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Elkmont Historic District Draft Environmental Impact Statement and General Management Plan Amendment

Volume I

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ELKMONT HISTORIC DISTRICT DRAFT ENVIRONMENTAL IMPACT STATEMENT and GENERAL MANAGEMENT PLAN AMENDMENT

SUMMARY

INTRODUCTION

Elkmont Historic District (District) is located within the Tennessee portion of Great Smoky Mountains National Park (Park), approximately six miles from Park Headquarters and eight miles from Gatlinburg, Tennessee.

The first recorded European- American settlement in the Elkmont area occurred in the 1830s along Jakes Creek, a tributary to the Little River, and consisted primarily of subsistence based agricultural economy. By the 1880s the first, small- scale logging operations were underway in the vicinity, but because the area was so remote, and timbering operations relatively primitive, commercial opportunities were limited. Large- scale, industrial logging began in the area in the early 1900s when the Little River Lumber Company was established in Townsend, Tennessee. By 1908, The Little River Railroad Company had constructed a rail line along the Little River from Townsend to the current site of Elkmont. The community of Elkmont soon developed between 1908 and 1925 in the typical "boom" fashion of many towns and communities associated with resource extractive activities common during that era.

In 1910 and 1912, two private resort communities were established on the outskirts of Elkmont known as the Appalachian Club and the Wonderland Club, respectively. Between 1910 and 1940, a social clubhouse, a hotel and annex and several dozen individual vacation cabins were constructed as part of these two, separate social clubs. In 1926, legislation for the creation of a National Park in the Smoky Mountains was passed in Congress and in 1934, the Park was officially established. Unlike western parks that were created from existing federal lands, Great Smoky Mountains National Park was created from lands purchased by the States of North Carolina and Tennessee from individual land owners and deeded as a grant to the federal government for the purpose of establishing this Park. Rather than face condemnation through the state held power of eminent domain, most property owners in the two clubs chose an option offered in 1932 that permitted a partial payment for property in exchange for a lifetime lease. Between 1934 and 1942, the formal community of Elkmont was removed and by the late 1960s, the National Park Service had developed the present day campground on the same site. In 1952, lifetime leases held by members of the two clubs were surrendered for a fixed 20 year lease in exchange for commercial power service. In 1972, the Secretary of the Interior permitted Elkmont leases to be extended for another 20 years. In the early 1990s, attempts at extending leases were unsuccessful and in 1992, all but three leases on buildings expired with the last three expiring in 1996 and 2001. The vacated buildings have remained empty since leases expired pending a final decision on the future management of Elkmont.



PURPOSE AND NEED FOR ACTION

The purpose of this environmental planning initiative is to reevaluate the current management strategy for the Elkmont Historic District as articulated in the 1982 Great Smoky Mountains National Park General Management Plan.

Based upon direction in the 1982 General Management Plan (1982 Plan), the Park planned to remove all buildings under lease to the Elkmont Preservation Committee when leases expired, allowing the area to be returned to a natural state. The only other action proposed in the 1982 Plan in addition to removal of the buildings is construction of a picnic shelter. The 1982 Plan states:

Leases for approximately 50 structures occupied by the Elkmont Preservation Committee (cabins and the Wonderland Hotel) will expire in 1992, and four remaining leases will expire in 2001. None of these leases will be extended and the structures are proposed for removal on termination of the leases. Building sites will be returned to a natural state.

In 1994, the Elkmont community was listed on the National Register of Historic Places (National Register) as an historic district, with 49 of the 74 buildings that remain listed as contributing to the character of the District. As a result of that designation, any subsequent action affecting the District requires consultation with the Tennessee State Historic Preservation Officer.

Between 1994 and 1999 the Park proposed three separate plans for Elkmont, all of which were objected to by the State Historic Preservation Officer. The Advisory Council on Historic Preservation was also consulted regarding the last plan, and responded that the proposal constituted a new action when compared with the direction provided in the 1982 Plan. New consultation and a new planning process were begun in 2001. Incorporating requirements of the National Historic Preservation Act (NHPA), the National Environmental Policy Act (NEPA) process was initiated to develop and determine the appropriate action for future management of the District.

OBJECTIVE AND SCOPE OF ANALYSIS

The overall goal of this project is to develop a full range of management alternatives under NEPA, to compare potential impacts that would result from implementation of each of the alternatives, and to select a preferred alternative that considers both agency and public comment. The alternative development process was based on a series of goal statements for the District. The primary goal identified is to "foster enjoyment, understanding, appreciation, and protection of natural and cultural resources both within Elkmont Historic District and Parkwide" by:

- creating opportunities for emotional and intellectual connections to these resources;
- protecting and perpetuating the significant and diverse natural resources and ecosystems (including forest communities and water resources) found within Elkmont Historic District, keeping them free from impairment; and
- protecting and perpetuating the tangible (archeological sites, and historic building and structures, landscapes and features) and intangible (feelings of attachment and family



life, myth, folklore and ideology) aspects of the cultural resources that comprise the District.

As stated in the 1982 Plan, the overall management objective for the Park is to "manage the Park in a manner consistent with the purpose of preservation, enjoyment and benefits to humankind through scientific study of its distinctive combination of natural and cultural resources". The 1982 Plan also includes management objectives prepared by the Park superintendent for each of the Park's resources. During the process of developing new management plan alternatives, management goals and objectives specific to various resources at Elkmont were refined to reflect current management direction.

Consistent with National Park Service (NPS) policy and the overall development of project goals and objectives, more specific cultural resource goals and management objectives were developed for the District by NPS with input from the public. Specific management objectives state that any historic resources selected for preservation should serve an agency need and should be adequately maintained. Buildings and associated landscape features would be retained in clusters and associations sufficient to provide a sense of character of the district. Management actions must be consistent with legislative and executive mandates as well as NPS policies in order to protect and perpetuate the significant and diverse natural resources and ecosystems found within the District and, where possible, restore the natural processes.

Guiding principles for visitor use and experience are to promote visitor activities at appropriate locations, levels, and times that minimize adverse impacts on Park resources, while achieving educational goals and ensuring that visitor access to adjacent use areas is adequately maintained.

ALTERNATIVES

Concurrent with development of project goals and objectives, potential uses for the District were considered. Park needs were examined to determine if the Park's proposed uses were compatible with the project goals and objectives, as well as the constraints and opportunities presented by District's natural and cultural resources, and location within the Park. The resulting potential uses for the District, as defined by the Park, were then considered along with uses identified by the public and the consulting parties. Consulting parties are defined in subsection 800.8(c)(2) of the National Historic Preservation Act.

The NPS planning team, with input from Park staff, members of the public and consulting parties, also identified a number of issues in regard to future management of the District. The primary concerns identified related to cultural resources, natural resources and visitor experience. The plan chosen for the District will provide guidelines for addressing specific issues, while adhering to the Park's mission, the vision for Elkmont and any laws or regulations that apply to Park planning procedures.

The project alternatives presented in this Draft Environmental Impact Statement were developed based on identified uses, incorporated in varying arrangements and degree of use to meet resource needs and are intended to represent a full range of possible actions designed to address the purpose and need for the project. The primary issues brought forth during formal



scoping centered on restoration of natural plant communities and various uses of the historic buildings, including curatorial storage and use as public lodging facilities. Because the true condition of the Wonderland Hotel was not completely understood until the project alternatives were developed, alternatives were adjusted prior to public scoping and impact analysis to reflect two options including complete removal of the building or reconstruction. Reconstruction requires approval by the Director of the NPS.

Seven detailed alternatives were developed to provide a full range of management options for the District. These alternatives include the No Action Alternative, as required by NEPA and Alternative A, a second alternative that follows the 1982 Plan, but also includes active restoration of natural resources. Alternatives B- F each propose incrementally greater preservation and reuse of District buildings for a variety of purposes as outlined below.

The No Action Alternative is tiered to and follows management direction described in the 1982 Plan. The 1982 Plan calls for removal of all buildings at Elkmont upon expiration of leases. While technically an "action", this direction maintains the current management plan for disposition of buildings at Elkmont and is considered no action based on current management policies. A physical "no action" that would permit buildings to simply decay in place, is not legal and was dismissed from consideration for two reasons. First, since Elkmont is listed as an historic district on the National Register of Historic Places, the Park is required to maintain properties until a management decision is made. Additionally, the Park is required to maintain safe conditions in developed areas of the Park and permitting structures to simply decay would create an unsafe environment for the visiting public.

As described in the 1982 Plan, under the No Action Alternative, all buildings and structures would be removed and the area would be allowed to return to a natural state. This alternative repeats previous management decisions by returning land to a natural condition, as was Park practice from the earliest days of establishment where buildings were removed. Where buildings are removed under this alternative, chimneys and other cultural landscape features would remain unless retention of these features would present a safety hazard.

No change in management direction as outlined in the 1982 Plan for the District would occur upon removal of buildings and structures. Visitor use, recreational opportunities and natural resource management would remain the same.

Alternative A proposes the greatest protection of natural resources and natural systems within the study area and calls for the removal of all buildings as outlined in the 1982 Plan. Alternative A improves upon the No Action Alternative by proposing active restoration of native plant species in all areas disturbed by previous human activity and occupation, including removal of buildings. Active restoration would include intensive removal of non- native species, and seeding and planting with native species collected and/or propagated from District species, followed by ongoing vegetation management to ensure appropriate conditions for plant reestablishment. Of particular interest in restoration efforts is the montane alluvial forest, a climax plant community type found in the District, primarily within the floodplains of the Little River and Bearwallow Creek, a tributary to the river. Because of previous disturbance from agricultural uses, followed by logging operations and then human development, this plant community type has been heavily impacted on this site. The montane alluvial forest is in the



early stages of succession at Elkmont but continues to experience ongoing impacts to understory plant regeneration as a result of decades of human activities that have prevented a full recovery of natural processes.

Alternative A proposes to create an environment conducive to the establishment of native plant communities in disturbed areas throughout the District. Active restoration of native plant communities would accomplish a variety of tasks including increasing species diversity, improving and increasing wildlife habitat and providing soil stabilization measures. Unlike the No Action Alternative, features such as rock walls and chimneys would be removed unless removal would cause undue ground disturbance.

Alternative B proposes to retain an example collection of historic buildings in one area of the District, including the Appalachian Clubhouse and 12 cabins, 11 of which are considered contributing elements to the character of the district. In all areas where buildings are removed, native plant communities and natural systems would be actively restored. Additionally, where buildings are removed, chimneys and other cultural landscape features would remain unless retention of these features would present safety hazards. The buildings proposed for retention would provide a contiguous collection of representative buildings restored on the exterior and the associated cultural landscape retained to represent a selected point from the period of significance. Interpretive features, such as wayside exhibits, would be introduced to describe features within the District.

The Appalachian Clubhouse would be rehabilitated on the interior for day use opportunities under special use permit. The restored and preserved cabins would function as a museum community. One hundred- six new parking spaces would be created in this alternative to accommodate day users within the District and to delineate specific parking for trails originating from Elkmont. Sensitive plant community types, such as montane alluvial forest, would be actively restored. Developed visitor uses would occur in other areas away from this forest type, permitting plants to regenerate without the pressure of visitation and associated impacts.

Alternative C is both the environmentally preferred and agency preferred alternative. This alternative proposes to retain the Appalachian Clubhouse and 16 historic buildings in the area immediately adjacent to the clubhouse known as Daisy Town. Fifteen of these 16 buildings are listed as contributing elements to the character of the District. The Daisy Town area represents the first portion of the resort community to be developed. Additionally, one cabin in the area known as Society Hill would be retained for the associative value with David C. Chapman, an important figure in the Park movement during the 1920s and 1930s. In all areas where buildings are removed, native plant communities and natural systems would be restored. Chimneys and other cultural landscape features would remain unless retention of these features would present a safety hazard.

The Appalachian Clubhouse would be rehabilitated on the interior for day use opportunities under special use permit. The restored and preserved cabins would function as a museum community. One hundred- six new parking spaces would be created in this alternative to accommodate day users within the District and to provide specific parking for trails originating from Elkmont. Sensitive plant community types, such as the montane alluvial forest, would be actively restored. Developed visitor uses would occur in other areas away from this forest type,



permitting plants to regenerate without the pressure of visitation and associated impacts. This alternative effectively strikes a balance between natural and cultural resources while permitting traditional uses and additional new uses to occur.

Alternative D proposes preservation of buildings in both the Appalachian and Wonderland Clubs. Under this alternative, two options exist for the Wonderland Hotel and Annex, including either complete removal of both or reconstruction of the Hotel and rehabilitation of the Annex for use as a curatorial facility for Park archived cultural resources. Six contributing cabins at the Wonderland Club would be retained for use as temporary housing for visiting scientists involved in Park- identified research functions. This alternative proposes to retain the Appalachian Clubhouse and 16 historic buildings, 15 of which are listed as contributing elements to the character of the District, in the area known as Daisy Town. One cabin with contributing status in the area known as Society Hill would be retained for the associative value with David C. Chapman. Another contributing cabin in the area known as Millionaire's Row along the Little River would be retained for the associative value with Colonel Wilson B. Townsend, President of the Little River Lumber Company. In all areas where buildings are removed, native plant communities and natural systems would be actively restored.

Restoration of natural resources would be limited to areas where buildings are removed in Millionaire's Row and Society Hill. Where buildings are removed, chimneys and other cultural landscape features would remain unless retention of these features would present a safety hazard.

The Appalachian Clubhouse would be rehabilitated on the interior for day use opportunities under special use permit. The restored and preserved cabins would function as a museum community. One hundred- nineteen to 169 new parking spaces would be created within the District to accommodate proposed uses and to provide specific parking for trails originating from Elkmont.

Alternative E also proposes two options for the Wonderland Hotel and Annex, including either complete removal of both or reconstruction of the Hotel and rehabilitation of the Annex for overnight lodging to be managed by a private concession operation. Seven cabins at the Wonderland Club, six of which are contributing elements to the District, would be rehabilitated for overnight use and managed by a private concession operation. A dining facility would also be developed at the hotel if it is reconstructed, but would be limited to overnight guests as part of the concession operation. Also, as part of the concession operation at the Wonderland Club, indepth educational programs for overnight guests would be provided. Along the Little River in the area known as Millionaire's Row, all six contributing cabins, including the cabin associated with Colonel Wilson B. Townsend, President of the Little River Lumber Company, would be rehabilitated for use as temporary housing for visiting scientists involved in Park- identified research functions.

Alternative E proposes to retain the Appalachian Clubhouse and 16 historic buildings in the area known as Daisy Town. Fifteen of these buildings are listed as contributing elements to the character of the District. The Appalachian Clubhouse would be rehabilitated on the interior for day use opportunities under special use permit. The restored and preserved cabins would function as a museum community. One cabin with contributing status in the area known as



Society Hill would be retained for the associative value with David C. Chapman. One hundred-nineteen to 244 new parking spaces would be created within the District to accommodate proposed uses and to provide specific parking for trails originating from Elkmont. The existing sewage treatment plant that currently serves the campground would not be allowed to treat additional sewage loads above current permitted levels. The increased sewage loads into the system created by overnight use and restaurant operation under the hotel reconstruction option would necessitate an alternative means of sewage treatment.

Restoration of natural resources would be limited to areas where buildings are removed in Society Hill. In locations where buildings are removed, chimneys and other cultural landscape features would remain unless retention of these features would present a safety hazard.

Alternative F proposes the greatest retention and preservation of historic buildings in the District and allows for the least protection of natural resources of all proposed alternatives. Two options for the Wonderland Hotel and Annex are proposed, including either complete removal of both of these buildings or reconstruction of the Hotel and rehabilitation of the Annex for overnight lodging that would be managed by a private concession operation. Eight cabins at the Wonderland Club would be rehabilitated for overnight use by a private concession operation, six of which are contributing elements to the District. If the hotel is reconstructed, a dining facility, open to all Park visitors, would also be developed at the hotel as part of the concession operation.

Along Bearwallow Creek, a tributary to the Little River in the area known as Millionaire's Row, all six contributing cabins would be rehabilitated for use as overnight lodging as part of a concession operation and would include the cabin associated with Colonel Wilson B. Townsend. Twenty- two cabins in the area known as Society Hill, 15 of which are considered contributing to the character of the District, would be rehabilitated for overnight use as part of a private concession operation. One cabin with contributing status in the area known as Society Hill would be retained for the associative value with David C. Chapman.

This alternative proposes to retain the Appalachian Clubhouse and sixteen historic buildings in the area known as Daisy Town, fifteen of which are listed as contributing elements to the character of the District. The Appalachian Clubhouse would be rehabilitated on the interior for day use opportunities under special use permit. The restored and preserved cabins would function as a museum community. Two hundred- fourteen to 299 new parking spaces would be created within the District to accommodate proposed uses and to provide specific parking for trails originating from Elkmont. The existing sewage treatment plant that currently serves the campground would not be allowed to treat additional sewage loads above current permitted levels. The increased sewage loads into the system created by overnight use and restaurant operation under the hotel reconstruction option would necessitate an alternative means of treatment.

There would be little to no opportunity for restoration of natural resources and natural processes under Alternative F, as most buildings would be retained.



IMPACT TOPICS AND PLANNING CONSIDERATIONS

The issues brought forth for analysis in this Draft Environmental Impact Statement include:

- cultural resources
- wetlands
- floodplains
- water quality
- air quality
- biological resources
- terrestrial habitats and forest communities
- aguatic habitats
- endangered and threatened species
- fish and wildlife
- geology and soils
- transportation and access
- visitor use and experience
- soundscape
- viewshed
- land use existing and historic
- social and cultural patterns
- impacts to the General Management Plan
- economics
- appropriate and necessary (NPS policy and mission)

Upon review of the listed issues for analysis, several topics have required special consideration. The study area is listed as an historic district on the National Register of Historic Places affording buildings special status. The National Park Service is tasked with protecting these resources and any action affecting listed buildings require consultation with the Tennessee State Historic Preservation Officer and the Advisory Council on Historic Preservation. The Little River flows directly through the center of the District and is designated an Outstanding National Resource Water with Tier III status. This designation strictly prohibits permitting new or expanding point source discharges and can greatly limit adjacent land use and development that may create additional non- point source pollutants. A plant community type known as montane alluvial forest occurs in several areas within the study area. This community type is listed as globally imperiled with only 6 to 20 known sites in the world. The Park purpose and significance have also been considered in the analysis, as have the issues of operations and maintenance and the future commitment of resources.

ENVIRONMENTAL CONSEQUENCES

No Action Alternative

The greatest impacts under this alternative would be to the National Register-listed Historic District. While many components of the cultural landscape would remain, historic buildings provide the greatest definition to the cultural landscape and removal of these elements would



significantly alter the historic landscape for which the District is listed. The result of implementing this alternative would be an irretrievable commitment of cultural resources through the permanent removal of historic buildings. The overall long- term productivity of all biotic resources would benefit from the increase in land available for restoration of sensitive native plant communities, particularly the globally imperiled montane alluvial forest. Water resources related to the Little River, a designated Outstanding National Resource Water, would also be protected under this alternative. Visitor use would not be impacted. Park operations and maintenance would benefit from this alternative.

Alternative A

Similar to the No Action Alternative, the greatest impacts under this alternative would be to the National Register- listed Historic District. While many components of the cultural landscape would remain, historic buildings provide the greatest definition to the cultural landscape and removal of these elements would significantly alter the historic landscape for which the District is listed. The result of implementing this alternative would be an irretrievable commitment of cultural resources through the permanent removal of historic buildings.

As a result of active restoration of natural resources, these resources would be improved to the greatest extent possible under this alternative. The overall long- term productivity of all biotic resources would benefit from the increase in land available for restoration of sensitive native plant communities, particularly the globally imperiled montane alluvial forest, and from implementation of a comprehensive non- native, invasive plants management plan. Water resources related to the Little River, a designated Outstanding National Resource Water, would also be protected under this alternative.

Visitor use would not be impacted. Overall impacts to Park operations and maintenance would be beneficial. As a result of implementing this alternative, visitor use activities are not expected to increase above existing levels. Pedestrian circulation would utilize existing roadways, also aiding in minimization of impacts to natural systems.

Alternative B

The greatest impacts under this alternative would be to the National Register- listed Historic District. While many components of the cultural landscape would remain, including the Appalachian Clubhouse and eleven contributing buildings, the majority of contributing buildings in the District would be removed. The buildings retained would provide a representative example of the resort community and architecture in one area of the District. Historic buildings provide the greatest definition to the cultural landscape and removal of many of these elements would significantly alter the historic landscape for which the District is listed.

Where buildings are removed, natural resources would be actively restored. The overall long-term productivity of all biotic resources would benefit in the most sensitive areas due to the increase in land available for restoration of sensitive native plant communities, particularly the globally imperiled montane alluvial forest. Additional sewage loads would be added to the existing campground wastewater system from the day use facility at the Appalachian Clubhouse, but would be a small enough increase that permitted discharge levels would not be exceeded. A



negligible increase in non- point source pollutants to water resources would be added as a result of a small increase in surface water runoff.

As a result of implementing this alternative, there would be a minor increase in visitation associated with new uses. Park operations and maintenance would be impacted by the uses associated with the Appalachian Clubhouse and museum community in Daisy Town. A total of 106 new parking spaces would be created, but otherwise, pedestrian circulation would utilize existing roadways and gravel pathways.

Alternative C

This alternative strikes a balance between natural and cultural resources. Some of the most important resources are preserved in this alternative including the original portion of the resort community, the Chapman cabin and the dominant area of montane alluvial forest currently occupied by buildings. While many components of the cultural landscape would remain, including the Appalachian Clubhouse and fifteen contributing buildings, nearly two- thirds of the contributing buildings in the District would be removed. The buildings retained would preserve the original core of the resort community.

Where buildings are removed, natural resources would be actively restored. The overall long-term productivity of all biotic resources would be benefited in the most sensitive areas due to the increase in land available for restoration of native plant communities, particularly the globally imperiled montane alluvial forest. Additional sewage generated by the day use facility at the Appalachian Clubhouse would be added to the existing campground wastewater system, but this increase would be small and within currently permitted discharge levels. A negligible increase in non- point source pollutants to water resources would be added as a result of increased use.

As a result of implementing Alternative C, there would be a minor increase in visitation associated with new uses. NPS operations would benefit from revenue realized as a result of the Appalachian Clubhouse being used as a public day use rental facility in addition to a general reduction in deferred maintenance with the removal of buildings. A total of 106 new parking spaces would be created, but otherwise, pedestrian circulation would utilize existing roadways and gravel pathways.

Alternative D

This alternative preserves cultural resources in all areas of the District. A majority of the contributing elements in the District would remain, including the Appalachian Clubhouse and 15 adjacent contributing buildings, cabins associated with David C. Chapman and Colonel Wilson B. Townsend, as well as all contributing cabins in the Wonderland Club. Under one option, the Wonderland Hotel would be reconstructed and Annex retained and rehabilitated to provide a curatorial storage facility, but reconstruction of the hotel would require approval by the Director of the National Park Service. Five contributing cabins in Millionaire's Row and sixteen contributing cabins in Society Hill would be removed.



A portion of montane alluvial forest currently occupied by buildings would be impacted by retention of the cabin associated with Colonel Wilson B. Townsend, but the remaining area would be restored. Where buildings are removed, natural resources would be actively restored. The overall long- term productivity of all biotic resources would be benefited in the most sensitive areas due to the increase in land available for restoration of native plant communities, particularly the globally imperiled montane alluvial forest. A minor increase in wastewater would be added to the existing campground wastewater system from the day use facility at the Appalachian Clubhouse, overnight use at Wonderland cabins and from the curatorial facility (if the hotel was reconstructed). This increase would require a flow equalization basin to be constructed at the sewage treatment plant, but the overall increase in wastewater would not exceed currently permitted discharge levels. A negligible increase in discharge of non-point source pollutants to water resources would be added as a result of increased use.

As a result of implementing Alternative D, there would be a minor increase in visitation associated with new uses. Park operations and maintenance would be impacted by the uses associated with retained buildings. One hundred- nineteen to one 169 new parking spaces would be created, and some new roadway modifications would be required.

Alternative E

This alternative preserves cultural resources in all areas of the District. A majority of the contributing elements of the District would remain, including the Appalachian Clubhouse and 15 adjacent contributing buildings, six contributing cabins in Millionaire's Row including the cabin associated with Colonel Wilson B.Townsend, the cabin associated with David C. Chapman, and all contributing cabins in the Wonderland Club. The Wonderland Hotel and Annex would be removed under option E1. Under option E2, the Hotel would be reconstructed and Annex retained for overnight lodging, but reconstruction would require approval by the Director of the NPS. Sixteen contributing cabins in Society Hill would be removed.

The portion of montane alluvial forest currently occupied by buildings in Millionaire's Row would be impacted by the retention of these cabins for use as temporary housing for visiting scientists. The occupation of buildings and associated maintenance in the montane alluvial forest would adversely impact this sensitive plant community considerably. In Society Hill, where buildings are removed, natural resources would be actively restored. A moderate increase in wastewater would be added to the existing campground wastewater system under E1, but this increase would be permissible under existing permits provided that the existing treatment plant is upgraded. Option E2 would create a major increase in wastewater requiring an alternative means of treatment outside the existing wastewater treatment facility. A minor increase in discharge of non- point source pollutants to water resources would be result from increased visitation and use. Additionally, three buildings proposed for retention in Millionaire's Row lie within the 100- year floodplain, immediately adjacent to identified wetlands.

As a result of implementing Alternative E, there would be a moderate increase in visitation associated with new uses. Park operations and maintenance would be adversely impacted by the uses associated with retained buildings in addition to the need for management of the private concession operation. One hundred- nineteen to 244 new parking spaces would be



created, and some roadway modifications and additions would be required, including a new bridge over the Little River.

Alternative F

This alternative preserves cultural resources in all areas of the District. Most contributing elements in the District would remain in this alternative, as well as many non- contributing buildings for use by overnight visitors. The Wonderland Hotel and Annex would be removed under option F_I. Under option F₂, the Hotel would be reconstructed and Annex retained for overnight lodging, but reconstruction would require approval by the Director of the NPS.

No portion of montane alluvial forest within the District would be restored. Occupation of buildings and associated maintenance in the montane alluvial forest would adversely impact this sensitive plant community. A major increase in wastewater would be added to the existing campground wastewater system under F1 and F2. As a result of increases in wastewater from intensive new uses, all additional wastewater generated above permitted levels would require alternative treatment. A minor increase in non- point source pollutants to water resources would be added as a result of increased use. Additionally, three buildings proposed for retention in Millionaire's Row are located in the 100- year floodplain, immediately adjacent to identified wetlands.

As a result of implementing this alternative, there would be a major increase in visitation associated with new uses and the intensity of visitation would likely create moderate to major impacts on natural and cultural resources in addition to impacting visitor experience. Adverse impacts to Park operations and maintenance would be created by the uses associated with retained buildings in addition to the need for management of the private concession operation. One hundred- nineteen to 299 new parking spaces would be created, and some new roadway modifications would be required including a new bridge over the Little River.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

Addressing Section 101 of the National Environmental Policy Act:

When considering all factors described in this analysis collectively, and seeking a management plan "in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony", Alternative C was selected as the Environmentally Preferred Alternative. Alternative C "best protects, preserves and enhances cultural, historic and natural resources" in the Elkmont Historic District by causing "the least damage to the biological and physical environment".

Alternative C actively restores native plant communities in all locations where buildings are removed and in areas previously impacted by human activity, providing for the long- term productivity of biotic resources. In particular, this alternative provides a long- term benefit to the globally imperiled montane alluvial forest by permitting this resource to become reestablished in areas and redirecting human activity to areas that will not directly conflict with this resource.



This alternative retains, restores and preserves National Register listed buildings and cultural landscape features in the Appalachian Club portion of the District. The portion of the District in which cultural resources will be restored is at a size that will ensure an appropriate level of ongoing preservation without further burdening park operations. At the same time, Alternative C achieves a wide range of visitor uses and opportunities for visitor understanding of natural and cultural resources. The retained cultural components and other resources within the District are expected to accommodate visitation levels without experiencing major adverse impacts. A minor increase in visitation above current levels would occur as a result of implementing this alternative. Impacts to the Little River, listed as an Outstanding National Resource Water, would be negligible from both point and non-point pollution sources. Longterm, moderate benefits to Park operations would be achieved as the current level of effort to maintain buildings in a stabilized state of repair would be greatly reduced, as would the level of patrol required and the amount of safety hazards to the visiting public. Most impacts would be short-term and, with the exception of permanent impacts to contributing buildings, all other impacts would be minor to negligible.

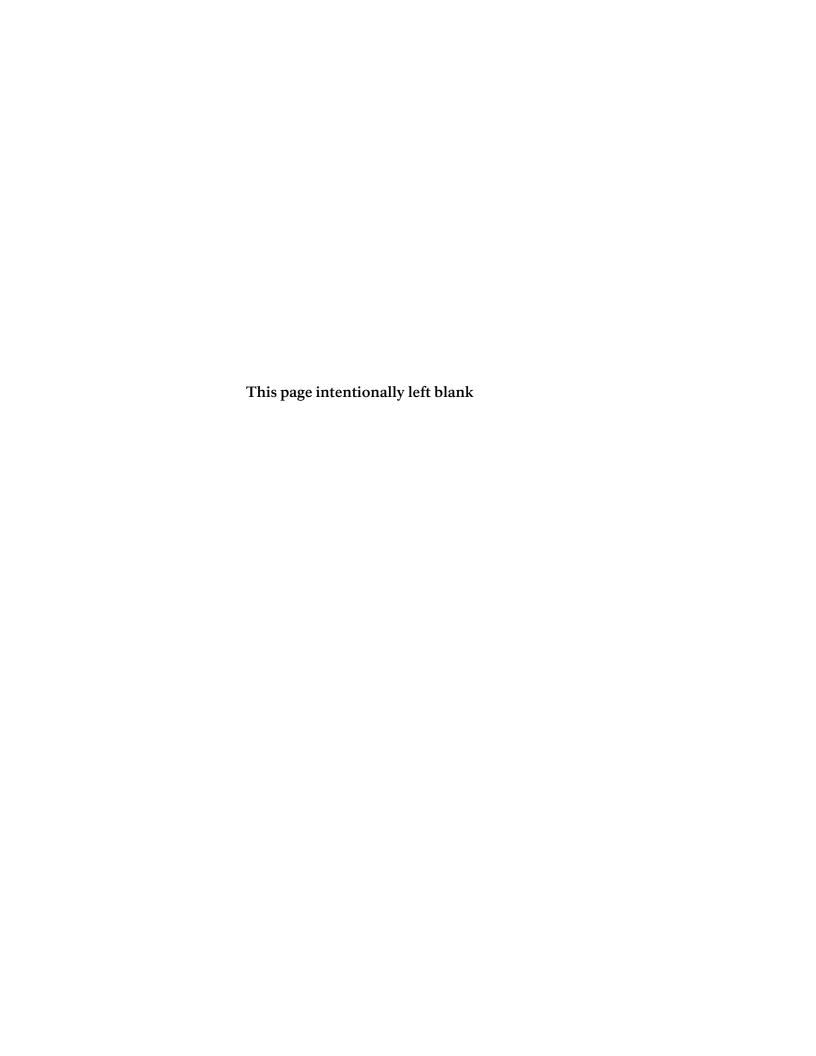
SELECTING THE AGENCY PREFERRED ALTERNATIVE - CBA

To select the preferred alternative for the Elkmont Draft Environmental Impact Statement/General Management Plan Amendment, the NPS employed the use of the "Choosing By Advantages" or "CBA" decision- making process. This decision- making process analyzed the advantages of each alternative and considered the potential beneficial and negative impacts in order to quantify and rank total advantages for each alternative. A cost/benefit analysis was then applied and the preferred alternative was selected.

The seven project alternatives were considered and each was individually evaluated under four categories, defined as "factors" in the CBA process. The four factors assessed were Protection of Natural Resources, Protection of Cultural Resources, Provision for Visitor Education and Enjoyment, and Protection of Public Health, Safety and Welfare, ranked for importance in that same order. Rank was based on Park purpose, legal requirements, policy and guidelines. Benefits, defined as advantages in this process, were calculated for each alternative within each factor. Individual scores for each alternative derived from each separate factor were then tallied into one combined summary as a means of ranking alternatives with all factors considered for total advantages. Once overall ranking was established, a cost-benefit analysis was applied to ranked alternatives based on the total cost of each alternative. The preferred alternative was selected based on a value ratio that calculated the alternative with the greatest benefits or advantages as compared to the cost.

Of the seven alternatives, Alternative C was selected as the agency preferred alternative. Prior to conducting a cost/benefit analysis it appeared that Alternative D was the most advantageous of all alternatives when other factors were considered irrespective of costs. When associated costs for each alternative were considered, there was a substantial increase in costs from alternative C to D. This cost increase, in conjunction with comparison of all other factors in the analysis illustrated that alternative C provided the most benefit for the cost. Alternative C achieves a strong balance between all factors considered, particularly concerns in regards to potential impacts to cultural and natural resources.





National Park Service U.S. Department of the Interior

Great Smoky Mountains National Park



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