National Park Service
U.S. Department of the Interior

Acadia National Park
Maine

Blackwoods Campground Rehabilitation & Policy Changes

Environmental Assessment

August 8, 2003



U.S. Department of the Interior
National Park Service

Environmental Assessment
Proposed Blackwoods Campground Rehabilitation

Acadia National Park
Bar Harbor, Maine
August 8, 2003

Proposed Action:
The National Park Service proposes to rehabilitate Blackwoods Campground and revise campground management policies at Acadia National Park near Bar Harbor, Maine, to improve visitor experience, rehabilitate historic structures and the cultural landscape, protect natural resources, and make facilities accessible to persons with disabilities.

Campground buildings, roads, utilities, campsites, and the natural environment show varying levels of deterioration. The proposed rehabilitation would focus on repairing campground facilities, while maintaining the historic integrity and rustic nature of the campground. Proposed revisions of management policies in the campground would affect the size of recreational vehicles allowed, the use of generators, and collecting firewood.

This Environmental Assessment presents three alternatives to achieve project goals and assesses the potential adverse and beneficial impacts that would result.

For Further Information Contact: Judith Hazen Connery
Acadia National Park
P.O. Box 177
Bar Harbor, ME 04609-0177
(207) 288-8721

Note to Reviewers and Respondents:
If you wish to comment on this Environmental Assessment, you may mail comments by September 8, 2003, to the name and address below. Please note that names and addresses of people who comment become part of the public record. If you wish for us to withhold your name and/or address, you must state this prominently at the beginning of your comment. We will make all submissions from organizations, businesses, and individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety.

Sheridan Steele
Superintendent
Acadia National Park
P.O. Box 177
Bar Harbor, ME 04609-0177

Comments submitted via electronic mail may be addressed to judy_hazen_connery@nps.gov (note underscore between names) until September 8, 2003.

Executive Summary vii

1 Introduction: Purpose & Need 1

1.1 Purpose & Need for the Action 1
1.2 Project Background 4
1.2.1 History and Significance of ANP 4
1.2.2 Blackwoods Campground 7
1.2.3 Supporting Plans and Studies 8
1.3 Planning Issues & Process 11
1.4 Impact Topics 14
1.5 Impact Topics Considered but Dismissed from Further Analysis 14
1.5.1 Ethnographic Resources 14
1.5.2 Indian Trust Resources 14
1.5.3 Archeological Resources 15
1.5.4 Floodplains 15
1.5.5 Prime or Unique Farmland 15
1.5.6 Geology 15
1.5.7 Wild and Scenic Rivers 15
1.5.8 Endangered, Threatened, Candidate Species, and Species of Special Concern 15
1.5.9 Marine and Estuarine Resources 15
1.5.10 Energy Requirements, Energy Resources, and Conservation Potential 16
1.5.11 Environmental Justice 16
1.6 Impairment of Park Resources 16

2 Alternatives 18

2.1 Introduction 18
2.2 Alternative A – No Action 18
2.3 Alternative B (NPS Preferred Alternative) 19
2.4 Alternative C 28

2.5 Alternatives Considered, but Eliminated from Consideration 29
2.6 Preferred Alternative 29
2.7 Environmentally Preferred Alternative 30

3 Affected Environment 37

3.1 Introduction 37
3.2 Natural Resources 37
3.2.1 Soils 37
3.2.2 Natural Communities 38
3.2.3 Wetlands and Streams 40
3.2.4 Wildlife 44
3.2.5 Soundscape 44
3.2.6 Air Quality 44
3.3 Cultural Resources 44
3.3.1 Cultural Landscape 44
3.3.2 Historic Structures 46
3.4 Visitor Use and Experience 47
3.5 Socioeconomics 48

4 Environmental Consequences 49

4.1 Introduction 49
4.2 Methodology for Assessing Impacts 49
4.2.1 Definitions 49
4.2.2 Impact Matrix Comparisons 53
4.3 Impact Assessment 53
4.3.1 Alternative A 53
4.3.2 Alternative B 58
4.3.3 Alternative C 63

5 Consultation & Coordination 70

5.1 Introduction 70
5.2 Regulatory, Management, and Legislative Considerations 70
5.3 Interagency Consultation 71
5.4 Compliance 71
5.4.1 Federal 71
5.4.2 State 72
5.4.3 Local 73
5.5 List of Recipients 73

6 Acronyms, Bibliography & List Of Preparers 76

Figures

Figure	Description	Page Number
1	Acadia National Park – Project Location	5
2	Map of Blackwoods Campground	6
3	Site Plan	20
4	Wetland Delineation Map	42

Tables

Table	Description	Page Number
1	Summary of Rehabilitation Alternatives for Blackwoods Campground	31
2	Natural Communities in Blackwoods Campground	39
3	Wetland Functions and Values for Wetlands in Blackwoods Campground	43
4	Impact Summary Matrix for Blackwoods Campground Rehabilitation Alternatives Considered	67

Appendices

Appendix	Description	Page Number
A-1	List of Plant Species Observed in Blackwoods Campground	A-1
B-1	Agency Correspondence	B-1

Executive Summary

The purpose of the proposed project within Blackwoods Campground at Acadia National Park (ANP) is to:

- preserve the campground's rustic character, historic structures, cultural landscape, and natural resources;
- improve visitor experiences;
- meet the requirements of the Americans with Disabilities Act; and,
- improve Park operations.

This Environmental Assessment (EA) provides and analyzes three alternatives for rehabilitating Blackwoods Campground and revising policies related to the size of camping equipment allowed, using generators, and collecting firewood. This EA reviews National Park Service (NPS) and ANP policies, the General Management Plan for Acadia National Park, and other relevant management plans to assess the consistency of the proposed actions with NPS guidance. It also analyzes the range of beneficial and adverse effects on the environment, and has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969.

Three alternatives are presented. Alternative A is the "No Action" alternative required by NEPA. Alternatives B and C present differing actions that meet the project purpose and are consistent with NPS management guidance.

Alternative A, the No Action alternative, does not meet the basic project purpose of rehabilitating the campground, but is included as a baseline for the purpose of comparing the effects of the other alternatives. This alternative avoids some short-term, temporary impacts to visitor use and experience, but does not address the deteriorating conditions of the campground. Furthermore, continued deterioration of the campground structures, roads, and utilities would likely have long-term adverse impacts on visitor use and experience. Under the No Action alternative, adverse impacts to the natural environment (i.e., erosion, soil compaction, vegetation loss) would continue and would constitute a long-term, minor adverse impact to the natural resource attributes of wetlands, soils, vegetation, and wildlife habitat and would have moderate adverse impacts on the cultural landscape and historic structures.

Alternative B clearly meets the basic project purpose of providing the necessary rehabilitation of Blackwoods Campground to keep the campground functional in the long-term. Universal access would be provided to the facilities and improvements made to handicap accessible sites. Campsite furnishings, boundary markers, and tent pads would be improved and some areas revegetated. Infrastructure and utilities upgrades and repairs would be completed. This alternative would limit recreational vehicle length to 35 feet and width to 12 feet, further limit generator use, and ban firewood collection within the campground, but would allow it within 100 feet of all other paved Park roadways. Group sites would be relocated into a cluster area closer to the ranger station and away from regular tent sites. Host sites and staff lodging would be provided. The campground entry and exit area would be reconfigured and the sewage dump station relocated. Completing the rehabilitation has long-term benefits for natural resources and visitor experience.

Alternative C also meets the basic project purpose, but considers adding electrical outlets at selected sites for special medical needs, limiting recreational vehicle size to 35 feet in length and 15 feet in width, banning firewood collection in the Park, and banning generator use.

The NPS considered three main factors to conclude that Alternative B would be the preferred option. The

primary consideration is the ability of the alternative to meet the project purpose. The second consideration is determining which alternative is the environmentally preferred alternative and provides for the least amount of adverse impacts to natural and cultural resources. The third consideration examines whether or not any of the alternatives impair Park resources. The environmental and cultural considerations include detailed assessments of the various impact topics. The impairment determination considers the holistic picture of the alternative and its potential impacts. After careful review and consideration of these issues, the NPS determined that Alternative B best meets the project purpose, has the most beneficial effects and least adverse impacts to environmental and cultural resources, and does not impair Park resources. Therefore, the NPS identified Alternative B as the preferred alternative.

Various impact topics were analyzed to determine the level of potential beneficial and adverse effects that could result from each of the alternatives. These topics included wetlands, soils, vegetation, wildlife, soundscape management, air quality, historic structures, cultural landscape, visitor and staff safety, visitor use and experience, and socioeconomic environment. Very minor adverse impacts related to natural and cultural resource elements could result from implementing the preferred alternative. Conversely, numerous benefits, including long-term maintenance of Blackwood Campground, would result from implementing Alternative B. Adverse impacts could include the temporary closure of one of the two campgrounds, temporary construction noise and fumes, a slight potential for erosion, and visitor complaints about policy changes. Rehabilitation would be scheduled in such a way as to allow one loop of Blackwoods Campground to remain open from mid-May until early October each year until the project is complete. Rehabilitation would be expected to last for two to three years. Beneficial effects include maintaining the campground facilities in good working order, reducing visitor conflicts, improving the campground appearance, providing universal access, reducing damage to vegetation, and generally improving visitor experience and visitor and staff safety.

1 Introduction: Purpose & Need

1.1 Purpose & Need for the Action

The purpose of the proposed project within Blackwoods Campground at **Acadia National Park (ANP)**[1] is to:

- preserve the campground's rustic character, historic structures, cultural landscape, and natural resources;
- improve visitor experiences;
- meet the requirements of the **Americans with Disabilities Act (ADA)**; and,
- improve Park operations.

This **Environmental Assessment (EA)** provides documentation and solicits public involvement in the decision making process for the rehabilitation of Blackwoods Campground at ANP (Figure 1). This EA describes the need for the project, presents alternatives considered, and analyzes their impacts on the human and natural environment. This EA was prepared in accordance with the **National Environmental Policy Act (NEPA)**, as amended, regulations of the **Council on Environmental Quality (CEQ)** (40 **CFR** 1508. 9), and *National Park Service Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making* (2001a). The preferred alternative described in this EA will follow the campground mission statement adopted by ANP through the Seawall Campground and Picnic Area Rehabilitation EA and **Finding of No Significant Impact (FONSI)**.

Because a large section of the campground is eligible for listing in the **National Register of Historic Places (NRHP)** as a district, this EA includes a thorough evaluation of the rehabilitation activities relative to maintaining the historic and architectural integrity of contributing structures and cultural landscapes. This EA does not, however, complete the requirements of Section 106 of the **National Historic Preservation Act of 1966 (NHPA)**, as amended (36 CFR 800). No construction work would be allowed to proceed until compliance with the NHPA has been achieved.

Blackwoods Campground (Figure 2) is one of three campgrounds in ANP; Seawall and Blackwoods Campgrounds are on **Mount Desert Island (MDI)**, while a small rustic campground exists on Isle au Haut. Built by the **Civilian Conservation Corps (CCC)** (1936 – 1942), Blackwoods was expanded during the immediate post-World War II era. The campground is an important part of the historic fabric of the Park and has been in continuous use for more than 50 years, currently serving about 80,000 people per year. Because of this heavy use, portions of the infrastructure and many facilities, including the grounds, have deteriorated. Rehabilitating the campground and making several policy changes would address current and long-term problems that threaten the infrastructure of the campground, the

[1] A complete list of acronyms in **bold** throughout the text is provided in Section 6.

environmental condition, and high quality visitor experience. Deterioration of structures, roadways, utilities, and campsites and degradation of native vegetation jeopardizes the intended purpose of the campground as described in the ANP mission statement. An extensive study completed by the **National Park Service (NPS)** Olmsted Center for Landscape Preservation (Foulds 1996) documents the historic and current conditions and makes recommendations for the appropriate rehabilitation and upgrades. Regardless of rehabilitation techniques and materials used, the rehabilitation must maintain the historic integrity and rustic nature of the campground and minimize environmental impacts.

Deteriorating conditions of restroom facilities and the awkward and inefficient setup of the ranger station need to be rectified. Rehabilitation of restrooms throughout ANP has been ongoing for several years. During this process, many historically significant and structurally sound buildings have been rehabilitated and inadequate, deteriorated, non-historic structures have been replaced. The historic restrooms in Loop A are structurally sound, but exterior and interior surfaces show wear and the buildings are not universally accessible. The non-historic restrooms in Loop B were rehabilitated or replaced as part of previous projects.

The condition of individual campsites varies with the location, drainage, and use of the site. Most individual campsites have been impacted by years of heavy use that has denuded vegetation, compacted soil, and created social paths between campsites, restrooms, and other trails. Vegetation that serves as natural screening between sites has been denuded, which has resulted in a lack of definition between sites that contributes to spillover of camping equipment and creates visitor conflicts. Poor drainage on some campsites is likely due to the natural composition and drainage characteristics of the soil in an area that has a seasonally high water table. Tent sites, parking areas, and the boundaries between campsites are not distinguishable. Many campsite furnishings have deteriorated.

Informal social paths created by visitors and drainage crisscross the campground causing erosion, soil compaction, loss of vegetation, and compromised privacy. Social paths are often "short cuts" that join various campsites to restrooms, formal trails, and roadways. These paths are often un-surfaced and increase in width during wet conditions when visitors walk around puddles.

The road system in Blackwoods has deteriorated due to frost heaves, lack of adequate drainage, and the fact that the road was not built to withstand the heavier modern vehicles currently using the campground. Combined, these issues reduce the structural integrity of the roadway. Contributing to the deterioration of the road system, the drainage system is inadequate and does not function properly, causing campground flooding during periods of heavy rainfall. Culverts and roadside swales have filled in and failed, restricting drainage, and often impounding water on and along the roads.

Poor drainage contributes to the deterioration of the foundations and wood structures of the buildings, and within individual campsites, poor drainage creates an uncomfortable situation for visitors after heavy rains.

Signage in some portions of the campground is inadequate, making it difficult for some visitors to initially find their campsites. Historic signs that contributed to the rustic nature of the campground have been removed over the years.

The wastewater and electric systems are in generally adequate condition, but need some upgrades to meet current health and safety codes. The water distribution system is old and corroded and needs to be replaced. Overhead power distribution lines entering the campground are old and should be upgraded.

Ash dump areas are inadequate and a plan is needed for ash removal.

Under current policies, generators may be used in Blackwoods Campground from 7 am until 10 pm. However, some visitors on adjacent sites complain about the noise and fumes that are produced by generators. These complaints are especially prevalent early in the morning and late in the evening.

Blackwoods Campground has five group camping sites for organized groups of up to 20 persons per site. These sites are currently located in the middle of Loop B, and are surrounded by regular campsites. Visitor conflicts occur related to these sites, often based on excess noise and loss of privacy. Groups may not fit into designated sites and their overflow into surrounding areas damages the vegetation, causes soil compaction, and increases erosion. Other visitor conflicts occur due to the activities of the group campsite users, which are often groups of minors with adult chaperones. Conflicts, often based on excessive noise and loss of privacy, develop between these groups and visitors on adjacent tent sites. The group sites are also not aesthetically pleasing to visitors, as they lack tree cover and provide few amenities. Additional complaints arise from a lack of privacy caused by visitors using social trails that pass near tent sites, spillover of camping and recreational equipment into adjacent sites, and a lack of visual screening between sites.

Firewood collection, which is currently allowed in the campground but not in the remainder of the Park, removes organics, nutrients, and fibrous material from the forest floor and has an adverse effect on ecological functions. Furthermore, individuals collecting firewood may pass through and around campsites, thereby reducing visitor privacy and hastening the creation and expansion of social trails.



Campsites in Blackwoods showing lack of understory vegetation, compacted soil, and lack of privacy.

Blackwoods Campground was designed during an era when camping equipment was much smaller than it is now. Camping equipment is currently limited to 35 feet in length, but there is no maximum width. Newer **recreational vehicles (RVs)** have pullout sections that can expand the width of the RV to 15 feet or more. When fully expanded, these units can damage vegetation in the campground. Occasionally, visitors remove vegetation that interferes with their equipment. The park seeks to set a width limit to protect vegetation, the cultural landscape and the rustic and natural setting of the campground.

Visitors with extra equipment such as awnings, extra cars, or tents spill over into adjacent sites or trample vegetation. This removes vegetation between campsites and can remove the sense of privacy among campers.

The current location of the sewage dump station lacks adequate space for vehicles to park while waiting to use the facility. RV's can back up into the travel lane of the camp court, creating traffic congestion and even blocking traffic exiting both campground loops.

Disposal of "gray" water and food scraps from dishwashing provides a source of food to scavenging animals such as raccoons (*Procyon lotor*) and striped skunks (*Mephitis mephitis*), both of which can carry rabies. Currently there are no areas to dispose of dishwater and food scraps. Uncovered and unprotected food sources are also exposed to these nuisance wildlife species. Scavenging wildlife can break into "soft-sided" or "convertible" type vehicles and remove food stored within. Further, interactions with

animals can lead to injuries to visitors and staff and create the need to remove and euthanize the offending animals. State regulations prohibit relocating animals that might carry rabies; therefore, offending animals must be euthanized.

The presence of on-site staff and volunteers on a 24-hours-a-day, seven-days-a-week basis could help resolve visitor conflicts and address the needs of visitors more efficiently. The NPS, like other employers in the area, is severely hampered in hiring seasonal staff by a lack of affordable housing. Adding two host campsites and a small number of apartments would help improve Park operations.

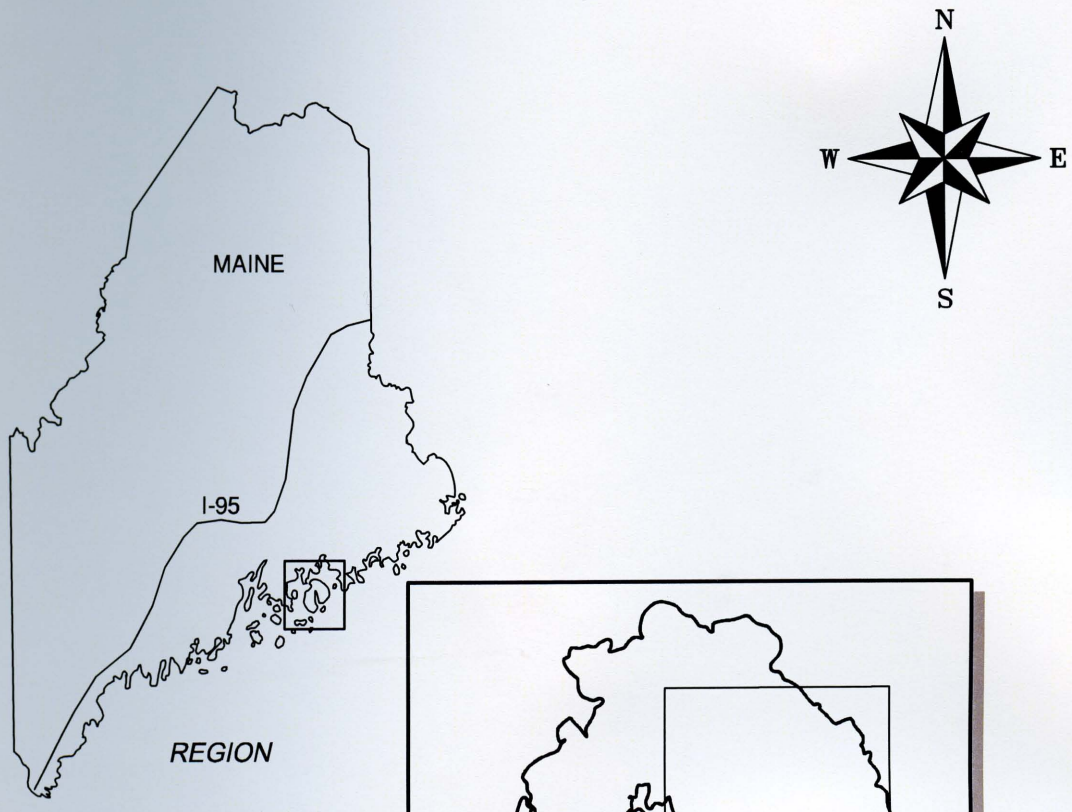
The rehabilitation work proposed herein would economically repair the damage, rehabilitate the campground preventing further deterioration, and maintain the environmental, structural, historic, and cultural resources of the site. Furthermore, rehabilitating these features and implementing the new policy changes would improve visitor experiences and maintain the Park's contribution to the local socioeconomic environment.

1.2 Project Background

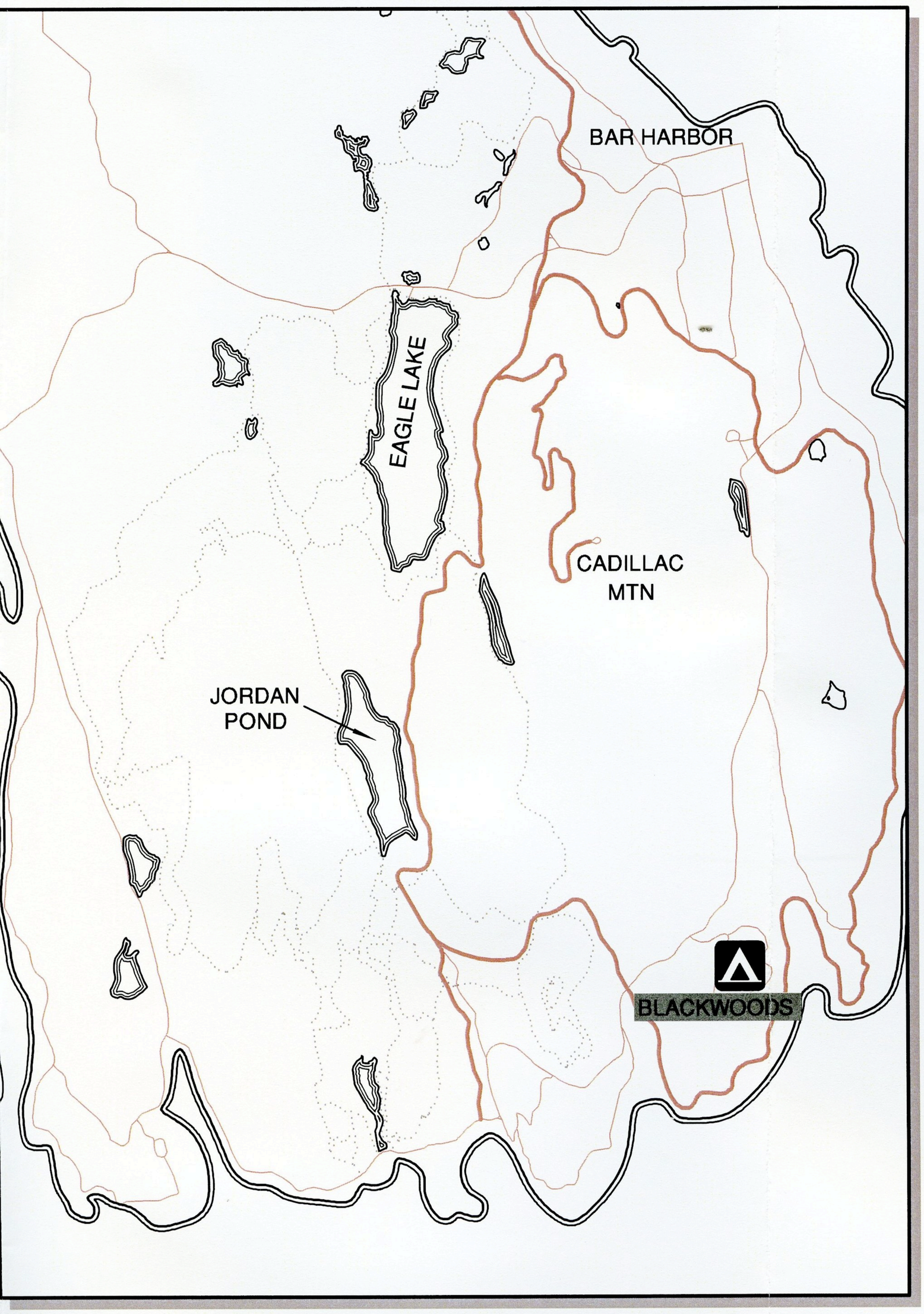
1.2.1 History and Significance of ANP

ANP is located on MDI in the mid-coastal region of Maine, approximately 45 miles southeast of Bangor (Figure 1). MDI lies just off the mainland and is accessible by a bridge from the Town of Trenton. The island is roughly divided into two sections that are separated by Somes Sound, a narrow bay surrounded by steep mountains. The east side of MDI borders Frenchman's Bay and is directly exposed to the Atlantic Ocean. The town of Bar Harbor and many of ANP's most popular attractions are located in this region. The west side of MDI is less developed and includes several small villages. ANP is known for its varied and dramatic scenery, including rugged coastline, cobblestone beaches, offshore islands, granite cliffs, glacial lakes, salt marshes, freshwater wetlands and streams, and evergreen and hardwood forests.

Archeological evidence suggests Native Americans occupied MDI, at least seasonally, for several thousand years prior to the arrival of Europeans. French explorers and missionaries landed on MDI during the early 17th century and established the first European settlement of the ANP area. British settlers took control of the area by the mid-18th century and the State of Maine remained part of Massachusetts until 1820. MDI became a tourist destination during the mid-19th century, as popularized by the paintings and stories of the "rusticators," who were artists and writers that glorified the rustic beauty of the island. A group of local citizens, led by Charles W. Eliot and George Dorr, established the Hancock County Trustees of Public Reservations, which subsequently acquired 5,000 acres on MDI and offered the land to the federal government to preserve the natural landscape from growing development interests. In 1916, President Woodrow Wilson created Sieur de Monts National Monument, which later became Lafayette National Park, the first National Park east of the Mississippi River. In 1929, the Park's name was changed to Acadia National Park. The Park currently encompasses approximately 46,000 acres on MDI, Schoodic Peninsula, and surrounding islands. Approximately 2.7 million visits are made to the Park annually, and the campground serves about 80,000 people per year.



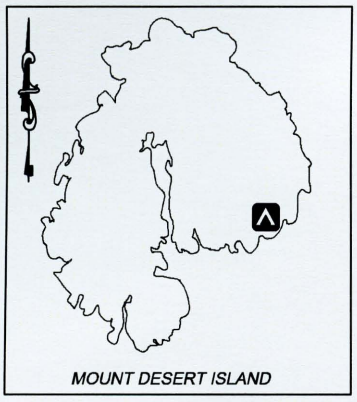
Acadia National Park
Blackwoods Campground Location
Figure 1



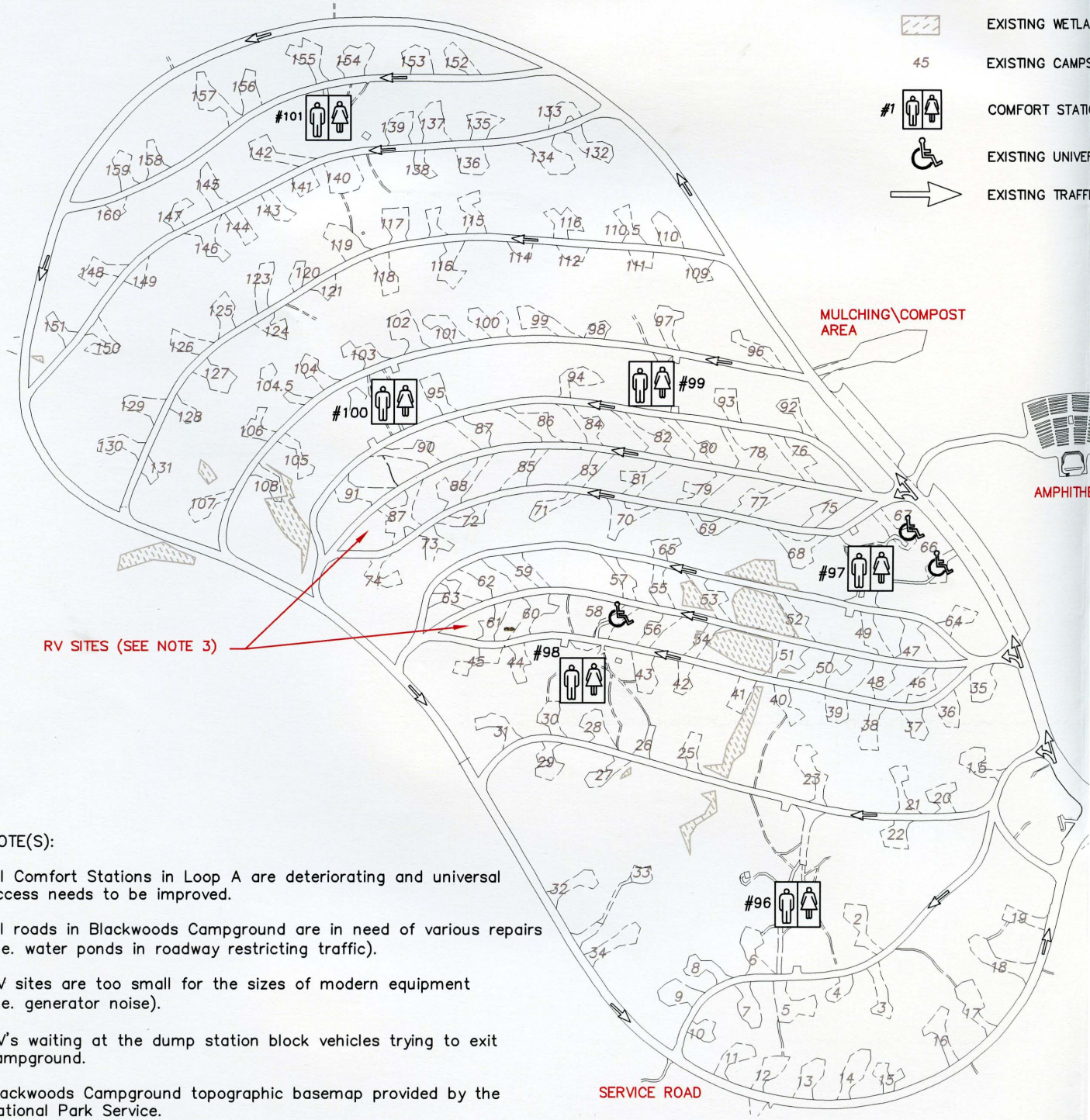
BLACKWOODS CAMPGROUND LOCATION

NOT TO SCALE

Acadia Nat
Blackwoods C
Existing C
Figu



LOOP A



NOTE(S):

1) All Comfort Stations in Loop A are deteriorating and universal access needs to be improved.
2) All roads in Blackwoods Campground are in need of various repairs (i.e. water ponds in roadway restricting traffic).
3) RV sites are too small for the sizes of modern equipment (i.e. generator noise).
4) RV's waiting at the dump station block vehicles trying to exit campground.
5) Blackwoods Campground topographic basemap provided by the National Park Service.

tional Park
Campground
Conditions
re 2

ANDS (REFER TO FIGURE 4)

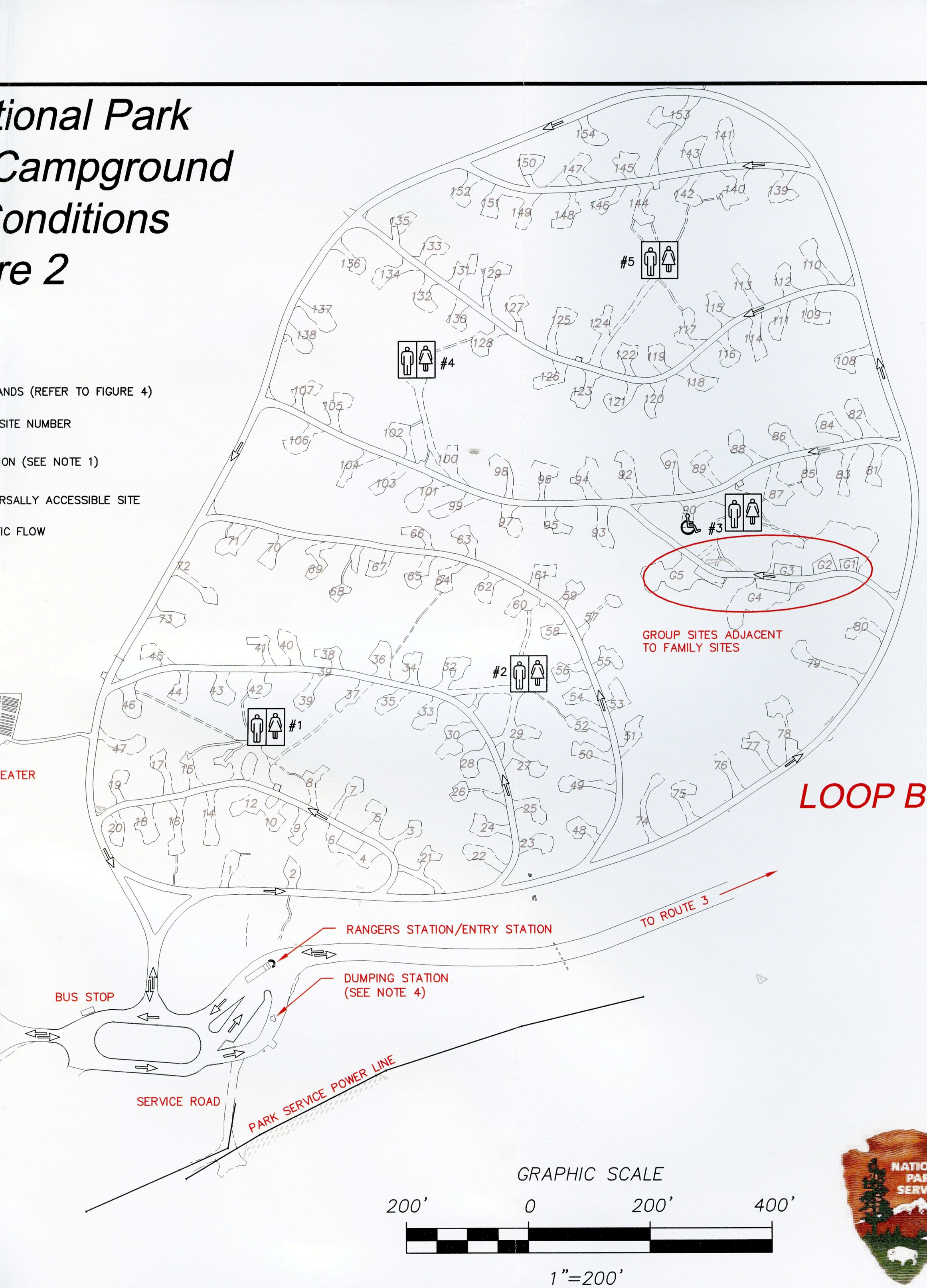
SITE NUMBER

ION (SEE NOTE 1)

RSALLY ACCESSIBLE SITE

IC FLOW

EATER



GRAPHIC SCALE

200' 0 200' 400'

1"=200'

NATIONAL PARK SERVICE

1.2.2 Blackwoods Campground

A steady increase of automobile traffic on MDI during the 1920s prompted concern among island residents and Park staff over the nature and location of auto-accessible campgrounds. Prior to this, the Park had no such facilities, forcing campers to stay at private campgrounds or seek accommodation at area hotels. In 1927, one of the Park's first planning documents described plans to construct an auto campground at Bear Brook. Completed in the mid-1930s, Bear Brook was the first campground at ANP to incorporate the ideas of forest pathologist E.P. Meinecke, who devised an innovative approach to reducing the impact of auto camping. Important features of Meinecke's campground designs included the use of narrow, one-way roads lined with logs or boulders to act as barriers to motorists who might otherwise leave the road to park and self-contained campsites that provided defined parking areas and tent sites with fire rings and picnic tables. These and other elements of the Meinecke design were ultimately adopted by the NPS on a wide scale and were later employed at the Blackwoods and Seawall Campgrounds at ANP.

Blackwoods Campground was originally conceived in 1929 as part of John D. Rockefeller Jr.'s plan for the construction of the Otter Creek causeway and Blackwoods motor road. Rockefeller would later donate this large tract of land to the Park. In 1936, the NPS obtained $500,000 in funding for the road improvements and construction of the campground. The campground was constructed by the CCC, one of the many relief programs implemented during the Great Depression by the Roosevelt administration, as a Recreational Demonstration Project. Preliminary designs for Blackwoods Campground, developed in 1937, featured a central camp court with an administration and concession building and three separate campground loops that contained approximately 400 campsites. The design for the campsites included both the spur-type developed by Meinecke and the newer link-type, which was recommended in Albert Good's *Park and Recreation Structures* (1938) to accommodate trailer campers. Compared to the 63-site Seawall Campground then under construction, the plan for Blackwoods was an extremely ambitious undertaking and exceeded the limits of available CCC labor and funding. The NPS was forced to implement a phased approach to the construction of the campground loops. Work commenced on Loop A in 1938, and by the end of 1941, approximately 100 campsites and 3 restrooms (Buildings #97, 98, and 99) had been constructed.

With the outbreak of war in Europe in 1940, President Roosevelt redirected the nation's energies and money away from relief programs and into the war effort. By the time the last CCC camp at ANP was disbanded in 1942, one additional restroom (Building #100) and the original ranger station were nearly complete, but the utility systems were not fully functional. The lack of available labor and funding, coupled with a decline in tourism, forced a postponement of further improvements until after the war.

Blackwoods Campground was first opened to the public for the summer of 1946. The following year, an extensive fire destroyed hundreds of structures and burned thousands of acres on MDI, which forced a delay in the further development of the campground until the following year when construction of most campground facilities was largely completed.

The last of the restrooms (Building #96) originally planned for Loop A was completed in 1950. That same year, an amphitheater was added between Loop A and Loop B. Built under tight budgetary constraints, the two structures lacked the design elements, workmanship, and use of compatible materials that characterized the buildings previously constructed at the campground.

Funding for the construction of Loop B (1956 – 1961) was made possible through the Mission 66 program. Authorized by Congress in 1956, Mission 66 resulted in a system-wide upgrade of facilities, staffing, and resource management capabilities in anticipation of the NPS's fiftieth anniversary in 1966.

The program's ambitious schedule forced some concessions in the design of NPS facilities, as more reliance was placed on private sector contractors who introduced standardized designs using mass-produced materials. This new direction resulted in the alteration or abandonment of long-standing plans for Blackwoods Campground. Plans for a headquarters building, ranger's quarters, a third camp loop, and a more elaborate camp court were dropped in 1960. The original link-type campsites in Loop B were redesigned to the easier to construct and maintain spur-type sites. The restroom buildings added during this period were built on standardized designs with little regard to their setting.

Minimal new development has occurred at Blackwoods since the completion of Mission 66. Emphasis has been on maintaining existing facilities, with minor modifications being made over time. From 1965 to 1969, ANP participated in the "Job Corps" program constructing picnic tables and fire rings in Blackwoods. The campground entrance road was widened in 1971 to create a lane for cars and trailers waiting to check in. A new ranger station was constructed in 1975 at the camp court to allow staff to check in campers to both loops of the campground. The existing 1942 ranger station was used as ranger housing and administration building until it burned down in 1978. A redesign of the amphitheater in 1977 resulted in the replacement of the original stage and screen structures and the relocation of the campfire circle. The Blackwoods restroom facilities and sewer system were upgraded between 1985 and 1987, with restroom siding being replaced and quarry tile flooring added. At that time, 10 universally accessible campsites were added to the existing 4.

Today, Blackwoods Campground contains approximately 5 miles of paved roads, 310 individual campsites, 5 group campsites, 11 restrooms, a dump station, an amphitheater, and a ranger station. Loop A contains 160 campsites, 5 historic restrooms, and 1 winterized brick restroom. Loop B contains 150 individual campsites, 5 group campsites, and 5 restrooms of similar design to the historic restrooms in Loop A.

The campground serves about 80,000 visitors per year. Visitors come from all U.S. states, with a majority being from the northeast. Peak use occurs during the summer vacation season, June-August, with moderate to heavy use also occurring during May, September, and October. Some winter camping occurs, but use is very limited from November through February. Limited facilities are available during the winter in Loop A; only a small portion of the loop is open with one restroom. Camping picks up again during the early spring (March and April), mostly on weekends. ANP campgrounds receive the most reservations and support the highest price paid per reservation of the four National Parks in the northeast that offer camping. The average stay is 2 to 3 days per reservation. Campground rates are $20 per night for a regular campsite. Senior citizens and people with disabilities receive a discounted rate of $10 per night. The campground accommodates most RV's up to 35 feet in length. Organized groups may use the group campsites, each of which accommodates up to 20 visitors.

1.2.3 Supporting Plans and Studies

Acadia National Park General Management Plan (GMP)

ANP's mission is based on NPS legislation and the *Acadia National Park General Management Plan* (NPS 1992).

"The National Park Service at Acadia National Park protects and preserves outstanding scenic, natural, scientific, and cultural values for present and future generations. These resources include a glaciated coastal and island landscape, biological diversity, clean air and water, and a rich cultural heritage. Acadia National Park also offers opportunities for high-quality non-consumptive recreation education, and scientific research."

This mission statement was formally adopted in the *Acadia National Park Strategic Management Plan* (NPS 1997a), which identified three primary purposes for the Park:

- To protect and conserve the land and water resources, the scenery, the natural and historic objects, the wildlife and the wild character of the Park;
- To promote and regulate the use of the Park for the benefit and enjoyment of the public in such a manner and by such means as will leave Park resources unimpaired for the enjoyment of future generations; and
- To protect and preserve the scenic, ecological, historic, archeological, and cultural resources of the Acadian archipelago and to limit development of the islands and conserve their natural qualities and traditional resource-based uses.

The GMP articulates a series of specific management goals for the Park. Of particular relevance to this EA are:

- To provide for a variety of high quality, resource-related visitor experiences while ensuring a safe and positive social environment;
- Manage, maintain, and develop services and facilities to adapt to changing visitor patterns and needs, to serve special populations, and to minimize resource impacts;
- To protect, preserve, and restore, as appropriate, the cultural heritage of ANP, including archeological, historic, curatorial, and cultural landscape resources.

In addition, the GMP suggests developing management strategies for the campgrounds that protect resources and encourage the use of tents and small RVs (units less than 35 feet) by separating those uses, providing more walk-in sites, and developing strategies to avoid overuse of sites.

The *NPS Management Policies, 2001* (2001c) (Chapter 9) provides guidance applicable to the management of campgrounds within the NPS system. *Director's Order 47: Sound Preservation and Noise Management* (2001b) provides guidelines for addressing issues specific to soundscape. Policies that were considered for guiding the rehabilitation of Blackwoods Campground include:

- Providing universal accessibility consistent with preserving Park resources, visitor safety, and high-quality visitor experience; designing, constructing, and operating all buildings and facilities so they are accessible to, and usable by, persons with disabilities to the greatest extent reasonable; ensuring all new and altered buildings are in conformance with the appropriate design standards;
- The NPS does not intend to provide a full range of camping services, amenities, and utility hookups;
- Limiting construction sites to the smallest feasible area; controlling ground disturbance; and minimizing air, water, soil, and noise pollution; and
- Planting species that are native to the Park or historically appropriate for the period or event; imported soils must be compatible with existing soil and free of undesired seeds and organisms.

ANP Campground Mission Statement

In 2003, ANP staff adopted a mission statement for the Park's campgrounds that reflects the overall management policies described above to reinforce the values consistent with the original design of the campground. The campground mission statement is as follows:

"Portions of the campgrounds are cultural resources. Rehabilitation, maintenance, and operations shall preserve the significant historic features and rustic character. Visitors staying in the campgrounds should have a traditional Acadia camping experience relating to the goals of the park. This experience may be different than that obtained in commercial campgrounds and may be different than the initial expectations of the visitors. Aspects of this experience are:

- Sights and sounds of the campground shall be as natural as possible;
- Privacy between sites shall be maintained as much as possible using native vegetation and materials;
- 'Contemplative recreational' experiences such as enjoying scenery, hiking, environmental education shall be encouraged over more active recreation such as participating in sports or touring by vehicle;
- Rehabilitation guidelines will encourage the use of small RVs (units less than 35 feet long and 12 feet wide) and tents. Historic features and character will not be modified solely to accommodate larger recreational vehicles;
- Modern amenities such as showers and RV hookups will not be added to meet changes in equipment or to match facilities provided for the public in private campgrounds; and
- Educational opportunities in the campgrounds shall emphasize environmental education, resource protection, appropriate recreation, and environmental ethics."

Blackwoods Campground Studies

ANP staff initiated planning studies addressing issues relating to visitor experience, resource protection, and rehabilitation of Blackwoods Campground. An extensive study completed by the NPS Olmsted Center for Landscape Preservation (Foulds 1996) documents the historical and current conditions and makes recommendations for appropriate rehabilitation and upgrades. This report also contains, as appendices, "The Status of Blackwoods Campground: Physical Conditions and Management Problems and Recommendations for Physical Redesign and Rehabilitation," a 1990 report by Charlie Jacobi, Fee Supervisor; notes from Round-Table Discussions with Park Staff, June 1995; and a memorandum from James Patterson, Research Agronomist at the Center for Urban Ecology, concerning soil and vegetation conditions in Blackwoods and recommendations for revegetation. A study documenting visitor use in ANP (Littlejohn 1999) provides some insight to the visitor use patterns of Blackwoods Campground.

1.3 Planning Issues & Process

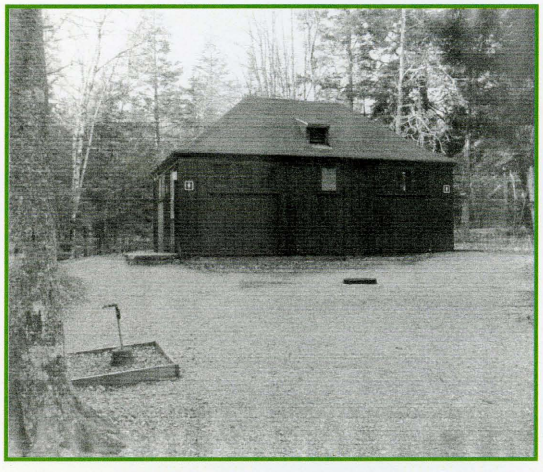
Numerous planning issues were identified during internal and external scoping meetings and site reviews. These issues are addressed in *Design Analysis, Upgrade Utilities and Campgrounds* and the *50% Construction Drawings* (NPS 2002 and NPS 2003b), which documented the condition and rehabilitation needs of the campground. The following issues were identified:

1. ***Protecting Soils, Wetlands and Streams, Natural Communities, and Wildlife.*** Minor earthwork associated with site rehabilitation could impact adjacent native vegetation or create conditions that favor the spread of exotic and invasive plant species. The small amount of understory and midcanopy vegetation that exists in the campground should be protected. Restoring vegetation will help to restore natural communities within the campground and improve wildlife habitat and aesthetics. Blackwoods Campground contains several small wetlands and man-made drainages. Wetland impacts resulting from drainage improvements could occur. Erosion of sediments is a potential adverse impact, even with minor construction projects.



RV campsite in Loop A. Note the bare ground and lack of privacy.

2. ***Protecting the Cultural Landscape, and Historic Structures.*** Cultural resource issues center on the long-term physical impacts of the alternative actions on historic structures, archeological sites, and cultural landscapes. All activities that have the potential to impact them must be carried out in accordance with the guidelines contained in the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (NPS 1996) in order to avoid adverse effects on their historic and architectural integrity. Rehabilitation techniques and materials must be consistent with the composition and architecture of the resources and meet the appropriate materials specifications.



Historic CCC-era restroom.

3. ***Rehabilitating Facilities.*** Deteriorating facilities include the restrooms, campsites and campsite furnishings, infrastructure and utilities, and other amenities. Restrooms show the normal signs of age and wear, with deteriorating roofs, sills, siding, and floors. Campsites are no longer well delineated due to loss of vegetation, social paths, spillover from large RVs, and damage to defining features. Tent pad areas are not well defined and often poorly draining. Many of the site furnishings, such as fire rings and picnic tables, are deteriorating and need replacement. Utilities (electric and water) and infrastructure (roads and some trails and paths) are deteriorating and need general repairs and upgrading. Lastly, seating at the amphitheater is deteriorating and needs to be replaced and repaired.

Some visitors use large tents with extra "living" space and other equipment that can overflow into adjacent campsites. Heavy campground use and deteriorating facilities have caused management problems and are a source of camper complaints. One source of conflict is a lack of clearly defined areas for placing camping equipment and poorly marked campsite boundaries. Campers may bring large amounts of additional equipment such as utility trailers, boat trailers, screen houses, and additional tents. The campground sites were not originally designed to accommodate these additional items. This situation causes campers to crowd equipment onto sites, pitch tents onto vegetation or in the leaf litter, and crowd vehicles and trailers into spaces not designed or large enough for them. Site sprawl, compacted soil, and vegetation damage resulting from this situation deteriorates campground conditions and causes camper conflicts.

Insufficient parking is also a problem in Blackwoods. Although the campground is designed to accommodate one vehicle per site, some campers arrive with more than one vehicle. Extra vehicles must be parked along the loop road at the amphitheater; however, space there is very limited. Parking by non-camping visitors arriving to see the evening slide show at the amphitheater further compounds this problem. Thereafter, campers are unable to find parking spaces and resort to parking multiple cars at the campsites and along roads, trampling vegetation and making the campground feel cluttered.



View of campsites showing soil compaction and lack of vegetation.

4. ***Providing Universal Accessibility.*** Restrooms and campsites at Blackwoods Campground have limited accessibility to disabled persons. Specifically, restrooms do not have the requisite sizing and features to accommodate persons who are disabled, many paths were not constructed or maintained to accommodate wheelchairs, and most campsites are not universally accessible.

5. ***Managing Timing of Construction.*** Timing of the project must be managed, as closing portions of the campground would create inconveniences to visitors. Construction may be possible out-of-season, i.e., from late October through early June, but only for some rehabilitation efforts. Short-term safety issues related to the construction include worker safety, following Occupational Safety and Health Administration guidelines, and protecting visitors and employees during construction.

6. ***Eliminating Social Trails.*** Social trails are generally created by varying patterns of use where visitors take "short cuts" between campsites and other facilities, such as restrooms and sources of water. Surface water runoff creates erosion along these paths that further defines and legitimizes their presence. Individuals wandering through or near occupied campsites on the social trails reduce the privacy of other visitors.

7. ***Managing Generator Use.*** RV owners often use generators for running various amenities and electronic devices. The use of generators to operate electronic equipment has increased steadily. Generator noise is a recurring conflict primarily between campground visitors in Loop A, since RV sites and regular tent sites are adjacent. Generator noise further disrupts the natural sounds and

peaceful environment of the campground. In addition, exhaust fumes create unpleasant odors and can affect the air quality around nearby sites.

8. ***Managing Nuisance Wildlife.*** Nuisance wildlife has become a chronic problem in the campground. Striped skunks and especially raccoons are attracted to the campground by food residue from dishwashing, direct feeding, and food left unattended. Both species carry rabies and the subsequent interactions pose a health threat, as the habituated animals may bite visitors and damage equipment and vehicles. State policies prohibit the relocation of rabid animals, thus Park staff must trap and euthanize nuisance animals.

9. ***Collecting Firewood.*** Current Park policy allows dead and down wood to be collected by hand for firewood from anywhere within the Park. This policy has contributed to the trampling of vegetation and the complete loss of decomposing wood from the campground. Furthermore, this policy is contrary to the recommendations of the *NPS Management Policies, 2001* (2001c), which prohibits the gathering of firewood. Firewood is readily available through private vendors in local communities.

10. ***Managing the Size of Recreational Vehicles.*** The layout of the roads and RV campsites in Loop A was designed for the camping equipment available during the 1940s and 1950s. The RV sites can accommodate equipment up to 35 feet in length and 12 feet wide. Modern RV equipment can exceed these dimensions, which results in damage to trees and facilities, traffic congestion, and complaints from other visitors. Narrow roads sometimes cannot accommodate large RVs. Some RV and trailer sites are not level, which makes setting the trailer difficult, if not unsafe.

11. ***Locating Group Campsites.*** Group campsites are generally used by youth organizations and are interspersed amongst "single-family tent" campsites within Loop B. The additional noise and behavior of the individuals at the group sites creates conflicts with visitors in the adjacent sites. The result is the diminished enjoyment of the tent site visitor's experience at the campground and complaints to campground staff. Furthermore, the group sites are unattractive, as they are mainly a wide gravel area with just enough space to pitch tents. Overall, these sites are often too small to accommodate tents and vehicles. Many visitors have expressed the desire to have group campsites separated from family sites.

12. ***Providing Staff and Volunteer Housing.*** ANP relies on volunteers to help staff many programs and operations. Having staff people on-site can be beneficial to visitors and the Park, but reasonably priced housing in the vicinity is difficult to find. Therefore, the Park proposes to build host sites, small trailer parking, and small apartment type facilities at the campground.

13. ***Effects on Local Businesses and Campgrounds.*** Modifications to campground facilities and changes to certain management policies could affect the local economy relative to area businesses and campgrounds. The ANP campgrounds on MDI fill a niche in this market that is generally not available at private campgrounds. The rustic nature and location within the Park makes Blackwoods unique. Modernizing facilities, such as adding electric hook-ups and showers, could put Blackwoods in direct competition with the private campgrounds. Rehabilitation would require temporary closure of each loop, which could affect some private businesses.

1.4 Impact Topics

Several impact topics were chosen for detailed evaluation based on the CEQ's NEPA regulations and *NPS Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making* (2001a), by assessing the issues raised during project planning meetings, and by identifying the potentially affected resources at the project site. The impact topics evaluated include soils, wetlands and streams, natural communities (vegetation), wildlife, soundscape, air quality, cultural landscapes, historic structures, visitor and staff safety, visitor use and experience, and socioeconomic resources. Several topics, which are discussed in Section 1.6, were considered and dismissed from the detailed EA analysis. Each of the impact topics analyzed in this EA is provided below.

1.5 Impact Topics Considered but Dismissed from Further Analysis

The following impact topics would not be affected by the proposed rehabilitation activity and were eliminated from further evaluation. They are briefly discussed below, but will not be analyzed in detail in this EA.

1.5.1 Ethnographic Resources

Ethnographic resources are defined by *NPS Director's Order 28: Cultural Resource Management Guideline* (NPS 1997b) as any "site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it." Consultation is currently ongoing with Native American tribes regarding proposed projects at the Park. ANP, in partnership with representatives of the federally recognized tribes in Maine, will be conducting ethnographic research over the next two years to identify ethnographic resources and places of religious or cultural importance within the Park. These groups include the Passamaquoddy Tribe – Indian Township; Passamaquoddy Tribe – Pleasant Point; Penobscot Nation; Houlton Band of Maliseet Indians; and Aroostook Band of Micmacs.

Presently, there are no known ethnographic sites in Blackwoods Campground. As part of the consultation process, tribes may review the proposed rehabilitation and identify the presence of ethnographic resources. Subsequently, the NPS would provide mitigation measures to address the presence of these resources. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 would be followed. Rehabilitation will not impact any known ethnographic resources. Therefore, this topic was dismissed from further analysis.

1.5.2 Indian Trust Resources

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of Interior agencies be explicitly addressed in environmental documents. 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, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes. Therefore, this topic was dismissed from further analysis.

The Blackwoods rehabilitation area is not considered an Indian Trust resource, and the proposed action does not conflict with known American Indian interests.

1.5.3 Archeological Resources

An archeological survey of Blackwoods Campground was conducted in the fall of 2002. No potentially significant archeological sites were identified in areas where ground-disturbing activities are proposed. No ground-disturbing activities would be conducted in the project area before the Park obtains concurrence from the Maine State Historic Preservation Officer, with the findings of the archeological investigation as required under Section 106 of the NHPA. If during construction, previously unknown archeological resources are discovered, all work in the immediate vicinity of the discovery would be halted until the resources could be identified and documented and an appropriate mitigation strategy developed in consultation with the State Historic Preservation Officer. Therefore, this topic was dismissed from further analysis.

1.5.4 Floodplains

Blackwoods Campground is not located within areas subject to normal flooding from a 100-year flooding event and the campground rehabilitation would not affect floodplain functions or values. Therefore, floodplain resources were dismissed as an impact topic.

1.5.5 Prime or Unique Farmland

Prime farmland is defined as soil that produces general crops, such as common foods, forage, fiber, and oil seed. Unique farmland is defined as soil that produces specialty crops, such as fruits, vegetables, and nuts. There are 12 soil types in the Hancock County area that support prime farmland as define by the Natural Resource Conservation Service (1998). The project area consists of Schoodic-rock outcrop-Naskeag complex soils that are on moderate to steep slopes and are not prime farmland. Therefore, this topic was dismissed from further analysis.

1.5.6 Geology

This project will not affect the geologic resources of the Park. Aggregate and stone will be acquired from state approved quarries. Therefore, geological resources were dismissed as an impact topic.

1.5.7 Wild and Scenic Rivers

There are no federal wild and/or scenic rivers located within Blackwoods Campground. Therefore, Wild and Scenic Rivers was dismissed as an impact topic.

1.5.8 Endangered, Threatened, Candidate Species, and Species of Special Concern

There have not been reports or sightings of any listed species in Blackwoods Campground, based on discussions with Park staff and information published on the Park's website (NPS 2003a). No adverse impacts to federal or state listed species would be expected; therefore, this impact topic was dismissed from the analysis.

1.5.9 Marine and Estuarine Resources

There are no marine or estuarine resources within Blackwoods Campground; therefore, assessing these resources is not needed for the proposed project.

1.5.10 Energy Requirements, Energy Resources, and Conservation Potential

ANP strives to incorporate the principles of sustainable design and development into all facilities and park operations. Blackwoods Campground uses a minimal amount of electrical resources, which are limited to the ranger station and restrooms and associated utilities. Therefore, energy requirements are minimal. The campground does not provide any energy resources. The minimal amount of electrical resources used and the efficient use of lighting maximizes energy conservation to the most practical extent. Therefore, the rehabilitation would not have an affect on energy requirements, energy resources, and energy conservation potential and is dismissed from further analysis.

1.5.12 Lightscape

In accordance with *NPS Management Policies, 2001* (2001c), the NPS strives to preserve natural ambient lightscapes, which are resources and values that exist in the absence of human caused light. ANP strives to limit the use of artificial outdoor lighting to that which is necessary for basic safety requirements and to ensure that all outdoor lighting is shielded to the maximum extent possible, to keep light on the intended subject and out of the night sky. Therefore, lightscape was dismissed as an impact topic.

1.5.11 Environmental Justice

According to the 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.

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. The proposed action would not have health or environmental effects on minorities or low-income populations or communities as defined in the Environmental Protection Agency's Draft Environmental Justice Guidance (July 1996). Therefore, environmental justice was dismissed as an impact topic.

1.6 Impairment of Park Resources

The *NPS Management Policies, 2001* (2001c) require analysis of potential effects to determine whether or not actions would impair Park resources. Impairment would diminish the value or quality of Park resources, which would be analyzed based on the intensity, duration, and context of the impacts and whether the impacts are direct, indirect, and/or cumulative. Impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of Park resources or values. The fundamental purpose of the National Park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve Park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting Park resources and values. However, the laws do give the NPS the management discretion to allow impacts to Park resources and values when necessary and appropriate to fulfill the purposes of a Park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS the management discretion to allow certain

impacts within the Park, that discretion is limited by the statutory requirement that the NPS must leave Park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. An impact to any Park resource or value may constitute an impairment, but an impact would be more likely to constitute an impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the Park;
- key to the natural or cultural integrity of the Park; or
- identified as a goal in the Park's GMP or other relevant NPS planning documents.

Impairment may result from NPS activities in managing the Park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the Park. Section 4, *Environmental Consequences,* provides a determination on whether or not the project would impair water quality, soils, streams and wetlands, wildlife, vegetation, historic structures, and cultural landscapes.

2 Alternatives

2.1 Introduction

The purpose of this project is to preserve the rustic character, historic structures, cultural landscape, and natural resources of Blackwoods Campground; improve visitor experiences; providing universal access; and improve Park operations. The NPS proposes revising policies relative to management of the campground, RV size, generator use, and firewood collection. These proposed rehabilitation activities and policy revisions have been designed for consistency with the ANP campground mission statement.

This EA considers several alternatives for the proposed Blackwoods Campground rehabilitation:

- Alternative A – No Action.
- Alternative B – Rehabilitate campground buildings and structures maintaining current level of services and rustic atmosphere (NPS preferred alternative).
- Alternative C – Rehabilitate campground with some modernization, upgrading, and construction of buildings and structures to provide a full-service campground.

A summary table of the three alternatives is provided at the end of Section 2 (Table 1). NEPA requires that the No Action alternative be considered in this EA for baseline comparisons. Other alternatives, such as modernizing the facilities, were initially considered, but each was ultimately rejected as not meeting the basic project purpose and/or the campground policies and mission statement.

2.2 Alternative A – No Action

This alternative would retain Blackwoods Campground in its current condition and would not proceed with any rehabilitation measures or policy changes. Some facilities could be rehabilitated if and when funds were to become available. In the meantime, all of the activities and processes that are contributing to the deterioration of the campground and facilities would continue until repairs could be made. Park staff would continue to educate visitors about nuisance wildlife and enforce regulations related to food storage, but other steps to manage nuisance animals such as installing food disposal stations or repairing structures to exclude animals, would not be implemented.

Blackwoods Campground would continue to accommodate vehicles up to 35 feet in length and any width. Generator use would continue from 7 am until 10 pm. Collecting firewood (dead and down woody debris) would be allowed within the campground.

The No Action alternative is included in this EA to provide a baseline upon which to compare the effects of the other alternatives.

2.3 Alternative B (NPS Preferred Alternative)

Alternative B, as outlined in the *Design Analysis Upgrade Utilities and Campgrounds* (NPS Denver Service Center 2002), would include a complete rehabilitation of Blackwoods Campground (Figure 3). Existing structures and facilities would be rehabilitated, upgraded, or replaced, but no new amenities would be added to the campground.

Rehabilitation activities would focus on the buildings in Loop A, the ranger station, campsites, and the circulation (roadways and trails), utility, and drainage systems. New construction would include a small apartment type building for staff housing, enlarging the ranger station, and the placement of additional signs. Policy changes designed to better protect the natural and cultural resources of the campground and enhance the visitor experience would include reducing the hours of generator use, eliminating firewood collection within the campground, and restricting the width of recreational vehicles to twelve-feet. A schedule for the rehabilitation would be completed, including the planning for minimal closure of the campground and to stagger closure with Seawall Campground, which is also being rehabilitated, so that at least one campground is open to public use. Rehabilitation would be scheduled in such a way as to allow one loop of Blackwoods Campground to remain open from mid-May until early October each year until the project is complete. Rehabilitation would be expected to last for two to three years.

Buildings

Under Alternative B, all restrooms in Loop A and the ranger station would be rehabilitated. All of the buildings are structurally sound and are, with the exception of one restroom (#96) and the ranger station, historically significant resources. The Mission 66-era restroom buildings in Loop B have all been recently replaced or rehabilitated as part of other construction projects and no further work on them is proposed under this alternative. The ranger station would be enlarged to meet ADA requirements, storage, and staff space needs.

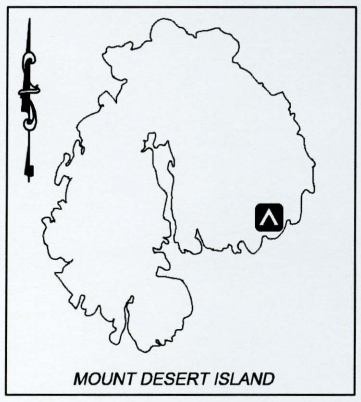


Blackwoods Campground ranger station from the egress side.

Within Blackwoods Campground, buildings in Loop B have all been recently replaced or rehabilitated as part of other construction projects. All of the restrooms in Loop B are historically significant, except for #118 and #120 (Figure 2).

No significant construction activities are proposed at the Amphitheater. Work there would be restricted to basic repairs, including the replacement in-kind of wood benches.

Acadia Na
Blackwoods
Site Plan
Figu

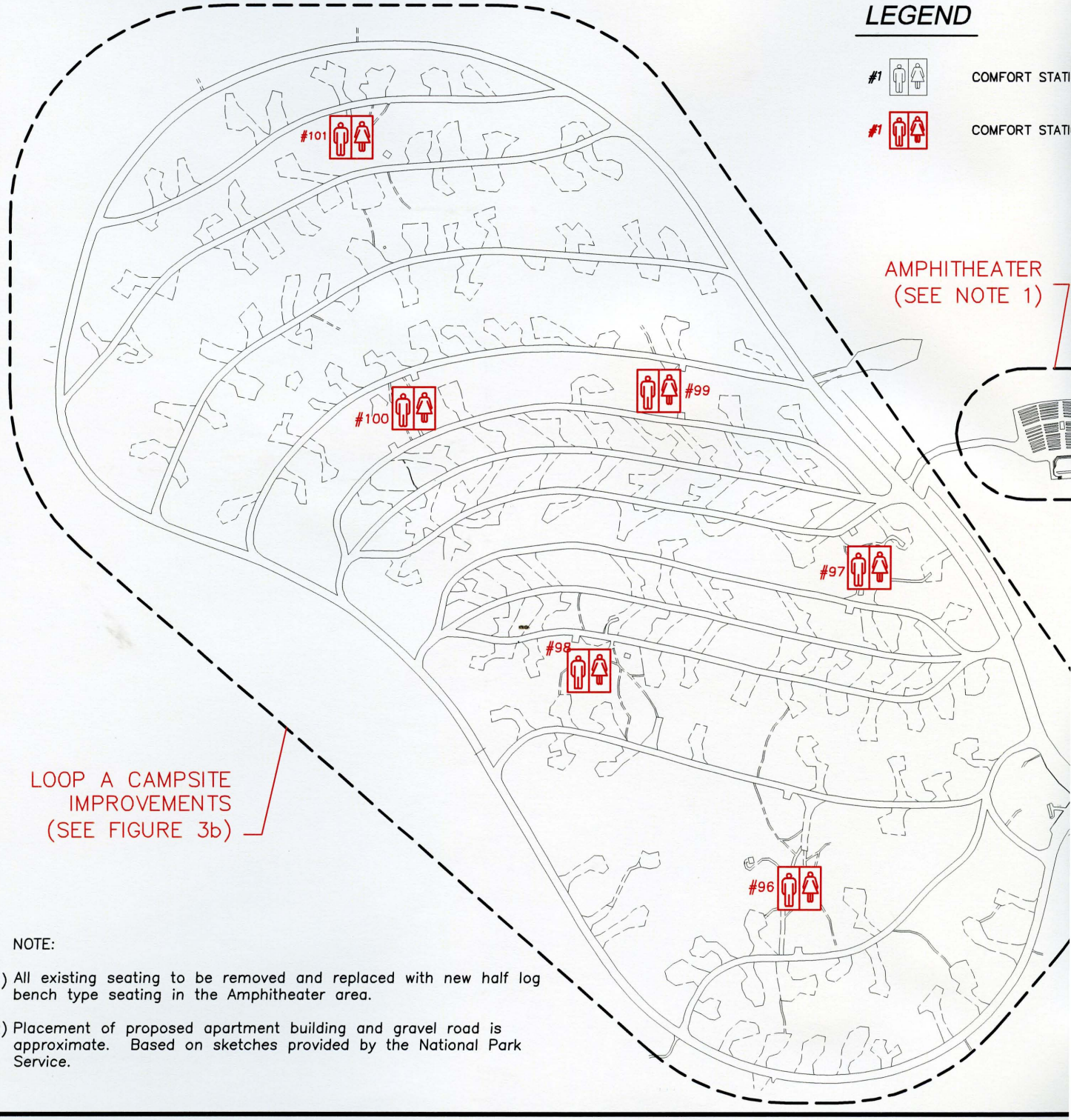




LEGEND

#1 COMFORT STATI

#1 COMFORT STATI



NOTE:

1) All existing seating to be removed and replaced with new half log bench type seating in the Amphitheater area.

2) Placement of proposed apartment building and gravel road is approximate. Based on sketches provided by the National Park Service.

tional Park
Campground
Key Map
e 3a

ON TO REMAIN

ON TO BE RENOVATED

#5

#4

#3

#2

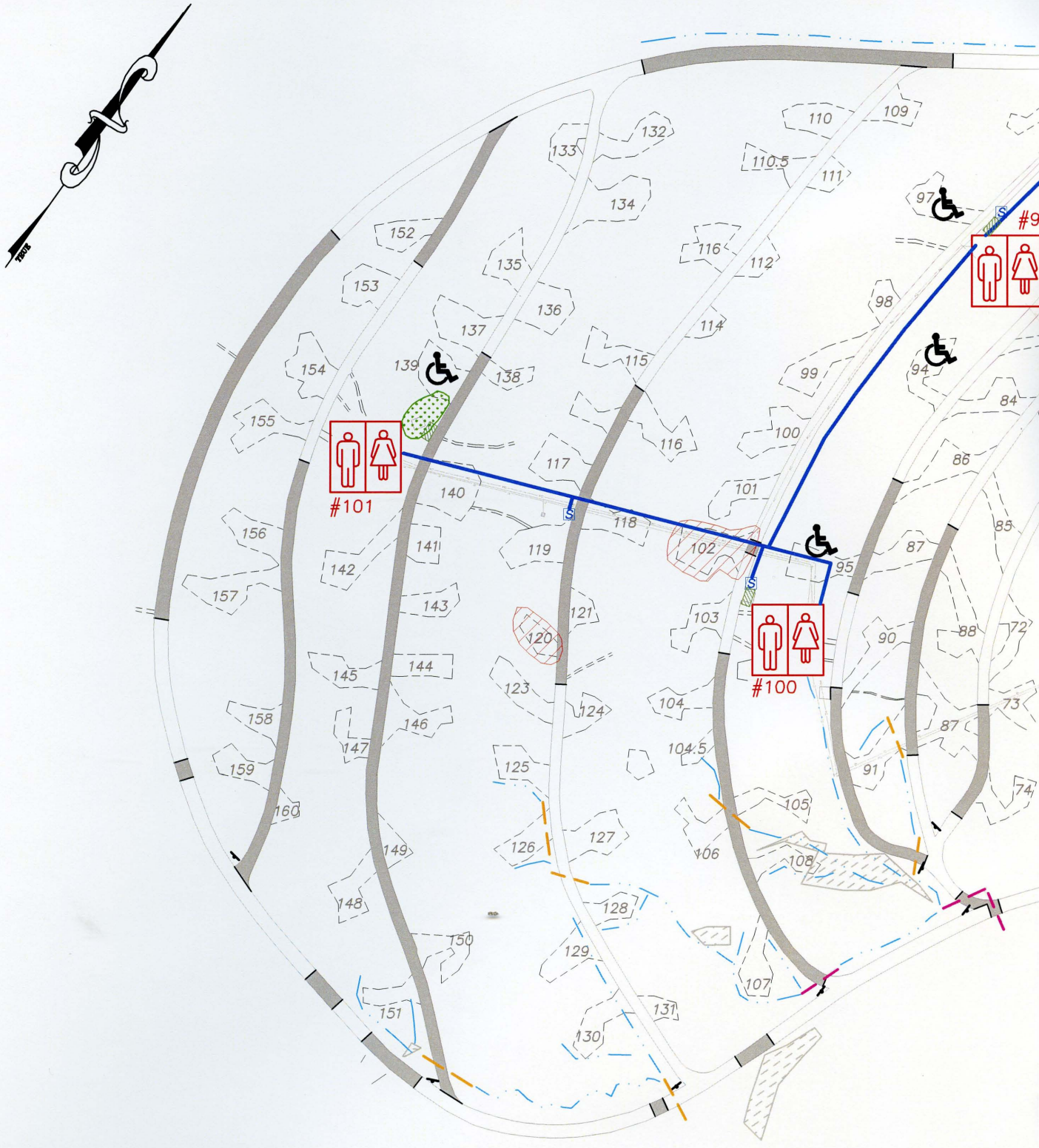
#1

LOOP B CAMPSITE
IMPROVEMENTS
(SEE FIGURE 3c)

RANGERS/DUMP STATION
(SEE FIGURE 3d)

PROPOSED BLACKWOODS
APARTMENTS AND GRAVEL ROAD
(SEE NOTE 2)

NATIONAL PARK SERVICE



Acadia National Park
Blackwoods Campground
Loop A Proposed Improvements
Figure 3b

HOST SITE

#97

#96

#98

LEGEND

- EXISTING WETLANDS (REFER TO FIGURE 4)
- 45 — EXISTING CAMPSITE NUMBER
- 45 — PROPOSED DELETED CAMPSITE
- #1 — COMFORT STATION TO BE RENOVATED
- EXISTING UNIVERSALLY ACCESSIBLE SITE
- PROPOSED UNIVERSALLY ACCESSIBLE SITE
- PROPOSED WATER LINE
- S — PROPOSED SPIGOT
- PROPOSED SEWER LINE
- PROPOSED STORMWATER LINE
- PROPOSED CULVERT
- PROPOSED REPLACE CULVERT
- PROPOSED DRAINAGE DITCH/SWALE
- PROPOSED DUMPSTER PAD
- PROPOSED REVEGETATION AREA
- PROPOSED LOOP ROAD IMPROVEMENT
- PROPOSED STREET SIGN

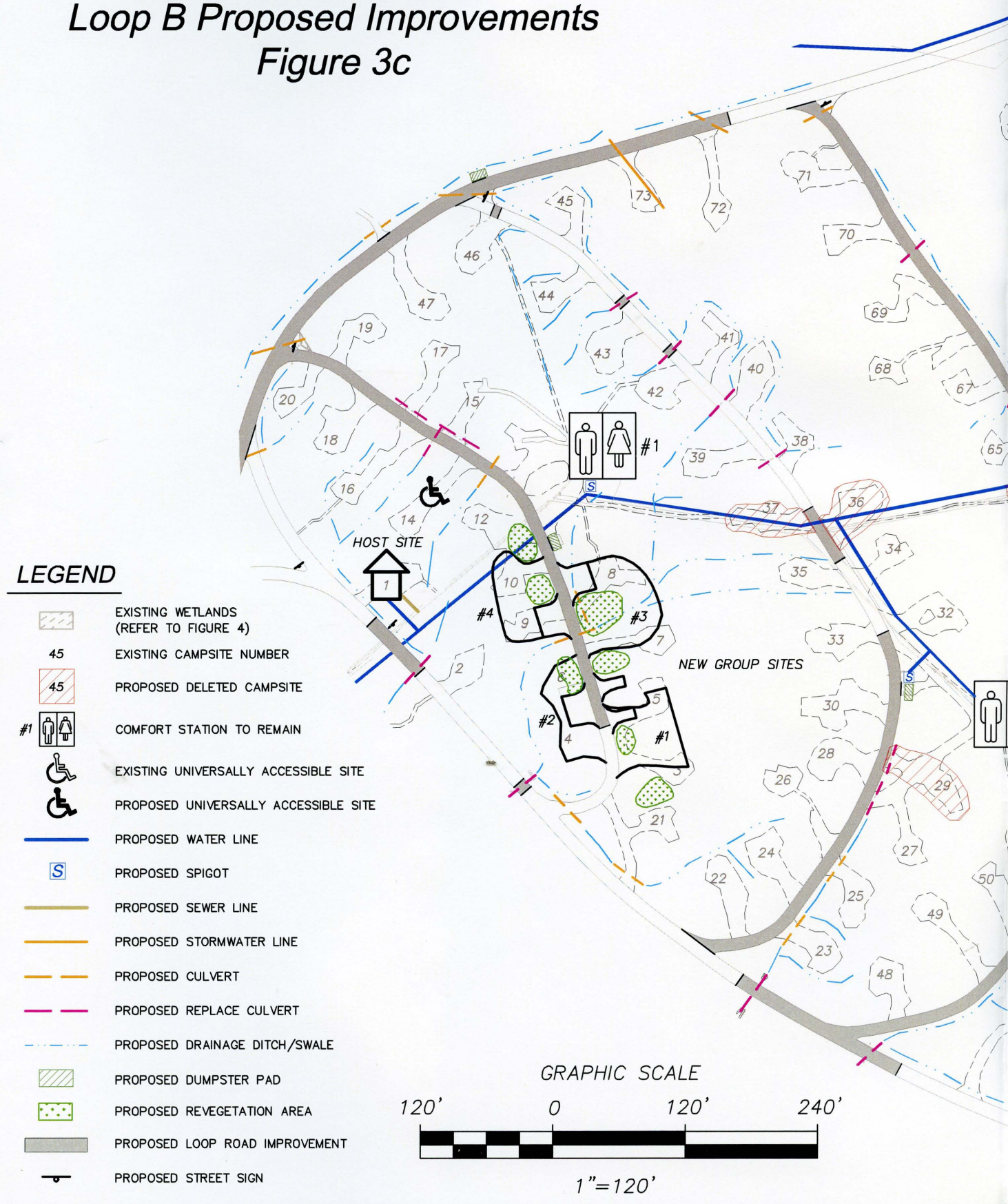
GRAPHIC SCALE

120' 0 120' 240'

1"=120'

NATIONAL PARK SERVICE

Acadia National Park
Blackwoods Campground
Loop B Proposed Improvements
Figure 3c



LEGEND

- EXISTING WETLANDS (REFER TO FIGURE 4)
- 45 — EXISTING CAMPSITE NUMBER
- 45 — PROPOSED DELETED CAMPSITE
- #1 — COMFORT STATION TO REMAIN
- EXISTING UNIVERSALLY ACCESSIBLE SITE
- PROPOSED UNIVERSALLY ACCESSIBLE SITE
- PROPOSED WATER LINE
- S — PROPOSED SPIGOT
- PROPOSED SEWER LINE
- PROPOSED STORMWATER LINE
- PROPOSED CULVERT
- PROPOSED REPLACE CULVERT
- PROPOSED DRAINAGE DITCH/SWALE
- PROPOSED DUMPSTER PAD
- PROPOSED REVEGETATION AREA
- PROPOSED LOOP ROAD IMPROVEMENT
- PROPOSED STREET SIGN

GRAPHIC SCALE

120' 0 120' 240'

1"=120'

TRUE

#4

#5

#2

#3

STONE SWALE

NEW INDIVIDUAL SITES

G5–B

G5–A

G4–B

G4–A

G3

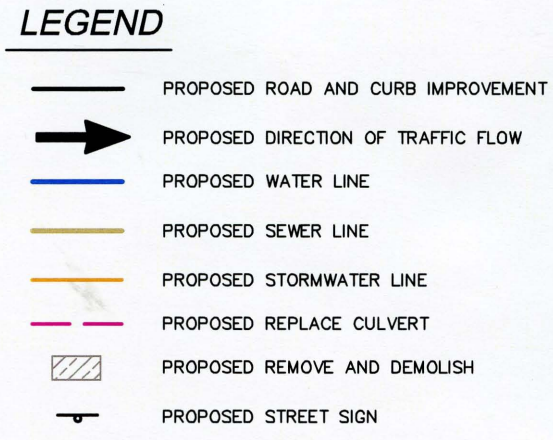
G2

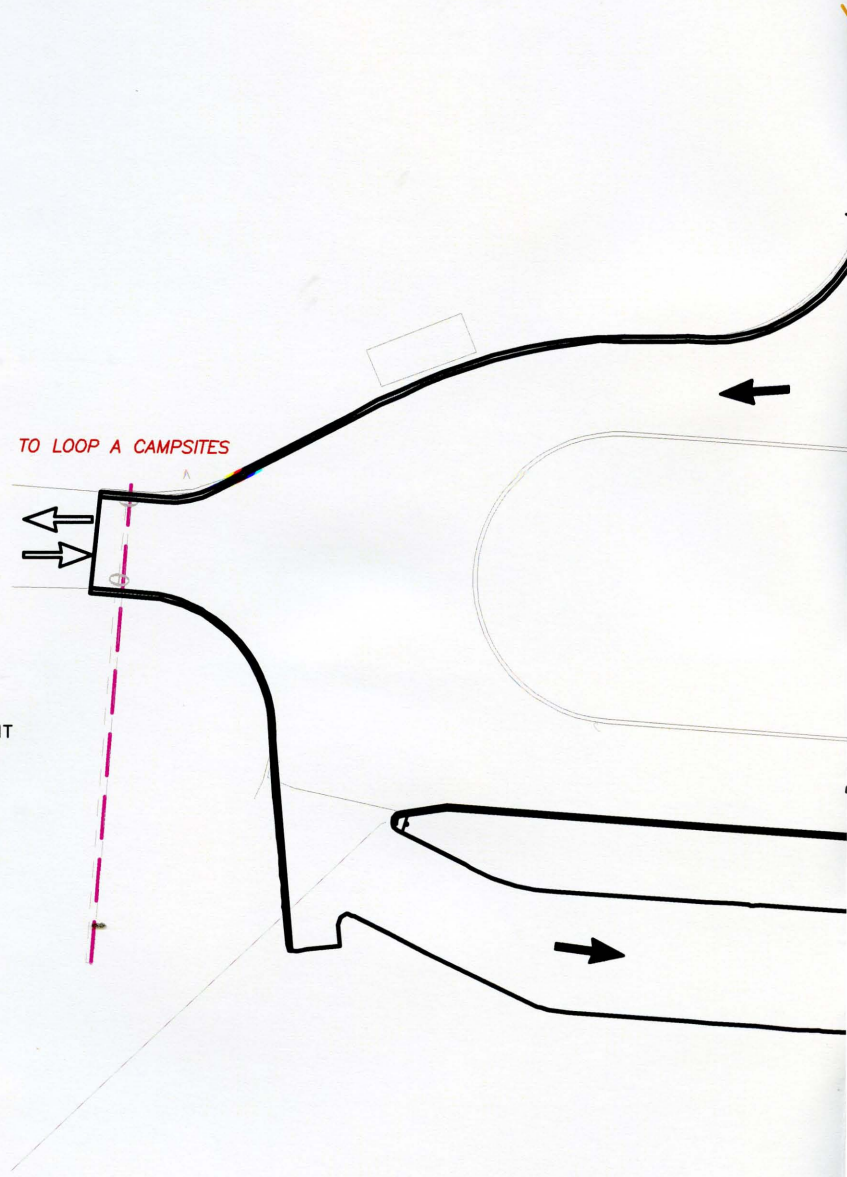
G1–B

G1–A

NATIONAL PARK SERVICE







Acadia National Park
Blackwoods Campground
Rangers/Dump Station Improvements
Figure 3d

TO LOOP B CAMPSITES

RANGER STATION

NEW DUMP STATION

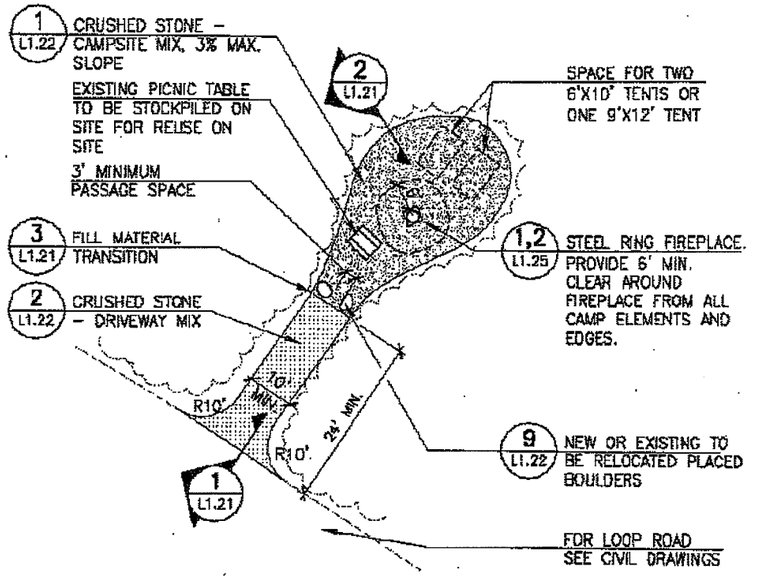
GRAVEL

GRAPHIC SCALE

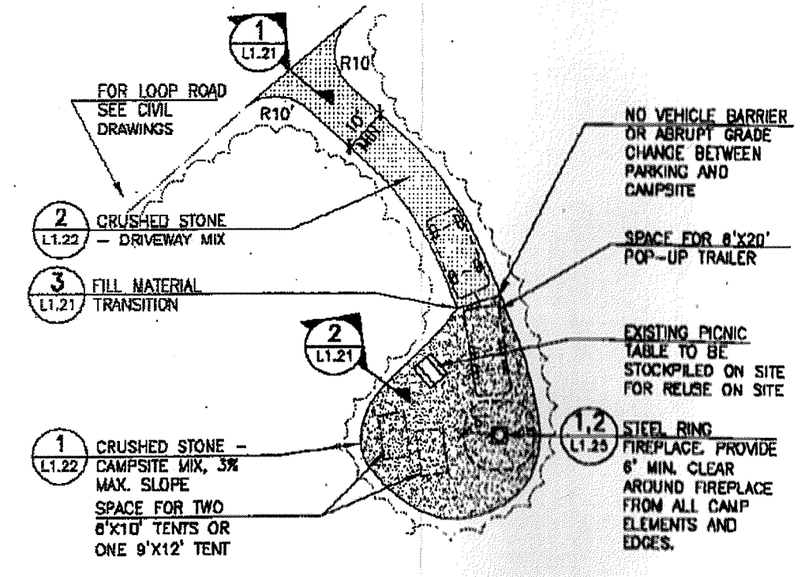
40' 0 40' 80'

1"=40'

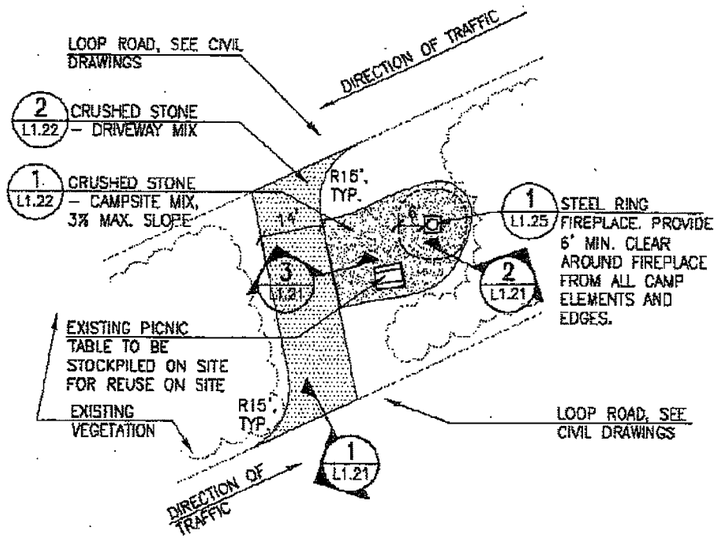
NATIONAL PARK SERVICE



CAMPSITE PROTOTYPE TYPE 1 – STANDARD VEHICLE



CAMPSITE PROTOTYPE TYPE 2 – VEHICLE WITH POP-UP TRAILER



CAMPSITE PROTOTYPE TYPE 3 – RECREATION VEHICLE

NOT TO SCALE

Acadia National Park
Blackwoods Campground
Campsite Prototypes
Figure 3e

Campsites



Campsite with typical furnishings, including picnic table and fire ring.

The proposed rehabilitation would standardize campsite size and features based on the intended use of each type of site. Campsites would be separated into four types: tent sites (192 sites), small trailer or pop-up campers up to 20' long (64 sites), RVs or large trailers up to 35' long and 12' wide (34 sites), and group sites (5 sites). Each site would have a delineated vehicle area and an approximate 15' x 22' living area, including a fire ring and picnic table. Tent sites would have an approximately 16' x 16' tent pad and "living area." Tent pad and living area sites would be raised and delineated using various aggregate materials. Vehicle areas would be delineated with boulders, logs, vegetation, and aggregate materials. Site furnishings, such as picnic tables and fire rings, would be replaced as needed. Sites that do not function well (e.g., because of extremely poor drainage or the lack of privacy) would be closed. The rehabilitation would close 18 campsites.



Single-family campsite. Note bare ground, lack of privacy, and old site furnishings.

The handicap accessible sites would be improved, located closer to restrooms and paths for easier access, and several added to increase the campground's total. Sites would be leveled and parking and picnic areas paved. Universally accessible picnic tables and grills would be installed.

Group sites would be moved to new areas where they would be better separated from family sites. This would help reduce visitor conflicts, as the sites would be closer to the ranger station so that rangers could better monitor activities there. The number of visitors allowed at each group site would be 20 people. Several single-family sites would be reconfigured into the new group sites. The current group sites would be realigned into single-family sites.

Circulation

The circulation system in each loop consists of an outer access road that encircles each of the main camping areas. Parallel internal roads lead to the individual campsites and connect at each end to the outer road. Vehicles, pedestrians, and cyclists use all the campground roads. There is a secondary system of social paths, which are informal paths created by visitors that connect sites with high use areas such as restrooms and water spigots. Deteriorating asphalt and general wear and tear of road surfaces would be repaired. The road system surface would be rehabilitated in some areas structurally, but dimensionally would remain unchanged. Other changes that would be made include reconfiguring the entry area, widening some intersections, and relocating the dumping station to improve safety, aesthetics, traffic flow, and ease of use for visitors. The most functionally useful social paths would be upgraded into

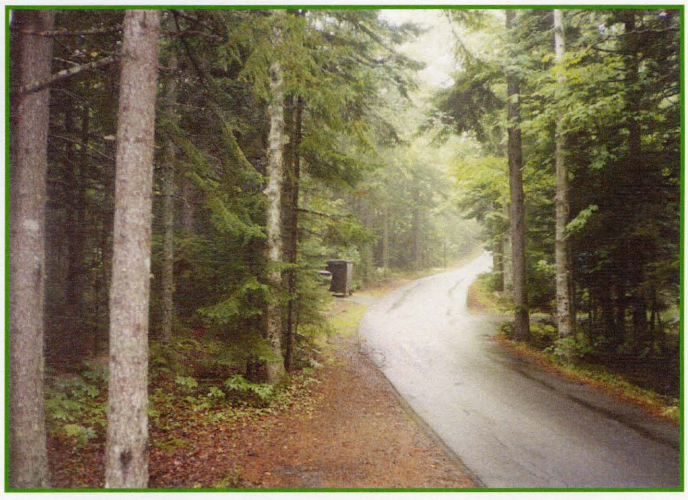
formal trails, while others would be removed through revegetation and regarding. Rehabilitation would keep the current signs and add new signs where needed. All new signs would be the historic style currently in use.

Drainage

The drainage system is a significant component of the campground. It is designed to remove surface and groundwater from the site, keeping the campground dry and usable. High average annual precipitation, shallow groundwater, and bedrock create a high water table and excessive water-flow and surface saturation. The current drainage system is inadequate and causes or contributes to erosion, damage to roadways and building structures, flooding of campsites, and the accumulation of standing water in small puddles, which are breeding grounds for mosquitoes. The drainage system in Blackwoods would be rehabilitated and upgraded to alleviate these problems. Old and damaged culverts would be replaced and new culverts would be added where necessary. Drainage ditches would be cleaned and re-graded to accommodate surface flow. Underdrains would be installed at selected locations along the roadway to prevent base material saturation and road deterioration, and road shoulders would be sloped to improve drainage.

Utilities

Utilities in Blackwoods Campground do not function adequately. The water system would be completely replaced. Water spigots would be added in areas where they are lacking. Minor repairs to the electrical system would be made, including the replacement of aluminum wire conduits. A new pump for the wastewater system would be installed. The current sewage dump station would be moved to a more functional and appropriate location to alleviate traffic congestion and improve the efficiency of the checkout process.



Example of an outer loop road with dumpster and pad.

Deteriorating dumpster pads would be replaced with harder Portland concrete pads that would support their weight.

Revegetation

Understory and shrub vegetation throughout the campsite has been destroyed by years of heavy use. A revegetation plan would be a part of the overall campground rehabilitation. Natural revegetation would be encouraged through site closures, rotations, and blocking access to problem areas and other native vegetation would be planted. Spillover from oversized equipment and the use of social trails would be managed to allow vegetation to become established. An ongoing study implemented through a cooperative effort by ANP staff and the University of Maine has been assessing revegetation options to determine which methods would be the most successful and efficient. Revegetation would establish screening for privacy and campsite definition, control erosion, and provide beautification and habitat value.

Nuisance Wildlife

Rehabilitation would include installing dishwater disposal sinks with food scrap strainers ("dishwater disposal stations") to limit food sources for nuisance wildlife, including raccoon, striped skunk, and porcupine. Visitors would be required to dispose of food scraps in the trash and thoroughly drain dishwater into the dishwashing sinks. Education efforts by Park staff would continue to advise visitors to keep food in secure containers where they cannot be accessed by nuisance wildlife. Food storage containers would be provided for individuals with "soft-sided" or "convertible" vehicles, for which food cannot be stored.

Campground Management Policies

Rehabilitation would implement new policies to limit generator use to the hours between 9am and 6pm and limit the size of RV equipment to a width of 12 feet. The new ANP campground mission statement would be implemented and has been used as a guiding principal for planning this rehabilitation. Firewood collection in the campground would be banned, but would be allowed within 100 feet of all other paved Park roadways.

Staff Housing

Rehabilitation would create a three-unit (six bedrooms total) apartment type building for staff housing, create two host campsites with electric and water hookups, and relocate trailer-parking sites for staff.

Scheduling

Rehabilitation would be scheduled in such a way as to allow one loop of Blackwoods Campground to remain open from mid-May until early October each year until the project is complete. Rehabilitation would be expected to last for two to three years. It would probably be necessary to close the campground to winter camping for one winter to accommodate rehabilitation. If Congress approves the funding as currently scheduled, rehabilitation would start in the fall of 2004. However, the Congressional budget process could delay this.

Mitigation

Mitigation measures will be employed to avoid and minimize adverse impacts to the natural and human environment. Mitigation measures focus on three central issues: protecting natural resources, protecting cultural resources, and minimizing disturbance and inconvenience to campground visitors. **Best Management Practices (BMPs)** will be employed to avoid and minimize soil loss and runoff through the use of sediment and erosion control devices. These devices and practices include silt fences, sedimentation basins, spraying water to reduce air-born dust, demarcating the limits of construction, covering soil piles, and keeping stockpiles outside of vegetated areas and away from wetlands and streams. Construction practices will be employed that avoid adverse impacts to the historic structures through sensitive rehabilitation efforts. Scheduling the rehabilitation actions with most of one loop remaining open at all times will avoid much of the indirect adverse effects of the construction. This scheduling will minimize visitor's exposure to the noise, dust, and fumes associated with the construction. Some construction may be completed during the winter, to reduce some of the potential adverse impacts that could occur.

2.4 Alternative C

Alternative C would include most of the rehabilitation elements described in Alternative B as well as additional features. The rehabilitation components of Alternative B are not restated below, rather the different components of Alternative C are presented. Loop A would remain largely unchanged to retain the historic integrity of this loop. Necessary rehabilitation of restrooms and campsites in Loop A would occur as described for Alternative B.

Buildings

Rehabilitation of existing buildings would occur as described for Alternative B, except that the entire ranger station would be remodeled using a design reflecting that of the CCC era.



Ranger station front and east side.

Campsites

All of the campsite rehabilitation activities described in Alternative B would be implemented. In addition, several sites designated as universal access would have electric hook-ups for those with special needs, such as operating or recharging medical equipment (i.e., electric wheelchairs) and necessary refrigeration for proper storage of medications.

Circulation

The road and trail system would be rehabilitated as described for Alternative B.

Drainage

The drainage system would be rehabilitated and upgraded as described in Alternative B.

Utilities

Existing utilities in Blackwoods Campground would be upgraded as outlined in Alternative B.

Revegetation

Revegetation within the campground would occur as described for Alternative B, although some of the camping pads in RV sites would be wider, thus reducing the amount of area available for revegetation.

Nuisance Wildlife

Rehabilitation would include installing dishwashing stations to limit this food source for nuisance wildlife as described for Alternative B.

Campground Management – Park Policies

Revised policies would be implemented banning generator use and limiting the size of RV equipment to 35 feet in length and 15 feet in width. Collecting firewood in the campground would be banned.

Staff Housing

All of the elements relating to staff housing proposed would be completed as outlined in Alternative B.

Scheduling

The entire campground would be closed for the duration of the rehabilitation, which would be expected to last at lease one-year. Scheduling the rehabilitation actions would focus on completing the work as efficiently and quickly as possible. Rehabilitation at Blackwoods Campground would not commence until the rehabilitation of the Seawall Campground and Picnic Area was complete, thus keeping one campground fully open at all times.

Mitigation

Alternative C would employ the mitigation measures, including BMPs, employed through Alternative B.

2.5 Alternatives Considered, but Eliminated from Consideration

Several rehabilitation alternatives were considered, but eliminated from further study primarily due to the implementation of the new ANP campground mission statement and policies approved through the Seawall Campground and Picnic Area EA. These policies were also used to shape the proposed policies presented in this EA. Modernization was initially considered which included adding showers, increased lighting, adding electric hookups at each site, expanding RV sites to accommodate large RV equipment and widening the roadways. Furthermore consideration was given to banning RV equipment altogether from the campground and banning all firewood collection in the Park. None of the alternatives fully met the project purpose and generally conflicted with current management policies and the campground mission statement. Therefore, each was rejected from further consideration.

2.6 Preferred Alternative

Alternative B is the preferred alternative because it meets the basic project purpose while minimizing adverse impacts to cultural and natural resources. The rehabilitation would eliminate short-term and long-term structural and aesthetic deterioration, repair and preserve character-defining features of the cultural landscape, correct drainage problems, control erosion, replace vegetation, improve campground conditions, and improve the general visitor experience. The rehabilitation eliminates potential safety hazards and deficiencies. This rehabilitation work would be technically feasible and appropriately funded.

Alternative A, No Action, would not meet the basic project purpose because no rehabilitation or upgrade of campground facilities would occur. The uncorrected deficiencies could lead to structural deterioration of buildings, environmental degradation, further loss of aesthetic appeal, and an increased potential for unsafe and unsanitary conditions for Park visitors and staff. While short-term adverse impacts generated by the rehabilitation may be eliminated by the No Action alternative, long-term adverse impacts to natural and cultural resources and the visitor experience would likely occur.

Alternative C would meet the basic project purpose by rehabilitating and upgrading campground facilities. The integrity of the cultural landscape would be maintained through sensitive rehabilitation of character-defining features. However, this alternative would include removing the existing ranger station and rebuilding it in a historic style similar to the Seawall ranger station, banning generators, and adding electrical outlets at selected handicap sites.

2.7 Environmentally Preferred Alternative

The Environmentally Preferred Alternative is defined by the CEQ as "the alternative that will promote the national environmental policy as expressed in the National Environmental Policy Act [Section 101 (b)]." This section states that the Environmentally Preferred Alternative should:

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

In accordance with the analysis of impacts of each alternative, Alternative B has been identified as the Environmentally Preferred Alternative. Alternative B meets the project purpose by rehabilitating the campground and improving the visitor experience, while maintaining cultural resources and preventing environmental degradation. The rehabilitation effort has been designed to avoid and minimize adverse impacts to cultural and natural resources and to the visitor experience at the Park. The rehabilitation process for Blackwoods Campground is also being planned by Park staff to avoid and minimize adverse impacts. The potential adverse impacts are short-term and temporary in nature and all can be controlled and minimized. There are no permanent adverse environmental effects that would result from the rehabilitation. Numerous beneficial effects would be anticipated by completing the full rehabilitation. Important environmental benefits include revegetating the campground, reducing campsite sprawl and associated soil and vegetation impacts, and eliminating erosion caused by inadequate drainage, lack of vegetation, and informal trails.

Table 1 Summary of Rehabilitation Alternatives for Blackwoods Campground

Goals (in bold) and Issues	Alternative A – No Action	Alternative B – "Preferred Alternative" Rehabilitate Retaining Rustic Characteristics	Alternative C – Rehabilitation Plus Modifications
Goal 1. Preserve and Protect the Rustic Character, Natural Resources, Historic Structures, and Cultural Landscape of Blackwoods Campground			
Restrooms and the amphitheater are in various stages of deterioration.	Restrooms and the amphitheater would remain as they are. Routine maintenance would be performed as funds became available.	Replace roofing, siding, trim, floors, and furnishings with historically compatible materials in five restrooms. Amphitheater walks and benches would be rehabilitated.	All the rehabilitation actions of Alternative B.
Ranger station lacks adequate functional workspace and lacks style elements of the original facility.	Ranger station would remain as is.	Enlarge and rehabilitate the facility in a style architecturally compatible with other Park buildings.	The existing facility would be removed and replaced with a new structure that would closely resemble the original 1942 ranger station.
Roadways are not engineered for heavier modern vehicles such as RVs, snowplow trucks, and maintenance vehicles.	Routine maintenance would be performed as funding became available.	Re-engineer and rehabilitate roads to withstand the weights of RVs, snowplow trucks, and maintenance vehicles.	All the rehabilitation actions of Alternative B and additional curve clearing and widening.
Many of the fire rings and picnic tables are deteriorating.	Picnic tables and fire rings would be repaired or replaced on a limited basis as funding became available.	Replace and repair all deteriorated picnic tables and fire rings.	All the rehabilitation actions of Alternative B.
Poor drainage creates standing water around buildings, which damages foundations.	Basic maintenance would be performed, but underlying drainage problems would not be resolved.	Grade around buildings to divert flow away from buildings.	All the rehabilitation actions of Alternative B.

Table 1 Summary of Rehabilitation Alternatives for Blackwoods Campground

Goals (in bold) and Issues	Alternative A – No Action	Alternative B – "Preferred Alternative" Rehabilitate Retaining Rustic Characteristics	Alternative C – Rehabilitation Plus Modifications
Water often impounds along roadways and contributes to the deterioration of the roads.	Basic maintenance would be performed, but the underlying drainage problems would not be resolved.	Replace or install culverts where needed. Clean and re-grade roadside drainage swales. Improve roadway shoulders to allow better drainage.	All the rehabilitation actions of Alternative B and excavate a swale system through the central wetland (Figure 2, G – O).
Most of the extra lane on the entrance road is no longer needed for queuing vehicles. The wide road changes the character of the entrance road, increases impervious surfaces and run-off, and reduces vegetative cover.	The entrance road would remain as currently configured.	Most of the extra lane on the campground entrance road would be removed and the area would be revegetated with native plants	All the rehabilitation actions of Alternative B.
Screening provided by understory vegetation has been lost from the campground.	There would be no effort to revegetate the campground understory.	Replant vegetation with native grasses, shrubs and trees. Educate visitors about revegetation efforts and encourage the practice of "Leaving No Trace," essentially maintaining vegetation and leaving an area as it was found.	All the rehabilitation actions of Alternative B.
Historic signs marking individual campsites have been removed and replaced with numbers painted on the roadways.	Campground signs would remain as they are. Deteriorated signs would be replaced and campsite numbers repainted as necessary.	Retain historic road signs and replace them as needed. Historic-style signs would be placed at each campsite. Re-paint campsite numbers on roadways.	All the rehabilitation actions of Alternative B.
Campsites and tent pads are not clearly delineated, soil is heavily compacted, and vegetation is denuded.	Campsites would remain as they are. Visitors would continue to be educated on how to minimize impacts on natural and cultural resources.	Delineate campsite borders using natural materials, such as trees and boulders. Elevate tent pads using aggregate material. Revegetate selected areas. Close some problem sites. Camper education about the principals of "Leave No Trace" would continue.	All the rehabilitation actions of Alternative B.

Table 1 Summary of Rehabilitation Alternatives for Blackwoods Campground

Goals (in bold) and Issues	Alternative A – No Action	Alternative B – "Preferred Alternative" Rehabilitate Retaining Rustic Characteristics	Alternative C – Rehabilitation Plus Modifications
Rehabilitating the campground would remove native plants.	There would be no major rehabilitation effort. Minor soil disturbances would continue to be allowed to revegetate naturally.	There would be a major revegetation effort to stabilize soils, restore the rustic natural setting, and replant affected areas.	All the rehabilitation actions of Alternative B.
Campground rehabilitation could increase the likelihood of introducing non-native plants and animals.	There would be no major rehabilitation effort. Soils and plants used in frequent maintenance would be monitored for non-natives.	Disturbed areas would be monitored for three years to detect and treat infestations of non-native plants and animals introduced during the rehabilitation effort.	All the rehabilitation actions of Alternative B.
Goal 2. Improving the Camping Experience and Reducing Visitor Conflicts, Improving Circulation of Vehicles and Pedestrians, Improve Visitor and Employee Safety by Reducing Conflicts with Wildlife, and Minimizing Impacts to Visitors and Local Businesses			
Generator use creates noise conflicts between visitors and exhaust fumes reduce air quality at adjacent sites during some atmospheric conditions.	Generator use would be allowed from 7am until 10 pm, allowing 15 hours of use and a minimum of 9 hours of quiet time per day.	Generator use would be allowed from approximately 9am until 6pm, allowing 9 hours of use. Quiet hours would be increased to at least 15 hours per day.	Generator use would be prohibited in Blackwoods Campground.
Conflicts arise between organized groups and visitors using adjacent individual sites due to noise and invasion of privacy.	Five group sites would remain, each accommodating up to 20 visitors. Park Rangers would continue to monitor activities and noise levels.	The number of group sites would be reduced to four, and these sites would be relocated to an area near the ranger station, generally away from tent sites. Each group site would accommodate up to 20 visitors.	Five group campsites would be relocated to an area more separated from individual campsites (exact location to be determined). Each group site would accommodate up to 20 visitors.
Water spigots are far away from some sites.	The number and location of water spigots would not change.	Additional cold-water spigots would be installed in the campground.	All the rehabilitation actions of Alternative B.

Table 1 Summary of Rehabilitation Alternatives for Blackwoods Campground

Goals (in bold) and Issues	Alternative A – No Action	Alternative B – "Preferred Alternative" Rehabilitate Retaining Rustic Characteristics	Alternative C – Rehabilitation Plus Modifications
Most restrooms are not insulated, and cannot be used during the increasingly busy spring and fall. Only pit toilets are available in winter.	Restroom facilities would remain as currently configured.	One restroom in each loop would be insulated and would be heated during the spring and fall. A composting toilet would be installed for winter operations.	One restroom in each loop would be insulated and would be heated during spring, fall, and winter.
Entrance/Exit area has poor circulation. RV users waiting to use the sewage dump area often create traffic congestion.	Entrance/Exit area and sewage dump area would remain as they are.	Reconfigure entryway to improve ingress and egress. Relocate sewage dump away from the main court with additional space for vehicles to queue without impeding other traffic flows.	All the rehabilitation actions of Alternative B.
The road configuration at the Entrance/Exit area near the Blackwoods ranger station is confusing.	Entrance/Exit area would remain in its current configuration.	Entrance/Exit area to the campground would be reconfigured.	All the rehabilitation actions of Alternative B.
Social trails bisect camping sites, damage vegetation, compact soil, disturb campers, and channel rainwater runoff into buildings and campsites.	Social trails would remain as they are.	Formalize useful social trails and remove those that do not work well. Upgrade and elevate trails with crusher fines and wood chips and use asphalt for handicap accessible trails.	All the rehabilitation actions of Alternative B.
Campers leave food scraps around campsites, attracting raccoons and skunks. Raccoons and skunks can bite or scratch visitors and employees, and can carry rabies.	Campers would continue to be limited to using restrooms and existing spigots for dishwashing, and they would continue to dispose of food scraps in trash receptacles. Efforts to educate campers about proper food disposal and storage would continue.	In addition to education and enforcement, a dishwater disposal or clog-less sink would be installed at each restroom and at 11 other locations throughout the campground. Efforts to educate campers about proper food disposal and storage would continue.	All the rehabilitation actions of Alternative B.
Campers without hard-sided vehicles have no way to store food to avoid attracting wildlife.	No food storage containers are available.	Food storage containers would be added to a small number of campsites.	All the rehabilitation actions of Alternative B.

Table 1 Summary of Rehabilitation Alternatives for Blackwoods Campground

Goals (in bold) and Issues	Alternative A – No Action	Alternative B – "Preferred Alternative" Rehabilitate Retaining Rustic Characteristics	Alternative C – Rehabilitation Plus Modifications
Campground closure during rehabilitation would reduce the number of campers who could be served by the NPS and could affect local businesses.	The campground would remain open, but deteriorating conditions could force a closure.	At least one loop would remain open during the peak (July-August) season, while the other loop was being rehabilitated. Rehabilitation would be expected to last two to three years.	The entire campground would be closed for the duration of the rehabilitation, which would be expected to last one to two years.
Goal 3. Improve Campground Facilities for Those with Special Needs			
Campsites, restrooms, and other facilities do not meet ADA guidelines for universal accessibility.	No additional campsites or facilities would be made universally accessible.	Ten campsites, five restrooms, the amphitheater, and ranger station would be rehabilitated in accordance with ADA guidelines.	All the rehabilitation actions of Alternative B.
Campers with special needs (electric wheelchairs, medications that need constant refrigeration) need access to electricity.	Campers could use generators to supply electricity needs for special circumstances.	Campers could use generators to supply electricity for special circumstances, although generator hours would be reduced somewhat.	Electric hookups, for use by those with special needs, would be supplied to a small number of campsites, since generators would be prohibited.
Goal 4. Improving Park Operations			
The Park lacks sufficient housing for employees and volunteers.	No additional housing would be constructed.	Add campground staff host sites within the campground, retain trailer parking, and add apartment type housing.	All the rehabilitation actions of Alternative B.
The water system is outdated, corroded, and causes frequent maintenance problems.	Basic maintenance would be performed as needed.	The water distribution system, including interior feed lines and the main line, would be replaced.	All the rehabilitation actions of Alternative B.
Electrical system needs minor repairs.	Electrical system would remain as it is.	Replace transformers and cable as needed, based on condition and adequacy. Replace aluminum conduit with copper.	All the rehabilitation actions of Alternative B.

Table 1 Summary of Rehabilitation Alternatives for Blackwoods Campground

Goals (in bold) and Issues	Alternative A – No Action	Alternative B – "Preferred Alternative" Rehabilitate Retaining Rustic Characteristics	Alternative C – Rehabilitation Plus Modifications
Wastewater system pumps often break down.	Basic maintenance would be performed as funding becomes available.	Replace wastewater pump system with new self-priming effluent pumps.	All the rehabilitation actions of Alternative B.
Dumpster pads soften during the summer heat and the dumpsters become difficult to empty.	Dumpster pads to remain as they are.	Replace current dumpster pads with harder Portland concrete pads.	All the rehabilitation actions of Alternative B.
Ash dump areas are inadequate.	Continue to deposit ash at current site.	Design and build a new ash dump area.	All the rehabilitation actions of Alternative B.
Goal 5. Revising Campground Policy			
Oversized RV equipment causes damage to campsites and vegetation and spillover into adjacent sites impacts vegetation.	ANP policy toward the sizes of RV equipment would not change, allowing RV equipment up to 35 feet in length and no limit on the width.	Implement the new Park policy: RV equipment would be limited to 35 feet in length and 12 feet in width.	RV equipment would be limited to 35 feet in length and 15 feet in width.
Campers collect dead and down wood to burn, removing coarse woody debris and trampling understory vegetation throughout the campground.	The NPS would continue to allow campers to collect dead and down wood in the campground.	The NPS would prohibit collecting dead and down wood in the campground, but would allow it to be collected within 100 feet of all other paved Park roadways.	Collecting firewood within the Park would be banned.
Costs			
	Variable, incorporated into the annual budget.	$3,177,478	$3,202,478

3 Affected Environment

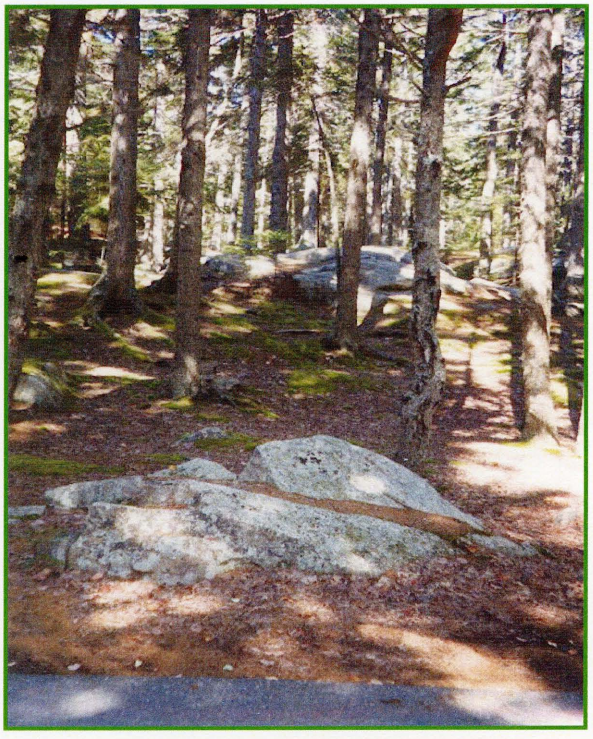
3.1 Introduction

This chapter describes the existing environmental conditions in and immediately adjacent to Blackwoods Campground. An interdisciplinary team of biologists and cultural resource specialists completed a thorough review of Blackwoods Campground during the fall of 2002. Biologists completed an inventory of wetlands and streams, documented the vegetative communities, made observations on water resources, noted wetland functions and values, obtained Global Positioning System locations on the wetlands and streams, conducted searches for rare plants and wildlife, and made wildlife observations. A review of potential archeological resources and the cultural landscape was completed. Background research was completed by reviewing existing information and by meeting with knowledgeable Park staff relative to visitor use and experience. An assessment of impacts that may result from each alternative is presented in Section 4 of this EA.

3.2 Natural Resources

3.2.1 Soils

Soils within ANP are generally derived from and are locally underlain by glacial till. Bedrock typically occurs on peaks and crests of ridges on the steeper hillsides. Many of the steepest hillsides have highly erodible soils with evidence of past avalanches and scarring. Muck soils dominate the lowlands along the wetlands where more level terrain allows the appropriate conditions for developing these soils. The remaining soils are generally well drained to excessively well drained, supporting numerous intermittent streams that drain the upper slopes. Soil descriptions are based on the Natural Resource Conservation Service (1998) soil survey of Hancock County, Maine.



Maritime Spruce Fir Forest with shallow soils and exposed rock.

The majority of Blackwoods Campground is on Lyman – Tunbridge Complex soils with 0 – 15% slopes. This soil type consists of nearly level to rolling hills on the crests and side slopes of upland glacial till. This complex is made up of 40% shallow, somewhat excessively drained Lyman soil; 35% moderately deep, well-drained Tunbridge soil;

and 25% other soils. The permeability of these soils is moderately rapid and erosion is a moderate hazard. The depth of the root zone and the movement of water through the soils are restricted by the bedrock at a depth ranging from 10 to 40 inches.

A portion of Blackwoods Campground is on Hermon – Colton – Rock Outcrop complex soils with 3 – 15% slopes. This soil type consists of deep sloping, somewhat excessively drained soils on moraines and terraces. This complex typically contains 30% Herman soils, 25% Colton soils, 20% Rock Outcrop, and 25% other soils. Hermon soils are glacial till derived from granite and gneiss while Colton soils are water-sorted sand and gravel deposits. The rock outcrops consist mainly of exposed granite, diorite, or gabbro bedrock. These soils are not subject to flooding, as permeability is moderately rapid to very rapid for both soils and surface runoff is medium to slow.

A small section of Loop A and the camp court and entrance area are on Naskeag – Schoodic Complex soils with 0 – 8% slopes. This soil type consists of approximately 45% poorly drained Naskeag soils, 30% shallow excessively drained Schoodic soils, and 25% other soils. This soil type is nearly level and found on low upland glacial till ridges in coastal areas. The Naskeag soils are wet soils with the water table within 1.5 inches from November to May. Schoodic soils consist of very shallow to bedrock, excessively drained soils on uplands formed in a very thin mantle of glacial till derived from granite and schist. The depth of the root zone and the movement of water through the soils are restricted by the shallow depth of the bedrock (1 to 10 inches).

3.2.2 Natural Communities

Table 2 provides a brief description of the natural communities, wetlands, and streams that are located in Blackwoods Campground. The natural community designations used here are based on descriptions presented in the *Natural Landscapes of Maine: A Classification of Vegetated Natural Communities and Ecosystems* (Gawler 2001). Using this classification system, a natural community is defined as "an assemblage of interacting plants and animals and their common environment recurring across the landscape, in which the effects of human intervention are minimal." Dominant species observed in the communities at this site were used to classify each system and were included with the natural community designation to appropriately describe each area. Common and scientific names of all plant species observed in Blackwoods Campground are listed in Appendix A.



Social trail leading through a Spruce- Northern Hardwoods Forest.

Blackwoods Campground is located in a maritime spruce-fir forest. Near the upper reaches of the campground, this community type mixes with a spruce-northern hardwood forest and scattered white pine. The forest is fairly uniform, with openings restricted to the roads and larger campsites. Quaking aspen is found more commonly around these open areas. The coniferous species represent an even aged stand and show some evidence of insect infestation and disease. The shrubs and herbaceous vegetation in the forest are generally sparse, except in wetland areas, due to low light and heavy camper foot traffic. No rare plants were observed in this area.

An assessment of the vegetative community was completed by Dunford (1971), which documented the characteristics of the upland forested areas. Red spruce (*Picea rubens*) and balsam fir (*Abies balsamea*) accounted for 89% and 63% of the canopy in Loops A and B, respectively. Loop B had more diversity with paper birch (*Betula papyrifera*), eastern white pine (*Pinus strobus*), red maple (*Acer rubrum*), smooth shadbush (*Amelanchier laevis*), and wild-raisin (*Viburnum nudum cassinoides*) account for over 30% of the canopy. This data is consistent with the current vegetative composition.

Table 2 Natural Communities in Blackwoods Campground

Community	Dominant Species
Upland Community[1]	
Spruce- Northern Hardwoods Forest	Red spruce with white pine on the upper slope of Loop B. White birch and red maple were mixed in some areas. Herbs included big-leaved aster, wild sarsaparilla, and bunchberry.
Maritime Spruce Fir Forest	Red spruce and balsam fir dominate, with red maple, yellow birch, and white birch. Shrubs included balsam fir, wild-raisin, meadowsweet, and sheep laurel. Herbs were lowbush blueberry and wild sarsaparilla.
Wetland Community[2] **Loop A**	
Small palustrine, persistent, seasonally flooded, emergent wetland (PEM1E).	Nodding sedge and flat-topped white aster with scattered alder.
Small palustrine, needle-leaved evergreen, seasonally flooded, forested wetland (PFO4E).	Sphagnum moss with a mannagrass species mixed in. The forest around this depression was dominated by red spruce.
Perennial stream (R2UB2) with palustrine, needle-leaved evergreen, seasonally flooded, spruce-fir-cinnamon fern swamp (PFO4E) and a palustrine, broad-leaved deciduous, scrub-shrub wetland (PSS1).	The largest wetland in the campground occurred along a drainage in Loop A. This drainage was dominated by red maple, balsam fir, and scattered red spruce. Shrubs included sheep laurel, winterberry, and speckled alder. Herbs consisted of cinnamon fern, bluejoint, and orange touch-me-not. Due to the altered condition of this wetland, categorization is uncertain.
Small palustrine, needle-leaved evergreen, seasonally flooded, forested wetland (PFO4E).	Sphagnum moss. Trees surrounding the depression included red spruce, northern white cedar, and balsam fir.
Small palustrine, needle-leaved evergreen, seasonally flooded, forested drainage (PFO4E).	Balsam fir, red maple, bluejoint, and sphagnum moss.
Small palustrine, needle-leaved evergreen, seasonally flooded, forested drainage (PFO4E).	Hemlock, balsam fir and sensitive fern.
Small palustrine, persistent, seasonally flooded, emergent wetland (PEM1E).	Steeple bush and barber pole sedge.
Wetland Community[2] **Loop B**	
Small palustrine, persistent, seasonally flooded, emergent wetland (PEM1E).	Bluejoint and path rush.
Small palustrine, needle-leaved evergreen, saturated, forested seep (PFO4B).	Bluejoint, sphagnum moss, and club mosses. The trees above the seep were red spruce, red maple, and balsam fir.
Small palustrine, persistent, seasonally flooded, emergent wetland (PEM1E).	Meadowsweet, soft rush, and sphagnum moss.

[1] Based on Gawler (2001). [2] Based on Cowardin *et al.* (1979).

3.2.3 Wetlands and Streams

Description

Wetland and stream resources associated with Blackwoods Campground have been given an alphanumeric code that follows the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin *et al.* 1979). The small size, fragmented nature and disturbance of wetlands located in the campground made classification difficult. The categorization of these wetlands is an approximation rather than a clear categorical distinction. Figure 4 provides a map of the wetlands and stream.

Seven distinct wetlands were located in Loop A (Wetlands I – O) (Figure 4). These wetlands were small, but more significant wetlands were associated with a stream. Other man-made drainage channels were located here, but these did not have hydrologic indicators and were not classified as wetlands. Furthermore, these areas did not have wetland plants and hydric soils.

The first small wetland, which was man-made, was located in a drainage swale (Wetland F) along the edge of the outer camp road. The second wetland was a small wet pocket between two ledges (Wetland G). The third wetland was the largest at the Blackwoods Campground. This wetland encompassed a small stream (R2UB2) and was intersected by campground roads at several locations. The stream flowed through culverts between the roads, but the roads created a barrier for some water flow. This barrier to water flow resulted in several wetlands being created in the sections between the roads. The stream (Wetlands H, I, J, and L) started as a wet pocket (Wetland N) and flowed south through this wetland. At the southern edge of the stream, it was absorbed into the ground and the habitat again became maritime spruce-fir forest. This wetland was difficult to categorize as a distinct natural community due to its fragmented and disturbed nature. The closest natural community type would be a spruce-fir-cinnamon fern swamp mixed with areas of scrub-shrub wetland (PSS1). The fourth wetland was located just outside the campground along the outer loop road (Wetland P). This wet pocket was located between a ledge and the road. The fifth wetland was a small drainage located between campsites 128 and 130 (Wetlands S and Q). The sixth wetland was a small drainage and seepage near campsite 108 (Wetland R). The last wetland located in Loop A was a small wet pocket at the junction of two camp roads (Wetland T). This wetland may be man-made, based on its location between the roads.



A small wetland alongside the road showing typical wetland vegetation.

Three small wetland areas existed in the Loop B campsite area. The first wetland was formed by the intersection of two camp roads (Wetland C). This small pocket was poorly drained, resulting in wetland conditions, and may have been man-made. The two inches of standing water pooled here were likely drainage from roads and campsites from rains earlier in the week. The second wetland in this loop consisted of a small forested seep with some shallow surface flow (Wetland E). This seep started near a campground road and seeps underground further down slope.

The third wetland was another very small pocket wetland formed by poor drainage at the junction of two camp roads and may also have been man-made (Wetland D).

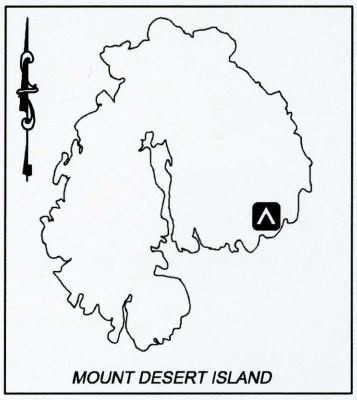
Wetlands A and B (Figure 4) occurred along the power line, just outside the campground. Wetland A was a red maple, balsam fir, and eastern hemlock dominated area that extends both west and east of the power line. This wetland was characterized by seasonal inundation and saturation, with seepage generally to the east. Wetland B was a small, forested wetland with red maple and balsam fir.

There were several drainage channels, but these were too dry to be classified as wetlands. Furthermore, these areas did not have evidence of hydrologic indicators, such as wetland plants and hydric soils. These drainage-ways appeared likely to function only for a very short period during or immediately after heavy rain events; a duration that appears to be too short and infrequent to support wetland plants.

Wetland Functions and Values Assessment

A wetland function and value assessment was completed for those wetlands in and adjacent to Blackwoods Campground. Wetland functions and values were assessed using *The Highway Methodology Workbook Supplement: Wetland Function and Value, A Descriptive Approach* (ACOE 1999). The purpose of this evaluation is to provide a rating of the relative value of each wetland system that can be used to assess the severity of proposed wetland impacts. This method bases function and value determinations on the presence or absence of specific criteria for each of the 13 wetland functions and values. The criteria are assessed through direct field observation during on-site wetland determinations and during office review of existing resource maps and databases. Table 3 summarizes the functions and values provided by these wetlands and their associated streams.

Acadia Na
Blackwoods
Wetland D
Figu



LOOP A

LEGEND

EXISTING WETL
BY WOODLOT
EXISTING DRAI
A EXISTING WETL
45 EXISTING CAMP
#1 COMFORT STA

MULCHING\COMPOST AREA

AMPHIT

RV SITES

SERVICE ROAD

NOTE(S):

1) Wetland boundaries delineated in accordance with US ACOE 1987 wetland delineation methodology.

2) Wetland boundary flags located with GPS technology. Expected accuracy of GPS data is within 1 to 2 meters of actual position.

3) Blackwoods Campground topographic basemap provided by the National Park Service.

tional Park
Campground
Delineation
re 4

ANDS IDENTIFIED
ALTERNATIVES

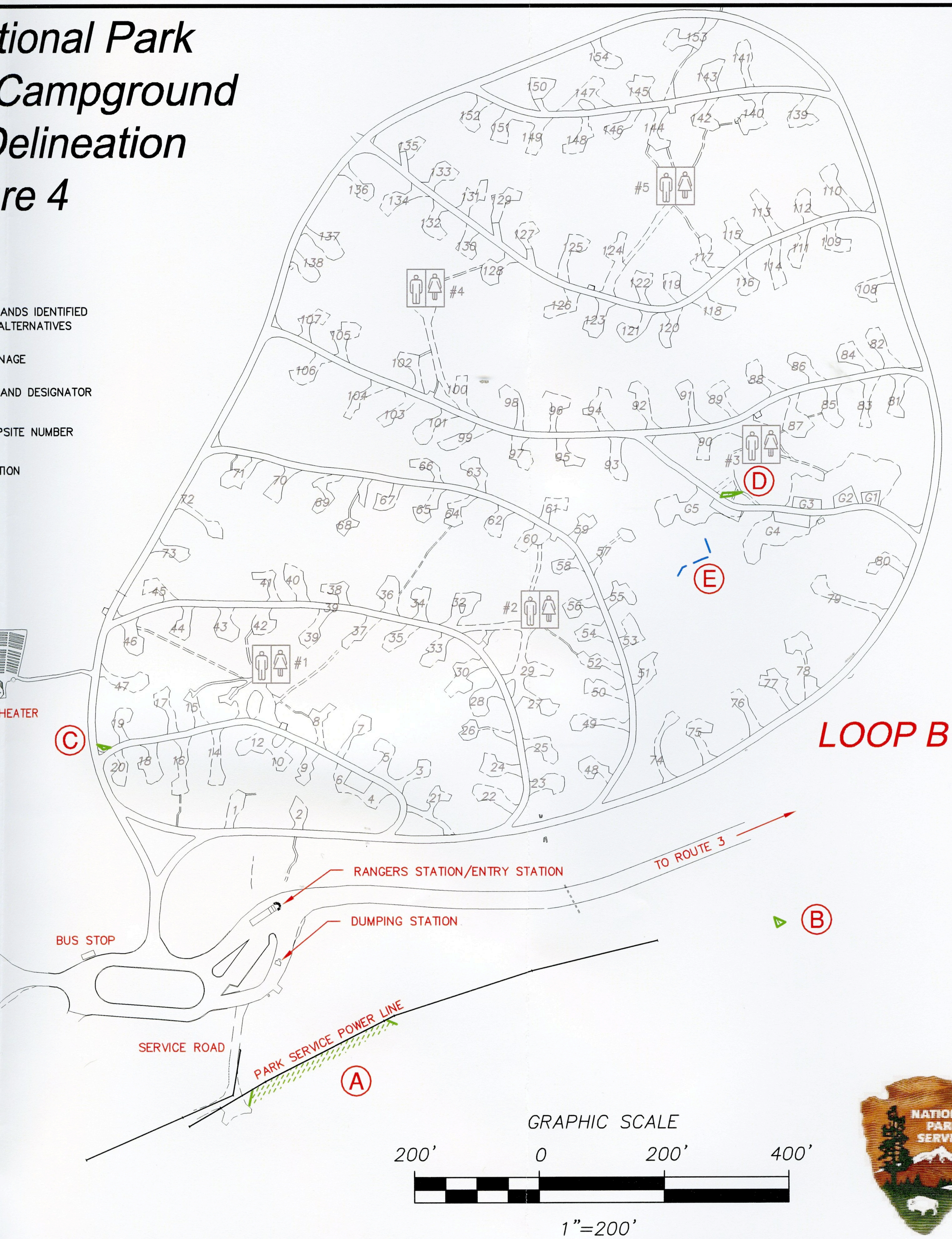
NAGE

AND DESIGNATOR

PSITE NUMBER

TION

HEATER



GRAPHIC SCALE

200' 0 200' 400'

1"=200'

NATIONAL PARK SERVICE

Table 3 Wetland Functions and Values for Wetlands in Blackwoods Campground

Function/Value	Spruce-fir-cinnamon fern swamp and scrub-shrub wetland	Small emergent and forested wetlands along drainage-ways and in depressions	Comments
Groundwater recharge/discharge	+	+	The large wetland begins in an area of groundwater discharge and flows back into the ground before leaving the campground. Some of the smaller wetlands are formed by seeps.
Floodflow alteration	-	-	These wetlands are not located near any waterbodies that could flood this area and probably do not contribute much to floodwater detention due to their small size.
Fish and shellfish habitat	-	-	No fish or shellfish habitat exists in these wetlands.
Sediment/toxicant/ pathogen retention	+	+	All of the wetlands are close to the camp roads and campsites. Any sediment and toxicants running off from these sites are likely deposited in these wetlands.
Nutrient removal, retention, and transformation	+	-	The large wetland has nutrient removal functions due to its saturation and slow moving stream. The smaller wetlands are too limited in size to satisfy this function.
Production export	+	-	The larger wetland contains flowering plants and dense vegetation. The small size of the other wetlands limits production export.
Sediment/shoreline stabilization	+	-	The larger wetland contains a small stream. The smaller wetlands are not associated with streams or areas of open water.
Wildlife habitat	+	-	The larger wetland contains a small stream and the vegetation associated with the wetland diversifies the surrounding forest. These features are a likely attractant to local wildlife. The smaller wetlands provide minimal wildlife habitat.
Recreation	-	-	These wetlands are too small to provide recreational opportunities, such as fishing or hunting. There is some potential for visitors to watch birds in the stream wetland.
Education/scientific value	-	-	The small size and location of these wetlands limit education or scientific value.
Uniqueness/heritage	+	-	The larger wetland meets this value because of its size and location within the campground. The smaller wetlands are too altered to provide this value.
Visual quality/aesthetics	+	-	The third wetland in Loop A is the largest in the campground and adds some diversity from the surrounding habitat. The smaller wetlands are primarily located in ditches and their small size limits visual quality/aesthetics.
Endangered species habitat	-	-	No rare or endangered species are known to occur in this area.

P = principal function/value (none of which were observed).
+ = function/value occurs in the wetland or stream.
- = function/value does not occur in the wetland or stream

3.2.4 Wildlife

Wildlife use of the campground is limited to common generalist species and probably many migrating or transient species. Wetland dependent species would be limited to some reptiles and amphibians that can breed or forage in the seasonally inundated wetlands. Species such as raccoons and striped skunks are attracted to trash and food scraps provided by campground visitors. Abundant species such as white-tailed deer (*Odocoileus virginianus*) and porcupine (*Erethizon dorsatum*) likely pass through the campground and may find some limited foraging opportunities. Ubiquitous species, such as eastern gray squirrel (*Sciurus carolinensis*), eastern chipmunk (*Tamias striatus*), and red squirrel (*Tamiasciurus hudsonicus*), inhabit the campground and likely forage on natural foods and food scraps left by visitors. The most abundant and prolific group of wildlife species would likely be passerines (resident and migrant songbirds). Common species observed included black-capped chickadee (*Poecile atricapillus*), tufted titmouse (*Baeolophus bicolor*), white-breasted nuthatch (*Sitta carolinensis*), blue jay (*Cyanocitta cristata*), and common crow (*Corvus brachyrhynchos*). Migrating and breeding warblers could inhabit the forested portions of the campground and provide some very good bird watching opportunities.

3.2.5 Soundscape

Given that the campground has been established for human use and is generally occupied by Park visitors, some level of human generated noise occurs along with natural sounds. ANP does not have any data available regarding ambient noise levels at the campground. Local ambient background sounds include bird calls, amphibian calls, wind passing through the trees, bell buoys and boat traffic in the distance, crackling campfires, automobiles, human voices, dogs barking, and generators usually associated with RV equipment.

3.2.6 Air Quality

ANP is downwind from large urban and industrial areas to the south and west. Periodically, high concentrations of air pollutants blow into the Park from these areas. ANP is considered a Class I area under the Clean Air Act, which means that the Park deserves the highest level of air-quality protection. Summer ozone levels occasionally exceed federal health standards, and the effects of atmospheric deposition are a major concern at the Park. Acid precipitation (rain, snow, and fog) can also be a major influence on lake and stream chemistry, cause nutrient enrichment in estuaries, and affect sensitive vegetation.

Generators emit air quality pollutants, particularly nitrogen oxides and carbon monoxide. Generators are commonly used for RV equipment and are permitted within the campground between 7 am and 10 pm. Visitors complain about the fumes produced by these generators, especially during weather inversions.

3.3 Cultural Resources

3.3.1 Cultural Landscape

Blackwoods Campground comprises a significant cultural landscape that is eligible for listing in the NRHP based on the multiple property listing, "Historic Park Landscapes in National and State Parks" (McClelland 1995). According to *NPS Director's Order 28: Cultural Resource Management Guideline* (NPS 1997b), a cultural landscape is a reflection of human adaptation and use of natural resources and is

often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions. The historic integrity of the campground, however, has been diminished by the overuse of the facility and the removal or replacement of historic features.

The remaining character-defining features of the Blackwoods Campground landscape include its setting, the physical design and layout of the campground, and the rustic man-made structures constructed during the period from 1935 to 1942 and in 1948 (Figure 2). Contributing elements of the potential historic district are the system of roads, including the entrance road, camp court, and Loop A; restrooms #97, 98, 99, 100, and 101; link (trailer) campsites in Loop A; and the service road (also known as the Ocean Path), which was constructed in 1938 and connects the campground to the cliffs overlooking the ocean. Resources that do not contribute to the historic character of the potential National Register district include the amphitheater; the ranger station; all of Loop B, including the Mission 66-era restrooms #118, 119, 120, 121, and 122; and restroom #96 in Loop A (Foulds 1996). Many of the aforementioned restrooms in Loop B have been replaced with newer, architecturally compatible restrooms.

A significant amount of damage to the integrity of the landscape has resulted from overuse of the campground during the last 50 years. Much of the vegetation that historically screened the campsites from one another has been lost; most of the natural barriers, such as boulders and logs that defined the campsites and roads, have been removed; and a number of campsites have been closed because of poor drainage or altered to accommodate modern RVs and other camping vehicles that are significantly longer and wider than the towed camp vehicles of the 1930s and 1940s.

System of Roads

The circulation network of Blackwoods Campground consists of the campground entrance road that leads from Route 3 to a central camp court, the campsite loop roads, parking spurs and links, and pedestrian pathways. The entrance road begins just southwest of the village of Otter Creek, where it intersects Route 3. The road continues for approximately 4,200 feet southeast until it meets the Blackwoods camp court, thereby creating an impression of remoteness and seclusion. Constructed by the CCC prior to 1942, the road is embraced by vegetation and features stone-masonry retaining walls. Bituminous concrete has replaced the earlier base-sealant surfacing. In the 1970s, the last 1,700 feet of road leading to the camp court was widened from 2 to 3 lanes to accommodate increased traffic queues.

The camp court acts as the nucleus of the campground and when it was first created it had a vista of Otter Cove. The campground access road, headquarters building site, and campsite Loops A and B radiate from this central open space. The original plan for the camp court included the construction of a headquarters building and an enclosing stonewall, neither of which was completed. In 1975, access to the camp court from the main access road was redesigned to accommodate a trailer sewage dump station and a contemporary ranger station along its northern edge. These changes were moderate in nature and have not significantly altered the function or organization of the campground.

Loop A is accessed by a one-way perimeter road that directs traffic in a counter-clockwise direction beginning at the camp court. A triangular traffic island, which lies on axis with the camp court, was the site of the original 1942 ranger station, which burned in 1978. One-way lateral roads branch off of this perimeter road, allowing access to the individual campsites. The original gravel or base-sealed surfaces of these campsite loop roads has been replaced by bituminous concrete, on which are painted identifying campsite numbers. Although the alignment of these roads remains intact, the physical barriers that originally defined the roadsides and discouraged access into wooded areas have been removed in many areas.

Loop A Campsites

The construction of Loop A was begun in 1938, utilizing the "link" campsite approach recommended by Albert Good in *Park and Recreation Structures* (1938) as the design best suited for trailers. Two groupings of three lateral roads each were built according to this design. The remaining six lateral roads, which were constructed in the financially lean years following the end of World War II, were created using the simpler "spur" campsite arrangement recommended by forest pathologist E.P. Meinecke in the early 1930s. The total number of campsites was documented in 1971 as 192; this number has since diminished to 160.

Although the individual campsites within Loop A have distinct spatial identity and character-defining features, their exact evolution is difficult to trace because of lack of documentation, the abandonment of certain sites, and various campsite realignments that have occurred since 1971. The removal of stone boulders, which were originally used to define campsite boundaries, has also exacerbated the problem; individual campsites have grown in size and screening vegetation has been lost.

Service Road ("Ocean Path")

Ocean Path is both a pedestrian and service road that leads from the east side of Loop A to the cliffs overlooking Otter Cove. Construction of this road was begun in 1938, when it was entirely cleared of brush and partially graded. The graded portion of this road appears to have been intended to link a proposed yet un-built ranger quarters east of the camp court with the motor road. With the ranger quarters remaining un-built, this small section of road was eventually tied into the base of Loop A, allowing access for pedestrians to the water and cliffs. The service road would not be affected by any of the proposed alternatives.

3.3.2 Historic Structures

Restrooms #97, 98, 99, 100, 101 are historically significant for their rustic designs and association with the development of Blackwoods Campground during its initial period of development. All are contributing elements of a potential Blackwoods Campground National Register district. Constructed between 1938 and 1948, the restrooms are examples of CCC-era rustic design. Similar plans appear in the *Portfolio of Comfort Stations and Privies*, the *Portfolio of Park Structures, Park Structures and Facilities,* and *Park and Recreational Structures,* published by the NPS in the 1930s in an attempt to provide practical prototypes that could easily be adapted or reproduced by the CCC. Designed in the "Rustic Style," which first gained popularity in the United States in the mid-nineteenth century, the restrooms exhibit the use of native woodland materials that echo the color and texture of their surroundings.

The historic restrooms are simple rectangular buildings constructed on granite ashlar masonry foundations. They have moderately-pitched hipped bell-cast roofs that are surfaced with asphalt shingles in place of original wood shingles. Shed dormers with louvered ventilation openings pierce the roofs on opposite slopes. Narrow bands of cove molding run around the buildings at the junction of the soffit and facia boards. The exterior walls are sheathed with board-and-batten siding. The exterior elements were originally finished in a dark brown stain, but in order to maximize protection of the substrate, the walls were subsequently painted in a color approximating the stain. The buildings may be entered through one of three doorways: one on each end provides access to the men's and women's restrooms, respectively, and a central door gives access into a utility room which lies between these two restrooms. The two sided restroom doorways are protected from view by tall wooden screens that have square corner posts, thin upper rails, and vertical boards set approximately one foot above grade. Several of the screens retain a

diamond pattern detail that was cut into the edges of the vertical board. Four-light awning windows are placed in groups of three, with the exception of a single window that provides ventilation and illumination for the central utility room.

3.4 Visitor Use and Experience

Visitor Characteristics

Visitors represent a variety of user groups, including families, organized groups (often including young adults), and RV enthusiasts, all of which are comprised of people from all regions of the country and from outside the United States. A study completed by Littlejohn (1999) provides an overview of demographics and characteristics of the visitors and their experiences while visiting the Park. This study provides some insight to the general opinions and comments expressed about the Park's campgrounds. It also provides a general assessment of the aspects of the campground that visitors found enjoyable and those that created concerns and issues. About 16% of the visitors to the Park used the campgrounds and considered the campgrounds to be an extremely important Park facility. About 21% of those visitors that stayed overnight used the campgrounds. Generally, a majority of the visitors to the Park were family groups (71%), and about 6% of all visitor groups had one disabled person in their party. About 39% of the visitor groups were groups of two and 37% were groups of three or four. About one-half of the visitors are from the northeast. Most visitors (83%) indicated that the campground facilities were very good to good, and only 6% indicated that they were poor to very poor. A small number of Park visitors gave some insight to the problems and dissatisfaction with the campgrounds, citing that the campsites were too small (n=8), the restrooms needed repair or were not clean (n=2), camping neighbors were too noisy (n=3), unsupervised children(n=3), difficulty of getting a campsite (n=7), and bicyclists riding too fast on campground roads(n=2). Visitors suggested that hot showers be added to the campgrounds (n=27), that the facilities should be cleaner (n=8), that more space should be added between campsites (n=4), and that electricity should be added to the campsites (n=2).

Visitor Use

Blackwoods Campground serves more than 80,000 people per year with almost 15,000 reservations made per year (Spherix 2002). Visitation at the Park peaks during July and August, with a steady flow through the fall foliage season (Spherix 2002). Blackwoods is open year-round; however, only a small section of Loop A is kept open during the winter. ANP uses a reservation system that allows visitors to reserve their campsite on a first come first served basis. This system reduces conflicts, waiting in line, and overbooking and allows for orderly management of the campsites. The system is privately operated and coordinated with Park staff for regular updating.

Visitor Experience

One goal of the ANP campgrounds is to retain the rustic outdoor experience consistent with the original purpose and design of the campground. While basic camping activities have not changed much since the campground was established, camping equipment, modes of transportation, technology, and visitor expectations have changed. Sleeping under the stars, cookouts, enjoying outdoor activities, and enjoying the outdoor experience remain the basics of an NPS camping experience. Conversely, what was once a chance to return to nature and enjoy a rustic experience has added extensive paraphernalia, new technology, large RVs, and the trimmings and trappings of a modern society.

A visitor use survey (Littlejohn 1999) indicated that approximately 83% of the visitors surveyed indicated that the quality of campgrounds at Acadia was good to very good. Most visitors enjoy the rustic and quiet nature of the campground, which sets the campground apart from other commercial campgrounds. The historic and rustic character of the campground fills a niche that does not exist elsewhere on MDI, except at Seawall Campground.

While most visitors' experiences are positive, some conflicts exist that diminish this positive experience. Often modernization conflicts with the rustic outdoor experience and these differences in visitor expectations can generate complaints. Generator use is allowed during a restricted timeframe, but is a common cause of conflict. RV sites are largely in one area; however, some tent sites are mixed in with them. The noise from generators can be heard far outside the primary RV area in Loop A and creates user conflicts. Noise and activity from visitors in the group campsites sometimes creates conflicts with adjacent visitors in the single-family campsites. Overflow of equipment, especially from RV equipment, and visitors using equipment that extends into adjacent sites creates some visitor conflicts. Deteriorating facilities, insufficient parking, and overcrowding are also sources of visitor complaints. For visitors with disabilities, the lack of universally accessible facilities can result in a negative experience by reducing their use of the campground or its facilities. The demand for these sites exceeds the supply.

3.5 Socioeconomics

The Park has a significant positive influence on the local economy, with regional and statewide contributions. A general assessment of the revenues that could be generated by camping fees, completed by the authors of this EA, indicates that upwards of $750,000 to $770,000 are generated for the Park. Specifically for 2002, data from Spherix (2002) were used to calculate revenues of $767,670. The 80,000 visitors using the campground contribute to the local economy by patronizing local establishments. Those visitors that travel from further away also patronize commercial establishments in other parts of Maine. The quality of the visitor experience has contributed to the Park's status as a tourist destination that attracts visitors from out-of-state to the area and to Maine in general (Littlejohn 1999). It also serves as a vacation destination for Maine residents. ANP provides recreational opportunities that may not be readily available at other parks, for people with disabilities. Visitors to ANP have a large fiscal impact on the surrounding communities. The Park's contribution to the economy is multifaceted:

- The NPS is one of the largest employers in the region, contributing temporary, seasonal, and permanent positions. Many of these positions are professional in nature, but also include skilled and unskilled labor, administrative, educational, and volunteer opportunities;
- ANP contributes to the need for lodging, food, entertainment, and other related goods and services;
- The Park creates numerous opportunities for professional service-related jobs and contracts that contribute to managing the Park and facilities;
- The Park continues to create opportunities for artistic expression, creative and science based writing, and scientific study, as it did historically.
- The Park's impact on the local and regional economy is significant and could certainly influence property values and the character of the area.

4 Environmental Consequences

4.1 Introduction

Consequences, including adverse and beneficial direct and indirect impacts, were assessed for each of the three alternatives for Blackwoods Campground, and cumulatively in the region. Impacts were divided into three categories: direct, indirect, and cumulative. Direct and indirect impacts were assessed for each resource and for Blackwoods Campground as a whole. Using the definitions below, cumulative impacts were assessed based on the combined effects of the complete Blackwoods Campground project and other projects in the immediate region. The focus of this assessment is to document potential impacts to assist in the decision-making process and to determine if implementing any of the alternatives would impair Park resources.

4.2 Methodology for Assessing Impacts

4.2.1 Definitions

Levels of Intensity

Levels of intensity refers to severity of the impact, whether it is negligible, minor, moderate, or major, or somewhere in between. The gradient of this grading system can be general or very detailed, but ultimately the assumptions and subjectivity of the system affect its sensitivity. A simple and subjective rating system is proposed for this EA, which includes a rating scale of "no effect, negligible, minor, moderate, and major effects." The authors of this EA based the rating system score on professional opinion and review. The context or setting of the action and resulting impact would be considered. For example, would an action affect the overall cultural setting of the campground or the natural resource setting. The definition of no effect would be the same for each of the general impact topics, natural resources (soils, natural communities-vegetation, wetlands and water resources, wildlife, soundscape management, and air quality), cultural resources, visitor use and experience (including recreational resources), and socioeconomics. No effect would mean that no measurable effects could be recorded or surmised. Furthermore, the following definitions are used.

- For natural resource impacts, including soils, natural communities-vegetation, wetlands and streams, and wildlife:
  - *Negligible:* Impacts would not be detectable, measurable, or observable.
  - *Minor:* Impacts would be detectable, but not expected to have an overall effect on the natural community. Impacts generally affect less than one-half acre of the resource or would not be expected to be outside the natural range of variability for that resource.
  - *Moderate:* Impacts would be clearly detectable and could have short-term, appreciable effects on the local ecology. Impacts may affect up to one acre of the resource, but would not threaten the continued existence of that resource.

- *Major:* Long-term or permanent, highly noticeable effects on individual species, community ecology, or natural processes. Impacts may affect over one acre of resource area or may affect the continued existence of that resource.

- For soundscape management impacts:
  - *Negligible*: Natural sounds would prevail; noise from human activities would be very infrequent or absent, mostly un-measurable.
  - *Minor*: Natural sounds would predominate in areas where management objectives call for natural processes to predominate, with noise from human activities infrequent and at low levels. At times when activity noise is consistent with Park policy, natural sounds could be heard regularly.
  - *Moderate*: In areas where management objectives call for natural processes to predominate, natural sounds would predominate, but activity noise could occasionally be present at low to moderate levels. At times when human activity noise is consistent with Park policy, activity noise would predominate during daylight hours and would not be overly disruptive to noise-sensitive visitor activities in the area; in such areas, natural sounds could still be heard occasionally.
  - *Major*: In areas where management objectives call for natural processes to predominate, natural sounds would be impacted by activity noise sources frequently or for extended periods of time. At times when activity noise is consistent with Park policy, the natural soundscape would be impacted most of the day, noise would disrupt conversation for long periods of time and/or make enjoyment of other activities in the area difficult, and natural sounds would rarely be heard during the day.

- For air quality impacts:
  - *Negligible*: There would be a net decrease in emissions from current levels.
  - *Minor*: There would be a slight increase in emissions from vehicles, construction activity, generators, and campfires.
  - *Moderate*: There would be a steady and obvious increase in emissions from vehicles, construction activity, generators, and campfires. Emissions could disrupt visitor activities at certain times.
  - *Major*: Increases in emissions would be significant and create noticeable changes in air quality. Emissions could interfere with visitor activities on a regular basis.

- For cultural resource – cultural landscape impacts:
  - *Negligible:* Impact to the resource is barely perceptible and not measurable and is confined to a very small area.
  - *Minor:* Adverse impact – Impact(s) would not affect a character-defining pattern and feature of an NRHP eligible or listed cultural landscape. For purposes of Section 106, the determination of effect would be *no adverse effect.*

    Beneficial impact – Preservation of character-defining patterns and features in accordance with The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes (NPS 1996). For purposes of Section 106, the determination of effect would be *no adverse effect.*
  - *Moderate*: Adverse impact – Impact(s) would alter a character-defining pattern or feature of the cultural landscape but would not diminish the integrity of the landscape to the extent that its National Register eligibility would be jeopardized. For purposes of Section 106, the determination of effect would be *no adverse effect.*

    Beneficial impact – Rehabilitation of a landscape or its character-defining patterns and features in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural*

Landscapes (NPS 1996). For purposes of Section 106, the determination of effect would be *no adverse effect.*

- *Major:* Adverse impact – Impact(s) would alter a character-defining pattern or feature of the cultural landscape, diminishing the integrity of the landscape to the extent that it is no longer eligible to be listed in the National Register. For purposes of Section 106, the determination of effect would be *adverse effect.*

  Beneficial impact – Rehabilitation of a landscape or its character-defining patterns and features in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes* (NPS 1996). For purposes of Section 106, the determination of effect would be *no adverse effect.*

- For cultural resource – historic structures impacts:
  - *Negligible*: Impact to the resource is barely perceptible and not measurable and confined to a very small area.
  - *Minor*: Adverse impact – Impact would not affect a character-defining feature of a National Register of Historic Places eligible or listed structure or building. For purposes of Section 106, the determination of effect would be *no adverse effect.*

    Beneficial impact – Stabilization/preservation of character-defining features in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes* (NPS 1996). For purposes of Section 106, the determination of effect would be *no adverse effect.*
  - *Moderate*: Adverse impact – impact would alter a character-defining feature of the structure or building, but would not diminish the integrity of the resource to the extent that its National Register eligibility is jeopardized.

    Beneficial impact – rehabilitation of a structure or building in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes* (NPS 1996). For purposes of Section 106, the determination of effect would be *no adverse effect.*
  - *Major*: Adverse impact – impact would alter a character-defining feature of the structure or building, diminishing the integrity of the resource to the extent that it is no longer eligible to be listed in the National Register. For purposes of Section 106, the determination of effect would be *adverse effect.*

    Beneficial impact – restoration of a structure or building in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes* (NPS 1996). For purposes of Section 106, the determination of effect would be *no adverse effect.*

- For visitor use and experience impacts:
  - *Negligible:* Impacts would not be detectable, hence visitors would not be aware of any effects of the rehabilitation. There would be no noticeable change in visitor use and experience or in any defined indicators of visitor satisfaction or behavior.
  - *Minor:* Visitors would be aware of effects, but this would not appreciably limit or enhance critical characteristics of the visitor experience. Visitor satisfaction would remain stable. Other areas in the Park would remain available for similar visitor experience and use without derogation of Park resources and values.
  - *Moderate:* A few critical characteristics of the desired visitor experience would change and/or the number of participants engaging in an activity would be altered. The visitor would be aware of the effects associated with implementing the alternative and visitor satisfaction would begin to either decline or increase as a result of the effect. Other areas in the Park would remain available for similar visitor experience and use without

derogation of Park resources and values, but visitor satisfaction might be measurably affected; visitors could be either satisfied or dissatisfied.

- *Major:* Multiple critical characteristics of the desired visitor experience would change and/or the number of participants engaging in an activity would be greatly reduced or increased. The visitor would be aware of the effects associated with implementing the alternative and visitor satisfaction would markedly decline or increase. Changes in visitor use and experience would be readily apparent and long-term. The change in visitor use and experience proposed in the alternative would preclude future generations of some visitors from enjoying Park resources and values. Some visitors who desire to continue their use and enjoyment of the activity/visitor experience would be required to pursue their choice in other available local or regional areas.

- For safety impacts:
  - *Negligible:* Impacts would not be detectable, measurable, or perceptible.
  - *Minor:* The impact would be measurable or perceptible, and it would be limited to a small number of visitors and/or staff at localized areas and could be avoided or minimized through planning. Impacts to visitor safety could be realized through a minor increase or decrease in the potential for visitor and staff accidents.
  - *Moderate:* Safety concerns, resulting in permanently increased accident rates, would still exist despite implementing all minimization efforts.
  - *Major:* The impact to visitor safety would be substantial, either through the elimination of potential hazards or the creation of new areas with a high potential for serious accidents or hazards.

- For socioeconomic impacts:
  - *Negligible:* Impact to local businesses and communities would be barely perceptible and not measurable and confined to a very small area.
  - *Minor:* Limited effects on local businesses and communities would be temporary and restricted to camping-related businesses and could be minimized through planning.
  - *Moderate:* Conflicts with local camping and concession businesses, generally confined to the MDI area, despite implementing all minimization efforts.
  - *Major:* Significant losses of tourist-generated business, both on MDI and in the region.

Duration

Duration describes how long an impact would be expected to last. In this EA, impacts are described as either being short-term or long-term. Short-term is an impact that would last no more than one or two years. Long-term would be an impact that would last for more than two years.

Context

Context is the setting within which an impact is analyzed, such as the affected region or locality and the affected interests. In this EA, the intensity of impacts is evaluated within a local context primarily considering effects on MDI and the immediate vicinity. The intensity of effects on cumulative impacts is evaluated in a regional context and considering effects further in time and effects from other projects.

Direct and Indirect Impacts

Direct impacts include effects on the resource actually caused by the proposed action, generally at the immediate site of the action and at the time of the action. Direct impacts can extend into the future and are often permanent, but can be temporary. A direct effect is an effect that is caused by an action and

occurs at the same time and place. An example of a direct impact would be the filling of a portion of a stream, which causes habitat loss.

Indirect impacts generally occur as a result of a "side-effect" of a direct impact, but occur later in time or further in distance from the action, but are still reasonably foreseeable. An indirect impact could result from silt flowing downstream, creating turbid conditions, and negatively affecting water quality.

Cumulative Impacts

The CEQ regulations, which implement the NEPA (42 USC 4321 *et seq.*), require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative impacts are considered for both the No Action and preferred alternatives.

Cumulative impacts were determined by combining the impacts of the preferred alternative—rehabilitating Blackwoods Campground—with other past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify other ongoing or reasonably foreseeable future projects at ANP and, if applicable, the surrounding region. Completed, ongoing, and reasonably foreseeable projects both inside and outside the Park include recently completed work on the visitor facilities at Sand Beach, Seawall Campground, and Duck Brook Road. Projects scheduled for 2004 include rehabilitating Blackwoods Campground, Echo Lake Beach, and Bear Brook waterline, as well as numerous small rehabilitation projects. Also, it is expected that the Town of Mount Desert will be addressing inadequacies in wastewater treatment in 2004 with additional construction associated with their existing facilities.

4.2.2 Impact Matrix Comparisons

Comparisons of potential adverse and beneficial impacts are made between the No Action alternative, Alternative B (NPS preferred option), and Alternative C in order to determine if the proposed project would impair Park resources. Impairment of Park resources is prohibited per NPS policy. The preferred alternative must not produce any significant impacts and must not impair Park resources to be approved as an EA as documented through a Finding of No Significant Impact. A prohibited impairment is an impact that would harm the integrity of Park resources and values, including the opportunity to enjoy those resources and values.

4.3 Impact Assessment

4.3.1 Alternative A

Overview

Alternative A, No Action, would not proceed with any rehabilitation or upgrade measures for Blackwoods Campground. This action does not meet the basic project purpose of rehabilitating Blackwoods Campground; therefore, Alternative A is not a viable alternative. This alternative is provided as a baseline for assessing the remaining alternatives. A summary matrix of impacts is provided at the end of Section 4 (Table 4).

Natural Resources – Soils, Wetlands, and Streams

Direct and Indirect Impacts: These topics were analyzed together, because the interactions of the effects of erosion often lead to impacts on wetlands and stream resources. Alternative A would not generate any new direct impacts to soils, wetlands, or streams. The ambient conditions lead to long-term, negligible adverse impacts through the compaction of soil, denuding of campground vegetation, erosion, poor drainage and runoff management. Heavy visitor use, sprawling campsites, overflow parking, social trails, and visitor overuse or misuse of the campground resources contribute to these impacts. Continued degradation of wetland functions from soil erosion would be a negligible, long-term adverse impact relegated to the immediate vicinity. Erosion will continue unabated and could worsen if drainage problems, social trails, campsite design and visitor overuse or misuse continues without rehabilitation.



A social trail showing erosion.

Cumulative Impacts: The effects of erosion on soils and wetlands should be considered when combined with the effects from other projects in the watershed over time. The long-term effects of continued erosion would be magnified somewhat because the erosion would become more extensive. Water quality, aquatic wildlife, and food chain production would be adversely affected by increased turbidity, although this would still be a negligible to minor impact. The combined effects of the No Action alternative and other ANP and private projects would likely not have any moderate or major cumulative impacts on natural resources within the Park and vicinity. BMPs would be employed on any active construction projects, thereby minimizing turbidity from other sources. BMPs, as generally accepted, include various erosion control measures, such as culvert sizing and placement, seeding and re-grading disturbed areas, and sediment barriers. Other ANP and private projects will be required to comply with federal, state, and local resource protection laws.

Summary: Indirect impacts to soils, wetlands, and stream are expected to be negligible, long-term, and restricted to the local area. They are largely related to ambient conditions, including flooding and erosion issues, soil compaction, and loss of vegetation, which can adversely impact soils and wetlands. Cumulative impacts are generally considered negligible to minor and restricted to the local watershed area. There would be no impairment to the soils, wetlands, and stream within Blackwoods Campground.

Natural Resources – Natural Communities (Vegetation) and Wildlife

Direct and Indirect Impacts: Vegetation and wildlife were analyzed together, because the condition of vegetation directly influences the quality of wildlife habitat. Under Alternative A, vegetation loss would continue and understory vegetation would not be re-established. Wildlife habitat values would continue to be very low. Aesthetic values provided by vegetative screening between campsites would remain. These adverse impacts would be considered minor, long-term, and local. Beneficial effects would not be expected.

Cumulative Impacts: Adverse cumulative impacts would be considered minor and long-term. The loss of vegetation occurs within many of the Park's developed areas. Development activities on MDI impact vegetation and habitat. The combined effects of vegetation loss from each project contributes to a minor regional loss of wildlife habitat on MDI. The area affected by extensive visitor use is small in comparison to the total acreage of wildlife habitat provided by the Park and its surrounding environment.

Summary: A minor, long-term loss of vegetation and wildlife habitat would continue and not be rehabilitated if Alternative A were implemented. These adverse impacts would have regional effects and would contribute to a minor cumulative loss of habitat in the Park. There would be no impairment to the natural communities-vegetation and wildlife within Blackwoods Campground.

Soundscape

Direct and Indirect Impacts: Adverse, minor to moderate, long-term impacts resulting from noise created by generator use would continue. These noise levels would continue to degrade the soundscape near the RV sites in Loop A and complaints from neighboring campground visitors would continue. No new impacts to the soundscape would occur, as construction activities would be absent.

Cumulative Impacts: There would be no cumulative impacts from this and other projects. The soundscape impacts are very local and probably would not extend beyond the immediate area.

Summary: Adverse minor impacts to the natural soundscape would continue. Cumulative impacts are not expected. There would be no impairment to the natural soundscape within Blackwoods Campground.

Air Quality

Direct and Indirect Impacts: Exhaust fumes from generators would continue to create long-term, minor adverse impacts to air quality generally within Loop A. These impacts would not increase as construction activity would not occur.

Cumulative Impacts: Cumulative impacts are not expected when considering other past, present, and future projects in the vicinity. Air quality impacts from these projects are probably negligible and very localized.

Summary: Negligible to minor adverse impacts would continue within Loop A and there would probably be no cumulative impacts. There would be no impairment to air quality within Blackwoods Campground.

Cultural Resources – Cultural Landscape

Direct and Indirect Impact: Alternative A would generate direct and indirect, moderate, long-term adverse impacts from the continued degradation of the landscape caused by overuse of the campground and drainage problems. The integrity of the landscape would be further damaged by a loss of character-defining features, including vegetation that serves to screen the campsites from one another, barriers placed to define roadways and campsites, and campsites that are either altered to accommodate large camping and RV equipment or closed due to improper drainage. Drainage problems could also undermine sections of the historic road system.

Cumulative Impacts: Alternative A would have a minor, adverse cumulative impact on the integrity of the cultural landscape of the Park. Recent and ongoing projects designed to rehabilitate other important components of the landscape, including Seawall Campground, the carriage roads, and the carriage road bridges, would result in the long-term preservation of those resources. The implementation of Alternative

A would not result in the rehabilitation of Blackwoods Campground and could, in the long-term, threaten its significance as a component of the Park's cultural landscape.

Summary: Short-term impacts to the cultural landscape would be of minor intensity, but over time would result in the further deterioration and alteration of character-defining features of the campground. There would be no impairment to the cultural landscape within Blackwoods Campground.

Cultural Resources – Historic Structures

Direct and Indirect Impacts: Alternative A would not create any new direct impacts on the historic restrooms. Moderate, direct and indirect, long-term adverse impacts would result from continued use and weather exposure, which ultimately could threaten the structural integrity of the buildings. The historic restrooms are functional and structurally sound, but currently show signs of wear and deterioration as a result of heavy use and the exposure of some building materials to the elements.



Examples of areas of disrepair on restroom facilities in Loop A.

Cumulative Impacts: Alternative A would have negligible cumulative impacts on the integrity of Park historic structures. Other recent, ongoing, and proposed projects include the rehabilitation of historically significant structures at Seawall Campground, Pretty Marsh, Schoodic Point, the carriage roads, and the carriage road bridges. The long-term prospect of structural damage to the Blackwoods Campground restrooms would impact the integrity of the historic designed landscape of the campground, but would not detract from the significance of the other historic structures throughout the Park.

Summary: Impacts to historic structures would be of moderate intensity, restricted to the campground, and of long-term duration. Over time, maintenance of the historic buildings would become a progressively more important concern, as heavy use and already deteriorating materials would require increasing attention. Cumulative impacts would likely be negligible. There would be no impairment to the historic structures within Blackwoods Campground.

Visitor and Staff Safety

Direct and Indirect Impacts: Alternative A does not implement any rehabilitation activities; therefore, short-term safety issues are negligible. Campground structures and roadways would continue to

deteriorate, potentially posing safety risks in the future. This would be considered a minor long-term adverse impact to safety.

Cumulative impacts: Safety hazards that would occur through this alternative, combined with other safety issues from projects in the vicinity, suggest negligible cumulative impacts.

Summary: Minor adverse impacts to visitor safety could occur due to deteriorating conditions within the campground. This would be a long-term adverse impact that would become more severe over time. Safety hazards would be limited to Blackwoods Campground and pose negligible cumulative impacts.

Visitor Use and Experience

Direct and Indirect Impacts: Alternative A would have long-term, direct and indirect adverse impacts of moderate intensity on visitor use and experience of Blackwoods Campground. The aesthetic and structural conditions of the campground would continue to deteriorate. While Blackwoods Campground buildings are currently structurally sound, they have varying degrees of deterioration. The continued flooding of structures and deterioration could compromise their structural integrity over time. The road and trail system would continue to deteriorate, impacting visitor experience and potentially causing safety issues. Older utility systems would continue to break down, needing frequent maintenance, thus disrupting visitor use and experience. Visitor use and experience would be adversely impacted by loss of understory vegetation, reducing privacy between sites and degrading visitor enjoyment of the natural environment. These adverse impacts would be a long-term consequence of the No Action alternative.

Cumulative Impacts: The combined adverse effects of not performing any of the rehabilitation could result in degraded visitor experience and reduced visitor use of the campground. When considered relative to other ANP projects, minor cumulative effects could result. The deterioration of the facilities at Blackwoods may encourage higher visitor use of the newly rehabilitated Seawall Campground, thereby increasing visitor use in the western portion of the Park.

Summary: Impacts to visitor use would be of minor to moderate intensity and of long-term duration. Visitor experience would likely decline over time, with impacts becoming more severe. Cumulative impacts of No Action alternatives could result from declining visitor experience in Blackwoods Campground and throughout ANP. Implementing rehabilitation projects in other areas of the Park, such as Seawall Campground, and taking no action in Blackwoods Campground could change visitor use patterns over time.

Socioeconomic Resources

Direct and Indirect Impacts: Deterioration of Blackwoods could lead to a loss of visitor use, which could have adverse effects on the local economy. Adverse impacts to socioeconomic resources from the implementation of Alternative A would likely be negligible over the short-term. However, the impact to socioeconomic resources could increase, over time to minor levels, if campground conditions were allowed to continue to deteriorate. This could impact visitor use and reduce the number of visitors staying in Blackwoods Campground. This could have a negative economic impact on nearby businesses in Otter Creek that cater to campers, such as convenience stores and shower facilities. Beneficial economic impacts to surrounding communities could also occur because some visitors driven away from Blackwoods Campground may choose to stay in privately operated campgrounds or hotels in the area.

Cumulative Impacts: The combined adverse effects of not performing any of the rehabilitation could result in reduced visitation to ANP. As tourism is a major industry in the communities surrounding ANP,

a decline in tourism due to deteriorated Park resources would have negative impacts to socioeconomic resources. These impacts would be considered negligible.

Summary: Short-term socioeconomic impacts would be negligible; however, long-term impacts would be minor to moderate. Impacts would increase in severity over time, as campground conditions deteriorate and visitor use changes. Some local, privately owned campgrounds would benefit from a reduction in market competition, should the campground be closed. There would be no impairment to the local or regional socioeconomic resources if Alternative A were to be implemented.

4.3.2 Alternative B

Natural Resources – Soils, Wetlands, and Streams

Direct and Indirect Impacts: Short-term, negligible adverse and minor beneficial impacts to soils and wetlands would occur during the rehabilitation process. Erosion and the introduction of exotic species would be a concern at construction sites, and short-term, negligible impacts to wetlands and the stream could occur. These impacts would be localized, short-term, and temporary, with impacts ending after the rehabilitation is completed. Improved drainage would reduce flooding and erosion problems and provide a minor, long-term beneficial impact to soils and wetlands by repairing erosion and thus removing a source of pollution. BMPs would be utilized during construction to minimize or eliminate impacts.

Some long-term, minor and localized benefits would occur, including the control and elimination of sources of erosion, which would improve the wetland habitat.

Cumulative Impacts: When considered with other projects in the vicinity, the combined effects of potential temporary erosion during rehabilitation projects should produce negligible levels of adverse impacts to soils and wetlands within the watershed. Most other projects in the region, as listed above, do not influence or connect to the wetlands in the vicinity of Blackwoods Campground. Through the implementation of BMPs, any impacts from other projects are expected to be negligible and of short-term duration. The benefits to soils are minimal when considered in a watershed context, but rehabilitation would still contribute a benefit to the natural resources of the Park and adjacent areas. The combined benefits to soils from ongoing rehabilitation activities throughout ANP would be minor

Summary: A small loss of soil during the rehabilitation process could have a direct, negligible adverse effect on wetland functions and values. These effects would be short-term and likely would be remedied soon after construction is complete. Long-term control and prevention of erosion would improve and maintain soil and wetland values. There would be no impairment to the soils, wetlands, or stream within Blackwoods Campground.

Natural Resources – Natural Communities (Vegetation) and Wildlife

Direct and Indirect Impacts: Negligible, short-term adverse impacts could occur to the vegetation and disturbance to wildlife during construction. Campsite sprawl, soil compaction, and denuding of vegetation would be reduced or eliminated, and revegetation of the campground understory would improve natural conditions and wildlife habitat. These improvements within Blackwoods Campground would have direct and indirect benefits on the surrounding natural resources. The reduction in erosion and soil compaction, as discussed above, would allow natural recruitment by native vegetation in those areas. As vegetation establishes and matures over time, it would improve conditions by filtering runoff and reducing erosion, thereby improving aquatic and upland resources. Maturing vegetation would also create additional and more diverse types of wildlife habitat. Establishing vegetation would improve the

demarcation of campsites and provide a visual screen between sites. This improvement would result in minor long-term benefits to the habitat value and the aesthetic qualities of the campground.

Cumulative Impacts: Negligible short-term cumulative impacts to vegetation would occur as a result of construction activities. Several rehabilitation projects throughout ANP are ongoing and aim to reduce erosion and soil compaction, eliminate or formalize social trails, rehabilitate formal trails, and reduce overuse of Park facilities and resources, all of which will provide a cumulative benefit to vegetation and natural communities throughout the Park. Minor long-term cumulative benefits to wildlife would occur, as wildlife habitat would be enhanced through improvements to natural communities and wetlands and water quality, through a reduction in erosion, run-off, and soil compaction, and revegetation.

Summary: Improvements to the vegetation communities would benefit wildlife habitat in and adjacent to the campground. Minor cumulative benefits would occur to wildlife habitat in the Park. Implementing guidelines to visitors and active maintenance of the re-established vegetation would provide long-term benefits. There would be no impairment to the natural communities-vegetation and wildlife within Blackwoods Campground. Negligible adverse impacts could occur to vegetation and wildlife during construction. Impairment of vegetative communities and wildlife is not expected.

Soundscape

Direct and Indirect Impacts: Construction and construction equipment would generate noise during the rehabilitation process creating adverse minor, short-term, local impacts. These impacts would end when construction is complete. During construction, hauling material, operating equipment, and other construction activities could result in dissonant, human-caused sounds. Any dissonant sounds associated with construction, however, would be temporary. The continued, albeit reduced, use of generators would continue to have adverse effects. The restrictions on generator use should reduce noise levels during the times that they would otherwise create greater disturbance. Revegetation would help buffer noise and have a minor beneficial impact. Overall, minor beneficial effects are expected in the long-term.

Cumulative Impacts: Cumulative impacts from the effects of other projects in the vicinity are not anticipated. Most of these projects are far enough removed in time and space. There may be some negligible cumulative benefits to the soundscape in ANP by restricting the use of generators in the campground.

Summary: Short-term, minor impacts would occur to the ambient soundscape within the campground during construction, and these impacts would end when construction was finished. Long-term, beneficial minor effects to the soundscape would occur by implementing the rehabilitation. Negligible beneficial, cumulative impacts are expected. Impairment of the soundscape is not expected.

Air Quality

Direct and Indirect Impacts: Short-term, negligible adverse impacts would result from the construction equipment that would be needed to complete much of the rehabilitation. Local ambient air quality would be slightly improved in the long-term through the reduction in daily hours that generator use is permitted. These minor beneficial effects would be restricted to Loop A and immediately adjacent areas. Much of the rehabilitation work would involve the use of hand tools and manual labor. Heavy machinery would be used when repairing roadways, drainages, utilities, and moving construction materials. These construction activities may create some minor short-term and local emissions and dust.

Cumulative Impacts: Neither cumulative adverse nor beneficial effects are expected to air quality.

Summary: Adverse, negligible impacts are expected from the construction, which would be short-term. Beneficial effects would be long-term by improving the local air quality. There would be no impairment to the air quality within Blackwoods Campground.

Cultural Resources – Cultural Landscape

Direct and Indirect Impacts: Alternative B would have direct moderate long-term beneficial effects on the cultural landscape by eliminating or controlling problems associated with overuse and improper drainage that have contributed to the loss of character-defining features of the campground. Character-defining features that would be rehabilitated under the preferred alternative include the revegetating areas surrounding the campsites, delineating campsites and roadways by placing natural barriers, standardizing campsite size, preserving historic furnishings, and the rehabilitating the system of roads through resurfacing and improving the drainage system. Moving the dump station should benefit the cultural landscape by improving the flow of traffic and moving it further from view. Adding additional staff and volunteer housing would not affect the cultural landscape as this structure would be located away from the entrance area and campground loops and would be screened by vegetation.

Cumulative Impacts: Alternative B would have a minor, beneficial cumulative impact on the cultural landscape of ANP as a whole. When considered in combination with previous projects to rehabilitate Seawall Campground, the carriage roads, carriage road bridges, scenic vistas, and other visitor attractions, the proposed project represents an additional component of a major system-wide rehabilitation effort to maintain and preserve the historic integrity of the cultural landscape while continuing to meet the needs of modern visitors. No adverse cumulative effects are anticipated from completion of the rehabilitation relative to other projects in the vicinity.

Summary: Alternative B represents a sound approach to rehabilitating Blackwoods Campground. The proposed project conforms to *The Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes* (NPS 1996) and would have no major short-term or long-term adverse impacts that would impair the historic character of the landscape.

Cultural Resources – Historic Structures

Direct and Indirect Impacts: The long-term effects of Alternative B would have a moderate beneficial and lasting impact on the five historic restrooms that are proposed for rehabilitation. The proposed project would include rehabilitating the exterior of the buildings by replacing the existing asphalt roof shingles with heavy asphalt shingles, replacing rotted structural members, and repairing and painting the exterior siding. Site work would be limited to the replacement in-kind of concrete walks and regrading around the foundation to promote better drainage. The interior plaster walls, tile, and fixtures will be removed and replaced in-kind. This alternative meets *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (NPS 1996) for the preservation of historic structures. It would allow for the preservation of the rustic character of the structures and improve the functionality of these utilitarian buildings.

Cumulative Impacts: The rehabilitation of the five historic restrooms at Blackwoods Campgrounds would have a minor beneficial impact on the cultural landscape of ANP. When considered in combination with other previous and proposed rehabilitation projects, including Seawall Campground, carriage roads, carriage road bridges, Pretty Marsh, and Schoodic Point, the proposed project represents an additional component of a major system-wide rehabilitation effort to maintain and preserve historic structures that are important contributing elements of the designed historic landscape. No adverse cumulative effects would result from completion of the rehabilitation relative to other projects in the vicinity.

Summary: Rehabilitation would have long-term, moderate beneficial effects to the structure and appearance of the historic restrooms and minor cumulative beneficial impacts. These benefits also relate to the overall stewardship of and improvements within the Park, which is the focus of many of the projects in the vicinity. Implementing Alternative B should not impair Park historic structures.

Visitor and Staff Safety

Direct and Indirect Impacts: Implementing Alternative B could have negligible direct impacts to visitor and staff safety due to the presence of construction equipment and materials in Blackwoods Campground. Indirect impacts would not be expected. These impacts are considered short-term and applicable to the immediate area. The presence of signage and the temporary closing of portions of campground will prevent more intensive safety concerns and should render adverse impacts to negligible levels. Minor, long-term benefits are expected immediately by repairing and maintaining the integrity of the campground structures, roadways, trails, and utilities.

Cumulative Impacts: The direct and indirect adverse impacts on safety should not extend beyond Blackwoods Campground and should not increase adverse effects within the Park and vicinity when considered in relation to other projects. These safety issues are temporary and should not extend beyond the immediate project area.

Summary: Negligible safety concerns would result from implementing Alternative B with the appropriate safety precautions taken. Visitor and staff safety would be improved in the long-term by rehabilitating deteriorating structures and conditions.

Visitor Use and Experience

Direct and Indirect Impacts: Construction activities would cause minor, direct adverse impacts on visitor use and experience through closure of the campground, albeit one loop would remain open, and would possibly cause a shortage of campsites in the immediate area. Minor indirect impacts may occur at off Park locations, due to a shortage of campsites. Some businesses may benefit from this shortage, but visitors may be inconvenienced. However, this impact would be short-term, with conditions improving once construction is complete. It is anticipated that rehabilitation within each loop would take about 18 months to complete. Alternative B would provide moderate, long-term, beneficial impacts to visitor experience by improving the conditions in the campground, including implementing new campground policies. Improving the campsite layout, rehabilitating the restrooms, improving road conditions, limiting generator use, reducing impacts to vegetation from social trails and firewood collecting, and revegetating would make the campground function better and be more aesthetically pleasing. These changes would contribute to an improved visitor experience.

Cumulative Impacts: Blackwoods Campground rehabilitation would require the closure of sections of the campground, one loop at a time. These closures would be staggered with rehabilitation work at Seawall Campground so that at least one campground would be open at all times. Although every effort would be made to avoid closures, it is likely that only one loop would be open from approximately mid-May through early October for two years, and both loops in Blackwoods Campground would be closed for one winter.

When Loop A is closed for rehabilitation, recreational vehicles would be displaced to another campground, as there are few RV sites in Loop B and none that will accommodate large RVs. When Loop B is closed, organized groups would not be accommodated in Blackwoods, and they would be forced to make reservations for Seawall Campground or go to private campgrounds. If the campground is closed in winter to accommodate construction, there are no local campgrounds open for winter campers.

Campers would be unable to winter camp in the area. This situation would result in increased use at Seawall Campground and private campgrounds in the region and would likely make it more difficult for visitors to obtain campsites.

The quality of the visitor experience would likely be diminished for short periods during the busy season. Visitors would be made aware of the rehabilitation work and the need for it, which would reduce the intensity of the impact. Appropriate education and signage would help prevent surprise and frustration among visitors and may induce a more cooperative and understanding visitor. The temporary closure of the campgrounds for rehabilitation combined with bridge and carriage road closures could have a minor adverse effect on visitor use, but these effects should only be apparent during the construction periods. Long-term moderate benefits to visitors would result directly relating to their enjoyment of the campgrounds and cumulatively within the Park and vicinity as other improvements are made to Park attractions and facilities.

Summary: Short-term minor impacts would be expected from closure of part of the campground. A shortage of campsites may result, causing minor, short-term impacts to visitors both at the Park and offsite. Cumulative impacts would be short-term and minor. Moderate, long-term benefits would result through improvements to the campground, which would reduce complaints and visitor conflicts. Improving campground conditions would improve the visitor experience by alleviating problems and issues that have reduced the quality of the visitor experience.

Socioeconomic Resources

Direct and Indirect Impacts: The partial closure of Blackwoods Campground, one loop at a time, during construction could have a minor indirect socioeconomic impact on the surrounding communities, especially if it occurred during peak season. Closing one loop at a time could create short-term economic impacts such as adversely effecting visitation by preventing camping and/or making campground reservations hard to obtain. Private services that cater to campers, such as the nearby shower facilities, may have minor economic impacts during the closure. Conversely, private campgrounds, inns, and hotels may benefit by increased sales to visitors whom might normally stay in Park run campgrounds. These economic impacts are likely to be short-term, occurring during the closure of Blackwoods and returning to normal conditions after the Blackwoods upgrade is complete. Long-term benefits would likely occur by improving campground conditions. These indirect benefits to socioeconomic interests would be minor and of a regional context.

Cumulative Impacts: Negligible cumulative adverse impacts may occur for the short-term during the rehabilitation process. Ongoing efforts throughout ANP to rehabilitate and upgrade structures and utilities, improve handicap accessibility, and maintain historic structures and landscapes would have a minor cumulative long-term beneficial impact on socioeconomic resources. These projects would improve visitor experience and help to maintain the tourism in the Park and surrounding communities. Tourism is a major industry in the communities surrounding ANP; therefore, these cumulative effects would have a minor impact on the economy of the region.

Summary: Short-term adverse impacts could occur to some businesses in the area during the rehabilitation. A shortage of campsites may actually increase business for some offsite campgrounds and hotels. These impacts and benefits would be contingent upon the type of business, but would be short-term and alleviated once the rehabilitation is complete. Long-term benefits would result through improving the campground. Combining the various rehabilitation and improvement projects in the Park, moderate, long-term benefits would be expected. Impairment of local and regional socioeconomic resources is not expected.

4.3.3 Alternative C

Natural Resources – Soils, Wetlands, and Streams

Direct and Indirect Impacts: Negligible direct adverse impacts to soils, wetlands, and the stream would occur during the construction period. Disturbed soil is at risk from erosion and could create conditions conductive to the spread of invasive species. These impacts would be localized and short-term, with conditions returning to normal after construction is complete.

As a direct impact of Alternative C, the natural resources conditions in Blackwoods Campground would improve in the long-term. Upgrading the drainage system would reduce flooding and erosion problems and thereby improve the water quality in the wetlands and stream. Aquatic habitat would benefit. Rehabilitation of the campground would have minor, long-term, indirect benefits on the surrounding natural resources.

Cumulative Impacts: The combined effects of potential temporary erosion during rehabilitation projects should produce negligible levels of adverse impacts on soils and wetlands, when considered with other projects in the vicinity. Most other projects in the region, as listed previously, do not influence or connect to the streams in the vicinity of Blackwoods Campground. Any impacts from other projects are expected to be negligible and generally of short-term duration, especially with the implementation of BMPs. The benefit to natural resources, such as reduced erosion and soil compaction and revegetation, would be minor when considered in a regional context, but would still benefit the natural resources of the Park and adjacent areas.

Summary: A small loss of soil during the rehabilitation process could have negligible effects on soils and wetland functions and values. These effects would be short-term and likely would be mitigated soon after construction is complete. Long-term control and prevention of erosion within the campground would improve wetland values and maintain soils. Impairment of soils, wetlands, and streams is not expected.

Natural Resources – Natural Communities (Vegetation) and Wildlife

Direct and Indirect Impacts: Campsite sprawl, soil compaction, and denuding of vegetation would be reduced or eliminated, and revegetation of the campground understory would improve natural conditions and wildlife habitat. These improvements within Blackwoods Campground would have minor, indirect, long-term benefits on the surrounding vegetation and wildlife species in the campground. The reduction in erosion and soil compaction would allow natural recruitment by native vegetation in those areas. As vegetation establishes and matures over time, it would improve aquatic and upland resources by filtering runoff and reducing erosion. Prohibiting firewood collection in the campground would help repair the understory vegetation by reducing trampling and allowing downed wood to decompose into the soil. Maturing vegetation would also create additional and more diverse types of wildlife habitat.

Minor, long-term beneficial impacts to wildlife will occur as rehabilitation efforts improve habitat through understory vegetation restoration, reduced soil compaction, and improved water quality as discussed above. Establishing vegetation would improve the demarcation of campsites and provide a visual screen between sites. This improvement would result in minor long-term benefits to visitors and the aesthetic qualities of the campground. Campsite sprawl, soil compaction, and denuding of vegetation would be reduced or eliminated and revegetation of the campground understory would improve natural conditions and wildlife habitat. BMPs would be utilized during construction to minimize impacts as much as possible.

Cumulative Impacts: Minor, long-term, beneficial cumulative impacts to vegetation would occur. Several rehabilitation projects throughout ANP are ongoing and aim to reduce erosion and soil compaction, eliminate or formalize social trails, rehabilitate formal trails, and reduce visitor effects on Park facilities and resources, all of which will provide a cumulative benefit to vegetation and natural communities throughout the Park. Minor long-term cumulative benefits to wildlife would occur, as wildlife habitat would be improved.

Summary: Improvements to the vegetation communities would benefit wildlife habitat in and adjacent to the campground. Minor cumulative benefits would occur to wildlife habitat in the Park. These benefits would be long-term by implementing guidelines to visitors and active maintenance of the re-established vegetation. Impairment to vegetative and wildlife resources should not occur.

Soundscape

Direct and Indirect Impacts: Short-term, negligible adverse impacts would occur during construction. These impacts would end once construction is finished. Long-term, moderate beneficial impacts would occur by prohibiting generator use and adding vegetation to buffer sound. The ambient soundscape would improve and visitor complaints would likely decrease.

Cumulative Impacts: Adverse and beneficial impacts would be restricted to Loop A and immediately adjacent areas and would be scheduled so as not to overlap. Therefore, cumulative impacts from other past, present, and future projects would probably not occur.

Summary: Short-term and local adverse impacts would be expected from construction activities. Long-term benefits would occur by reducing a source of noise that many visitors find annoying. Impairment to the soundscape resources should not occur.

Air Quality

Direct and Indirect Impacts: Construction activities completed during the rehabilitation process would create some negligible impacts to local air quality. Moderate improvements to air quality would be expected within Loop A, when generator use is terminated. Beneficial effects would be long-term and local.

Cumulative Impacts: Adverse and beneficial impacts would be restricted to Loop A and immediately adjacent areas. Therefore, cumulative impacts from other past, present, and future projects would probably not occur.

Summary: Negligible adverse impacts would occur from short-term construction activities. Long-term, negligible beneficial effects to the air quality would occur because generator use would be prohibited. Impairment of air quality would not occur.

Cultural Resources – Cultural Landscape

Direct and Indirect Impacts: The moderate long-term beneficial effects on the historically designed landscape of Loop A would be similar to those of Alternative B by eliminating or controlling problems associated with overuse and improper drainage that have contributed to the loss of character-defining features of the campground.

Cumulative Impacts: Alternative C would have cumulative beneficial impacts on the cultural landscape of ANP the same as those of Alternative B. The proposed project represents a component of a major

system-wide rehabilitation effort that will allow ANP to retain its historic integrity and cultural landscape, while continuing to meet the needs of modern visitors. No adverse cumulative effects are anticipated from completion of the rehabilitation relative to other projects in the vicinity.

Summary: Impacts on the cultural landscape of the proposed Alternative C are the same as those of the preferred alternative. Impairment of the cultural landscape is not anticipated.

Cultural Resources – Historic Structures

Direct and Indirect Impacts: The moderate beneficial impacts to historic structures would be the same as those of Alternative B, focusing on the rehabilitation and preservation of the exterior of the five historic restrooms and replacement in-kind of old fixtures with modern ones.

Cumulative Impacts: As for Alternative B, the rehabilitation of the restrooms would have a minor, long-term beneficial effect on the cultural landscape of ANP as a whole, when considered in combination with other previous and proposed rehabilitation projects, including Seawall Campground, carriage roads, carriage road bridges, Pretty Marsh, and Schoodic Point. No adverse cumulative effects are anticipated from completion of the rehabilitation relative to other projects in the vicinity.

Summary: Moderate, direct long-term beneficial impacts would result from the sensitive rehabilitation of the five historic restrooms according to *The Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes* (NPS 1996). Impairment of historic structures is not expected.

Visitor and Staff Safety

Direct and Indirect Impacts: Adverse and beneficial impacts would be the same as those of Alternative B, generally focusing on short-term minor adverse impacts and long-term minor benefits.

Cumulative impacts: Potential cumulative effects would be similar to those of Alternative B, generally negligible to minor considering safety hazards that would occur through this alternative combined with other safety issues from projects in the vicinity.

Summary: Negligible to minor safety concerns would result from implementing Alternative B with the appropriate safety precautions taken. Visitor and staff safety would be slightly improved in the long-term by rehabilitating deteriorating structures and conditions.

Visitor Use and Experience

Direct and Indirect Impacts: Alternative C would improve visitor experiences by improving the conditions in the campground. The improved campsite layout, rehabilitation of the restrooms, improved road conditions, and revegetation would make the campground more aesthetically pleasing and better functioning. Separating different user groups (i.e., tent campers and group campers) would reduce user conflicts. Generator use would be banned, which would create beneficial effects for some visitors, while creating adverse effects for RV owners using Blackwoods. Providing electrical hookups at several handicap sites under this alternative would better serve the needs of some visitors with disabilities.

Cumulative Impacts: Blackwoods Campground would be closed for the duration of construction. The closure would be staggered with rehabilitation work at Seawall Campground such that at least one campground would be open at any given time. This situation would result in increased demand at Seawall Campground and private campgrounds in the region and would likely make it more difficult for

visitors to obtain campsites during the construction phase. The quality of the visitor experience would likely be diminished for short periods during the busy season. Visitors would be made aware of the rehabilitation work and the need for it. Appropriate education and signage would help prevent surprise and frustration among visitors. With these minimization aspects in place, temporary, short-term adverse impacts should be minimal and negligible. The temporary closure of the campgrounds for rehabilitation combined with bridge and carriage road closures could have a minor adverse effect on visitor use, but these effects should only be apparent during the construction periods. Long-term moderate benefits to visitors would result directly relating to their enjoyment of the campgrounds and cumulatively within the Park and vicinity as other improvements are made to Park attractions and facilities.

Summary: Short-term, minor impacts would be expected from closure of the campground during rehabilitation. A shortage of campsites may result with minor, short-term adverse impacts to visitors both at the Park and offsite. Cumulative impacts would be short-term and minor. Moderate, long-term benefits would result through improvements to the campground, which would reduce complaints and visitor conflicts. Improving campground conditions would alleviate problems and issues that have reduced the quality of the visitor experience in the past; however, campers with RV's would be inconvenienced by not being able to use generators.

Socioeconomic Resources

Direct and Indirect Impacts: Negligible, short-term beneficial impacts to socioeconomic resources that may occur during the closure of Blackwoods Campground would be similar to Alternative B, except that they may be slightly more intense during a shorter time-frame. Some minor, short-term benefits could occur to local private campgrounds when portions of Blackwoods is closed by displacing campers to private campgrounds during the off seasons, when these campgrounds do not operate at peak capacities. Some visitors unable to obtain campground accommodations could leave the MDI area and not return to the Park or simply not visit the Park during this time period, thus creating some negligible adverse impacts to the local economy. Others may seek accommodations further away from MDI, but return to the Park, which takes some business from local merchants. These impacts, both beneficial and adverse, would be restricted to the local area.

Cumulative Impacts: Rehabilitation projects are ongoing throughout ANP. The cumulative effects of these projects along with the rehabilitation of Blackwoods Campground would have a minor, short-term adverse impact on socioeconomic resources of the region. Over time, these projects would improve visitor experiences and help maintain the level of tourism in the Park and surrounding communities, which in the long-term would create minor beneficial effects on the economy.

Summary: Short-term adverse impacts could occur to some businesses in the area during the period of construction. A reduction of NPS campsites may actually increase business for some private campgrounds and hotels. These impacts and benefits would be contingent upon the type of business, but would be short-term and alleviated once the rehabilitation is complete. Long-term benefits would result through improving the campground. Combining the various rehabilitation and improvement projects in the Park, moderate, long-term benefits would be expected. There would be no impairment to the socioeconomic resources of the Park and vicinity.

Table 4 Impact Summary Matrix for Blackwoods Campground Rehabilitation Alternatives Considered

	Alternative A	Alternative B	Alternative C
Impact Category	Impact, duration, and intensity rating	Impact, duration, and intensity rating	Impact, duration, and intensity rating
Natural Resources:			
Soils, Wetlands and Streams.	**Adverse** negligible to minor, indirect, cumulative, long-term impacts could occur to wetlands from erosion. Soil compaction is also an adverse impact, especially in high-use areas. The intensity would be negligible and restricted to the local watershed.	**Adverse** negligible, direct, indirect, and cumulative short-term impacts could occur during construction from erosion within the campground. Minor **beneficial** impacts to the local area and watershed would occur over the long-term, by controlling erosion, reducing soil compaction, and improving drainage.	**Adverse** and **beneficial** impacts would be the same as those for Alternative B.
Natural Communities (Vegetation) and Wildlife	**Adverse** minor direct and indirect, long-term adverse impacts would result from continued loss of vegetation predominately occurring in the high-use areas of the campground. Impacts would be restricted to the campground. Denuded vegetation would contribute adverse impacts to wildlife habitat. Cumulative effects are expected to be negligible.	**Adverse** negligible, short-term impacts would result from incidental vegetation damaged during rehabilitation activities or the potential for introducing exotic species and disturbance to wildlife. There would be no adverse cumulative impacts. **Beneficial** minor direct, indirect, and cumulative, long-term impacts would result from revegetation and improving terrestrial habitat. All impacts would be restricted to the campground.	Direct and indirect **adverse** impacts and **beneficial** impacts would be the same as those for Alternative B.
Soundscape	**Adverse** minor to moderate, long-term impacts to the soundscape in the campground near the RV sites in Loop A would continue due to continued generator use. There would be no cumulative impacts.	**Adverse** minor impacts could occur during construction. **Beneficial** minor, long-term improvements to the soundscape would occur in the campground by restricting generator use and adding vegetation to buffer sound. Cumulative beneficial impacts should be negligible.	**Adverse** negligible impacts could occur during construction. Moderate, long-term **beneficial** impacts to the soundscape would occur in the campground by prohibiting generator use and adding vegetation to buffer sound. Cumulative impacts are not expected.

Table 4 Impact Summary Matrix for Blackwoods Campground Rehabilitation Alternatives Considered

	Alternative A	Alternative B	Alternative C
Impact Category	Impact, duration, and intensity rating	Impact, duration, and intensity rating	Impact, duration, and intensity rating
Air Quality	**Adverse** Negligible to minor impacts of long-term duration from generator use would continue to degrade air quality within the campground. No cumulative impacts would occur.	**Adverse** negligible, short-term, local impacts could occur during construction within the campground. There would not be any cumulative impacts. **Beneficial** minor improvements to air quality in the long-term within the campground would result by restricting the hours of generator use. Cumulative improvements are not expected.	**Adverse** negligible impacts could occur during construction. Minor local, long-term **beneficial** effects to air quality would occur by eliminating generators.
Cultural Resources:			
Cultural Landscape	**Adverse** Moderate, long-term, direct, indirect, and minor cumulative impacts would be moderate to minor resulting from deteriorating conditions that would lead to a loss of historic value within the campground.	**Adverse** impacts are not expected. **Beneficial** moderate, long-term, direct improvements would occur by rehabilitating the cultural landscape within the campground. Minor cumulative beneficial impacts are expected to the Park.	**Adverse** impacts are not expected. **Beneficial** moderate effects would be the same as for Alternative B.
Historic Structures	**Adverse** direct and indirect, long-term impacts would be moderate, eventually resulting in the potential deterioration and loss of historic structural elements or materials within the campground. Cumulative impacts would be negligible.	**Adverse** impacts would not be expected. **Beneficial** direct, moderate, long-term impacts would result from the sensitive rehabilitation of the five historic restrooms according to *The Secretary of the Interior's Standards for the Treatment of Historic Properties With Guidelines for the Treatment of Cultural Landscapes* (NPS 1996). Cumulative benefits would be minor.	**Adverse** impacts would not be expected. **Beneficial** moderate, long-term impacts the same as Alternative B would be expected. Cumulative benefits would be minor.

Table 4 Impact Summary Matrix for Blackwoods Campground Rehabilitation Alternatives Considered

	Alternative A	Alternative B	Alternative C
Impact Category	Impact, duration, and intensity rating	Impact, duration, and intensity rating	Impact, duration, and intensity rating
Visitor and Staff Safety	**Adverse** direct, indirect, and cumulative impacts would be negligible. Deteriorating conditions could lead to an increase in safety issues that, overtime would probably be minor. All impacts would be restricted to the campground.	**Adverse** short-term, negligible, direct, impacts to visitor and staff safety could occur during construction. **Beneficial** long-term, minor improvements to safety would occur as deteriorating campground facilities are improved. No cumulative effects would be expected. All effects would be restricted to the immediate area of the rehabilitation.	**Adverse** and **beneficial** effects would be the same as for Alternative B.
Visitor Use and Experience	**Adverse** long-term, moderate, direct and indirect impacts to visitor experience would occur as campground conditions continue to deteriorate. Impacts would be restricted to the campground. Minor cumulative effects would possibly occur.	**Adverse** short-term, minor, direct and indirect impacts to visitor use would occur during construction and rehabilitation activities. **Beneficial** long-term, moderate effects would occur as visitor use and experience would improve with better campground conditions. All effects would be restricted to the area on and near MDI.	**Adverse** long-term, moderate impacts would occur to those RV owners that use generators. **Beneficial** impacts would be the same as for Alternative B.
Socioeconomic Resources	**Adverse** minor, long-term impacts could occur as deteriorating campground conditions change visitor use patterns and push visitors to use other facilities. Revenues generated by visitors would be reduced. There would be negligible adverse cumulative effects over the long-term.	**Adverse** minor, indirect, short-term impacts from campground closure during construction generally of local context. Negligible cumulative adverse impacts are expected. **Beneficial** minor, local and cumulative impacts over the long term as improved campground conditions encourage visitor use and thereby benefit local businesses that cater to campers.	**Adverse** impacts could occur to the ANP revenues, especially with the closure occurring during the busy season. Campsites that provide showers and other facilities for visitors to Blackwoods may suffer some revenue loss during the period of construction. **Beneficial** effects would be similar to those for Alternative B. The beneficial effects of increasing some revenues to off-site camping areas may occur during rehabilitation.

5 Consultation & Coordination

5.1 Introduction

NEPA requires federal agencies preparing EAs to consult with stakeholders, including the general public and appropriate federal, state, and local regulatory agencies, early in the planning process to identify issues and concerns. This EA considers federal, state, and local agencies that may have some regulatory jurisdiction over the rehabilitation activities that are proposed and provides a discussion of regulatory permitting that must be completed before the proposed rehabilitation and policy changes can begin. The steps taken towards meeting these compliance goals, thus far, are documented below. Consultation was completed with numerous agencies and public interest groups to facilitate permitting and to inform them of the project. The necessary permits are discussed below as organized by regulatory authority. Public input is sought by issuing this EA for a 30-day public review and commenting period.

5.2 Regulatory, Management, and Legislative Considerations

A workshop was held at ANP on October 16, 2001 to discuss rehabilitating Seawall and Blackwoods Campgrounds with local business owners and other interested parties, specifically to identify issues of concern and to gather suggestions for minimizing impacts. Eleven individuals attended, including owners and representatives of Seawall Camping Supplies, Maine Campground Owners Association, Hot Showers/Blackwoods, Bar Harbor Chamber of Commerce, Down East Regional Tourism Board, Spruce Valley Campground, Smuggler's Den Campground, Bass Harbor Campground, Mount Desert Narrows Campground, and Hadley's Point Campground.

Topics discussed at the workshop included modernizing Blackwoods Campground by adding electric hookups and showers; banning generator use; and construction schedule alternatives. Commercial campground operators indicated that modernizing the campground would bring ANP in direct competition with private campgrounds in the area. Traditionally, the ANP campgrounds offer a more rustic camping experience, distinguishing them from private sites that provide water and electric hookups and cater to campers who seek more services.

In general, the workshop participants felt that closing the campground during the shoulder seasons (May to the end of June and mid-September to the end of October) would have less impacts to their businesses because campgrounds are generally not full during these times, and the private campgrounds could accommodate displaced campers. This would not be possible in the peak season when private campgrounds are typically at capacity. ANP suggest that one strategy might be to complete road and utility work in the off-season, with limited "loop" closures during the shoulder seasons.

5.3 Interagency Consultation

Federal, state, and local agencies that have jurisdiction over the project area were contacted to determine permitting and other compliance requirements. Copies of this EA were provided to each agency and other individuals listed in section 5.5. The following agencies are requested to provide a determination of permitting requirements under their respective jurisdiction.

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- Maine Department of Environmental Protection
- Maine Department of Inland Fisheries and Wildlife
- Maine State Historic Preservation Commission
- Coastal Program, Maine State Planning Office
- Town of Mount Desert

5.4 Compliance

5.4.1 Federal

Clean Water Act of 1972

The purpose of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." As part of this legislation the **U.S. Army Corps of Engineers (ACOE)** regulates fill impacts to Waters of the United States, including wetlands, which could potentially degrade Waters of the United States. The wetlands delineated within the campground and underneath the power-line would be considered jurisdictional wetlands by the ACOE; therefore, any permanent or temporary fill impacts or other activities that alter the wetlands will require permitting through either the Programmatic or Individual permitting processes.

Alteration of the wetlands is not proposed as part of the rehabilitation; hence, permitting through the ACOE should not be required.

Endangered Species Act of 1973, as Amended (16 USC 1531 et seq.)

The **U.S. Fish and Wildlife Service (USFWS)** regulates the taking and incidental taking of wildlife and plant species listed as endangered and threatened as per the Federal Register. Section 7 of the Endangered Species Act requires that federal agencies consult with the USFWS on any action that may affect a listed species. The USFWS was consulted through correspondence to biologists in the Old Town field office and will be provided a copy of this report. Correspondence from the USFWS indicates that there are no known endangered or threaten species in the vicinity of the project. There does not appear to be any suitable habitat of federally listed species and none have been observed in the vicinity of the campground so it is unlikely that the rehabilitation will impact any federally listed species (Correspondence Attached).

Section 106 of the National Historic Preservation Act of 1966 as amended (16 USC 470 et seq.)

Section 106 of the National Historic Preservation Act, as amended (36 CFR 800), requires federal agencies to consider the affects of projects they fund, permit, or license on historic properties that are listed or eligible for listing in the NRHP. Compliance with Section 106 requires agencies to initiate consultation during the project's early planning stages with appropriate parties, including the pertinent State and/or Tribal Historic Preservation Officer(s); identify historic properties within the project's area of potential effect; and determine what impact, if any, the project will have on those resources. If the agency, in consultation with the other consulting parties, determines that the project has the potential to have an adverse impact on historic properties, further consultation must occur to seek ways to avoid, minimize, or mitigate the effects. Consultation and compliance under Section 106 will be completed prior to project commencement.

While this EA identifies historic properties and provides information about the potential effects of the project, it does not satisfy the NPS's obligations under Section 106. No rehabilitation activities can begin until the NPS completes consultation with the State Historic Preservation Commission/State Historic Preservation Officer and a mutual accord is reached concerning the potential effects. Consultations with the Historic Preservation Officer are ongoing and expected to be completed prior to commencement of the project.

Coastal Zone Management Act of 1972

The Consistency Determination through the Maine State Planning Office, Coastal Program under the Coastal Zone Management Act, Section 307 (c) and 15 CFR Part 930, sub-part C, will be obtained after documentation is provided that permits pursuant to the Natural Resources Protection Act and Clean Water Act are not needed. This determination is made to insure compliance with the Coastal Zone Management Act and to insure that coastal resources would not be adversely affected by the project. The NPS believes that the full rehabilitation work is consistent to the maximum extent practicable with the enforceable policies of the Maine Coastal Program based on the information and analysis contained herein. The NPS will obtain all necessary permits to complete work within the coastal zone. The Coastal Zone Management Act concurrence will not be effective and rehabilitation work will not begin until the coastal zone consistency is obtained.

5.4.2 State

Natural Resources Protection Act (38 M.R.S.A. Section 480)

The Maine Department of Environmental Protection implements this legislation, which protects wetland and water resources from impacts and alterations and protects water quality from degradation. Wetland impacts are not proposed and work is not proposed within any resource protection areas. The project should not require any permits pursuant to the Natural Resource Protection Act, as there are no wetland impacts. Should a permit be required by the Maine Department of Environmental Protection, the appropriate submittal will be made, and if so, rehabilitation work will not begin until all necessary permits have been obtained.

State Endangered Species Act

The State of Maine Endangered Species Act protects state listed endangered and threatened species. The Maine Department of Inland Fish and Wildlife was contacted to determine if any significant wildlife or fisheries habitat exists in the project area. Mr. Scott Lindsay was contacted and indicated that habitat for

state-listed endangered and threatened species and other significant wildlife habitat does not occur within the campground (Correspondence Attached).

Mandatory Shoreline Zoning Act

The Maine Mandatory Shoreline Zoning Act (Title 38 MRSA Sections 435-449) applies to all lands within 250 feet of lakes, ponds, rivers, tidal areas, and freshwater wetlands and at least 75 feet from the portions of streams that are downstream of two intermittent or perennial confluences. These regulations are implemented at the local level through the Town of Mount Desert. There are no waterbodies within the campground and none occur within 250 feet of the campground boundary. Issues relating to Shoreland Zoning should not apply to the rehabilitation of Blackwoods Campground.

5.4.3 Local

Blackwoods Campground exists in the Mount Desert township. The project is not within any shoreland zoning areas. Projects on federal lands are not required to comply with local building codes or zoning, except those that are promulgated from federal legislation.

5.5 List of Recipients

This EA is available for public review and comment for a 30-day period, expected to close on September 8, 2003. As indicated below, it has been distributed to a number of interested individuals, agencies, organizations, including those agencies referenced in Section 5.3 of this EA. This EA is available on the Internet at http://www.nps.gov/acad/management.htm and is being made available in local libraries for the review period.

State, Federal, and Local Agencies
James Beyer, Maine Department of Environmental Protection
Todd Burrows, Maine Coastal Program
Jay Clement, U.S. Army Corps of Engineers
Mark McCollough, U.S. Fish and Wildlife Service
Tom Schaeffer, Maine Department of Inland Fish and Wildlife
Earle Shettleworth, Jr., Maine Historic Preservation Commission
Louis Sidell, Maine Floodplain Management Program
Dana Reed, Town Manager, Town of Bar Harbor
Michael MacDonald, Town Manager, Town of Mount Desert

Community Organizations and Interested Individuals
Acadia Bike
Acadia Corporation
ANP Advisory Commission, Steve Katona
Aquaterra Adventures
Arter, Barbara S.
Associated Press
Bar Harbor Bicycle Shop
Bar Harbor Campground
Bar Harbor Chamber of Commerce
Bar Harbor Historical Society
Bar Harbor KOA
Bass Harbor Campground

Bicycle Coalition of Maine
Church, Ellen
Downeast Area Regional Tourism c/o Risteen Masters
Downeast Transportation
Ellsworth Chamber of Commerce
Escapees RV Club
Family Motor Coach Association
Footloose Friends
Friends of Acadia
Hadley's Point Campground
Hot Showers/Blackwoods
Maine Campground Owners Association
Maine Chapter of the Sierra Club
Mount Desert Campground
Mount Desert Chamber of Commerce
Mount Desert Island Historical Society
Mount Desert Narrows Campground
National Parks & Conservation Association
Northeast Harbor Chamber of Commerce
Otter Creek Market
Quietside Campground and Cabins
Seawall Camping Supply
Smuggler's Den Campground
Somes Sound View Campground
Southwest Cycle
Southwest Harbor Chamber of Commerce
Spruce Valley Family Campground
White Birches Campground
Wildwood Stables

Federally Recognized Tribes in Maine
Aroostook Band of Micmacs, Bernard Jerome
Aroostook Band of Micmacs, William Phillips, Chief
Houlton Band of Maliseet Indians, Brenda Commander, Chief
Houlton Band of Maliseet Indians, Sharri Venno
Passamaquoddy Tribe-Indian Township, Robert Newell, Governor
Passamaquoddy Tribe-Pleasant Point, Melvin Francis, Governor
Penobscot Nation, Barry Dana, Chief
Penobscot Nation, Bonnie Newsom
Tribal Historic preservation Office, Donald Soctomach

Libraries
Bangor Public Library
Bass Harbor Library (College of the Atlantic)
Ellsworth Public Library
Jesup Memorial Library (Bar Harbor)
Northeast Harbor Library
Seal Harbor Library
Somesville Public Library
Southwest Harbor Public Library
Thorndike Library (College of the Atlantic)

Press Releases were submitted to the following:
Appalachian Mountain Club
Bangor Daily News
Bar Harbor Times
Bates College AESOP
Berkshire Country Day
Bowdoin Outing Club
BSA Venture Crew 121
Camp Jewell YMCA
Camp Knickerbocker
Camp Laurel
Camp Laurel South
Camp Modin
Camp Winnebago
Castine Patriot
Catholic JH Youth Ministry
Dobbs Production
Downeast Coastal Press
Ellsworth American
Ellsworth Weekly
Frost Valley YMCA
Girl Scout Troop 350
Hidden Valley Camp
Island Advantage
Longacre Expeditions
Maine Coast Reporter
Maine House of Representatives
Maine Teen Camp/OTR
Mount Desert Islander
Maine Publicity Bureau
Penobscot Bay YMCA
Trailmark #4
University of Maine Upward Bound
U.S. Senator
U.S. Representative
WABI Television Station
WERU Radio Station
WKSQ Radio Station
WLBZ Television Station
WQCB-FM Radio Station
WVII- TV
WWFX Radio Station

6 Acronyms, Bibliography & List Of Preparers

Acronyms

ACOE	U.S. Army Corps of Engineers
ADA	Americans with Disabilities Act
ANP	Acadia National Park
BMPs	Best Management Practices
CCC	Civilian Conservation Corps
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
FONSI	Finding of No Significant Impact
GMP	General Management Plan, Acadia National Park
MDI	Mount Desert Island
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
RV	Recreational Vehicle
USFWS	U.S. Fish and Wildlife Service

Bibliography

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States.* U. S. Fish & Wildlife Service Publication Number FWS/OBS-79/31.

Dunford, Robert D. 1971. Ecological Aspects and Camper Opinions of Blackwoods Campground, Acadia National Park. National Park Service, Unpublished report.

Foulds, H. Eliot. 1996. *Cultural Landscape Report for Blackwoods and Seawall Campgrounds-Acadia National Park.* Olmstead Center for Landscape Preservation. Boston, MA.

Gawler, S. C. 2001. *Natural Landscapes of Maine: A Classification of Vegetated Natural Communities and Ecosystems.* Maine Natural Areas Program, Department of Conservation, Augusta, ME.

Good, A.H., ed. 1938. Park and Recreation Structures. 3 Vols. National Park Service, Washington, DC.

Littlejohn, Margaret. 1999. *Acadia National Park Visitor Survey Summer 1998.* Visitor Services Project, National Park Service, Cooperative Park Studies, Unit, University of Idaho.

McClelland, L.F. 1995. Historic Park Landscapes in National and State Parks, National Register of Historic Places Multiple Property Documentation Form. U.S. Department of the Interior, National Park Service. Washington, DC.

National Park Service, U.S. Department of the Interior. 1992. General Management Plan – Acadia National Park. National Park Service Regional Office, Boston, MA.

_____. 1996. The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.

_____. 1997a. Strategic Management Plan-Acadia National Park. National Park Service Regional Office, Boston, MA.

_____. 1997b. Director's Order 28: Cultural Resource Management. Washington, DC.

_____. 2001a. Director's Order 12 and Handbook Conservation Planning, Environmental Impact Analysis, and Decision-making. Washington, DC.

_____. 2001b. Director's Order 47: Sound Preservation and Noise Management. Washington, DC.

_____. 2001c. National Park Service Management Policies, 2001. Washington, DC.

_____. 2002. Design Analysis, Upgrade Utilities and Campgrounds. Acadia National Park, ACAD Package 233, July 30, 2002, Denver Service Center.

_____. 2003a. Amphibians, Reptiles, and Mammals. Acadia National Park Official Website. Last updated: 10-26-02. http://www.nps.gov/acad/animals.htm

_____. 2003b. Design Analysis, Upgrade Utilities and Campgrounds, 50% Construction Drawings. Acadia National Park, ACAD Package 233, January 21,2003, Denver Service Center.

Natural Resource Conservation Service, U.S. Department of Agriculture. 1998. Soil Survey, Hancock County. Bangor, ME.

Spherix. 2002. NPRS Statistics 2002, Acadia National Park. 12051 Indian Creek Court, Beltsville, MD 20705. Unpublished report.

U.S. Army Corps of Engineers. 1999. The Highway Methodology Workbook Supplement: Wetland Functions and Values, A Descriptive Approach. U.S. Army Corps of Engineers, New England Division. Waltham, MA. Publication Number NAEEP-360-1-30a.

U.S. Environmental Protection Agency. 1996. Draft Environmental Justice Guidance. Washington, D.C.

List of Preparers

Woodlot Alternatives, Inc., Environmental Consultants, 30 Park Drive, Topsham, ME 04086. Mark W. Christopher, Senior Project Manager; Steven K. Pelletier, Principal; Karol Worden, Project Manager; Chris Werner, Project Biologist; Michael Johnson, Project Biologist; Donna Watson, Administrative Assistant; Kurt Howard, GIS Specialist.

Public Archeology Laboratory. Steven Olausen, Senior Architectural Historian.

Acadia National Park. Judith Hazen Connery, Biologist and NEPA Compliance Coordinator; James Vekasi, Chief of Maintenance; Clay Gilley, Park Engineer; Len Bobinchock, Acting Park Superintendent; Lee Terzis, Cultural Resource Program Manager; Sheridan Steele, Superintendent.

National Park Service Denver Service Center. Richard Crane, Project Manager.

National Park Service Boston Regional Office. David Clark, Senior Environmental Compliance Specialist.

Appendix A

List of Plant Species Observed in Blackwoods Campground

Table A-1 List of Plant Species Observed in Blackwoods Campground

Scientific Name	Common Name	Native/Exotic	Wetland/Upland
Abies balsamea	Balsam fir	N	U
Acer pensylvanicum	Striped maple	N	U
Acer rubrum	Red maple	N	W/U
Acer saccharum	Sugar maple	N	U
Acer spicatum	Mountain maple	N	U
Agrostis perennans	Autumn bentgrass	N	U
Alnus incana	Speckled alder	N	W
Amelanchier bartramiana	Mountain shadbush	N	W
Aralia nudicaulis	Wild sarsaparilla	N	U
Aster macrophyllus	Big-leaved aster	N	U
Betula papyrifera	White birch	N	U
Betula populifolia	Gray birch	N	W/U
Brachyelytrum septentrionale	Grass	N	U
Calamagrostis canadensis	Bluejoint	N	W/U
Carex cf. arctata	Drooping wood sedge	N	U
Carex crinita	Drooping sedge	N	W/U
Carex gynandra	Nodding sedge	N	W
Clintonia borealis	Bluebead-lily	N	W
Cornus canadensis	Bunchberry	N	U
Cornus sericea	Red osier dogwood	N	W
Danthonia spicata	Poverty oatgrass	N	NL
Diervilla lonicera	Bush-honeysuckle	N	U
Doellingeria umbellata	Flat-topped white aster	N	W
Erythronium americanum	Trout lily	N	NL
Euthamia graminifolia	Grass-leaved goldenrod	N	W/U
Fraxinus americana	White ash	N	U
Gaylussacia baccata	Black huckleberry	N	U
Glyceria sp.	A grass	N	NA
Impatiens capensis	Orange touch-me-not	N	W
Juncus effusus	Soft rush	N	W
Juncus tenuis	Path rush	N	U
Kalmia angustifolia	Sheep laurel	N	U
Ilex verticillata	Winterberry	N	W
Lonicera cf. morrowii	Morrow's honeysuckle	E	U
Lycopodium obscurum	Ground-pine	N	U
Maianthemum canadense	Canada mayflower	N	U
Myrica pensylvanica	Bayberry	N	W/U
Nemopanthus mucronatus	Mountain holly	N	W
Oclemena acuminata	Whorled aster	N	U
Onoclea sensibilis	Sensitive fern	N	U
Osmunda cinnamomea	Cinnamon fern	N	U
Osmunda claytoniana	Interrupted fern	N	U

Table A-1 List of Plant Species Observed in Blackwoods Campground

Scientific Name	Common Name	Native/Exotic	Wetland/Upland
Phalaris arundinacea	Reed canarygrass	N	W
Phleum pratense	Timothy	E	U
Picea glauca	White spruce	N	U
Picea rubens	Red spruce	N	U
Pinus strobus	Eastern white pine	N	U
Poa palustris	Fowl mannagrass	N	W
Polygonum spp.	A knotweed	NA	NA
Populus grandidentata	Big-toothed aspen	N	U
Populus tremuloides	Quaking aspen	N	U
Physocarpus opulifolius	Ninebark	E	W
Prunus pensylvanica	Pin cherry	N	U
Prunus virginiana	Choke cherry	N	U
Pteridium aquilinum	Bracken fern	N	U
Rubus allegheniensis	Common blackberry	N	U
Rubus hispidus	Swamp dewberry	N	W
Rubus idaeus	Red raspberry	N*	U
Scirpus cyperinus	Wool-grass	N	W
Scirpus microcarpus	Barber pole sedge	N	W
Solidago bicolor	White goldenrod	N	NL
Solidago puberula	Downy goldenrod	N	U
Solidago rugosa	Rough-stemmed goldenrod	N	U
Sorbus americana	American mountain-ash	N	U
Spiraea alba	Meadowsweet	N	W
Spiraea tomentosa	Steeple-bush	N	U/W
Symphyotrichum lateriflorum	Calico aster	N	U
Symphyotrichum novae-angliae	New England aster	N	W
Symphyotrichum novi-belgii	New York aster	N	W
Thuja occidentalis	Northern white-cedar	N	U
Trientalis borealis	Starflower	N	U
Trifolium pratense	Red clover	E	U
Tsuga canadensis	Eastern hemlock	N	U
Typha latifolia	Common cat-tail	N	W
Vaccinium angustifolium	Common lowbush blueberry	N	U
Vaccinium corymbosum	Highbush blueberry	N	U
Veronica officinalis	Common speedwell	E	U
Viburnum lentago	Nannyberry	N	U

Appendix B

Agency Correspondence

MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

ANGUS S. KING, JR.
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

June 13, 2003

Mark W. Christopher, M.S.
Senior Project Manager
Woodlot Alternatives
30 Park Drive
Topsham, ME 04086

Project: MHPC #1024-03 - Blackwoods Campground rehabilitation
Location: Bar Harbor, ME

Dear Mr. Christopher:

In response to your recent request, I have reviewed the information received May 27, 2003 to initiate consultation on the above referenced project. We are reviewing this project pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended.

With regards to historically significant areas within the Blackwoods Campground; Loop "A", Camp Court, Ocean Path, and Entrance Road are all eligible for inclusion in the National Register of Historic Places. Therefore, additional consultation with this office regarding rehabilitation plans for these sections of the campground is necessary prior to commencing work.

Please contact Mike Johnson of this office if we can be of further assistance in this matter.

Sincerely,

Earle G. Shettleworth, Jr.
State Historic Preservation Officer

EGS/mj

PHONE: (207) 287-2132

PRINTED ON RECYCLED PAPER

FAX: (207) 287-2335

John E. Baldacci
Governor

Roland D. Martin
Commissioner

DEPARTMENT OF INLAND FISHERIES AND WILDLIFE

June 13, 2003

James Hall
Wildlife Division - Region C
P.O. 220
Jonesboro, ME 04648
Phone: (207) - 434-5927
Fax: (207) - 434-5923

Mark Christopher
Woodlot. Alter.
30 Park Dr.
Topsham, Maine 04086

Dear Mark,
I have reviewed the Blackwoods Campground Project. We have no records of any Essential or Significant Wildlife Habitats associated with that area. Feel free to contact me if you have any questions.

Sincerely,

James Hall, Wildlife Biologist

STATE OF MAINE
DEPARTMENT OF CONSERVATION
159 HOSPITAL STREET
93 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0093

JOHN ELIAS BALDACCI
GOVERNOR

PATRICK K. McGOWAN
COMMISSIONER

June 10, 2003

Mark W. Christopher
Woodlot Alternatives, Inc.
30 Park Drive
Topsham, ME 04086

Re: Rare and exemplary botanical features, Campground Rehabilitation, Blackwoods Campground, Acadia National Park.

Dear Mr. Christopher:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request of May 27, 2003 for information on the presence of rare or unique botanical features documented from the vicinity of the project site in Acadia National Park. Rare and unique botanical features include the habitat of rare, threatened or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as

NATURAL RESOURCES INFORMATION AND MAPPING CENTER
ROBERT G. MARVINNEY, DIRECTOR AND STATE GEOLOGIST

PRINTED ON RECYCLED PAPER

PHONE: (207) 287-8044
FAX: (207) 287-8040
TTY: (207) 287-2213

well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

The Natural Areas Program has instituted a fee structure of $75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for $75.00 for our services.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,

Toni M. Bingel

Toni Bingel
GIS Specialist/Assistant Ecologist
93 State House Station
Augusta, ME 04333-0093
207-287-8044
toni.bingel@maine.gov

Enclosures

Rare or Exemplary Botanical Features in the Project Vicinity

Documented within a four mile radius of the proposed campground rehabilitation, Blackwoods Campground.

Scientific Name Common Name	Last Seen	State Rarity	Global Rarity	State Legal Status	Federal Legal Status	Habitat Description
CALAMAGROSTIS STRICTA SSP INEXPANSA NEW ENGLAND NORTHERN REED GRASS	1992	S1	G5T5	E		Damp woods and shaded cliffs.
CAREX ADUSTA SWARTHY SEDGE	1899	S2	G5	E		Dry, open places.
CAREX BUSHII BUSH'S SEDGE	1898	SX	G4	PE		Meadows (chiefly calcareous), fields, prairies, and open woods
CAREX SILICEA SEA-BEACH SEDGE	1928	S3	G5	SC		Maritime sands and rocks.
CAREX WIEGANDII WIEGAND SEDGE	1987	S3	G3	SC		Boggy or peaty soils.
CLETHRA ALNIFOLIA SWEET PEPPER-BUSH	1898	S2	G5	SC		Swamps and moist woods.
CYPRIPEDIUM REGINAE SHOWY LADY'S-SLIPPER	1891	S3	G4	T		Circumneutral peatlands (often at edges) or sunlit openings of mossy woods.
HUPERZIA APPALACHIANA APPALACHIAN FIR-CLUBMOSS	1995	S2	G4G5	SC		Damp or mossy rocks, barrens, cold woods, or bare mountains

Rare or Exemplary Botanical Features in the Project Vicinity

Documented within a four mile radius of the proposed campground rehabilitation, Blackwoods Campground.

Scientific Name Common Name	Last Seen	State Rarity	Global Rarity	State Legal Status	Federal Legal Status	Habitat Description
HUPERZIA SELAGO ALPINE CLUBMOSS	0	S1	G5	T		Damp or mossy rocks, barrens, cold woods or bare mountains.
ISOETES ACADIENSIS ACADIAN QUILLWORT	1995	S1	G2G3	T		Submersed in ponds or lakes, less often in rivers, rooted in gravel, sand, or mud, rarely amphibious
ISOETES PROTOTYPUS PROTOTYPE QUILLWORT	1992	S1	G1?	T		Shallow low nutrient ponds on sandy substrates.
JACK PINE WOODLAND JACK PINE WOODLAND	1982	S3	G3G5			Found on rock outcrops or thin sandy soils over till, mostly along the eastern coast or along lakeshores in central-northern Maine. Soils are nutrient-poor, excessively well-drained, and often contain evidence of fire.
KALMIA LATIFOLIA MOUNTAIN-LAUREL	1989	S2	G5	SC		Rocky or gravelly woods and clearings, sometimes swamps.
MARITIME SPRUCE - FIR FOREST MARITIME SPRUCE - FIR FOREST	1996	S4	G4G5			Forests of exposed maritime locations. Soils often have a thick organic mat over a thin mineral layer. Cool temperatures and frequent fogs create comparatively mesic conditions. Variants include patches dominated by fir, heart-leaved paper birch, and mou
MINUARTIA GLABRA SMOOTH SANDWORT	1998	S2	G4	SC		Open granitic ledges of mountains less than 1000 m tall.
MINUARTIA GROENLANDICA MOUNTAIN SANDWORT	1996	S3	G5	SC		Granitic ledges and gravel.

Rare or Exemplary Botanical Features in the Project Vicinity

Documented within a four mile radius of the proposed campground rehabilitation, Blackwoods Campground.

Scientific Name Common Name	Last Seen	State Rarity	Global Rarity	State Legal Status	Federal Legal Status	Habitat Description
ORYZOPSIS CANADENSIS CANADA MOUNTAIN-RICEGRASS	1897	S2	G5	SC		Dry, sandy, rocky woods
PARIETARIA PENSYLVANICA PENNSYLVANIA PELLITORY	1899	SX	G5	PE		Rocky or shaded ground
PITCH PINE WOODLAND PITCH PINE WOODLAND	1996	S3	G2			Open forest of Pinus rigida (with lesser amounts of other conifers and/or oak) on ledges or rock outcrops; elevations up to 300 meters. Soils are nutrient-poor and excessively well-drained. Heath shrubs are common in the understory. Mostly coastal.
POTAMOGETON CONFERVOIDES ALGA-LIKE PONDWEED	1995	S3	G4	SC		Acidic cold waters.
PRENANTHES NANA DWARF RATTLESNAKE ROOT	1953	S1	G5	E		Rocky or mossy exposed places in alpine areas.
PROSERPINACA PECTINATA COMB-LEAVED MERMAID-WEED	1998	S1	G5	SC		Sandy bogs of the coastal plain
SUBULARIA AQUATICA WATER AWLWORT	1987	S2	G5	SC		Sandy or gravelly margins of lakes and slow streams.
TARN TARN	1996	S2				High elevation ponds, generally above treeline, with clear, cold, fairly acidic waters in a small deep basin. Aquatic plants and algae are sparse. Salvelinus alpinus is a characteristic fish.

Rare or Exemplary Botanical Features in the Project Vicinity

Documented within a four mile radius of the proposed campground rehabilitation, Blackwoods Campground.

Scientific Name Common Name	Last Seen	State Rarity	Global Rarity	State Legal Status	Federal Legal Status	Habitat Description
THREE-TOOTHED CINQUEFOIL - BLUEBERRY LOW SUM LOW-ELEVATION BALD	1996	S3				Bedrock, ledges, and summits of igneous and high-grade metamorphic rocks usually at low to moderate elevations fairly near the coast.
UTRICULARIA RESUPINATA SMALL PURPLE BLADDERWORT	1921	S2	G4	E		Pond, lake, and river shores and margins.
VACCINIUM BOREALE ALPINE BLUEBERRY	2001	S2	G4	T		Alpine meadows and exposed, rocky sites.
WHITE CEDAR WOODLAND WHITE CEDAR WOODLAND	1996	S2				Partial to nearly closed canopy woodlands in an upland setting, on rocky slopes (10-50%). Soils thin (0-30cm) and acidic. Known only from coastal areas.

STATE RARITY RANKS

S1	Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
S2	Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
S3	Rare in Maine (on the order of 20-100 occurrences).
S4	Apparently secure in Maine.
S5	Demonstrably secure in Maine.
SH	Occurred historically in Maine, and could be rediscovered; not known to have been extirpated.
SU	Possibly in peril in Maine, but status uncertain; need more information.
SX	Apparently extirpated in Maine (historically occurring species for which habitat no longer exists in Maine).

Note: **State Ranks** determined by the Maine Natural Areas Program.

GLOBAL RARITY RANKS

G1	Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
G2	Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
G3	Globally rare (on the order of 20-100 occurrences).
G4	Apparently secure globally.
G5	Demonstrably secure globally.

Note: **Global Ranks** are determined by The Nature Conservancy.
T indicates subspecies rank, **Q** indicates questionable rank, **HYB** indicates hybrid species.

STATE LEGAL STATUS

Note: State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's endangered and threatened plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

E	ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future, or federally listed as Endangered.
T	THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.
SC	SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.
PE	POSSIBLY EXTIRPATED; Not known to currently exist in Maine; not field-verified (or documented) in Maine over the past 20 years.

FEDERAL STATUS

LE	Listed as Endangered at the national level.
LT	Listed as Threatened at the national level.

Please note that species names follow Flora of Maine: A Manual for Identification of Native and Naturalized Vascular Plants of Maine, Arthur Haines and Thomas F. Vining, 1998, V.F. Thomas Co., P.O. Box 281, Bar Harbor, Maine 04069-0281.

Where entries appear as binomials, all representatives (subspecies and varieties) of the species are rare in Maine; where names appear as trinomials, only that particular variety or subspecies is rare in Maine, not the species as a whole.

Visit our web site for more information on rare, threatened and endangered species!
http://www.state.me.us/doc/nrimc/mnap/factsheets/mnapfact.htm

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Maine Field Office
1168 Main Street
Old Town, ME 04468-2023
(207) 827-5938

In Reply Refer To:
FWS/Region 5/ES/MEFO

June 27, 2003

Mr. Mark Christopher
Woodlot Alternatives
30 Park Drive
Topsham, Maine 04086

Dear Mr. Christopher:

Thank you for your e-mail dated 6/25/03 requesting information or recommendations from the U.S. Fish and Wildlife Service. This form provides the Service's response pursuant to Section 7 of the Endangered Species Act (ESA), as amended (16 U.S.C. 1531-1543), and the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667d).

Project Name/Location: Blackwoods Campground / Acadia Nat'l Park **Log Number:** 03-248

Based on the information currently available to us, no federally-listed species under the jurisdiction of the Service are known to occur in the project area, with the exception of occasional, transient bald eagles (*Haliaeetus leucocephalus*). Accordingly, no further action is required under Section 7 of the ESA, unless: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner that was not considered in this review; or (3) a new species is listed or critical habitat determined that may be affected by the identified action.

A list of federally-listed species in Maine is enclosed for your information. Please contact the Maine Department of Inland Fisheries and Wildlife and Maine Natural Areas Program for an up to date account of state-listed species in the project area.

If you have any questions, please call me at (207) 827-5938.

Sincerely,

Mark A. McCollough,
Endangered Species Biologist

Enclosure





As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

August 2003

United States Department of the Interior – National Park Service