

SECTION 1: PURPOSE AND NEED

PURPOSE OF AND NEED FOR THE PROPOSED ACTION

The National Park Service is proposing to improve and/or construct new environmental education facilities at the Great Smoky Mountains Institute at Tremont (hereafter referred to as “Tremont”) using sustainable design principles. The purpose of the proposed project is to redesign the facilities to be more energy efficient, environmentally friendly, and sustainable. This would create a facility with appropriate design and features for a high quality environmental learning center within the most visited national park in the United States. This action is needed because the buildings at Tremont are over 40 years old and were not designed for their present purpose and uses. The facilities were retrofitted to provide adequate space for program needs, but limit the organization and its potential in numerous ways.

Tremont is located approximately 3 miles south of Townsend, Tennessee in the northwest portion of the Great Smoky Mountains National Park (Figure 1). Tremont is located adjacent to and on both sides of the Middle Prong of the Little River within Walker Valley, named for the well-known local family who originally settled the area. Tremont is a non-profit residential environmental education center operated under an agreement with the Great Smoky Mountains National Park, and is the only residential education facility in the park. Tremont was established in 1969 as one of the first environmental education centers located entirely within a national park.

The buildings and campus at Tremont, however, were never designed to function as an environmental education facility and do not function well in meeting current programmatic, visitor, or employee needs. Facilities are not sustainable and were not designed to blend with the park environment, either in function or aesthetics. The campus buildings and grounds do not demonstrate the principles that Tremont teaches and do not embody the core philosophies of the National Park Service related to ecology, biodiversity, and environmental stewardship through sustainable designs. The existing designed campus landscape needs improvement to more effectively support National Park Service and Tremont programs and to meet National Park Service mandates and policies.

A condition assessment survey of the buildings performed in 2002 as part of the Master Plan effort for Tremont (Barge Waggoner, Sumner and Cannon 2003) found that most of the buildings were in fair to good condition. The exception is the River House, which was recommended for demolition. The buildings were generally determined to be outdated and the site layout and building design were not conducive to the Tremont vision.



Existing buildings are limited in scope due to lack of flexibility and adaptability within their physical designs and prevent adequate accommodation of differing group sizes, genders, demographics, and uses in most facilities. The large dormitory rooms do not provide a sufficient level of privacy and make it difficult to accommodate smaller organized groups, families, and adults. A large, multi-use space or separate individual spaces to accommodate school group activities and/or large meetings complete with audio/video capabilities are needed. There is a lack of adequate classroom space, office space, staging and storage areas, and a shortage of necessary housing for permanent staff, interns, volunteers, visiting teachers, security, and other necessary on-site personnel. Greater privacy in bathroom and lodging areas is needed.

An adequate dining facility to meet physical space requirements is needed. Handicapped accessibility is limited. Universal design principles are not comprehensively employed in the campus design. Building designs do not provide adequate natural sunlight. Lack of sunlight and adequate natural ventilation, coupled with improper heating, ventilation, and air conditioning systems, permit high levels of humidity that cause physical discomfort and extensive mold and mildew problems. Most buildings have poor thermal insulation properties. Utilities, water, and wastewater systems are old and inadequate to sustain existing or increased levels of use.

A separation of services and parking from the core education program space needs to be incorporated into the campus. An appropriate location for a sustainably designed visitor information/contact center, backcountry registration, sales area, and public restrooms need to be identified. A registration area for programs and large groups using Tremont as well as an appropriate means to convey necessary information with both personal services and fixed media for general campus orientation is lacking.

The transition between indoor and outdoor uses is an important feature of environmental education centers. However, this is poorly defined at Tremont at the present time, and physical transitional spaces are largely absent in the existing campus configuration. Transitional learning spaces; gathering spaces; the gradual nodes that define changes in environments between interior and exterior spaces; formal transitions between arrival, entry, and orientation, as well as adequate transition from campus trails to park trails, are also needed to incorporate the desired experience and effectively move students and visitors between different places. The aging existing Tremont facilities need increasing amounts of maintenance. Improved facilities designed according to sustainable principles will allow Tremont to operate in a more cost effective manner over the long-term. This can be accomplished through the redesign of facilities to be more energy efficient, environmentally friendly, and sustainable. This would create an Institute with appropriate design and features for a high quality environmental learning center within the park. The purpose of this Development Concept Plan and accompanying Environmental Assessment is to describe and analyze alternative concepts to improve and/or construct new environmental education facilities using sustainable design principles and assess the potential effects of the alternatives on natural resources, cultural resources, and the man-made environment. The improved



and/or new facilities would allow Tremont to meet its long-term objectives to serve as the primary residential, environmental education center for the park.

This Development Concept Plan/Environmental Assessment has been prepared in accordance with the National Environmental Policy Act of 1969 and regulations of President's Council on Environmental Quality (40 CFR 1500 – 1508); the National Park Service Director's Order No. 12 (DO-12) and the associated handbook, *Conservation Planning, Environmental Impact Analysis, and Decision-making*; and Section 106 of the National Historic Preservation Act of 1966 (as amended). This document will also be used to comply with Section 106 regulations.

PURPOSE AND SIGNIFICANCE OF THE PARK

Great Smoky Mountains National Park was established by Congress on June 15, 1934. The park's 800 square miles are almost equally divided between eastern Tennessee and western North Carolina (Figure 1). The park is one of the premier national parks in the country. The park is located within a one-day drive of over half of the population of the United States and has become the most visited park in the National Park system, with over nine million visitors each year. The park is world-renowned for the diversity of its plant and animal resources, the beauty of its ancient mountains, the quality of its remnants of American early settlement culture, and the extent and integrity of the wilderness sanctuary within its boundaries. The park preserves 160 historic buildings and structures and maintains over 800 miles of trails, including a section of the Appalachian Trail with elevations ranging from 800 feet to 6,642 feet at Clingman's Dome. Residing in the Southern Appalachian Mountains, the park is one of the most biologically diverse regions in the world and contains the richest flora and fauna of any temperate area of comparable size anywhere on earth. This is evident in the park's status as the core unit of one of America's few International Biosphere Reserves and its designation as a World Heritage Site in 1983.

The mission of the National Park Service at Great Smoky Mountains National Park is identified in the park's legislative mandate found in the Act of Congress dated May 22, 1926, which states that Great Smoky Mountains National Park was created "for the benefit and enjoyment of the people." The park's purpose is "to preserve exceptionally diverse resources and to provide for public benefit from and enjoyment of those resources in ways which will leave them basically unaltered by human influences." The park's mission statement is a synthesis of this mandated purpose and the park's primary significance, which includes:

- The extraordinary diversity and abundance of its plants and animals,
- The beauty of its mountain terrain and waterways,
- The quality of its remnants of pioneer culture, and
- The sanctuary it affords to those resources and for its modern human users.



Tremont

The overall purpose of Tremont is to serve as the primary residential environmental education facility for the Great Smoky Mountains National Park. Tremont provides programs that meet goals and principles of environmental education as an extension of the park's Division of Resource Education. Residential environmental education programs have been conducted in the park at Tremont since the mid-1980s. Prior to January 2001, these programs were operated under the auspices of the Great Smoky Mountains Natural History Association.

Tremont's revised mission statement, published in 2000, states that the "Great Smoky Mountains Institute provides in-depth experiences through educational programs that celebrate ecological and cultural diversity, foster stewardship, and nurture appreciation of Great Smoky Mountains National Park. Specifically, this program was established at Tremont to provide visiting students with concentrated resource-based education programs and overnight experiences inside the national park environment. Tremont's program is designed to perpetuate, for future generations, an understanding and appreciation of one of the most biologically diverse natural systems in North America, incorporating both past and present human relationships with these Southern Appalachian Mountain systems.

Tremont uses the park as an outdoor classroom. The 3 to 11-day residential environmental education programs are directed toward a wide audience and include classes for school groups, summer youth programs, elder hostels, with special workshops for educators, adults, and college groups.

Tremont fulfills and upholds the mission of Great Smoky Mountains National Park and the park's Comprehensive Resource Education Plan. The location of a residential educational facility within the park provides tangible opportunities for students to experience the largest protected forest in the southeastern United States in the form of an outdoor classroom and environmental learning laboratory. Tremont primarily serves middle school and high school students and serves educators secondarily. In addition, Tremont nurtures adults and family appreciation of the Great Smoky Mountains National Park.

Tremont serves a critical role in providing training opportunities and networking for those persons who are interested in empirical and field-based education methods. The facility serves as a learning laboratory for teachers who may later bring their groups to the park. It is also a training ground for young professionals who gain experience in the field of place-based education and interpretation.

Tremont's curriculum provides opportunities for students to experience science first-hand by providing a total educational immersion into the natural and cultural environment of the Southern Appalachians. Fewer and fewer opportunities exist outside of park boundaries that meet this intensive standard of combining education with the unmatched, exceptional resources for which the park was established. Students learn, develop, and apply skills as resource stewards, both at Tremont and upon



returning home. Transition, both physically and psychologically from the student's home environment to the park environment and then back again, is central to the Tremont experience. Tremont provides in-depth experiences through educational programs designed to nurture appreciation of the Great Smoky Mountains National Park, celebrate diversity, and foster stewardship.

Tremont is an independent non-profit 503(3)(c) organization that operates under a Cooperative Agreement with the Great Smoky Mountains National Park. The Cooperative Agreement with the Great Smoky Mountains National Park directs Tremont to accomplish its mission by doing the following:

- Operate a residential center that provides visitors with in-depth experiences in Great Smoky Mountains National Park that educate users about park ecosystems and associated management issues.
- Provide training opportunities for, and assist in networking for those who are interested in interpretive and environmental education methods.

Programs are required to serve a diverse population of users, including the following (in order of priority):

- School age children of the region.
- Educators and college students interested in environmental education methods and natural and cultural history of the park.
- Other adults with interest in developing skills to allow them to better appreciate the natural and cultural resources of the park.
- Groups interested in utilizing the facilities to conduct a program within the park. Such groups must have at least 30 percent of their program that relates to environmental education or park issues.

Under the agreement with the park, Tremont staff are required to work closely with the Great Smoky Mountains National Park Resource Education Division to implement the best possible programs appropriate to themes and issues. Tremont is expected to exceed the standards and common peer practices within the field of residential, outdoor environmental education. Participants develop and demonstrate a greater understanding and appreciation of the park through high quality, in-depth learning experiences. Those lessons are required to be extended and applied to the participant's home communities.

Approximately 75 percent of the Tremont budget comes from user fees, and the remaining portion of the budget comes from outside funding, making the program largely self-sustaining. Revenue from programs and visitor center sales cover most of the operating expenses, routine maintenance, and repair. Additional operational and office expenses are covered through in-kind support from the Park, sales revenue from The Great Smoky Mountains Association store at Tremont, and Tremont fundraising efforts. These funds supplement the operational budget, and provide for scholarships through an endowment and for special projects and initiatives. Program costs are required to be maintained at an affordable level and yet produce revenue necessary to maintain high



quality programs, operations, and facilities. Expansion of programs and facilities allows for managed growth that enhances the quality of the experience and efficiency of use for a diversity of user groups.

For each of the action alternatives, planning for minimal resource impact is of prime importance. Facilities are required to be maintained and operations conducted in ways appropriate for an environmental education center within a national park. Model programs and facilities demonstrating energy efficiency, waste reduction, and other examples of resource preservation and stewardship are proposed. Staff are required to be well-qualified and are provided with the necessary training and resources to do their job well. Safety for all participants, employees, and visitors is a priority.

PROJECT BACKGROUND

Previous Planning

The original facilities at Tremont were constructed in 1964 as a Job Corp training center. The Job Corps training center encompassed a much larger area than Tremont, and included more buildings. The Job Corp training center was closed in 1969 and operations were consolidated at the companion Job Corp facility located in the Great Smoky Mountains National Park at Oconaluftee near Cherokee, North Carolina.

The “Tremont Educational Center” was opened in the fall of 1969 in the former Job Corp facilities under a cooperative arrangement with the National Park Service and Maryville College. During the 1973-1974 school year, 9,026 people participated in programs at Tremont. At that time, facilities could accommodate 200 people for an overnight stay.

In 1979, Maryville College withdrew from operating Tremont. In May of 1980, the Great Smoky Mountains Natural History Association (the Association) took over the operation. The Association and the National Park Service remodeled, and in some cases removed, aging facilities. In 1985, the name Tremont Environmental Education Center was changed to the Great Smoky Mountains Institute at Tremont. This change was made to further emphasize Tremont’s tie to Great Smoky Mountains National Park, associate its mission with similar institutes around the country, and emphasize that its audience had expanded beyond elementary school groups.

In 1999, the Association voted to establish Tremont as a separate 501(3)(c) organization for the new board of directors to focus on its specific needs, challenges, and opportunities. On January 1, 2001, the association formally created the Great Smoky Mountains Institute. This congenial separation positioned Tremont to develop in new and exciting ways while retaining the strength of programming developed during the years the association operated Tremont. Tremont will continue to work in partnership with National Park Service to provide in-depth experiences through educational programs that celebrate ecological and cultural diversity, foster stewardship, and nurture appreciation of Great Smoky Mountains National Park. (Tremont’s mission statement).



In June 2001, the Tremont Board of Directors engaged the services of a planning and architectural firm (Barge Waggoner, Sumner and Cannon, Inc.) to prepare a master plan for Tremont. The objective was to develop a plan for a facility that would be environmentally sensitive and use sustainable design principles. The master planning process was a collaborative effort between the Tremont staff, the National Park Service, and the planning and architectural firm. The final master plan was published in 2003 (Barge Waggoner, Sumner and Cannon 2003). It includes a site inventory and analysis of the existing facilities to evaluate their fitness for carrying out the Tremont mission within the context of the vision for the future.

Coincidental to completion of the Master Plan for Tremont by the Board of Directors, the National Park Service instituted new policies and procedures for facility development, design, and construction. These new policies established the Development Advisory Board (DAB), which is delegated with the authority to review and make recommendations to the Director regarding line item construction and partner construction projects that exceed \$1 million.

When the Tremont Development Concept Plan/Environmental Assessment originated, it was determined that the master plan would be utilized as an alternative to be evaluated. It appears as Alternative E herein.

Scoping

Scoping is an open process performed at the beginning of the environmental assessment process to determine the breadth of environmental issues to be addressed in the environmental assessment, and to identify potential alternatives.

The National Park Service conducted both internal scoping with appropriate staff, as well as external scoping with federal, state, and local agencies, and the general public and affected groups. Internal scoping meetings were held at Tremont during the week of May 8, 2006. In addition, scoping letters were mailed to the following agencies and organizations on October 18, 2006:

- Eastern Band of the Cherokee Indians in North Carolina
- Tribal Historic Preservation Office
- U.S. Fish and Wildlife Service
- Tennessee Valley Authority
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- Tennessee Department of Environment and Conservation
- Tennessee State Historic Preservation Office
- Two responses were received from the scoping letters that were sent out to the agencies.

A summary of the responses follows:



- The Tennessee State Historic Preservation Office indicated there were no properties listed or eligible for listing on the National Register of Historic Places affected by the project and had no objections to proceeding with the project.
- The Tennessee Historical Commission indicated that no National Register of Historic Places or eligible properties would be affected by the proposed project. The commission also reviewed the University of Tennessee Archeological Research Laboratory report (UTARL 2007) and concurred that no archeological resources eligible for listing on the National Historic Register occur on the site. It also stated that if project features changed, or if any archeological remains were discovered during construction, its office would be contacted to determine what action, if any, would be necessary to comply with Section 106 of the National Historic Preservation Act.
- The U.S. Fish and Wildlife Service indicated that Tremont is located within 3.5 miles of a cave that is critical habitat during the winter months for the endangered Indiana bat . The habitat at Tremont is suitable and within range of the swarming and foraging habits of the bats during the fall months prior to entering the cave. Major construction activities should not occur during the swarming period and suitable roost trees should be preserved at Tremont.

External scoping meetings were held at Tremont and the Blount County Library during the week of August 14, 2006. Sixteen comments were received during the meetings and the 30-day comment period that followed. The comments received are presented in Appendix A. Six of the commenters preferred Alternative E, two commenters recommended Alternative A, one commenter preferred Alternative C, and one commenter recommended Alternative C or D. The other commenters did not indicate a preference. Many of the comments stated that Tremont should be energy efficient and have a “natural” appearance. Commenters had a very high regard for Tremont and the available programs, but recommended that Tremont be rebuilt. However, they did not want Tremont to become a resort. The section entitled “Scoping and Agency Coordination” includes a summary of the major issues.

Impact Topics

Derivation of Impact Topics

Impact topics are the resources of concern that could be affected by the range of alternatives. They are used to focus the evaluation of the potential environmental consequences of the alternatives. Specific impact topics were developed for discussion and to allow for a comparison of the environmental consequences of each alternative. These impact topics were identified based on federal laws, regulations, and Executive Orders, National Park Service *Management Policies 2006*, and National Park Service knowledge of limited or easily impacted resources. Table 1 lists the relevant regulations or policies related to each impact topic.



TABLE 1 DERIVATION OF IMPACT TOPICS	
Impact Topic	Relevant Regulations or Policies
RETAINED	
Air Quality	Federal Clean Air Act (CAA); CAA Amendments of 1990; National Park Service Management Policy, 4.7.1, 2006
Soil	National Park Service Management Policy 4.8.2.4, 2006
Water Quality	Executive Order 12088; Executive Order 11990; National Park Service Management Policy 4.6.3, 2006; Federal Water Pollution Control Act (The Clean Water Act of 1972 as amended in 1977)
Aquatic Resources	National Park Service Management Policy 4.6, 2006; Federal Water Pollution Control Act (The Clean Water Act of 1972 as amended in 1977)
Vegetation – Native Plant Communities	National Park Service Management Policy 4.4.2, 2006
Special Status Species	Endangered Species Act of 1973; National Park Service Management Policy 4.4.2.3, 2006; 40 CFR 1500 (regulations for implementing the National Environmental Policy Act)
Wildlife	National Park Service Management Policies 2006: 4.4.2, 2006; Migratory Bird Treaty Act
Ecologically Critical Areas, Wilderness, Wild and Scenic Rivers, or Other Unique Natural Resources	36 CFR 62 (criteria for national natural landmarks); National Park Service Management Policy 2.3.1.9, 2006; Wilderness Act of 1964, National Park Service Management Policy 4.3.3, 2006; National Park Service Management Policy 6.0, 2006
Socioeconomics	40 CFR 1500 (regulations for implementing the National Environmental Policy Act)
Transportation	National Park Service Management Policy 9.2, 2006
Visitor Use and Experience and Visual Quality/Viewshed	National Park Service Organic Act; National Park Service Management Policy 8.2, 2006
Public Health and Safety	National Park Service Management Policy 8.2.5, 2006
Soundscape	National Park Service Management Policy 4.9, 2006



TABLE 1 DERIVATION OF IMPACT TOPICS	
Impact Topic	Relevant Regulations or Policies
DISMISSED	
Floodplains	Executive Order 11988 (Floodplain Management); National Park Service Director's Order #77-2; National Park Service Management Policy 4.6.4, 2006
Wetlands	Executive Order 11990; Clean Water Act Section 404; National Park Service Director's Order #77-1; Executive Order 11988; National Park Service Management Policy 4.6.5, 2006
Cultural Resources / Ethnographic Resources	National Park Service Management Policy 5.3.5.3, 2006
Cultural Resources / Archaeological Resources	National Park Service Management Policy 5.3.5, 2006; 40 Code of Federal Regulations 1500 (regulations for implementing the National Environmental Policy Act); National Park Service Director's Order #12; Section 106 of the National Historic Preservation Act
Cultural Resources / Collections	National Park Service Management Policy 5.3.5.5, 2006
Cultural Resources / Historic Structures	National Park Service Management Policy 5.3.5.4, 2006
Cultural Resources / Cultural Landscapes	National Park Service Management Policy 5.3.5.2, 2006
Geologic Resources	National Park Service Management Policy 4.8, 2006
Prime or Unique Farmlands	Council on Environmental Quality 1980 memorandum on prime and unique farmlands; 40 CFR 1500 (regulations for implementing the National Environmental Policy Act, section 1508.27
Natural Lightscape (Night Sky)	National Park Service Management Policy 4.10, 2006
Environmental Justice	Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations)
Land Use	National Park Service Management Policies 2006: 1.3.3 / 1.6 / 3.2 / 3.4, 2006
Park Operations	National Park Service Management Policy 1.8 and 4.1.1, 2006
Sacred Sites	Executive Order 13007; National Park Service Management Policy 5.3.5.3.2, 2006
Indian Trust Lands	National Park Service Management Policy 1.11.3, 2006
Concession \ and Commercial Services	National Park Service Management Policy 10.2, 2006



A brief rationale for the selection of each impact topic is given below, as well as the rationale for dismissal of specific topics from further consideration.

Impact Topics Dismissed from Further Analysis

Certain potential impact topics were dismissed because these resources would not be affected by the alternatives or the potential for impacts under all alternatives would be negligible. These topics are listed below with the reasons they were dismissed.

Floodplains: The Middle Prong of the Little River flows through the project site. However, a study conducted by the University of Tennessee (UT 2006) showed that none of the construction areas on the project site are located within the 100- or 500-year floodplain. Therefore, the proposed project would have no effect on floodplain functions and values. This impact topic was therefore dismissed.

Wetlands: Jurisdictional wetlands occur on the site. One wetland occurs immediately south of the basketball court and is associated with a small drainage originating from surface and groundwater sources on the hill to the east. Other very small seepage wetlands are also located on other parts of the site. However, all wetlands will be delineated and avoided in the early design phase of the project. Therefore, the proposed project would have no impacts on these wetlands.

The project would also affect two actively used, man-made wastewater ponds on the east side of the Middle Prong of the Little River, but these are not defined as wetlands by the National Park Service. According to National Park Service *Procedural Manual #77-1: Wetland Protection* (NPS 2008), actively used wastewater treatment ponds are not considered to be jurisdictional wetlands:

“Artificial ponds, channels, or similar features that are used for the sole purpose of active storm water, wastewater, or drinking water treatment are not considered wetlands for purposes of these procedures. However, if such systems retain wetland characteristics as defined in Section 4.1.1 of these procedures after they have been abandoned, they revert to the procedures for artificial wetlands discussed previously in this Section.”

Because the wastewater ponds have not been abandoned and are currently in use, they were not classified as wetlands under National Park Service policies.

For the above reasons, wetlands were dismissed as an impact topic. The ecological values associated with wetlands and the wastewater ponds, however, are included in the Aquatic Resources sections of the environmental assessment.

Geological Resources: There are no unique geological features in or near the proposed action and sites considered. For this reason, geological resources were dismissed as an impact topic.

Prime or Unique Farmlands: The Farmland Protection Policy Act and the U.S. Department of the Interior require an evaluation of impacts on prime and unique agricultural lands. These lands require certain soil types and water availability.



According to the Natural Resources Conservation Service located in Sevierville, there are no prime or unique farmlands within or near the Tremont area (USDA 2006, 2007a, 2007b)). Because these areas do not exist in the area of concern, prime or unique farmlands were dismissed as an impact topic.

Natural Light (Night Sky): Although Tremont would continue to be used at night and would have outside lighting, the location of Tremont within the Knoxville metropolitan area results in negligible impacts on the lightscape created by the lighting. The National Park Service would take measures to use low lighting and directional lighting to minimize potentially adverse effects. There would be few changes to the natural lightscape at Tremont. For these reasons, lightscape was dismissed as an impact topic

Environmental Justice: Presidential Executive Order 12898, *General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing the disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. According to the U.S. Environmental Protection Agency, environmental justice is the:

...fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

The goal of 'fair treatment' is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts.

There are both minority and low-income populations in the general vicinity of Tremont; however, environmental justice was dismissed as an impact topic because:

- The park staff, Tremont staff, and planning team actively solicited public participation as part of the planning process and gave equal consideration to all input from persons regardless of age, race, income status, or other socioeconomic or demographic factors.
- Implementation of the preferred alternative would not result in any identifiable adverse human health effects.
- The impacts associated with implementation of the preferred alternative would not disproportionately affect any minority or low-income population or community.



- Implementation of the preferred alternative would not result in any identified effects that would be specific to any minority or low-income community.
- The park staff, Tremont staff, and planning team do not anticipate the impacts on the socioeconomic environment to appreciably alter the physical and social structure of the nearby communities.

Therefore, environmental justice was dismissed as an impact topic.

Land Use: Land use at Tremont will remain as an institutional purpose and the size of the site will remain essentially the same. Land use surrounding Tremont is forested and will remain forested. Construction and operation of the Tremont improvements would have no effect on land use in the area, nor conflict with other local land use plans. For these reasons, land use was dismissed as an impact topic.

Park Operations: As the improvements proposed for Tremont are essentially replacing existing facilities and the operation of Tremont would not be altered, park operations would not change significantly. Facility maintenance would most likely decrease as the facilities would be new and would also be of a sustainable design. Energy and other utility costs could be slightly reduced due to the installation of more efficient equipment that would also require less maintenance. During construction, a National Park Service staff person would be assigned on a part time basis to monitor construction activity at the site, but no additional staff would be required. Overall, construction and operation of the proposed action or the alternatives would have a negligible effect on park operations. For these reasons, park operations were dismissed as an impact topic.

Concessions and Commercial Services: Tremont is a private, non-profit operation that operates under a partnership agreement with the National Park Service. Tremont is considered a partner and is not considered a concession. The bookstore at Tremont is operated by the Great Smoky Mountains Association. Proceeds from the bookstore are donated to Tremont. Tremont provides staff to operate the bookstore. As there would be no new concessions associated with the redevelopment of Tremont and no changes to the business relationships of the parties, concessions and commercial services were dismissed as an impact topic.

Sacred Sites: Project-specific consultation was initiated with potentially interested tribes. No Native American sacred sites, as defined by Executive Order 13007, have as yet been identified in or near Tremont. No sacred sites are known to occur on the project site; therefore, this impact topic was dismissed.

Indian Trust Resources: The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights. No Indian trust resources have been identified for Great Smoky Mountains National Park; therefore, this impact topic has been eliminated from further consideration.

Cultural Resources / Ethnographic Resources: Ethnographic resources are “about people and the ethnographic resources, or traditional park sites, structures, objects,



landscapes and natural resources that they define as significant to their present way of life” (NPS 1998a). Traditionally associated groups may remain attached to the area despite having relocated, and people with loved ones buried in a National Park represent another unique user group. They represent a special client population with long-term stakes in the integrity of park resources and the outcomes of management decisions that affect resources associated with them. The National Park Service (NPS 2006f) stated that the following ethnographic resources were present in the area:

- Walker Family has a reunion in the valley each year;
- Eastern Band of Cherokee Indians;
- Little River Railroad Lumber Company and Museum; and
- Tremont students and area school teachers.

The proposed project would have no effect on these ethnographic resources. Therefore, ethnographic resources were dismissed as an impact topic.

Cultural Resources / Archaeological Resources: An archaeological survey of the project site was completed by the University of Tennessee Archeological Research Laboratory in 2006 to determine whether archaeological resources were present on the site (UTARL 2007). The study “integrated archival research with a field testing program that incorporated shovel testing, hand augering and backhoe testing”. The study concluded there were no intact archaeological deposits that have the potential for National Register eligibility in the project area, and recommended that the project should proceed as planned, but it is not expected that subsurface features (such as privy pits), or burials would be encountered during construction. A qualified archeologist would be assigned to monitor the site during construction. If artifacts or structures are encountered, the project would be stopped and the park Archaeologist would be contacted for an evaluation prior to continuation of work.

The Management Summary from the University of Tennessee Archeological Research Laboratory study (UTARL 2007) concluded it was unlikely the proposed project would impact archeological resources. This impact topic was therefore dismissed.

Cultural Resources - Collections – Guidance provided by *Management Policies 2006* (NPS 2006e), Directors Order 28, *Cultural Resource Management Guidelines* (NPS 1998a), and Directors Order 77-2, *Floodplain Management* (NPS 2008) mandates that a park’s irreplaceable museum items, archival materials, photographs, natural and cultural specimens, artifacts, and other collections be protected from a variety of threats, including natural physical processes such as flooding, fire, theft, and vandalism.

Great Smoky Mountains National Park collections, totaling 441,006 items, include a herbarium that houses a collection of the park’s flora and the associated field records. Collections also include entomological specimens and archeological objects and associated records, historic objects, and archival materials relating to early residents, logging crews, farmers, and construction crews. Other items are on display in various historic structures or exhibits in other areas of the park.



Under all alternatives, proposed actions (for both natural and cultural resources) could generate new items that would be added to the park's collections. Archeological investigations associated with new facilities at Tremont could produce artifacts and specimens that would become part of the collection. However, collections that are developed at Tremont are addressed through the park's Research Permitting process and, thus, actual improvements at the site do not affect the park's collection, only the activities at Tremont. Therefore, collections were dismissed as an impact topic.

Cultural Resources - Historic Structures – The National Park Service *Management Policies* (NPS 2006e) and Directors Order 28, *Cultural Resource Management Guidelines* (NPS 1998a) provide guidance for preservation and protection of historic structures; that is, structures that are more than 50 years old, or that have achieved importance in their own right. As part of that mandate, significant structures are added to the park's List of Classified Structures (LCS) and evaluated for their National Register of Historic Places eligibility. However, the structures at Tremont are not considered historic. They were built during the 1960s, and are not included in the park's LCS; nor are they potentially eligible for the National Register of Historic Places (NPS 2006b). For these reasons, cultural resources -historic structures was dismissed as an impact topic.

Cultural Resources - Cultural Landscapes – Directors Order 28, *Cultural Resource Management Guidelines* (NPS 1998a) and National Park Service *Management Policies* (NPS 2006e) also provide for the protection and preservation of cultural landscapes within parks. No part of Tremont is currently identified or being managed as a cultural landscape. The buildings are not historic, and many of the landscape features date to the 1960s or later. Thus, cultural landscapes were dismissed as an impact topic. Designs of new structures would, however, conform to park design standards, so the historic ambiance of the broader area would be retained.

