financial capacity and political will exists in that locality to protect cultural resources and guide growth and development in a manner that respects and attempts to avoid adverse impacts.

Alternative B: Management with a Preservation Emphasis

Direct and Indirect Impact Analysis

The adverse impacts to cultural resources discussed under the Status Quo would still be relevant in Alternative B but at less intensity due to less effort being invested in pursuit of the heritage development goal and 60% of effort being earmarked expressly for heritage preservation. Beneficial impacts are expected from: 1) direct expenditures on cultural resource preservation; 2) deliberate marketing and promotional messages that produce more advocates and supporters of cultural resource preservation; 3) the role of the PTF that aligns BRNHA strategy and actions in support of local cultural resource preservation priorities; and 4) deliberate use of programs to help build local capacity for planning that should protect cultural and historic resources sites. Some beneficial impacts produced by the Status Quo may be reduced under Alternative B. In order to keep cultural heritage alive and viable into the future as more than a museum piece, it is critical that those artisans, crafters, musicians, dancers, singers, and storytellers operating at this point in time earn enough money to keep them in business so that they can teach others their traditions, and moreover have a pool of interested persons who believe they can earn enough money from the practice of these

crafts to make it worth their time. While the Status Quo would likely accomplish this objective, Alternative B may not supply enough effort on the heritage development front to make a meaningful impact.

A dedication of \$2.1 million in grant funding over the next 10 years to heritage preservation, some of which could be tapped by cultural resource preservation interests would help partners protect important cultural resource assets. It would help to pay for local cultural preservation planning initiatives that could set the stage for later partnerships with additional grant funders, though the extent and amount of available grant funding does not appear anywhere near as significant as identified for natural resources. Marketing and promotional efforts would carry explicit language encouraging support for the heritage assets that many tourists come to experience - a big distinction between this alternative and the Status Quo.

The use of the research program to track attitudinal transitions among tourists and residents from awareness and appreciation to support for cultural resource protection initiatives would help BRNHA gauge how successful it is over time at encouraging behaviors that help it preserve cultural resource capital. The use of research projects to identify and track 'endangered' heritage resources would also be used to inform both the marketing and grants programs so that decision making remains consistent with clearly identified cultural resource preservation needs.

A partnership program that requires preservation interest membership in every heritage council and makes extensive use of a PTF would help ensure that cultural resource preservation needs remain at the forefront of BRNHA planning and decision making. The PTF networking efforts among private foundations and agency programs should deliver some additional financial resources to meet cultural resource preservation needs, but probably not to the extent that is available for natural resource preservation. Its networking efforts among the local heritage councils and other potential implementation partners should ensure that local cultural resource preservation projects are cultivated that match BRNHA's priorities and hold appeal to those organizations with potential matching contributions.

Cherokee Resources

While the EBCI currently holds power of appointment of one Board member, additional Cherokee involvement in the PTF should help reveal Cherokee resource preservation needs and opportunities and cultivate good projects in pursuit of those objectives. While some benefits could possibly be gained through BRNHA assistance with local planning on the Qualla Boundary, experience suggests that the EBCI already pays attention to possible impacts that development related projects may have on historic and cultural sites.

Craft & Music Resources

There is no additional analysis of craft and music resources in Alternative B to add to the discussion already presented.

Other Resources - Historical and Archaeological Sites

Except in exceptional cases or when the heritage themes or other items reflected in the heritage resource inventory have a clear connection with historical and archaeological sites, the BRNHA would not be expected to devote programmatic activities to the preservation of historical and archaeological resources. For this reason, few beneficial impacts to these resources are forecasted. Adverse impacts could arise as heritage development and related activities potentially intrude into sensitive historical or archaeological resource areas.

Conclusion

Alternative B should produce a net negligible beneficial impact on cultural resources in the Heritage Area. The risk of adverse impact from tourism should be reduced from Status Quo levels due to less effort invested in heritage development. Less marketing and promotional effort should equate to fewer tourists, and generally fewer additional visits should produce less overall adverse impact. The shift in programmatic emphases toward activities that directly promote cultural resource preservation should produce some beneficial environmental outcomes. Alternative B might be expected to produce more benefits except that by reducing its cultural resource marketing and promotional effort it will also likely reduce the pool of potential clientele that musicians and crafters need to purchase

their goods and services. Less ability to earn a decent living may translate into fewer musicians and crafters who are needed long term to keep these cultural traditions viable and alive.

Cumulative Impacts

Cumulative impacts from the various ongoing efforts to promote tourism and economic development, identified in the Status Quo Alternative, continue to exist in Alternative B. However adverse impacts may be reduced somewhat by the presence of the BRNHA as a strong advocate for heritage preservation. While grant funding for cultural resource preservation in NC is less extensive than for natural resources, the coordinating presence of the BRNHA could help to promote more effective use of these funds, at least within the western portion of the state. Efforts to implement existing plans (e.g. the NC Historic Preservation Plan or the action plans of local Arts Councils and Historic Preservation Commissions) could be enhanced with the BRNHA as a catalyst to focus attention on these issues. Having the BRNHA ‘lead by example’ by bringing a better understanding of heritage preservation issues into the organization’s own development efforts may induce others to do the same. Finally, preservation efforts under Alternative B would probably satisfy a niche that may be underrepresented in other organizations’ cultural resource marketing and promotional efforts.

Alternative C - Management with an Interpretation Emphasis

Direct and Indirect Impact Analysis

Both the adverse and beneficial impacts from tourism and development discussed under the Status Quo would also occur in Alternative C but at slightly less intensity. Impacts similar to those forecasted for the Status Quo would be expected because a large amount of interpretational effort geared toward the public at large will, by default, stimulate heritage tourism. When the unique qualities of Western North Carolina’s cultural resources are showcased either within or outside of the Heritage Area, increasing

visitation should be expected. If this outcome is not properly planned for or managed, adverse impacts including damage to sites and disruptions in events may be caused by those people wanting a firsthand experience of Western North Carolina music and craft. Even when planned and managed problems may still occur. Certainly not all of the interpretation work would be expended on advertising the cultural resources of the region, however. Some would have no bearing at all on heritage development but would have great potential of increasing the perpetuation of cultural traditions, which is a noteworthy beneficial impact. For this reason, anticipation of beneficial and adverse impacts from tourism and development is lowered while anticipation of beneficial impacts from education unto itself is raised. The JAMS (Junior Appalachian Musicians) project initiated under the Status Quo and likely to be carried forward under Alternative C is an example of just such a heritage interpretation activity that should prove beneficial to the perpetuation of traditional music but that is far removed from tourism and development. Other beneficial impacts to cultural traditions would be expected as awareness among tourists translates ultimately into their purchase of craft and music, which should also help perpetuate the continuation of those traditions.

Conclusion

Alternative C should have an overall net minor beneficial impact to the Heritage Area as a whole. Optimistically, it can be hoped that greater awareness will automatically translate into greater protection of cultural resources, but experience suggests that such increased protection will occur slowly, if at all, without the essential education strategies that have been proven to promote environmental sensitivity. This idea is promoted in the Status Quo, but to date there is only scattered evidence to bear it out. There is great potential for this goal to be realized if the ITF were to operate with this outcome as an overarching objective. The common interests between members of the ITF and heritage development partners and constituencies may create both challenges and opportunities. As the ITF struggles to maintain a healthy balance between heritage preservation and heritage development, up to 40% of effort will still be invested on stimulating tourism, further advancing the economic development focus of the last three years and creating minor impacts long term.

Cumulative Impacts

Cumulative impacts identified in the Status Quo Alternative continue to exist in Alternative C. Tourism and heritage development stimulated under Alternative C would combine with these conditions to create more pronounced adverse impacts.

Alternative D - Management with a Development Emphasis**Direct and Indirect Impact Analysis**

Alternative D retains the benefits provided by the economic stimulation of the Status Quo to the perpetuation of cultural resources and would do more. Through this approach, the DTF could work with traditional crafters and musicians to facilitate better business planning, marketing, and other activities that could enhance market opportunities in other ways than merely bringing more tourists to the region. It also could provide a mechanism for local communities to plan and prepare for expected increases in tourism and development so that the adverse impacts associated with those activities can be addressed. Alternative D lacks the direct expenditures of Alternative B on heritage preservation projects, however and relies almost exclusively on tourism and development to ensure long term viability of cultural resources. As with the Status Quo, no mechanism exists in Alternative D to encourage this outcome or evaluate its progress. There is no additional analysis of Cherokee, craft or music resources in Alternative D to add to this discussion.

Other Resources - Historical and Archaeological Sites

As discussed in other alternatives, the BRNHA would not expect to devote programmatic activities under Alternative D to the protection or restoration of historic and archaeological resources unless a clear connection can be made between those resources and the heritage themes or other items presented in the heritage resource inventory. For this reason, few beneficial impacts to these resources are forecasted. Adverse impacts could arise as heritage development and related activities facilitated by BRNHA potentially intrude into

sensitive historical or archaeological resource areas. However, the planning and infrastructure activities promoted in this alternative should help identify such resources and minimize potential adverse impacts.

Conclusion

Alternative D should produce a net moderate beneficial impact to cultural resources in the Heritage Area as a whole. This conclusion is based on the belief that for cultural resource perpetuation to occur, it is crucial that those people who practice the traditional arts actually have the ability to earn a decent living from their work. In addition, those adverse consequences that could arise due to increasing tourism and development could to some degree begin to be addressed through improvements in local planning and infrastructure encouraged by Alternative D.

Cumulative Impacts

Cumulative impacts identified in the Status Quo Alternative continue to exist in Alternative D. Tourism and heritage development stimulated under Alternative D would combine with these conditions to create more pronounced adverse impacts.

Alternative E - Management with Goal Integration**Direct and Indirect Impact Analysis**

Alternative E essentially incorporates the beneficial aspects of Alternatives B and D that protect cultural resources and mitigate against possible adverse impacts while maintaining core cultural resource development activities that are fundamental to the BRNHA mission and that ironically are also necessary to the perpetuation of craft and music traditions.

Some the adverse impacts to cultural resources discussed under the Status Quo would still be relevant in Alternative E but at less intensity due to the heritage development goal assuming a lower priority, more emphasis placed on heritage preservation, and more emphasis

on increasing local planning and infrastructure capacity. A danger exists however that in attempting to minimize adverse impacts from tourism and development that BRNHA could overshoot its target, minimizing the beneficial impacts expected to accrue from these activities. Under Alternative E, great care would need to be taken to ensure that management does not focus so tightly on activities designed to preserve and protect cultural resources that it neglects the investments that are needed in marketing and promotions to stimulate the widespread and long term demand for arts, craft, and music that is also essential to music and craft perpetuation.

In addition to the benefits produced by heritage development, other benefits should come from: 1) direct annual expenditures to groups working to preserve cultural resources; 2) deliberate marketing and promotional messages that produce more advocates and supporters of the region's cultural resources; and 3) use of funding and the PTF in aligning BRNHA strategy and actions in support of local initiatives that preserve important cultural resources. Efforts invested on these activities would detract to some degree from amount of investments that could otherwise be placed on heritage development. For this reason, benefits from Alternative E are forecasted to be slightly less than those that would be produced in Alternative D.

As with natural resources, the grants program could prove to be a powerful tool in cultural heritage preservation though perhaps not as many large match funding opportunities exist. The environmental sensitivity sought as an outcome in the marketing and promotions program for natural resources also has applicability in cultural resources. The research program used to track attitudinal transitions among tourists and residents from awareness to appreciation to eventual support for cultural resource protection initiatives would help BRNHA gauge its success and help it to adapt as necessary. It would be expected that cultural resource items would also be included in any barometer that tracks the existence and viability of 'endangered' heritage resources. A partnership program that makes extensive use of a PTF would ensure that cultural resource preservation needs remain at the forefront of BRNHA planning and decision making. Its networking efforts among private foundations and agency programs should deliver some financial resources to meet

cultural resource preservation needs. Its networking efforts among the local heritage councils and other potential implementation partners should ensure that local cultural resource preservation projects are cultivated that match BRNHA's priorities and hold appeal to those organizations with potential matching contributions. All of this should ensure that many cultural resource preservation needs are met. In some local councils where preservation interests are not as well represented, there is some concern that less attention may be given cultural resource protection issues but this concern could be addressed through outreach conducted by heritage tourism officers and PTF members.

Conclusion

Alternative E should produce a net minor beneficial impact to cultural resources in the Heritage Area as a whole. While cultural resources stand to benefit from an active preservation agenda and investments in local planning and infrastructure capacity, a decreased level of effort on heritage development (as in Alternative B) may actually reduce the potential of the marketplace in helping to perpetuate cultural resources of the Heritage Area.

Cumulative Impacts

Cumulative impacts identified in the Status Quo Alternative continue to exist in Alternative E. Tourism and heritage development stimulated under Alternative E would combine with these conditions to create more pronounced adverse impacts.

IMPACTS ON LANDSCAPE & REGIONAL IDENTITY

Agricultural landscapes and land resources are the resource categories used in the assessment of landscape and regional identity. Farmland and farm communities characterize the traditional lower elevation mountain landscape while prominent forested ridgelines and peaks characterize the horizon. Between these two dominant landscape features, the vibrant and unique culture that is Western North Carolina was born and now thrives. These are described in the heritage resource inventory presented in Chapter 3.

A summary of the impact analysis on landscape and regional identity for each management alternative is depicted in Table 6-5. The analysis that follows provides greater detail about the conclusions presented. The intensity of impact expected for each alternative has been assigned a rating (negligible, minor, moderate, and major). Both the duration (short term and long term) of impact and whether the impacts are expected to be beneficial or adverse have been factored into the assessment. Taking all information into account, an overall conclusion has been reached for each alternative about the intensity and type of impact expected to be produced. Using only impacts expected to landscape and regional identity, Alternative B would be the environmentally preferred approach.



Table 6-5:
Summary of Likely Impacts to Landscape & Regional Identity

INTENSITY & DURATION OF LIKELY IMPACTS TO LANDSCAPE & REGIONAL IDENTITY				
Management Alternatives	Duration	Intensity		Overall Conclusion
		Adverse	Beneficial	
Status Quo	Short Term Long Term	MODERATE MODERATE	NEGLIGIBLE NEGLIGIBLE	MODERATE ADVERSE
Alternative B	Short Term Long Term	NEGLIGIBLE NEGLIGIBLE	MODERATE MAJOR	MODERATE BENEFICIAL
Alternative C	Short Term Long Term	NEGLIGIBLE MINOR	NEGLIGIBLE MINOR	NEUTRAL
Alternative D	Short Term Long Term	MODERATE MODERATE	NEGLIGIBLE NEGLIGIBLE	MINOR ADVERSE
Alternative E	Short Term Long Term	MINOR MINOR	MINOR MODERATE	MINOR BENEFICIAL

Alternative A - Status Quo Management Approach

Direct and Indirect Impact Analysis

Adverse impacts to landscape and regional identity will come from: 1) tourists directly encountering the Western North Carolina landscape; and 2) construction activities associated with the expansion and growth of commercial and residential enterprise to support the demands of increasing tourist and resident populations.

An increasing level of tourist traffic increases the likelihood of trash and litter and number of vehicles on scenic byways. The amount of litter on the landscape may grow not only from carelessness or lack of respect but also from inadequate management of public sites and facilities where trash has been disposed of properly. Vehicular traffic can grow to a point that it becomes a common condition on

a scenic road and an actual component of the scenery. Once this condition is met, the scenic values of that road will diminish. Under the Status Quo these potential problems are not addressed.

The rapid pace of commercial and residential construction can alter forever the mountain landscape and its traditional, agrarian identity. Increasing tourists to the region helps to fuel the demand for new home development and subdivisions that are placed where farms and forests were formerly located. Ill conceived and executed development on ridges and steep slopes are a severe threat to landscape integrity. For some people, exposure to historic and century farmsteads will hold special appeal, and in these cases beneficial consequences may result as some historic structures are purchased and refurbished by people moving into the area. In still other cases, these historic structures will likely be bulldozed to make room for

new development. This is especially of concern in counties lacking preservation commissions or strong historical societies. Under the Status Quo, these issues are not addressed.

Conclusions

The Status Quo should produce a net moderate adverse impact to landscape and regional identity in the Heritage Area as a whole. Major adverse impacts are forecasted short and long term for those localities with a notable lack of planning.

Cumulative Impacts

The pace of building in western NC is due to a number of factors beyond BRNHA control. Depending upon survey, Asheville and Western North Carolina in general are consistently ranked as top places to live, retire, travel, recreate, and do business (<http://www.exploreasheville.com/press-room/asheville-quality-of-life-awards/index.aspx>). The area and region is growing. BRNHA's efforts to create more tourists will contribute to this growth and exacerbate impacts.

Alternative B: Management with a Preservation Emphasis

Direct and Indirect Impact Analysis

Adverse impacts identified in the Status Quo Management Approach would still be relevant in Alternative B but at less intensity due to less effort being invested in pursuit of the heritage development goal and 60% of effort being earmarked expressly for heritage preservation. Beneficial impacts would be expected from: 1) direct annual expenditures on preservation of natural areas, farmland, and other scenic properties; 2) deliberate marketing and promotional messages that produce more advocates and supporters of landscape preservation and land use planning; 3) strong participation of preservation interests on all heritage councils and the use of the PTF in support of local initiatives that preserve important landscapes; and 4) deliberate use of programs to help build local capacity for

planning that should help protect landscape integrity. Alternative B would help ensure that visitors to the BRNHA will be able to experience over the long term the unique landscape of Western North Carolina.

While the federal legislation authorizing the creation of the BRNHA forbids the use of federal funds for the acquisition of any interest in real property, a dedication of \$2.1 million in grant funding over the next 10 years can support in other ways locally driven land preservation efforts. This could be of significant value in helping partners preserve important farmland in the region. This opportunity could be enhanced with a partnership with the NC Department of Agriculture's Farmland Preservation Trust Fund. A research program that identifies and prioritizes important landscapes, coupled with 60% of grant funding dedicated to land preservation projects would help preserve key rural properties associated with regional identity. A marketing and promotions campaign that draws attention to threatened landscapes at or in the vicinity of advertised attractions should raise awareness and generate additional funding for land preservation. It should also generate advocates of land use planning from among existing and new residents in the area. A partnership program that requires representation of preservation interests on local councils and in the PTF could encourage locally led land use planning initiatives and promote recognition throughout the Heritage Area of the value of forested and agricultural landscapes. It would also ensure that these values remain recognized and promoted by BRNHA in its own policy development, planning, and decision making. None of these organizational and partnership strategies identified in Alternative B are guaranteed to protect important landscapes from the projected increases in tourism, but they do establish a structure upon which a greater likelihood of landscape protection and land planning more consistent with the BRNHA mission will occur.

Conclusion

Alternative B should produce a net moderate beneficial impact to landscape and regional identity in the Heritage Area as a whole. Beneficial impacts should be amplified by the percentage of effort in the marketing and promotions program dedicated to landscape

preservation. Benefits should also be produced by a more widespread acknowledgement of the need for and benefits to be gained from local land use planning.

Cumulative Impacts

Private land trusts, regional councils of government, the State of NC, and some local governments are taking significant steps to preserve important landscape components of their regional identity. Active collaboration with these partners would increase the odds of successfully preserving landscape identity.

Alternative C: Management with an Interpretation Emphasis

Direct and Indirect Impact Analysis

Many of the adverse impacts to natural resources discussed under the Status Quo would still be relevant in Alternative C and at only slightly less intensity. This is because heritage interpretation is likely to more immediately lead to heritage tourism and development than to heritage preservation. Beneficial impacts to landscapes and regional identity might occur as awareness among tourists translates into their political and financial support for local planning, funding, and additional education on needs related to landscape preservation and land use planning. However, no mechanism exists in Alternative C to facilitate this outcome or track its evolution.

Beneficial consequences are expected to be less than those produced by the preservation emphasis due to less funding being applied directly to projects that preserve natural areas, farmland, and other scenic properties. The four program areas would instead emphasize building awareness among the touring public and permanent residents of the relationship of the landscape to regional identity and ultimately to heritage tourism. Educational efforts alone would likely not produce political and financial supporters of landscape preservation and land use planning. The partnership program requiring interpretation interests on local councils and

in the ITF could encourage local land use planning and promote recognition throughout the Heritage Area of the value of forested and agricultural landscapes. However, without dedicated funding to either facilitate preservation of important properties (available in Alternative B) or help local communities develop their capacity for better land use planning (available in Alternative D), there would be less opportunity for local communities to apply newfound knowledge and lessons learned and produce outcomes that protect key features on the landscape associated with regional identity.

Conclusion

Alternative C should produce a net neutral impact to landscape and regional identity in the Heritage Area as a whole. There is no guarantee that greater environmental awareness would translate into protection of natural areas, farmland, and scenic properties. Without essential educational strategies in place to guide these outcomes, that notion would be mainly a hope. Alternative C provides fewer opportunities than Alternatives B or D for local leaders to apply newfound knowledge about the need for intact landscapes into pragmatic action. Minor adverse impacts would continue to be experienced by some increases expected to occur in tourism, though not to the degree described in the Status Quo.

Cumulative Impacts

Local and regional efforts are underway in some counties to raise awareness about steep slope development, farmland preservation needs, and other issues affecting the Western North Carolina landscape. Interpretation efforts could expose local councils to these initiatives and thereby raise awareness among heritage constituencies of these landscape resource issues and provide added value to these efforts.

Alternative D: Management with a Development Emphasis

Direct and Indirect Impact Analysis

There are many similarities between the Status Quo and Alternative D. To reduce duplication of text, the details of the analysis presented in the Status Quo are not repeated here. Adverse impacts under Alternative D could be less long term however due to the effort that could be placed on increasing local capacity to plan for and manage increasing numbers of tourists. Conversely, the attention given local infrastructure improvements could have the opposite effect, instead facilitating the continuation of current building trends. In either case, local needs likely far outstrip the ability of BRNHA to coordinate effective solutions region wide.

Conclusions

Alternative D should produce a net minor adverse impact to landscape and regional identity in the Heritage Area as a whole. Adverse impacts could be moderated with greater local investments in planning and management, but due to the political charge of the issue, BRNHA would only help stimulate local planning where invited and where it made practical sense.

Cumulative Impacts

The cumulative impacts described in the Status Quo apply in Alternative D as well. This alternative may even exacerbate adverse impacts due to the potential of infrastructure improvements in the stimulation of growth and development that can occupy and fragment the traditional mountain landscape.

Alternative E: Management with Goal Integration

Direct and Indirect Impact Analysis

Alternative E essentially incorporates the beneficial aspects of Alternatives B and D that would be intended to protect and mitigate against adverse impacts to landscape and regional identity while maintaining core heritage development activities that are fundamental to the BRNHA mission but that are acknowledged to possibly produce adverse impacts. Adverse impacts identified in the Status Quo would be relevant in Alternative E but at somewhat less intensity due to a reduced emphasis on heritage development and an enhanced emphasis on landscape preservation. As discussed under Alternative D, some infrastructure improvements such as water and sewer expansion and new road construction or widening projects can actually stimulate growth and development in such a manner that consumes and fragments open space. Projects such as this would be eligible for BRNHA support under Alternative E. Deliberate thought would need to be exercised by partners and decision makers when formulating projects so that the BRNHA does not compete against itself on the landscape preservation front. There is a danger that under Alternative E, the BRNHA could end up facilitating both landscape fragmentation and landscape preservation. This danger should be minimized however through 1) involvement of the PTF in strategic planning and decision making; 2) direct annual expenditures on preservation of natural areas, farmland, and other scenic properties important to landscape and regional identity; and 3) deliberate marketing and promotional messages that produce more advocates and supporters of landscape preservation and land use planning; and 4) deliberate use of programs to help build local capacity for planning that (in addition to facilitating infrastructure improvements) could also help protect landscape integrity. These programmatic initiatives should also stimulate beneficial impacts to the Western North Carolina landscape.

Increased grant funding over the next 10 years to support locally driven land preservation efforts should help the BRNHA and its partners protect properties important to landscape and regional

identity. The use of the grants program to stimulate local planning and infrastructure improvements could help local governments protect community parks, open space, and other natural resources.

A marketing and promotions program that simultaneously educates the public about the importance of landscape integrity while enticing them to visit the area is more likely to produce advocates and supporters of landscape protection mechanisms than merely enticing them to visit without this message. Creating ‘environmentally sensitive’ tourists, residents, and decision makers would be a desired outcome that would be complimentary of the Status Quo intentions to use marketing and promotions in pursuit of economic development goals.

The research program could be used to track attitudinal transitions among tourists and residents from their growing awareness and appreciation to support for landscape protection initiatives. This could help BRNHA gauge how successful it is over time at encouraging behaviors that help it preserve landscape and regional identity and then adapt as necessary. The use of research projects to identify and track ‘endangered’ landscapes would also be used to inform both the marketing and grants programs so that decision making remains consistent with clearly identified landscape preservation needs. Research activities would still be used to inform BRNHA of heritage tourism and development trends so that it can evaluate and adapt to better fulfill the heritage development goals. Research alone should not produce any measurable impact though it may initiate actions that could.

A partnership program that makes extensive use of a PTF would help ensure that landscape preservation needs remain at the forefront of BRNHA planning and decision making. It’s networking efforts among private foundations, agency programs, and state trust funds should deliver more financial resources to meet landscape preservation needs. Its networking efforts among the local heritage councils and other potential implementation partners should ensure that local landscape preservation projects are cultivated that match BRNHA’s priorities and hold appeal to those organizations with potential matching contributions. All of this should ensure that significant

landscape preservation needs are met. In some local councils where preservation interests are not as well represented, there is some concern that less attention may be given landscape preservation issues but this concern is limited to only a few places and could probably be addressed through outreach conducted by heritage tourism officers and PTF members.

Conclusion

Alternative E should produce a net minor beneficial impact to landscape and regional identity in the Heritage Area as a whole. The BRNHA would fulfill a vital partnership role, considering the different private and state and local government partners in the region focused on landscape preservation and the availability of substantial state funding dedicated to heritage preservation. While some funding sources would likely emphasize high quality natural resources, there are others that will support protection of farmland properties, greenways, and parks. Tourism and heritage based development initiatives and the potential adverse consequences that stem from these activities would still occur under Alternative E, although at a somewhat slower pace than under the Status Quo and Alternative D.

Cumulative Impacts

Private land trusts, regional councils of government, the State of NC, and some local governments are taking significant steps to preserve important landscape components of their regional identity. Local and regional efforts are underway in some counties to raise awareness about steep slope development, farmland preservation needs, and other issues affecting the Western North Carolina landscape. Active collaboration with these partners would increase the odds of successfully preserving landscape identity.

IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT

Socio-economic conditions assessed (Table 6-2) include transportation and infrastructure and trends regarding population, employment, county building patterns, and land cover change. These are discussed in Chapter 4.

A summary of the impact analysis on cultural resources for each management alternative is depicted in Table 6-6. The analysis that follows provides greater detail about the conclusions presented. The intensity of impact expected for each alternative has been assigned a rating (negligible, minor, moderate, and major). Both the duration (short term and long term) of impact and whether the impacts are expected to be beneficial or adverse have been factored into the assessment. Taking all information into account, an overall conclusion has been reached for each alternative about the intensity and type of impact expected to be produced. Using only impacts expected to the socio-economic environment, Alternative D would be the environmentally preferred approach.

Table 6-6:
Summary of Likely Impacts to the Socio-Economic Environment

INTENSITY & DURATION OF LIKELY IMPACTS TO SOCIO-ECONOMIC ENVIRONMENT				
Management Alternatives	Duration	Intensity		Overall Conclusion
		Adverse	Beneficial	
Status Quo	Short Term	NEGLIGIBLE	MINOR	MINOR BENEFICIAL
	Long Term	MINOR	MINOR	
Alternative B	Short Term	NEGLIGIBLE	MINOR	MINOR BENEFICIAL
	Long Term	NEGLIGIBLE	MINOR	
Alternative C	Short Term	NEGLIGIBLE	NEGLIGIBLE	NEGLIGIBLE BENEFICIAL
	Long Term	NEGLIGIBLE	MINOR	
Alternative D	Short Term	NEGLIGIBLE	MODERATE	MAJOR BENEFICIAL
	Long Term	NEGLIGIBLE	MAJOR	
Alternative E	Short Term	NEGLIGIBLE	MINOR	MINOR BENEFICIAL
	Long Term	NEGLIGIBLE	MODERATE	

Status Quo Management Approach

Direct and Indirect Impact Analysis

Beneficial impacts from the Status Quo include increased employment and business growth and expansion, especially in the service industry and construction trades. Grocers, restaurateurs, owners of gas stations, artists and craftspeople, and a wide variety of other types of entrepreneurs stimulated by heritage tourism opportunities would benefit from BRNHA's efforts under the Status Quo. This economic activity should generate additional revenues for local governments in the region. Revenues could be utilized in certain ways that would further enhance socio-economic conditions, but no mechanism exists in the Status Quo to encourage this outcome or track its evolution.

Adverse impacts produced by the Status Quo include haphazard growth and development that could impede over the long term the effectiveness of heritage tourism as an economic development tool. Tourists visit Western North Carolina to have a first-hand experience with many of the environmental resources already discussed in this assessment. Growth and development stimulated by Status Quo is more apt to result in impacts on those very resources that are the object of desire. At some point, these impacts could become severe enough that they compromise the attractiveness of the region. Ill planned development may also lead to an increase in cost of community services. Permanent residents may find themselves funding, through their own taxes, the infrastructure expansion and community services built primarily for a seasonal or vacationing population. The Status Quo would be expected to produce a lot more people on the highways and backroads of the region with limited or no knowledge of transportation improvement projects scheduled by NCDOT and the infrastructure limitations in some localities. Traffic congestion could become more severe resulting in increasing frequency of traffic jams, accidents, and automobile air pollution.

Conclusion

The Status Quo should produce a net minor beneficial impact to socio-economic conditions in the Heritage Area as a whole. While the economic stimulus is duly noted, a variety of problems associated with the strain of unplanned for and unmanageable tourism and development would also be expected, especially in certain localities. These adverse impacts would keep the Status Quo approach from delivering on its potential as a major benefactor of long term socio-economic gains.

Cumulative Impacts

As discussed in Chapters 3 - 5, Western North Carolina is a dynamic and growing area. Tourism has been a major component of the regional economy for many years and some areas have experienced heavy population growth for decades. Many public agencies and nonprofit organizations and private businesses work actively to promote tourism in the region - both heritage based tourism and tourism in general - as well as to further other aspects of economic

development. Most of these efforts were initiated prior to the establishment of the BRNHA and, in aggregate, far exceed the tourism-promotion activities of the BRNHA itself. If these efforts are successful in increasing the extent and duration of visitation or overall development and economic activity, both the adverse and beneficial impacts to socio-economic conditions are likely.

The growth in population and building permits and the subsequent changes on the landscape that are described in Chapter 5 are producing both beneficial and adverse impacts to socio-economic conditions. Increased employment opportunities are a good thing. However, with expected increases in primarily service sector jobs, it is doubtful that the Status Quo could exert any major pressures that would enhance per capita incomes that largely lag behind the state and national averages.

Alternative B: Management with a Preservation Emphasis

Direct and Indirect Impact Analysis

Adverse impacts discussed under the Status Quo would also occur under Alternative B but at less intensity due to decreasing emphasis on heritage development and more emphasis on heritage preservation. Alternative B would also likely produce some economic gains, though probably not at the level of expansion of the Status Quo or Alternative D. Natural and cultural-historic resource professionals, archivists, land planners and landscape architects, architects, the private land trust community, attorneys, estate planners, and large tract landowners would benefit from BRNHA investments in Alternative B. The preservation emphasis could help to slow outward expansion of some communities thereby alleviating increases in costs for community services. Conversely, the protection of more and more land will shrink the available property tax base in the region, which could ultimately result in higher property taxes for residents. Alternative B would result in the preservation of ecosystem services, a somewhat nebulous concept with very real benefits. High quality water, habitat that hosts native pollinators, forests that cleanse and

purify the air and moderate temperatures are but a few of those ecosystem services that contribute to the high quality of life and attraction of the region.

Conclusion

Alternative B should produce a net minor beneficial impact to socio-economic conditions in the Heritage Area as a whole. Beneficial socio-economic impacts would be no more than negligible in the short term but could grow to a moderate rating long term as outcomes preserve the quality of life in the region and the heritage resource assets that form the basis for heritage tourism.

Cumulative Impacts

The issues discussed under the Status Quo have applicability under Alternative B as well.

Alternative C: Management with an Interpretation Emphasis

Direct and Indirect Impact Analysis

Some of the adverse and beneficial impacts discussed under the Status Quo would also occur at slightly less intensity under Alternative C due primarily to the effect that some heritage interpretation activities can have on stimulating interest among potential visitors and ultimately their travel to the region and the development that is spurred thereafter. Educators, camps, outfitting and guide services, arts councils, and the public lands would serve to benefit from BRNHA investments. Problems from traffic congestion and ill planned development would remain. However, all heritage interpretation activities would not be expected to produce these outcomes. Some efforts would be undertaken for the expressed purpose of simply stimulating greater awareness and acknowledgement of heritage resource values among local residents and decision makers. Those efforts would enhance quality of life in the region without producing associated adverse impacts.

Conclusion

Alternative C should produce a net negligible beneficial impact to socio-economic conditions in the Heritage Area as a whole. This alternative has no mechanism in place to use educational activities and outcomes in a manner that stimulates socio-economic benefits. This is the primary factor holding this alternative back from a higher beneficial rating.

Cumulative Impacts

The issues discussed under the Status Quo have applicability under Alternative C as well.

Alternative D: Management with a Development Emphasis

Direct and Indirect Impact Analysis

Beneficial impacts discussed under the Status Quo should occur also in Alternative D but at greater intensity. Alternative D should produce employment and business growth as discussed under the Status Quo, but with less adverse unintended consequences. Heritage development undertaken in concert with the DTF and local stakeholders and with greater forward thought has potential to result in rationally planned development that takes into consideration problems that may accrue as well as opportunities heretofore unknown that may be available on the local level. A dedicated effort to build local capacity for good planning, management, and infrastructure improvements should create conditions for sustained capitalization and economic growth. Professional service providers such as engineers, architects, land planners and landscape architects would benefit as well as construction and landscape contractors and suppliers. These benefits being recognized, land use changes from forest and farmland to urban areas would likely increase and this would detrimentally affect the provision of ecosystem services that are also important to socio-economic health.

Conclusion

Alternative D should produce a net major beneficial impact to socio-economic conditions in the Heritage Area as a whole. The socio-economic problems associated with haphazard and unplanned heritage development resulting in the Status Quo could largely be addressed under Alternative D.

Cumulative Impacts

The issues discussed under the Status Quo have applicability under Alternative D as well.

Alternative E: Management with Goal Integration

Direct and Indirect Impact Analysis

Alternative E protects some components in the socio-economic environment through outright preservation of land resources and by building local capacity for planning and infrastructure improvements that are essential to sustained prosperity, the public health, and an overall high quality of life. This management approach would help stimulate economic development in the region, but moreso in those niche markets of resource conservation, land planning, and less from heritage tourism related activities. Not as much impact would be expected from tourism and related development due solely to the decreased emphasis placed on those heritage development activities.

Conclusion

Alternative E should produce a net moderate beneficial impact to socio-economic conditions in the Heritage Area as a whole. The socio-economic problems associated with the Status Quo would largely be addressed.

Cumulative Impacts

The issues discussed under the Status Quo have applicability under Alternative E as well.

IMPACTS ON VISITOR USE

Visitor use has been assessed through the synthesis of the analysis presented thus far regarding natural and cultural resources and landscape and regional identity. Visitors come to Western North Carolina for the expressed purpose of experiencing these heritage resources. Adverse impacts cause or influenced by the various management approaches would be expected to produce an adverse impact on visitor use and experience. Similarly, management alternatives that benefit these resources would likely also generate beneficial impacts to visitor experience. The cumulative impact findings presented under each of the other resource categories would have applicability here as well. To reduce duplication of text, these are not described in this section.

A summary of the impact analysis on landscape and regional identity for each management alternative is depicted in Table 6-7. The analysis that follows provides greater detail about the conclusions presented. The intensity of impact expected for each alternative has been assigned a rating (negligible, minor, moderate, and major). Both the duration (short term and long term) of impact and whether the impacts are expected to be beneficial or adverse have been factored into the assessment. Taking all information into account, an overall conclusion has been reached for each alternative about the intensity and type of impact expected to be produced. Using only impacts expected to visitor use and experience, Alternatives B and C would be the environmentally preferred approach.

Table 6-7:
Summary of Likely Impacts to Visitor Use and Experience

INTENSITY & DURATION OF LIKELY IMPACTS TO VISITOR USE & EXPERIENCE				
Management Alternatives	Duration	Intensity		Overall Conclusion
		Adverse	Beneficial	
Status Quo	Short Term	MINOR	MINOR	NEGLECTIBLE ADVERSE
	Long Term	MODERATE	MINOR	
Alternative B	Short Term	NEGLECTIBLE	MINOR	MODERATE BENEFICIAL
	Long Term	NEGLECTIBLE	MAJOR	
Alternative C	Short Term	NEGLECTIBLE	MODERATE	MODERATE BENEFICIAL
	Long Term	MINOR	MODERATE	
Alternative D	Short Term	NEGLECTIBLE	MINOR	MINOR BENEFICIAL
	Long Term	NEGLECTIBLE	MODERATE	
Alternative E	Short Term	NEGLECTIBLE	MINOR	MODERATE BENEFICIAL
	Long Term	NEGLECTIBLE	MODERATE	

Status Quo Management Alternative

Direct and Indirect Impact Analysis

The Status Quo would be expected to produce a net of moderate adverse impacts on natural resources, neutral impacts on cultural resources, and moderate adverse impacts on landscape integrity. Visitor use and experience would likely suffer long term from this management approach. In the short term, any adverse consequences would probably be negligible but that would probably grow as BRNHA efforts accumulate with other efforts that are geared toward tourism promotion and development. Minor or greater beneficial consequences to visitor use would probably result in the short term as the exposure generated by BRNHA creates additional opportunities for heritage resource interaction. Over the long term however, the Status Quo would produce too many tourists who would exacerbate

population and growth pressures in the region while not providing the controls or management mechanisms necessary to protect heritage resources and ensure sustained quality visitor experience.

Conclusion

The Status Quo should produce a net negligible adverse impact to visitor use and experience in the Heritage Area as a whole. While some positive outcomes would be expected to occur over the life of this plan, this management approach could lead to severe disruptions in the very qualities of Western North Carolina that hold so much attraction.

Alternative B: Management with a Preservation Emphasis

Direct and Indirect Impact Analysis

Alternative B would be expected to produce a net moderate beneficial impact on natural resources, negligible beneficial impact on cultural resources, and moderate beneficial impact on landscape and regional identity. Less emphasis on the heritage development goal should produce less tourists and less development, reducing the threats from overcrowding and overuse of certain resources. Greater emphasis on heritage preservation should help ensure that resources that attract tourists and residents remain viable over the long term. Because some effort would still be expended on heritage development, some increases in tourism and development would be expected to occur. The increases in tourism would continue to strain management capacity in some localities in the region, which may result in adverse environmental impacts but not to the extent of the Status Quo.

Conclusion

Alternative B should produce a net moderate beneficial impact to visitor use and experience in the Heritage Area as a whole. This management approach will help protect the quality of the visitor experience over the long term.

Alternative C: Management with an Interpretation Emphasis

Direct and Indirect Impact Analysis

Alternative C would be expected to produce a net neutral impact on natural resources, minor beneficial impact on cultural resources, and neutral impact on landscape and regional identity. Based on these aspects alone, it would be expected that the interpretation emphasis would have little adverse or beneficial impact to visitor use and experience, but that would be an incomplete assessment.

Unlike the other alternatives, this approach is designed with the primary purpose of stimulating visitor experience. Sixty percent of programmatic effort dedicated to heritage education would likely produce tremendous opportunities for new and enhanced visitor experiences, ensuring that a moderate level of beneficial impacts occurs. Conversely, heritage interpretation is also unique in that many activities undertaken in this alternative will also, by default, promote heritage development. The adverse consequences discussed above under the Status Quo would also likely apply here, albeit at less intensity.

Conclusion

Alternative C should produce a net moderate beneficial impact to visitor use and experience in the Heritage Area as a whole.

Alternative D: Management with a Development Emphasis

Direct and Indirect Impact Analysis

Alternative D would be expected to produce a net minor adverse impact on natural resources, moderate beneficial impact on cultural resources, and moderate adverse impact on landscape and regional identity. The increases in tourism would continue to strain management capacity in some localities in the region, which may result in adverse environmental impacts. The development emphasis would have potential to improve visitor use and experience in the Heritage Area over time due to the continuation of heritage development, which has its benefits, but with more strategic thinking from the DTF and local councils on the targeting of heritage development projects. Alternative D would also devote some effort helping certain localities build their capacity to adequately serve, host, and entertain projected increases in tourism. A danger also exists in Alternative D being used to help localities improve their infrastructure without them simultaneously spending the necessary effort and political capital in coming to terms with how growth and development, if ill planned, could actually threaten the resource base upon which heritage development is being built.

Conclusion

Alternative D should produce a net minor beneficial impact to visitor use and experience in the Heritage Area as a whole.

As with the Status Quo, Alternative D is likely to produce moderate beneficial impacts in the short term to visitor use and experience but beneficial impacts should grow to a major rating long term as localities improve their capacity to plan, prepare for, and manage better the increasing numbers of tourists that visit their communities. No more than moderate adverse impacts are expected long term.

Alternative E: Management with Goal Integration**Direct and Indirect Impact Analysis**

Alternative E would be expected to produce a net minor beneficial impact on natural resources, minor beneficial impact on cultural resources, and minor beneficial impact on landscape and regional identity. Less emphasis on the heritage development goal should produce less tourists and less development, reducing the threats from overcrowding and overuse of certain resources. Greater emphasis on heritage preservation should help ensure that resources that attract tourists and residents remain viable over the long term. Because some effort would still be expended on heritage development, some increases in tourism and development would be expected to occur - creating opportunities for interaction with heritage resources. However, the emphasis placed on helping localities plan and prepare for expected increases in tourism and overall population growth should minimize expected adverse impacts. The significance of the PTF in this alternative should also override any tendency to utilize investments on planning and infrastructure improvements in a manner that would promote sprawl and disrupt landscape integrity important to visitor experience.

Conclusion

Alternative E should produce a net minor beneficial impact to visitor use and experience in the Heritage Area as a whole. The minor beneficial ratings applied to natural, cultural, and landscape resources would have an exponential impact on protecting the qualities that are attractive to tourists and residents.

CONCLUSIONS FROM THE ENVIRONMENTAL ASSESSMENT

Alternative B, management with a preservation emphasis, is the environmentally preferred approach. This conclusion has been reached by comparing conclusion statements of each management alternative across all environmental resources and conditions assessed. The comparison was made by assigning a numerical rating to each conclusion statement given for each management alternative per resource category assessed and then summing those numbers to attain a total impact score (Table 6-8). Alternative B scored 12 total points.



Table 6-8:
Final Impact Ratings Per Management Approach

FINAL IMPACT RATING - ALL RESOURCES COMBINED <i>Rating Scale</i> <i>Major Adverse -4 Moderate Adverse -3 Minor Adverse -2 Negligible Adverse -1 Neutral 0</i> <i>Negligible Beneficial +1 Minor Beneficial +2 Moderate Beneficial +3 Major Beneficial +4</i>						
Management Alternatives	Natural Resources	Cultural Resources	Landscape & Regional Identity	Socio-Economic Environment	Visitor Use & Experience	TOTAL IMPACT SCORE
Status Quo	-3	0	-3	2	-1	-5
Alternative B	3	1	3	2	3	12
Alternative C	0	2	0	1	3	6
Alternative D	-2	3	-2	4	2	5
Alternative E	2	2	2	2	2	10

Alternative B is the management approach most likely to produce more overall beneficial impacts to the Heritage Area environment and fewer adverse impacts. Adverse consequences are still likely to result from some activities undertaken through Alternative B, and these can be referenced through a review of the analysis. However, when all adverse and beneficial impacts were factored together for each resource category, no adverse impact conclusion was reached for Alternative B.

The Status Quo approach would likely be the most disrupting to environmental resources and conditions in the Heritage Area. The analysis found this approach likely to produce moderate adverse impacts on both natural resources and landscape and regional identity, though it would also probably deliver some benefits to the socio-economic environment.

Alternative C, management with an interpretation emphasis, was found to deliver few significant benefits though no substantial adverse impacts would occur either. This approach might deliver moderate beneficial impacts to visitor use and experience. While there is intrinsic value in that outcome, it is not clear how this approach would stimulate additional valuable outcomes regarding other resource categories - outcomes that are both desired by BRNHA and necessary considering threats to heritage resources that this analysis revealed.

Alternative D, management with a development emphasis, would be good for the Heritage Area environment in many ways. Interestingly enough, the analysis found this alternative to be more likely to produce greater benefit to cultural resources and the socio-economic environment than any of the other alternatives. Conversely, it was

also found to be more detrimental to natural resources and landscape and regional identity than any of the alternatives except for the Status Quo.

Alternative E, management with goal integration, produces no overall adverse impacts and minor beneficial impacts in each resource category. It would not be expected to produce as great of benefit to natural resources, landscapes and visitor use as Alternative B. Nor would it be expected to produce as great of benefit to cultural resources or the socio-economic environment as Alternative D. This is not a glamorous management approach. Little is risked and significant gains for the Heritage Area should only be expected after years of methodical execution of management intent. However, it is the most balanced approach of the alternatives given and one that should enable the BRNHA to realistically succeed in pursuing the sometimes contradictory intentions of stimulating economic opportunity in the region while preserving its environmental qualities.



