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ALTERNATIVES

This section first describes each management prescription developed for Rock Creek Park and the Rock Creek and Potomac Parkway. It then describes how the alternatives were formulated and provides descriptions of each alternative, using zoning to apply management concepts to park resources.

A description of how the alternatives were created based on scoping is provided in the section entitled “Formulation of Alternatives.” Following their general definition, the development of the alternatives was a two-step process.

The National Park Service identified management prescriptions that potentially were applicable to the park and parkway. Each management prescription was defined by desired visitor experiences and resource conditions. This helped establish the kinds of activities or facilities within each prescription that would achieve those targeted conditions.

The management prescriptions were then mapped to specific areas of the park to create the four alternatives evaluated in this draft general management plan.

Each alternative is a combination of several management prescriptions. None of the alternatives uses all of the prescriptions, and the locations where the prescriptions would be applied vary among alternatives.

POTENTIAL MANAGEMENT PRESCRIPTIONS

This section defines all of the management prescriptions that could be applied to Rock Creek Park and the Rock Creek and Potomac Parkway under any of the alternatives. The management prescriptions define the desired resource conditions and visitor experiences, including the appropriate kinds and levels of management, use, and development.

A management prescription is an approach for administering or treating the resources or uses of a specified area that is based on desired outcomes. Management prescriptions include target goals or objectives for one or more resources and/or visitor experiences that are present within the prescription area.

At some NPS units, management prescriptions apply to an entire park. However, all of the alternatives for Rock Creek Park and the Rock Creek and Potomac Parkway consist of multiple zones with different management prescriptions. Together, all of the management prescriptions within an alternative meet all of the goals for the park and parkway.

Different physical, biological, and social conditions are emphasized in each zone. The factors that define each management prescription are the

desired natural and cultural resource conditions

desired visitor experience

These factors then indicate the types of activities or facilities that are appropriate within the zone.

Regardless of the target visitor experience or resource condition, all of the management prescriptions conform to all of the park-specific purpose, significance, and mission goals, and the servicewide mandates and policies, that were described earlier in this draft general management plan. For example an archeological site would be protected, regardless of whether it occurs in the forest zone, cultural resource zone, or valley floor automobile access zone. However, the *use* of that site for interpretive or educational purposes could vary, depending on the management prescription to which its vicinity was assigned.

The 12 management prescriptions identified as potentially applicable to Rock Creek Park and the Rock Creek and Potomac Parkway are described below and summarized in table 2. Consistent with the high level of concern expressed in scoping about the use of roadways, seven of the prescriptions apply to roads. The others emphasize desired conditions and visitor experiences for forests, cultural resources, recreation areas, visitor facilities, and administration and operations areas.

FOREST ZONE

Largely undisturbed forests characterize this zone. Forests on the valley slopes and ridge tops provide opportunities for solitude, nature study, and wilderness-like scenery. This is the only zone where a visitor expects a low to moderate number of encounters with other park visitors.

Impacts on natural resources from human activities are avoided or largely mitigated. Cultural resources are managed compatibly with the natural environment.

Unpaved trails provide for hiking, horseback riding, and jogging. A few paved trails provide for mechanized activities such as bicycling and in-line skating.

Desired Visitor Experience

In the interior of this zone, visitors are immersed in a natural landscape. The zone provides opportunities for exploration and contemplation of the forest, and respite from the sounds and views of the city.

Paved trails within the zone support active recreation and also provide opportunities for visitors in wheelchairs or with young children in strollers to experience a natural setting. On paved trails in the forest zone, the chance of a visitor encountering someone else are moderate to high on busy weekends. Away from paved trails, the encounter rate is low to moderate.

Desired Resource Conditions

Natural processes function in this zone with relatively little interference except for restorative actions to protect or promote native biota, mitigate pollution, and control erosion. Natural and cultural resources within the zone are documented and understood through nondisruptive research. Archeological, historic, and ethnographic resources are managed compatibly with the natural environment, while recognizing that some disturbance to the forest currently occurs and will continue to occur in these areas.

TABLE 2: SUMMARY OF MANAGEMENT PRESCRIPTIONS

Management Prescription	Description	Visitor Experience and Resource Condition	Appropriate Activities and Facilities
Forest Zone	Natural landscape of forests on the valley slopes and ridge tops	Provides opportunities for exploration and contemplation of the forest Low to moderate encounter frequency with other visitors Mostly undisrupted natural processes	Activities: hiking and nature study Facilities: mostly undeveloped, other than trails
Cultural Resource Zone	Contains the key cultural resources related to the significance and purposes of the park	Provides a sense of history High encounter frequency with other visitors and park personnel Protects the integrity and ambiance of cultural features Documents and interprets resources Manages natural resources compatibly with cultural resource	Activities and facilities are compatible with cultural resource protection Activities: education and interpretation, adaptive uses Facilities: cultural resources, which could be adaptively used
Valley Floor Automobile Access Zone	Roadways and mowed areas along the Rock Creek and Piney Branch valley floors Provides scenic views of the creek and forested valley	Provides motorized and nonmotorized access to the valley and informal recreational areas Moderate to very high encounter frequency with other visitors Heavy urban traffic on weekdays On weekends and holidays, motorized traffic is excluded and nonmotorized recreation occurs Landscape is largely forested, but shoulders and grassy bays are maintained by mowing	Activities: motorized and nonmotorized touring, nonrecreational traffic through or across the valley, and informal recreation such as picnicking, nature study, and hiking Facilities: rustic picnic areas, paved trails, roadways, and traffic control devices
Valley Floor Controlled Automobile Access Zone	Similar to Valley Floor Automobile Access Zone but with reduced traffic volumes and speeds	Same as Valley Floor Automobile Access Zone	Same as Valley Floor Automobile Access Zone

TABLE 2: SUMMARY OF MANAGEMENT PRESCRIPTIONS (Continued)

Management Prescription	Description	Visitor Experience and Resource Condition	Appropriate Activities and Facilities
Valley Floor Nonmotorized Recreation Zone	<p>Excludes motorized traffic</p> <p>Includes Beach Drive and adjacent mowed areas</p> <p>Provides scenic views of the creek and forested valley</p>	<p>Visitors enjoy natural sights, sounds, and smells, uninterrupted by motor vehicle traffic</p> <p>Relaxed and unhurried experience</p> <p>Moderate to very high encounter frequency with other visitors</p> <p>Landscape is largely forested, but shoulders and grassy bays are maintained by mowing</p>	<p>Activities: nonmotorized recreation such as walking, bicycling, in-line skating, and picnicking</p> <p>Facilities: paved trails or former road bed, rustic picnic areas, and interpretive waysides</p>
Valley Floor Mid-Weekday Recreation Zone	<p>Excludes motorized traffic on weekdays between 9:30 A.M. and 3:30 P.M.</p> <p>At all other times, is similar to the Valley Floor Controlled Automobile Access Zone</p>	<p>During mid-weekday closures, same as the Valley Floor Nonmotorized Recreation Zone</p> <p>At all other times, same as the Valley Floor Controlled Automobile Access Zone</p>	<p>Same as Valley Floor Automobile Access Zone</p>
Rock Creek and Potomac Parkway Zone	<p>Highly developed parkway that provides a scenic driving experience</p> <p>Mix of grassy fields and woodlands with limited city views</p>	<p>Esthetically pleasing landscape provides a sense of decompression and relaxation</p> <p>High to very high encounter frequency with other visitors</p> <p>Heavy traffic is accepted</p> <p>Natural and historic features are maintained, including parkway design</p>	<p>Activities: motorized and nonmotorized recreation such as driving, walking, bicycling, and in-line skating</p> <p>Facilities: roadways and paved trails</p>
Park Road Zone	<p>Park roads, including associated shoulders, pullouts, parking areas, paved trails, historic bridges, and scenic viewpoints</p>	<p>Provides motorized and nonmotorized park access</p> <p>High to very high encounter frequency with other visitors</p> <p>Unhurried drive or bicycle ride, despite heavy urban traffic at times</p> <p>Surrounding landscape is forested, but shoulders are maintained by mowing</p>	<p>Activities: motorized and nonmotorized touring, nonrecreational traffic across the park</p> <p>Facilities: roadways, paved trails, and traffic control devices</p>

TABLE 2: SUMMARY OF MANAGEMENT PRESCRIPTIONS (Continued)

Management Prescription	Description	Visitor Experience and Resource Condition	Appropriate Activities and Facilities
Visitor Facility Zone	Developed zone defined by facilities for information, interpretation, education, and other visitor services	<p>Receive introduction to park's natural and cultural history</p> <p>Obtain information on recreation opportunities</p> <p>High encounter frequency with other visitors and park personnel</p> <p>Substantial maintenance and intervention to accommodate concentrated visitor use</p>	<p>Activities: information, interpretation, education, and other visitor services</p> <p>Facilities: buildings and waysides to support information and interpretive activities; historic structures could be adaptively used</p>
Urban Recreation Zone	<p>Developed recreation facilities such as picnic areas, community gardens, stables, sport fields, and golf course</p> <p>Background setting is rustic and park-like</p>	<p>Developed facilities for recreation</p> <p>High levels of intervention and maintenance to support concentrated visitor use</p> <p>Very high encounter frequency with other visitors</p>	<p>Activities: gardening, picnicking, tennis, performances, golf, horseback riding, and informal sports</p> <p>Facilities: developed recreation features and structures</p>
Administration/Operations Zone	Includes structures and grounds used for park administration and operations	<p>Most visitors are unaware of the facilities</p> <p>When necessary, visitors are able to locate facilities easily and find them user friendly</p> <p>Best management practices protect resources, prevent pollution, and reduce noise and visual impacts</p>	<p>Activities: park administration and operation</p> <p>Facilities: offices and maintenance yards; historic structures could be adaptively used</p>
Urban Transit Zone	Includes non-NPS roads within the park and parkway boundaries that provide access across the park and connections with the urban street grid	<p>Visitors experience the sights and sounds of urban traffic</p> <p>Very high encounter frequency with other visitors</p>	<p>Activities: urban transportation; where possible, links the park to local trails for nonmotorized recreation</p> <p>Facilities: roadways and traffic control devices</p>

Some open spaces are maintained within the Forest Zone using processes such as mowing and brush cutting. These include, but are not limited to, picnic groves and meadows like Military Field. Long-standing vegetation management practices involving thinning or limbing-up of trees are used along the stream banks to maintain glimpses of the water and occasional views up or down the creek. Some historic clearings may be restored within the Forest Zone, potentially including the vista at Pulpit Rock, specific views of the boulder dam at Peirce Mill, and the historic entry drive at Linnaean Hill. However, areas of modified vegetation are limited in size, have a well-defined purpose, and could be reversed by ending the management practice and allowing natural vegetation succession to occur.

Appropriate Kinds of Activities or Facilities

A strong emphasis is placed on natural and rustic scenic and esthetic quality. Structures or activities that would disrupt such a setting are not permitted.

This zone is mostly undeveloped. Park facilities are limited to bridle paths, foot trails, limited paved recreation trails, and a few picnic sites to assist visitors in enjoying the forest. Nondisruptive environmental and cultural research and monitoring, consistent with the park purpose, are permitted.

CULTURAL RESOURCE ZONE

The cultural resource zone contains lands that are managed primarily for the preservation, protection, and interpretation of their cultural resource values. Typically, these lands include key cultural resources related to the significance and purposes of the park and parkway.

Not all lands that contain valuable cultural resources would be assigned to the cultural resource zone. For example, the park's entire circulation network of historic roads and trails contributes to the listing of the Rock Creek Historic District on the National Register of Historic Places. However, these roads also fulfill transportation functions that justify a different management prescription. Similarly, a historic building that houses administrative offices would be assigned an administrative rather than a cultural resource management prescription.

Desired Visitor Experience

Visitors are offered the opportunity to learn about and contemplate the prehistoric and historic resources in the park and obtain a sense of past human occupation and use of the park area. The resource management objectives for each facility are based on site-specific visitor activities and encounter rates. Visitors expect a high number of encounters with other park visitors, and with NPS personnel.

Desired Resource Conditions

Archeological and historic sites, buildings, structures, circulation networks, features, and landscapes are protected and preserved. Cultural resources in the zone are documented and interpreted.

Cultural landscapes in this zone generally are managed to reflect their historic design. Nonnative plant species are used sparingly, and only in a manner that is consistent with their historic use (see *Management Policies 2001*, NPS 2001b).

Natural resources are managed compatibly with cultural resource preservation procedures and programs. Natural processes are maintained wherever possible.

Appropriate Kinds of Activities or Facilities

Activities are limited to those compatible with maintaining the integrity of the featured cultural resources. Historic buildings or structures could be adaptively used for various park purposes subject to NPS policies for protection, preservation, and utilization of cultural resources.

VALLEY FLOOR AUTOMOBILE ACCESS ZONE

This zone lies along the Rock Creek and Piney Branch valley floors. It includes the roadways and adjacent mowed areas that are maintained for recreation and esthetics. The zone features scenic views of the creek and the forested valley. Grassy areas and rustic facilities are maintained for picnicking and other informal recreation.

On weekdays, the zone is managed for pleasure driving and for urban traffic, which at times is very heavy. On weekends and holidays, motorized traffic is excluded from this zone, and it provides nonmotorized recreation such as walking, bicycling, and in-line skating.

Desired Visitor Experience

Visitors have convenient access to the valley and to informal recreational areas along Rock Creek and Piney Branch. Visitors enjoy being in a picturesque landscape of fields and forests. Informal recreation in the corridor contributes to social interaction. The frequency of visitor encounters with other visitors is moderate to very high, although secluded spots on the creek offer a chance for solitude.

Desired Resource Conditions

The landscape beside the road and creek is modified from natural conditions. Shoulders and established grassy bays along Beach Drive are maintained by mowing. Forested areas within this zone are managed in a natural condition, similar to that in the Forest Zone. Wetlands and seeps are kept in a natural condition. Historic bridges and picnic facilities are maintained for heavy daily use.

Appropriate Kinds of Activities or Facilities

During weekdays, motorized and nonmotorized touring are accommodated. This includes nonrecreational traffic through and across the valley, which results in heavy traffic, particularly during rush hours. Traffic control devices, such as signal lights, are used judiciously to control volumes and speeds with as little detraction from the rustic setting as practical. Speed limits and other traffic regulations are enforced. During weekends and holidays, roadways are closed to motorized traffic.

Informal recreation such as picnicking, casual ball games, and contemplation are supported, for both individuals and groups. Facilities include rustic-style picnic tables, grills, and shelters; parking and staging areas; comfort stations; and interpretive waysides and information boards.

VALLEY FLOOR CONTROLLED AUTOMOBILE ACCESS ZONE

The configuration of and desired experiences and resource conditions in this zone are similar to the Valley Floor Automobile Access Zone described above. However, different kinds of activities and facilities are used to control the level of traffic in the park. The management goals are to slow traffic to posted speed limits and to reduce the volume of nonrecreational traffic in the valley.

Desired Visitor Experience

The desired visitor experience is the same as the Valley Floor Automobile Access Zone.

Desired Resource Conditions

The desired resource conditions are the same as the Valley Floor Automobile Access Zone.

Appropriate Kinds of Activities or Facilities

Motorized and nonmotorized touring are accommodated, similar to the Valley Floor Automobile Access Zone. However, nonrecreational traffic through or across the valley is more rigorously controlled. Traffic-calming measures are used judiciously to control volumes and speeds with as little detraction from the rustic setting as practical. Speed limits and other traffic regulations are enforced. Even with controls, traffic is heavy at times.

Other activities and facilities are similar to those described in the Valley Floor Automobile Access Zone.

VALLEY FLOOR NONMOTORIZED RECREATION ZONE

Motorized traffic is excluded from this zone, which includes former roads and adjacent mowed areas. The zone features scenic views of the creek and the forested valley. Grassy areas and rustic facilities support picnicking and other informal recreation. The zone provides nonmotorized recreation such as walking, bicycling, and in-line skating.

Desired Visitor Experience

The zone provides visitors with opportunities to enjoy the natural sights, sounds, and smells of the creek valley, uninterrupted by motor vehicle traffic. Visitors enjoy being in a scenic landscape of fields and forests in contrast to the surrounding city. The experience is relaxed and unhurried. Informal recreation in the corridor contributes to social interaction. The frequency of visitor encounters with other visitors is moderate to very high, although secluded spots on the creek offer a chance for solitude.

Desired Resource Conditions

Shoulders and some established grassy bays along Beach Drive are maintained by mowing for esthetics and informal recreation. Some currently mowed areas are allowed to succeed to meadow and forest. Forested areas within this zone are managed in a natural condition, similar to that in the Forest Zone. Wetlands and seeps are kept in a natural condition. Historic bridges and picnic facilities are maintained.

Appropriate Kinds of Activities or Facilities

This zone supports a variety of informal, nonmotorized recreational uses along the creek. Activities range from passive recreation and repose to the physically challenging. Activities include bicycling, walking, picnicking, nature study, in-line skating, and jogging. The road corridor remains along the existing alignment of Beach Drive. Facilities include rustic picnic tables, grills, and interpretive waysides and information boards.

VALLEY FLOOR MID-WEEKDAY RECREATION ZONE

On weekdays between 9:30 A.M. and 3:30 P.M., this zone is managed in a manner similar to the Valley Floor Nonmotorized Recreation Zone. At all other times, its management is identical to that of the Valley Floor Controlled Automobile Access Zone.

Desired Visitor Experience

Except during mid-weekday hours, the desired visitor experience is the same as the Valley Floor Automobile Access Zone. During mid-weekdays, the desired visitor experience is like that in the Valley Floor Nonmotorized Recreation Zone and includes unhurried enjoyment of the natural sights, sounds, and smells of the creek valley, uninterrupted by motor vehicle traffic.

Desired Resource Conditions

The desired resource conditions are the same as the Valley Floor Automobile Access Zone.

Appropriate Kinds of Activities or Facilities

Except during mid-weekday hours, activities are identical to those of the Valley Floor Controlled Automobile Access Zone. This includes the use of traffic-calming measures to control volumes and speeds. However, traffic is heavy even when controls are in place, particularly during rush hours. During mid-weekdays, activities are limited to nonmotorized uses, similar to those described for the Valley Floor Nonmotorized Recreation Zone. Facilities are similar to those described in the Valley Floor Automobile Access Zone.

ROCK CREEK AND POTOMAC PARKWAY ZONE

The developed parkway zone connects the National Zoo, Rock Creek Park, and the monumental core of the city with a scenic driving experience. It consists of the parkway, non-forested areas of the right-of-way, and the paved recreation trail.

This zone provides a scenic corridor through a park-like setting consisting of a mix of forests and fields with limited views of the surrounding city. Landscapes are managed in a sustainable fashion, and the defining features of the historic parkway are preserved.

Desired Visitor Experience

Visitors drive along a well-maintained paved road, or they bicycle, walk, or skate on a paved recreational trail. Views include the creek, overhead bridges, the artistically designed roadway, planting of trees and shrubs, and forest edges.

The experience is linear and sequential in character and is transitional between the adjacent urban landscape, particularly at the southern end of the parkway, and the more natural landscape of Rock Creek Park to the north. Visitors entering the parkway from city streets have a sense of decompression and relaxation. The Godey Lime Kilns offer visitors an opportunity to view a historic industrial ruin. The visitor encounter rate with other visitors in the zone is very high at times, and heavy traffic is accepted.

Desired Resource Conditions

The landscape is substantially modified compared to natural conditions. Native plant materials are used to create an esthetically pleasing landscape in keeping with the historic parkway design.

Nonnative, noninvasive plant species are used sparingly in this zone within the standards of NPS policies. Historic parkway design features are maintained, as are the ruins of Godey Lime Kilns.

Appropriate Kinds of Activities or Facilities

Visitor activities include driving, bicycling, walking, jogging, and in-line skating. Landscape management is relatively intensive, including such activities as mowing and trimming, tree planting or removal, and invasive plant control. Existing levels of development are maintained. Some intersections or other points are rehabilitated for visitor safety or esthetics, but the redesign avoids increasing the capacity of the roadway or encouraging increased speeds. Speed limits and other traffic regulations are enforced.

PARK ROAD ZONE

The Park Road Zone includes all paved roads, other than Beach Drive and the Rock Creek and Potomac Parkway, that are owned and maintained by the National Park Service and are open to automobile use by the public. The zone is a narrow corridor that includes the road surface, shoulders, and associated pullouts, parking areas, and paved trails. These corridors provide scenic driving, as well as pedestrian and bicyclist access, to park recreational and interpretive facilities.

Desired Visitor Experience

The primary visitor experience goal for this zone is an unhurried drive or bicycle ride through a scenic, esthetically pleasing natural landscape. The roadways and paved trails within this zone are used by visitors for touring the park, enjoying scenic vistas, and accessing interpretive and recreational fa-

cilities and other zones. The visitor experience generally depends on a motorized vehicle or bicycle, and involves traveling on a well-maintained, paved surface designed to complement the forest setting.

The frequency of visitor encounters with other visitors on park roads is high to very high. The latter condition occurs most often during weekday rush-hours, when many of the roads in this zone are used by commuters to travel across or through the park. Although such nonrecreational use is viewed as a secondary purpose for park roads, it is accepted so long as traffic volumes do not pose an undue threat to visitor safety, cause resource damage, or create excessive traffic congestion in the park.

Desired Resource Conditions

On park roads that have been identified as cultural resources, a strong emphasis is placed on the esthetic quality of the roadways, including their ability to harmonize with the surrounding forest and retain the historic, rustic design of early park facilities. Within the goal of maintaining the historic appearance and function of the roads, some modern traffic signage and traffic control devices are accepted for visitor safety, and curbing and drainage structures may be rehabilitated to improve storm water control.

Appropriate Kinds of Activities or Facilities

All roads, recreational trails, and associated facilities in this zone are managed to complement the natural setting and historic road design. The design and capacity of the roads are not adjusted to meet nonrecreational traffic volumes. Rather, traffic-calming measures, possibly including temporary closures, are used to reduce nonrecreational traffic volumes and congestion if they become a problem. Sidewalks or paved trails are provided adjacent to the road in some corridors to improve pedestrian and bicycle access from adjacent streets and neighborhoods. Temporary closures are appropriate after snow storms to allow winter recreational opportunities such as sledding and skiing.

VISITOR FACILITY ZONE

This is a developed zone that is defined by facilities for information, interpretation, education, and other visitor services. High maintenance and intervention are required to accommodate concentrated visitor use. In some cases, the zone includes historic structures that have been adapted for visitor services.

Desired Visitor Experience

Visitors in this zone are introduced to the natural and cultural history of the park and are provided with information on recreation opportunities. They participate in variety of activities related to environmental and cultural history. Access is easy and convenient. Social interaction is common, and the encounter rate with other visitors and park staff is very high.

Desired Resource Conditions

The developed areas in this zone receive a high degree of maintenance and intervention to accommodate concentrated visitor use. Historic buildings and grounds that have been adaptively used for visitor services are maintained in keeping with NPS policies and the Secretary of the Interior's (1992 and 1996) standards for the protection of cultural resource values. Natural and cultural resources are integrated into educational and interpretive programs where appropriate. Nonnative plant species are used sparingly in this zone within NPS policies.

Appropriate Kinds of Activities or Facilities

This zone includes facilities where the predominant use involves providing information and interpretive services. Facilities include exhibits and other media, auditorium, book sales, and other aids for promoting visitor understanding of the park and its resources. Consistent with NPS policies for preservation and use of cultural resources, historic structures could be adaptively used for visitor services.

URBAN RECREATION ZONE

The urban recreation zone includes facilities and grounds associated with reserve picnic areas, community gardens, horseback riding facilities, sport fields, the golf course, entertainment areas, and other active recreation that is consistent with traditional uses of the park. Although the natural environment is substantially modified within the zone, the background is rustic and park-like.

High levels of intervention and maintenance are required to support concentrated visitor use. Noise and visual impacts are mitigated to avoid disturbances to other visitors and park neighbors.

Desired Visitor Experience

The visitor experience in this zone is strongly associated with the presence of developed facilities. Social interactions are supported, and the visitor encounter rate with other visitors is very high. Visitors participate in active recreation and entertainment events within a background provided by the rustic setting.

Desired Resource Conditions

Vegetation within the zone is managed to support the designated recreational activities for each site. Native vegetation is preferred, although nonnative species are used within this zone in keeping with *Management Policies 2001* (NPS 2001b). Facilities within the zone are buffered to avoid noise and visual impacts to other visitors and neighbors. Storm water leaving the zone meets district storm water codes and does not contribute to the pollution of Rock Creek or its tributaries.

Appropriate Kinds of Activities or Facilities

Activities in this zone include group picnicking, tennis, performances, golf, horseback riding, and informal sports. Facilities include the structures and land modifications that support these activities, with associated infrastructure such as parking areas and public toilets.

ADMINISTRATION/OPERATIONS ZONE

This zone is defined by structures and grounds used for park administration and operations, such as offices, maintenance shops, storage areas, holding cells, horse patrol stables, and laboratories. This zone typically is highly modified and intensively maintained.

Desired Visitor Experience

Most visitors are unaware of the facilities in this zone during their visit, and the encounter rate among visitors is low. Visitors with special needs, such as permits or first aid, are able to locate facilities easily and find them to be user friendly. Facilities in the zone provide a safe and esthetic work environment for park staff.

Desired Resource Conditions

The zone is limited to existing developed or disturbed sites in the park. Facilities in this zone result in sustainable development through the application of best management practices. The spatial extent of structures and stored materials in the zone is minimized.

While the natural environment is highly modified within the zone, pollutants or other disturbances are contained or mitigated and do not affect adjoining areas. In particular, storm water leaving the zone meets district storm water codes and does not contribute pollution to Rock Creek or its tributaries. Sites in this zone are buffered to avoid noise and visual impacts on visitors and neighbors.

Consistent with NPS policies for preservation and use of cultural resources, historic structures could be adaptively used for administration. Other cultural resources within the zone are documented and salvaged if necessary. Nonnative plants are used sparingly, if at all.

Appropriate Kinds of Activities or Facilities

Facilities support park administration and operational needs. They may include office space; police facilities such as holding cells, laboratories, and stables; storage facilities for fuel, salt, sand, stone, and equipment; vehicle maintenance areas; shops for carpentry and plumbing; staff conference sites; and employee parking.

URBAN TRANSIT ZONE (NON-NPS ROADS)

This zone includes roads that are owned and maintained by the District of Columbia that are within the boundaries of the park and parkway. Examples include Military Road, Broad Branch Road, Porter Street/Klinge Road, Calvert Street, Connecticut Avenue, Massachusetts Avenue, Q Street, P Street, M Street, Pennsylvania Avenue, and the Whitehurst Freeway/K Street. These roads provide access across the park and connections with the urban street grid.

The zone encompasses nonconforming (nonpark) uses. In most cases, the right-of-way within the zone is under the jurisdiction of the District of Columbia.

The National Park Service works with district and other agencies to maintain the zone as compatibly as possible with park values. This includes emphasizing scenic views, the historic character of road structures, and linkages between the park and local trails.

Desired Visitor Experience

The presence of bridges and cross roads reminds visitors that they are still within the city while in Rock Creek valley. Within this zone, visitors experience the sights and sounds of urban traffic, although measures are taken to minimize noise to the extent practical. The frequency of encounters among visitors within the zone is very high.

Desired Resource Conditions

Storm water runoff from the zone meets district standards before it enters Rock Creek. Bridges and roads crossing the park are compatible in design and management with the rustic and historic scene. Scenic views of the park from roads and bridges in the zone are protected and contribute positively to the character of the city.

Appropriate Kinds of Activities or Facilities

This zone primarily supports urban transportation rather than the purposes of the park. The National Park Service cooperates with other agencies to link the park to local trails for nonmotorized recreation within these corridors where practical.

FORMULATION OF ALTERNATIVES

This section describes how, in concert with public input, the National Park Service developed the four alternatives that are presented in this draft general management plan.

PUBLIC INPUT AND THE DEVELOPMENT OF ALTERNATIVES

Many aspects of the desired future condition of Rock Creek Park and the Rock Creek and Potomac Parkway are defined in the establishing legislation, park purpose and significance statements, and servicewide mandates and policies that were described earlier. Within these boundaries, the National Park Service solicited input from the public regarding the long-term goals for the park, and measures that could be implemented to achieve those goals.

The public was first invited to suggest ideas for the future of the park and parkway during scoping at the beginning of the general management planning project in June 1996 (see “Consultation and Coordination”). About 800 people responded. A large majority favored closing some of or all park roads and providing increased protection of the environment.

Based on early public comments, and within the framework established by legislation and mandates, the planning team developed four “preliminary alternative scenarios” that attempted to reflect the range of ideas proposed by the public. These approaches, which are described below, were published for public review and comment in newsletter 3 in June 1997.

Preliminary Alternative Scenario 1: The National Park Service would maintain the current management direction.

Preliminary Alternative Scenario 2: Current management would be adjusted to reduce costs, emphasize group recreational opportunities, and control traffic on existing roads.

Preliminary Alternative Scenario 3: Leisurely driving, walking, cycling, and other recreation would be emphasized by permanently closing a short section of Beach Drive north of Broad Branch Road and restricting traffic elsewhere. The scenario also called for removal of boarding stables and community gardens from the park to reduce environmental disturbance and provide more equitable public access.

Preliminary Alternative Scenario 4: The “urban wilderness” scenario called for restoring the golf course and Military Field to forest. The scenario also called for removal of boarding stables and the community gardens and permanently closing four sections of Beach Drive to automobiles.

About 1,000 people responded to newsletter 3. Public comments overwhelmingly favored retaining the kinds of experiences and opportunities currently provided by the park and parkway. Removal of established recreational facilities, including community gardens, horse stables, and the golf course, was almost universally opposed. Respondents generally supported improving interpretation and education opportunities in the park. Public comments on the traffic management approaches proposed in newsletter 3 fell into three general responses, including

maintaining the current traffic pattern

reducing current traffic volumes and speeds in the park on the existing road system

closing selected park roads and improving control of traffic on open segments

The great majority of respondents in the third category indicated that they were not satisfied with either preliminary alternative scenarios 3 or 4. Instead, they supported extending the current weekend road closures to full time. Consequently, the National Park Service included this position as part of Alternative C in this draft general management plan.

A summary of comments was provided in newsletter 4. Based on these comments and NPS management concerns, the National Park Service developed the three decision points described earlier in the section entitled “Decision Points.” Other actions that were suggested by the public, and the justifications for not incorporating them into any of the alternatives, are described in the section “Alternatives or Actions Eliminated from Further Study.”

Based on the public comments and decision points, the four preliminary alternative scenarios were modified into three of the alternatives that are evaluated in this draft general management plan. The alternatives are:

Alternative A: Improved Management of Established Park Uses. Alternative A would modify current management to improve visitor safety, better control traffic volumes and speeds through the park, enhance interpretation and education opportunities, and improve the protection of park resources. It generally would retain the current scope of visitor uses.

Alternative B: Continue Current Management/No Action. Alternative B would continue the current management pattern into the future. It represents the “no action alternative” required by the Council on Environmental Quality (1978) guidelines for implementing the National Environmental Policy Act (NEPA).

Alternative C: Nonmotorized Recreation Emphasis. Alternative C is based on comments by members of the public who favor promotion of nonmotorized recreation. Alternative C would eliminate automobile through-traffic in northern portions of the park and control through-traffic in the southern portion of the park and on the parkway. Non-traffic-management proposals for Alternative C would be the same as in Alternative A.

In January 2001, the National Park Service received a letter from Mr. Anthony A. Williams, the mayor of Washington, D.C. The letter encouraged the National Park Service to consider another alternative, which would implement “weekday vehicular traffic restrictions on sections of upper Beach Drive in non-rush-hour periods.” The goals stated in the letter would include “reducing automobile traffic in the most sensitive portions of Rock Creek Park, while minimizing any impact on surrounding neighborhoods and commuters.” A copy of the letter is provided in appendix D. The alternative developed to address this letter is:

Alternative D: Mid-Weekday Recreation Enhancement. On weekdays, Alternative D would close three segments of Beach Drive to motorized traffic between 9:30 A.M. and 3:30 P.M. This would not change cross-park traffic patterns, but would provide a nonmo-

torized setting for recreation through much of the northern portion of the park during non-rush-hour periods. It would also maintain driving for pleasure along the length of Beach Drive as an allowed activity during such popular times as weekday summer evenings. This alternative would include all of Alternative A's non-traffic-management actions, as well as most of the traffic-calming measures of that alternative.

These four alternatives embody the range of what the public and the National Park Service want to see accomplished with regard to visitor experience, natural resource conditions, and cultural resource conditions. They are based on outcomes, or actual conditions on the ground, as expressed by the management prescriptions.

The configurations for future park conditions and management within each alternative were developed by placing the management prescriptions described previously on the map. None of the alternatives contains all of the management prescriptions. Instead, each consists only of those prescriptions that achieve the goals for the park under that alternative.

In some cases, all four alternatives apply the same management prescription to the same area. For example, Fort DeRussy and the Godey Lime Kilns are within the Cultural Resource Zone in all four alternatives. This occurs because this appears to be the most appropriate way to manage these facilities, regardless of the alternative selected for the park.

MITIGATION

Mitigation is a key concept in resource management planning. It provides a means for accommodating visitor interactions and park operations with natural and cultural resources and their tolerances for disturbances.

Mitigation and best management practices are regularly used to ensure that the park's natural and cultural resources are protected and preserved for future visitors without impairment. In the legislation that created the National Park Service, Congress charged it with managing lands under its stewardship "in such manner and by such means as will leave them unimpaired for the enjoyment of future generations"(NPS Organic Act, 16 USC 1). As a result, the National Park Service routinely evaluates and implements mitigation whenever conditions occur that could adversely affect the sustainability of park resources.

Mitigation was included throughout the formulation of the alternatives included in this general management plan. A few examples include considering different options for the park's administrative offices, identifying approaches to reduce roadkill of terrestrial wildlife, and incorporating best management practices to reduce non-point discharges of animal wastes from stable areas.

THE PREFERRED ALTERNATIVE

The preferred alternative is the agency-preferred course of action at the time the public review document is released. Guidelines stipulate that unless the decision-maker has no preference, the preferred alternative must be identified in the draft environmental impact statement so that agencies and the public can understand the lead agency's orientation. All final environmental impact statements must identify the preferred alternative.

All of the alternatives would preserve the important historic, cultural, and natural resources in Rock Creek Park and along the Rock Creek and Potomac Parkway for future generations. As funds allowed under each alternative, activities would continue in keeping with NPS policies and federal laws and regulations. These would include such actions as surveying native species and archeological sites, controlling invasive species, restoring habitats, and improving water quality.

The largest differences among the alternatives are associated with the three decision points, including managing traffic, providing visitor information and interpretive services, and meeting administration and operational needs. Within these broad categories are such differences as the most appropriate use of some cultural resources, and the need to reduce risk to wildlife from collisions with vehicles (roadkill).

The most difficult decision to be made in the general management planning process is the management of traffic on the park road system. Park roads are recognized historic resources and the primary means for most visitors to experience the park. They are also used as part of the city's traffic grid. Displacement of motorized traffic from park roads, particularly during rush hours, could increase traffic on arterials and neighborhood roads outside of the park. It could also encourage the use of mass transit, and/or promote commuting by bicycle or on foot.

The councils of the District of Columbia and Montgomery County have passed formal resolutions emphasizing the importance of Beach Drive and the Rock Creek and Potomac Parkway to the local and regional transportation system. The councils have urged that these corridors remain open with no new restrictions to motor vehicles because of their concerns for potential adverse effects on the heavily burdened regional street grid. This position is supported by the Maryland Department of Transportation, the District of Columbia Department of Public Works, several neighborhood organizations, and many individuals who commented during scoping.

This traffic management approach is included in Alternative B, Continue Current Management/No Action.

Alternative D, Mid-Weekday Recreation Enhancement, would comply with the intent of these resolutions. While it would include traffic-calming measures and mid-day closures, Alternative D would keep park roads and the parkway open without restrictions (such as requiring at least two people per vehicle, called HOV-2) during rush hours.

Traffic modeling indicates that regardless of park management actions, commuter traffic will increase throughout the region. By the year 2020 with Alternative B, commuter traffic along some portions of Beach Drive would routinely include near-gridlock conditions, with average travel speeds only a third of free-flow speeds, vehicular backups, and long delays. This situation in Rock Creek valley would increase risks to visitors and disrupt their appreciation of the park.

In addition to providing inadequate traffic management, Alternative B presents several other environmental and park management concerns.

Increasing pedestrian and bicycling use would not be served by maintaining the paved recreational trail system in its existing, inadequate condition.

The park would continue to have inadequate capability to provide environmental education to students and basic orientation and interpretation services to other visitors.

Future administration and operational efficiency would be impaired by the inadequate, existing support facilities.

Continued use of the Peirce-Klingbe Mansion and the Lodge House for expanding administrative purposes could further affect these historic structures.

Consequently, the National Park Service does not consider Alternative B to be satisfactory.

Differences in environmental consequences of the three action alternatives are not great, and each action alternative is environmentally acceptable. None of the action alternatives would likely cause substantial adverse impacts to environmental or cultural resources.

Guidelines for preparing environmental impact statements (CEQ 1978; NPS 2001a) require that the preferred alternative be identified in the draft environmental impact statement unless the decision-maker has no preference. As shown in table 3, each of the action alternatives has advantages. The National Park Service would find any of these alternatives acceptable as the basic guidance approach for managing Rock Creek Park and the Rock Creek and Potomac Parkway. Therefore, the National Park Service does not currently have a preferred alternative. Public input on this document will help the National Park Service select the preferred alternative in the final general management plan.

TABLE 3: ADVANTAGES OF THE ACTION ALTERNATIVES

Advantage	Alternative A	Alternative C	Alternative D
Reduces rush-hour motorized traffic volumes in the park	✓	✓	
Reduces non-rush-hour motorized traffic volumes in the park		✓	✓
Slows the speeds of traffic through the park	✓	✓	✓
Improves conditions for nonmotorized recreation and transportation	✓	✓	✓
Promotes recreational and commuter cycling and walking in the park and the region	✓	✓	✓
Supports regional efforts to discourage single-occupancy-vehicle use and promote high-occupancy-vehicle use during peak-traffic hours	✓	✓	
Continues the tradition of motor touring on the park road system, which would help preserve the historic integrity of the park design	✓		✓
Improves the protection of the park's natural and cultural resources	✓	✓	✓
Enhances the enjoyment of natural sounds and setting		✓	✓
Increases the safety of cyclists and pedestrians	✓	✓	✓
Improves opportunities for recreation	✓	✓	✓

THE ENVIRONMENTALLY PREFERRED ALTERNATIVE

This section identifies the alternative that will best promote the national environmental policy expressed in the National Environmental Policy Act. This alternative causes the least damage to the biological and physical environment, and best protects, preserves, and enhances historic, cultural, and natural resources.

Section 101(b) of the National Environmental Policy Act identifies the following policies to help determine the environmentally preferred alternative. The act directs that federal plans should:

fulfill the responsibilities of each generation as trustee of the environment for succeeding generations

ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings

attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences

preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and 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

Alternatives A, C, and D all meet these goals more effectively than Alternative B, Continue Current Management/No Action. Each of the action alternatives would reduce traffic through the park, improve the protection of the park's natural resources, and make better use of the park's cultural resources.

Of the three action alternatives, Alternative C is environmentally preferred by a close margin.

By permanently closing portions of Beach Drive to motorized vehicles, Alternative C would promote the safety and health of recreational users and nonmotorized commuters. The reduction of traffic noise and exhaust fumes on these segments would provide visitors with more "esthetically . . . pleasing surroundings."

Alternative C would attain "the widest range of beneficial uses of the environment" by providing the greatest opportunities for nonmotorized recreational use while also allowing parts of the park road system to be used for motor touring and urban transportation.

Alternative C would support the greatest "diversity and variety of individual choice" in the range of activities available to visitors on a daily basis. By providing the greatest reduction in roadkill, it would be most effective in preserving natural aspects of the park.

By closing road segments, Alternative C would best acknowledge Rock Creek Park as a unique amenity that enhances the standard of living in the Washington, D.C. area and would “balance . . . population and resource use” by establishing the park as a quiet place within this major urban center.

By encouraging the use of nonmotorized methods of travel, both for recreation and commuting, Alternative C would reduce the use of depletable petroleum resources.

However, Alternative C would not preserve historic use of Beach Drive for scenic driving.

ALTERNATIVE A: IMPROVED MANAGEMENT OF ESTABLISHED PARK USES

This section describes Alternative A, including the concept that defines the alternative, where the management prescriptions that would be included in this alternative would be applied, and the approximate costs.

CONCEPT

The goals of Alternative A would be to

- preserve traditional visitor experiences and activities
- enhance natural, cultural, and scenic values in the park
- assert more control over nonrecreational use of park roads and improve visitor safety
- optimize the use of structures for purposes such as interpretation, visitor contact, and park administration

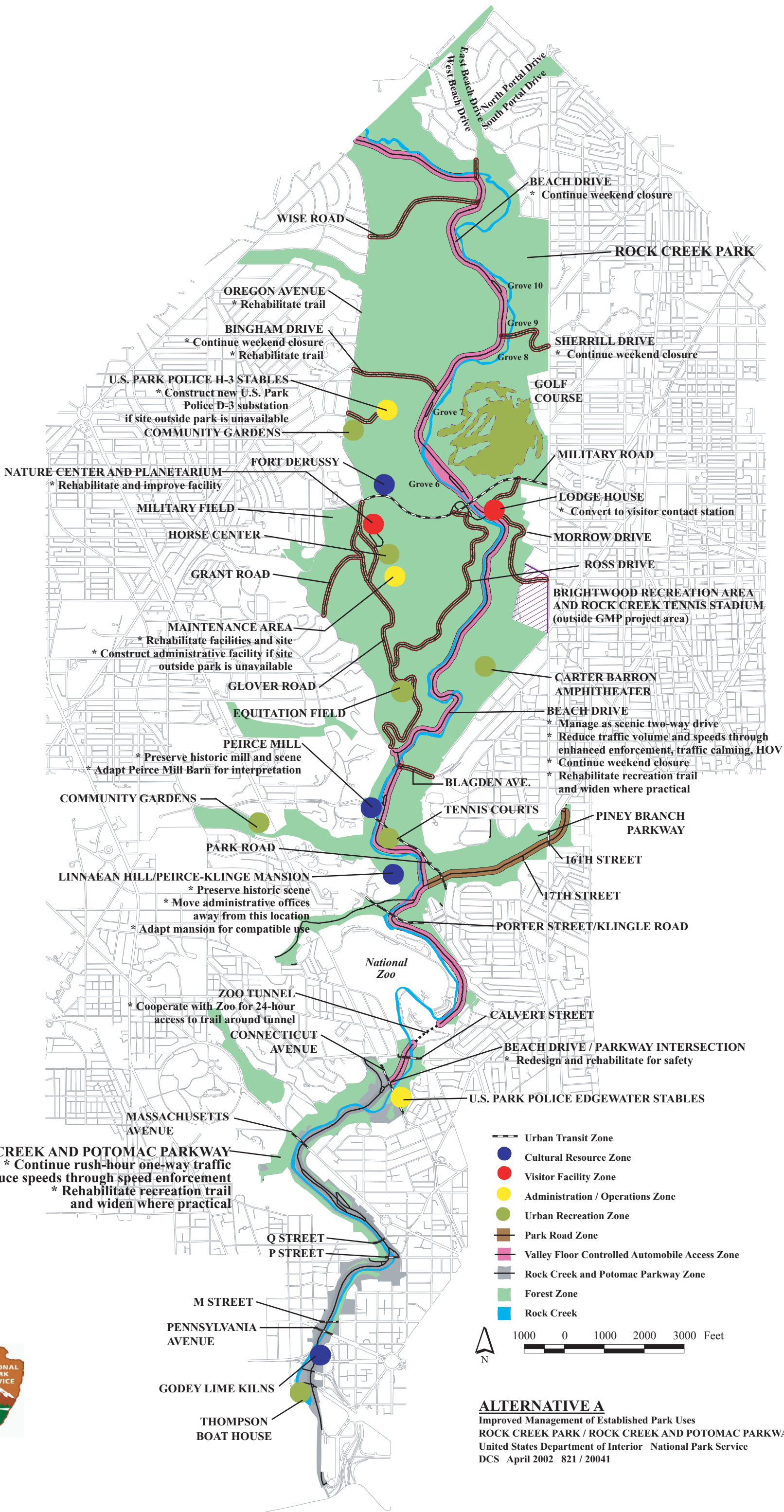
The existing park roadway system would be retained and nonrecreational through-traffic would be accommodated. However, to improve visitor safety and the quality of the visitor's experience, traffic would be managed to reduce levels compared to levels that would occur if current management were continued (Alternative B).

Weekend and holiday road-segment closures would be continued to promote recreational bicycling and other nonmotorized recreation in the valley. Weekday bicycle commuters choosing to ride through the park would continue to share the roads with automobile traffic, but at reduced traffic levels.

Better use of the park's cultural resources would be made in Alternative A. This would include moving some park functions out of historic buildings and converting those structures to visitor contact, education, and interpretation. Improvements to existing facilities would also be made. Park administrative and police functions that currently occur in historic buildings would be moved to nearby commercial space outside of the park, or to new facilities constructed within already-developed areas of the park.

Alternative A would improve the protection of the park's natural resources. For example, poorly designed sections of foot and horse trails would be rerouted, and the abandoned trail sections would be restored to natural conditions. During these activities, each trail site would be evaluated to determine effects on safety and on cultural and natural resource values. Improvements would be designed to maximize the former while protecting the latter. To improve protection of terrestrial wildlife, the National Park Service would identify the most frequent locations of roadkill and would implement measures, possibly including traffic controls or protected crossways (culverts), to reduce mortality to wildlife from collisions with vehicles.

Measures that could be taken to achieve the Alternative A goals are embodied in the management prescriptions presented below. These are shown on the Alternative A map and summarized in table 4.



ALTERNATIVE A
Improved Management of Established Park Uses
ROCK CREEK PARK / ROCK CREEK AND POTOMAC PARKWAY
United States Department of Interior National Park Service
DCS April 2002 821 / 20041

ALTERNATIVES

TABLE 4: MANAGEMENT PRESCRIPTION ZONING UNDER EACH ALTERNATIVE

Management Prescription	Acres/Percent of Total Park Area			
	Alternative A Improved Management	Alternative B Continue Past Management	Alternative C Nonmotorized Emphasis	Alternative D Mid-Weekday Recreation
Forest Zone	2,331 acres/79%	2,331 acres/79%	2,331 acres/79%	2,331 acres/79%
Cultural Resource Zone	6 acres/0.2%	2 acres/<0.1%	6 acres/0.2%	6 acres/0.2%
Valley Floor Automobile Access Zone	--	184 acres/6%	--	--
Valley Floor Controlled Automobile Access Zone	184 acres/6%	--	134 acres/5%	134 acres/5%
Valley Floor Nonmotorized Recreation Zone	--	--	50 acres/2%	--
Valley Floor Mid-Weekday Recreation Zone	--	--	--	50 acres/2%
Rock Creek and Potomac Parkway Zone	161 acres/5%	161 acres/5%	161 acres/5%	161 acres/5%
Park Road Zone	74 acres/2%	74 acres/2%	74 acres/2%	74 acres/2%
Visitor Facility Zone	1 acre/<0.1%	3 acres/0.1%	1 acre/<0.1%	1 acre/<0.1%
Urban Recreation Zone (includes Brightwood area)	200 acres/7%	200 acres/7%	200 acres/7%	200 acres/7%
Administration/Operations Zone	5 acres/0.1%	7 acres/0.2%	5 acres/0.1%	5 acres/0.1%
Urban Transit Zone	8 acres/0.2%	8 acres/0.2%	8 acres/0.2%	8 acres/0.2%

MANAGEMENT PRESCRIPTIONS

Management prescription zoning under Alternative A is shown in the Alternative A map. The management prescriptions were described previously in this draft general management plan.

Forest Zone

The Forest Zone would be applied to 79 percent of the park (2,331 acres). There would be no major change in the management of forested areas of the park from current management practices.

Existing horse and foot trails would be maintained. The trail system would be reevaluated (NPS 1993b) and, based on the results, poorly designed trail sections would be rerouted and abandoned trail sections would be restored to natural conditions. As discussed previously, bicycles would not be allowed off of roads, parking areas, and designated paved trails. An estimated 2 miles of paved trail parallel to Oregon Avenue would be rehabilitated under Alternative A to improve the trail surface.

Military Field and other, smaller meadows in the park would be managed as part of the Forest Zone to promote the diversity of native plants and habitats and to preserve the scenic variety in

the park. However, rather than allowing these areas to revert to forest, they would be mowed periodically to maintain them as meadows with early successional native plants and open space for nonorganized recreation. Treatment of the meadow areas would be designed to ensure protection of archeological resources. This management approach is consistent with current management of park meadows.

Cultural Resource Zone

Alternative A would increase the area of the park managed primarily for protection of park historic resources to about 6 acres (0.2 percent of the park). The types of actions that could be implemented at some of the historic sites in the park are identified below.

Peirce Mill Complex. The Peirce Mill complex would be the primary location for interpreting the history of milling and historic land use in the Rock Creek area. Cultural resource management would include a historically accurate representation of a typical mill complex in the region. Visitor understanding and appreciation of the mill complex would be emphasized. Measures that could be taken to achieve this condition include the following.

The mill would be managed consistent with the recommendations of a historic structure report, currently nearing completion. The mill would provide demonstrations of the historic milling industry in the valley.

The Peirce Mill Barn would be rehabilitated and converted for use as an interpretive and education facility to support visitor programs at the mill.

The landscape of the complex would be rehabilitated to retain the historic character while allowing continued use.

Linnaean Hill Building Complex. The Linnaean Hill building complex and its associated designed historic landscape would be rehabilitated. Park administrative offices currently housed in the Peirce-Klingel Mansion would be relocated to a another facility, which is described in the Administration/Operations Zone, below.

The exterior of the historic buildings would be accorded appropriate preservation treatment to protect their documented resource values.

The building interiors would be adaptively used for activities compatible with park resource values and the maintenance of the historic structures.

The landscape of the complex would be rehabilitated to retain the historic character while accommodating continued park use.

Other Cultural Features. Other cultural features, including but not limited to Fort DeRussy, the Godey Lime Kiln, and the Miller cabin, would be maintained according to accepted NPS practices. Interpretive enhancements would be guided by future interpretive plans.

Valley Floor Controlled Automobile Access Zone

The Valley Floor Controlled Automobile Access Zone (184 acres, 6 percent of the park) would continue to be managed to preserve the valley's characteristic mix of forest, grassy openings, and floodplain terraces interspersed with rustic facilities. Types of actions that could be taken within this zone include the following.

Beach Drive. The tradition of auto touring the length of Beach Drive would be maintained. However, the road would be managed primarily as a scenic drive, rather than as a commuter route, encouraging slower speeds and fewer nonrecreational vehicles. The National Park Service would work with surrounding jurisdictions to reduce the volume of nonrecreational traffic through the park and to help mitigate traffic impacts on adjoining neighborhoods.

The following types of measures could be implemented to reduce traffic speeds and the volume of nonrecreational traffic on Beach Drive.

- Impose high-occupancy vehicle (HOV) restrictions during rush-hours on segments of Beach Drive that would not interfere with cross-park traffic. HOV restrictions are consistent with regional transportation policies aimed at reducing reliance on single-occupant vehicles, reducing traffic congestion, improving air quality, and encouraging responsible commuting.

- Improve speed limit enforcement on Beach Drive. This could include new technologies such as automated photography to more effectively ticket violators.

- Implement traffic-calming measures to slow vehicle speeds. Such measures might include rumble strips, speed humps, and intersection modifications such as all-way stops, traffic circles, reduced turning radii, and raised intersections.

Adjustments over time may be required to determine the best methods of controlling nonrecreational traffic volume and vehicle speeds. To support modeling and environmental assessment in the "Environmental Consequences" section, the following conditions were used as a reasonable scenario to characterize management of traffic on Beach Drive under Alternative A.

- Traffic-calming measures and improved enforcement would hold traffic speeds to the posted speed limit of 25 miles per hour.

- Two-way traffic would be maintained.

- HOV requirements for a minimum of two people per vehicle (HOV-2) would be implemented directionally, in the southbound lane during morning rush-hours and in the northbound lane in the evening.

- HOV-2 would be implemented in the following two sections of Beach Drive.

Joyce Road south to Broad Branch Road – this would reduce traffic volume in the gorge section of the park and discourage commuter single-occupant vehicles from entering Beach Drive in the northern portion of the park.

Porter Street / Klinge Road south to the parkway intersection near Connecticut Avenue – this would reduce through-traffic volume south of Broad Branch Road, while allowing for cross-park traffic between Broad Branch Road and Porter Street / Klinge Road.

Current weekend and holiday closures would continue for sections of Beach Drive (as well as Sherrill and Bingham Drives, which are in the Park Road Zone). The goal would be to provide opportunities for nonmotorized recreation in the corridor without traffic interference on weekends, when demand for nonmotorized recreation is highest. Ross Drive would remain open as an alternate route for motorists.

Paved Recreational Trail. An estimated 5.3 miles of trail in the Valley Floor Controlled Automobile Access Zone would be upgraded under Alternative A. The existing paved recreational trail sections paralleling Beach Drive would be rehabilitated for visitor safety. This could include widening and/or realigning some sections. The park would work with the National Zoological Park to keep the tunnel bypass trail open 24 hours a day.

Reduction of Roadkill. Within this zone, the National Park Service would improve monitoring of the frequencies and locations of animals killed or injured by collisions with vehicles. The mapping of roadkill sites would indicate locations where methods to reduce road mortality would be most effective. Techniques that could be implemented to reduce roadkill under Alternative A, either singly or in combination, may include public education about vehicle hazards to wildlife; warning signs, road striping, and speed humps to reduce speeds and enhance driver alertness; and strategically placed underpasses (culverts) for small animals such as reptiles and amphibians.

Rock Creek and Potomac Parkway Zone

The parkway corridor, which covers 161 acres (5 percent of the park) would continue to be managed for a landscape mix of fields and forest. This would provide both a pleasant esthetic experience, and visual and sound buffers.

The paved recreational trail paralleling the parkway would be improved and realigned in segments. The goal would be to provide a safe pathway separated from the roadway. An estimated 2 miles of trails would be upgraded within the Rock Creek and Potomac Parkway Zone.

Rush-hour lane reversals (one-way traffic) would continue on the parkway. Traffic modeling indicates that discontinuing the practice would lead to increased traffic on Beach Drive. An automated system for accomplishing lane reversals may be implemented.

The intersection of the parkway with Beach Drive near Connecticut Avenue would be improved to increase safety for pedestrians, cyclists, and motorists. The intersection redesign would not increase traffic capacity or encourage increased speeds through the intersection. Improvements may require reconfiguration of existing roads, potentially including closure of Cathedral Avenue access.

Speed limit enforcement on the parkway would be strengthened as described above for the Valley Floor Controlled Automobile Access Zone. This could include the use of automated photographic equipment. Actions to reduce wildlife roadkill also would be the same as those described for the Valley Floor Controlled Automobile Access Zone.

Park Road Zone

Other park roads (74 acres, 2 percent of the park) would continue to be managed to provide vehicular routes into and through the park. However, park roads would not be widened to increase capacity for nonrecreational traffic. The management emphasis in Alternative A would be on improving linkages between the park and the surrounding neighborhoods.

Improvements could include rehabilitating or constructing recreational trails adjacent to roads to minimize pedestrian and vehicular conflicts, and incorporating better directional and information signs for visitor orientation. About 0.5 miles of trail along Bingham Drive would be upgraded within the Park Road Zone. Up to a mile of new trail also may be provided. A feasibility study would be conducted to determine the optimal locations for new pedestrian trails.

Bingham Drive and Sherrill Drive would continue to be closed on weekends and holidays for nonmotorized recreation. Following snow storms, several roads in this zone could be closed to provide winter recreational opportunities such as sledding and skiing. These could include, but may not be limited to, Glover Road, Ross Drive, Bingham Drive, Sherrill Drive, and Morrow Drive.

Speed limit enforcement on park roads would be strengthened as described above for the Valley Floor Controlled Automobile Access Zone. Actions to reduce wildlife roadkill also would be the same as those described for the Valley Floor Controlled Automobile Access Zone.

Visitor Facility Zone

Alternative A would improve park information, interpretation, and education services. Under this alternative, the Visitor Facility Zone would occupy about 1 acre (less than 0.1 percent of the park). Potential actions that could be implemented to improve visitor services include converting the Lodge House to a visitor contact station and upgrading the nature center and planetarium.

Lodge House. The Lodge House is an attractive, rustic building in a scenic setting in Rock Creek valley just south of the intersection of Beach Drive and Military Road. Under Alternative A, this building would be converted from a U.S. Park Police District 3 (D-3) substation to a visitor contact station to provide park orientation, information, and interpretation.

Visitors could obtain general park information, park brochures and other publications, directions, event schedules, and permits at the building.

The building would be staffed by an interpretive ranger during high visitation periods. The site also would provide information and orientation when staff were not present.

U.S. Park Police officers would be stationed at the Lodge House to provide a police presence and visibility at this popular location in the park.

The exterior of the structure would be rehabilitated to preserve its documented cultural resource values. Its interior would be converted for visitor contact. Landscaping in front of the building would be rehabilitated to better reflect its rustic and historic character and to better serve visitors. However, the area occupied by the building, its parking lot, and its landscaping, would not be expanded beyond the current area of disturbance.

Rock Creek Nature Center and Planetarium. The nature center area would continue to serve as the park's primary facility for environmental education and natural history interpretation. The building would first be evaluated for inclusion on the National Register of Historic Places, and then rehabilitated and/or expanded to improve the effectiveness of programs for the public. Improvements may include additional classroom space, a covered group shelter for bad weather, and staff offices. The planetarium would be upgraded, including increased seating capacity. Rehabilitation of the building would be esthetically compatible with the natural setting. Expansion of the structure would be within the existing grounds of the center.

Urban Recreation Zone

Most facilities and activities in the Urban Recreation Zone (200 acres, 7 percent of the park) would be retained at their current levels. These include the community gardens off Oregon Avenue and at Melvin Hazen Park, the Rock Creek Horse Center and equitation field, the Rock Creek Golf Course, the clay tennis courts near Peirce Mill, and reserve picnic areas. The Brightwood Recreation Area and Rock Creek Tennis Stadium, which are outside of the area covered by this general management plan, would continue to be managed as specified in the *Final Environmental Impact Statement, Tennis Stadium, Rock Creek Park, Washington, D.C.* (NPS 1995b).

The 4,200-seat Carter Barron Amphitheater, which also is not included in this general management plan, is in the early stages of a \$1.5 million program of repair and rehabilitation. This outdoor theater was built to celebrate the Washington, D.C. sesquicentennial in 1951 and was then turned over to the National Park Service. Performances are held from May through September and include a free Shakespeare festival. The amphitheater renovation will include repairing or replacing the concrete slab and drainage system, upgrading or replacing the electrical system, replacing the seats, and renovating the dressing rooms.

Construction of the amphitheater upgrade currently is scheduled to occur in 2002 and 2003. The area occupied by the amphitheater, its parking lot, and its landscaping, will not be expanded beyond the current area of disturbance. Designs will require the use of best management practices to minimize environmental effects, such as air emissions and soil erosion. The use of hardened areas such as parking lots in the immediate vicinity for construction staging will further reduce the effects of construction.

Administration/Operations Zone

Alternative A would address the problems associated with the current location of park administrative offices in the Peirce-Klingbe Mansion and District 3 (D-3) U.S. Park Police operations at the Lodge House. Possible actions for remedying these conditions are described below. In addition, Alternative A would improve the use of the park maintenance area and implement measures to prevent water pollution from runoff at Edgewater.

The area within the Administration/Operations Zone within Alternative A would vary, based on the site selected for the park administrative offices. However, with the configuration shown in the Alternative A map, this zone would occupy approximately 5 acres (0.1 percent of the park).

Park Administration Offices. Park administrative offices currently are located in the Peirce-Klingbecker Mansion. Disadvantages of this arrangement include the following.

The existing buildings are not large enough to accommodate a centralized administrative facility. Substantial alterations to the historic structure would be required to meet future needs of the administrative staff.

The current use precludes the ability to employ this historic resource for interpretation and education of the public.

Under Alternative A, administrative functions would be relocated to another facility. The goal would be to provide adequate, safe, energy-efficient, and cost-effective office and work space in a manner that minimizes impacts on natural and cultural resources. All park administrative staff would be consolidated into a central office, which would create a more efficient, cohesive working environment.

Section 9.1 of *Management Policies 2001* (NPS 2001b) states that:

the Service will not develop, or re-develop, a facility within a park until a determination has been made that . . . it would not be practicable for the facility to be developed, or the service provided, outside the park.

Consistent with this policy, the preferred approach would be to lease or purchase office space outside of, but near the park. This option is made feasible by the location of the park in the Washington, D.C. metropolitan area, which offers a substantial amount of nearby commercial office space.

A less desirable option would involve constructing a new office facility at the park maintenance area. This would not disturb any additional land within the park and would be visually unobtrusive to visitors. However, it would increase development within the park and could result in conflicts between maintenance operations and administrative office functions associated with noise and site constraints. If new facilities were constructed in this area, existing buildings and parking areas might be redesigned to minimize increases in impervious surfaces and disturbance.

U.S. Park Police Substation. The U.S. Park Police station for District 3 (D-3) in the Lodge House currently is overcrowded. There is no opportunity for expanding the existing building because of site limitations and the historic character of the building. Alternative A would move the D-3 substation out of the Lodge House and into a new facility that would be designed to meet police functional needs and improve operational efficiency.

The preferred option would be to relocate these functions into commercial facilities outside of the park in keeping with Section 9.1 of *Management Policies 2001* (NPS 2001b). The National Park Service would work with the General Services Administration to contract for a long-term lease or other arrangement with a private firm that would construct or adapt a facility to U.S. Park Police specifications. However, this option would depend on the availability of adequate commercial

properties at the time of implementation. The outside-the-park site would have to be within a reasonable response distance from Rock Creek Park and other sites protected by the District 3 staff. The U.S. Park Police would determine acceptable areas of northwest Washington for accessing the park and other sites, and a determination would be made on whether suitable properties were available at an acceptable price.

In the event that a suitable commercial facility was not available, a second option would be to construct a new facility within the existing disturbed area near the stables at H-3. The H-3 site would consolidate U.S. Park Police administrative and horse patrol functions. Construction of a new facility at the H-3 area would occur only if assessments established that it clearly was impractical to locate the D-3 structure outside of the park. If new facilities were constructed in this area, existing buildings and parking areas might be redesigned to minimize increases in impervious surfaces and disturbance.

For either option, the existing stables at H-3 would remain, as would the nearby community gardens.

Park Maintenance Area. As described above, Alternative A could involve constructing a new building to house park administrative offices at the maintenance area. Such new development would occur only if suitable commercial office space could not be secured outside of the park and would be restricted to the existing disturbed land at the maintenance area.

Regardless of whether administrative offices were constructed at the site, the maintenance area would be rehabilitated to correct problems with equipment and materials storage, parking, and staff office space. The site would be reorganized and improved within the existing developed area. Best management practices (BMPs) would be developed and implemented to reduce the risk of environmental contamination from operations and to correct drainage problems at the site.

Edgewater. The U.S. Park Police regional stables and training arena at Edgewater would remain unchanged in its current facilities. However, BMPs would be implemented to reduce the potential for polluted runoff from the site.

Urban Transit Zone

Existing rights-of-way in the park for non-NPS roads would be classified under the Urban Transit Zone (8 acres, 0.2 percent of the park). The National Park Service would continue to work with the district government to provide linkages to the surrounding city and to protect the historic character of road structures and scenic views in this zone.

COSTS

Cost estimates for implementing Alternative A, including both one-time capital costs and annual costs for operations and maintenance, are presented in table 5. Capital costs would total almost \$13.4 million.

More than 60 percent of the capital costs (\$8.4 million) would be used to rehabilitate and improve the Rock Creek Nature Center and Planetarium, convert the Lodge House to a visitor contact station, and restore the historic Peirce Mill area.

Approximately \$2 million of the capital costs (15 percent) would be required to bring existing park features up to existing NPS policy and regulatory requirements.

Another \$2 million in capital costs would fund proposed trail improvements.

About \$1 million would pay for safety improvements at the intersection of the parkway and Beach Drive, and for traffic-calming devices on Beach Drive.

Annual costs would be almost \$8.2 million, about \$875,000 more than the annual costs for Alternative B.

The largest part of the new costs (43 percent) would be used to lease commercial space outside of the park for the new D-3 substation.

Almost a quarter of the increased operations costs would fund eight new full-time-equivalent staff positions, including two staff positions for HOV and speed enforcement, and six positions to improve visitor contact, education, and interpretation, primarily at the Lodge House, Peirce Mill complex, and nature center and planetarium.

About 15 percent would be used to lease administrative space for park headquarters outside of the park.

Ten percent would be used annually to lease mobile photo speed detection devices.

TABLE 5: ESTIMATED COSTS OF IMPLEMENTING THE ALTERNATIVES ^{a/}

	Alternative A		Alternative B		Alternative C		Alternative D	
	Annual Costs	Capital Costs	Annual Costs	Capital Costs	Annual Costs	Capital Costs	Annual Costs	Capital Costs
Current annual funds allocated for park and parkway operations	\$6,250,000	--	\$6,250,000	--	\$6,250,000	--	\$6,250,000	--
Funding to meet NPS policy and regulatory requirements								
Natural resource management	\$350,000	--	\$350,000	--	\$350,000	--	\$350,000	--
Cultural resource management	\$200,000	--	\$200,000	--	\$200,000	--	\$200,000	--
Visitor services	\$350,000	--	\$350,000	--	\$350,000	--	\$350,000	--
Special use management	\$50,000	--	\$50,000	--	\$50,000	--	\$50,000	--
Partnership/cooperative activities	\$100,000	--	\$100,000	--	\$100,000	--	\$100,000	--
Bring existing facilities up to standards								
Peirce-Klingling Mansion	--	\$940,000	--	\$940,000	--	\$940,000	--	\$940,000
Maintenance area	--	\$680,000	--	\$680,000	--	\$680,000	--	\$680,000
Miller cabin	--	\$30,000	--	\$30,000	--	\$30,000	--	\$30,000
H-3 U.S. Park Police stables	--	\$210,000	--	\$210,000	--	\$210,000	--	\$210,000
Construct 3,500 feet of new foot/horse trails and restore 3,000 feet of former trail	--	\$60,000	--	\$60,000	--	\$60,000	--	\$60,000
Subtotal	\$7,300,000	\$1,920,000	\$7,300,000	\$1,920,000	\$7,300,000	\$1,920,000	\$7,300,000	\$1,920,000
Proposed facility changes								
Rehabilitate and improve Rock Creek Nature Center and Planetarium	--	\$5,400,000	--	--	--	\$5,400,000	--	\$5,400,000
Convert Lodge House to visitor contact station	--	\$1,300,000	--	--	--	\$1,300,000	--	\$1,300,000
Restore historic Peirce Mill area	--	\$1,730,000	--	--	--	\$1,730,000	--	\$1,730,000
Proposal trail improvements	--	\$2,050,000	--	--	--	\$2,050,000	--	\$2,050,000
Road system changes								
Install six permanent vehicle gates	--	--	--	--	--	\$54,000	--	\$54,000
Construct/install traffic-calming devices on Beach Drive	--	\$220,000	--	--	--	\$220,000	--	\$220,000
Redesign/reconstruct intersection of parkway and Beach Drive	--	\$755,000	--	--	--	\$755,000	--	\$755,000

TABLE 5: ESTIMATED COSTS OF IMPLEMENTING THE ALTERNATIVES (Continued)

	Alternative A		Alternative B		Alternative C		Alternative D	
	Annual Costs	Capital Costs	Annual Costs	Capital Costs	Annual Costs	Capital Costs	Annual Costs	Capital Costs
Additional annual operational costs								
Lease headquarters office space ^{b/}	\$135,000	--	--	--	\$135,000	--	\$135,000	--
Maintain paved trails	\$1,000	--	--	--	\$1,000	--	\$1,000	--
Maintain traffic-calming devices	\$1,000	--	--	--	\$1,000	--	\$1,000	--
Lease two mobile photo speed detection devices	\$85,000	--	--	--	\$85,000	--	\$85,000	--
Enforce HOV/speed (two full-time staff equivalents at GS-7 rate)	\$70,000	--	--	--	\$70,000	--	\$70,000	--
Mid-day closures of Beach Drive	--	--	--	--	--	--	\$30,000	--
Staff Lodge House, Peirce Mill complex, and nature center (six full-time staff equivalents at GS-7 rate)	\$205,000	--	--	--	\$205,000	--	\$205,000	--
Lease new D-3 substation space ^{c/}	\$381,000	--	--	--	\$381,000	--	\$381,000	--
Subtotal	\$878,000	\$11,455,000			\$878,000	\$11,509,000	\$908,000	\$11,509,000
Total	\$8,178,000	\$13,375,000	\$7,300,000	\$1,920,000	\$8,178,000	\$13,429,000	\$8,208,000	\$13,429,000

a/ All costs are in year 2001 dollars.

b/ Costs include 4,500 square feet of office space at a cost of \$30 per square foot per year.

c/ Costs include 10,000 square feet of office space at a cost of \$30 per square foot per year, plus 45 vehicle parking spaces (for cruisers, emergency vehicles, and visitor parking) at \$1,800 annually per vehicle space.

ALTERNATIVE B: CONTINUE CURRENT MANAGEMENT/NO ACTION

This section describes Alternative B, including the concept that defines the alternative, where the management prescriptions that would be included in this alternative would be applied, and the approximate costs.

CONCEPT

The goals of Alternative B would be to

- preserve traditional visitor experiences and activities

- maintain the park's natural, cultural, and scenic values in conformance with the provisions outlined in "Servicewide Mandates and Policies"

Rock Creek Park and the Rock Creek and Potomac Parkway would be maintained as they have evolved thus far. There would not be any major changes in resources management, visitor programs, or facilities beyond regular maintenance. The current park road system would be retained and existing management would continue.

Measures that could be taken to achieve the Alternative B goals are embodied in the management prescriptions presented below. These are shown on the Alternative B map and summarized in table 4.

MANAGEMENT PRESCRIPTIONS

Management prescription zoning under Alternative B is shown in the Alternative B map. The management prescriptions were described previously.

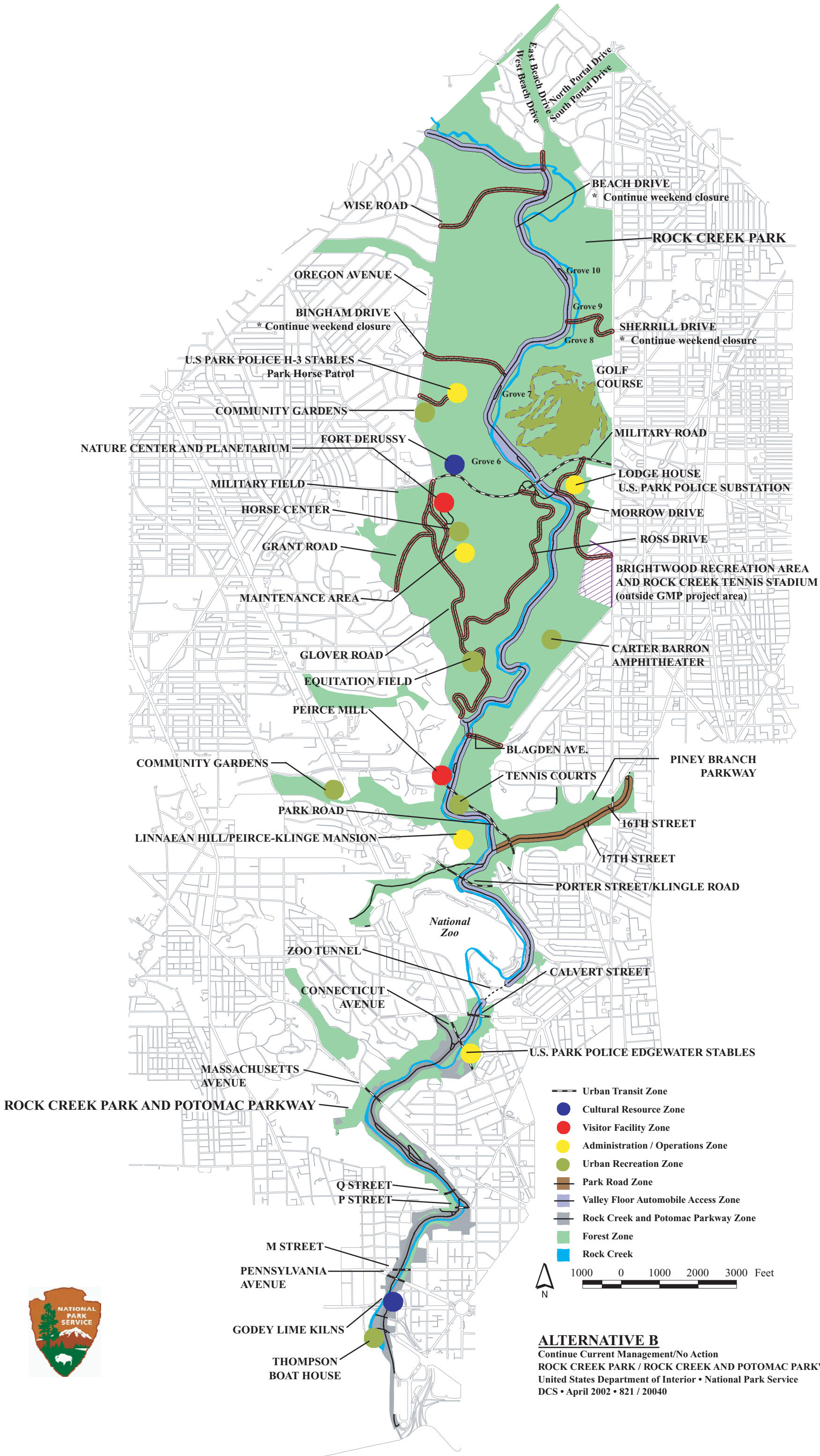
Forest Zone

As in all alternatives, the Forest Zone would be applied to 79 percent of the park (2,331 acres). There would be no major change in the management of forested areas of the park from current management practices. Existing horse and foot trails would be retained and deteriorated segments would be rehabilitated to the extent practical. During these activities, each trail site would be evaluated to determine effects on safety and on cultural and natural resource values. Improvements would be designed to maximize the former while protecting the latter.

Bicycles would continue to be limited to roads, parking areas, and designated paved trails. Military Field and other meadows would be managed in a manner similar to that described in Alternative A, including protection of archeological resources.

Cultural Resource Zone

Under Alternative B, about 2 acres (less than 0.1 percent of the park) would continue to be managed primarily for cultural resource protection. Resources such as Fort DeRussy and the Godey Lime Kilns would be maintained in their current condition in this zone. Historic structures and resources at the Peirce-Kingle Mansion would continue to be maintained, but the sites would be



ALTERNATIVE B
Continue Current Management/No Action
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within the Administration/Operations Zone. The Peirce Mill complex would be in the Visitor Facility Zone.

Valley Floor Automobile Access Zone

The Rock Creek valley would continue to accommodate through-traffic along the length of the park and parkway. The Valley Floor Automobile Access Zone (184 acres, 6 percent of the park) would be managed to preserve the valley's characteristic mix of forest, grassy openings, and floodplain terraces interspersed with rustic facilities. Management actions that could be taken within this zone include the following.

Beach Drive. The tradition of auto touring the length of Beach Drive would be maintained. Two-way traffic would continue during the week along the length of the road for noncommercial vehicles without limits on the number of vehicle occupants.

Segments of Beach Drive would continue to be closed to traffic on weekends and holidays. These include Broad Branch Road to Joyce Road, picnic grove 10 to Wise Road, and West Beach Drive to the Maryland border. Weekend closures of Sherrill and Bingham Drives, which are in the Park Road Zone, also would continue. Piney Branch Parkway would be open to two-way traffic at all times.

Paved Recreational Trail. The existing paved recreational trail paralleling Beach Drive would be retained along the current alignment. The paved trail would be maintained, including repairs and re-paving, but major changes in location, width, or alignment would not be undertaken.

Rock Creek and Potomac Parkway Zone

The parkway corridor, which covers 161 acres (5 percent of the park) would continue to be managed for a mix of open fields and forest. This would provide both a pleasant esthetic experience, and visual and sound buffers. The paved trail paralleling the parkway would be maintained, including repairs and re-paving, but major changes in location, width, or alignment would not be undertaken.

Parkway traffic would be managed as at present. Rush-hour lane reversals (one-way traffic) would continue on the parkway.

Park Road Zone

Other park roads (74 acres, 2 percent of the park) would continue to be managed in their current alignments and widths to provide vehicular routes into and through the park. The existing infrastructure would be maintained, potentially with improvements such as better directional and information signs for visitor orientation.

Bingham Drive and Sherrill Drive would continue to be closed on weekends and holidays for nonmotorized recreation. Following snow storms, several roads in this zone could be closed to provide winter recreational opportunities such as sledding and skiing. These could include, but may not be limited to, Glover Road, Ross Drive, Bingham Drive, Sherrill Drive, and Morrow Drive.

Visitor Facility Zone

Alternative B would continue to use the existing facilities for park introduction and information services. Under this alternative, the Visitor Facility Zone would occupy about 3 acres (0.1 percent of the park).

Rock Creek Nature Center and Planetarium. The nature center area would be maintained in its current configuration. The facility would continue to serve as the park's primary location for environmental education for school groups as well as an information, orientation, and interpretation center for other visitors.

Peirce Mill Complex. The Peirce Mill complex would continue to be managed primarily for visitor information and orientation, resources interpretation, and recreation.

The mill would be managed consistent with the recommendations of a historic structure report, currently nearing completion. The mill would provide demonstrations of the historic milling industry in the valley.

Park interpretive staff in the mill would continue to provide park-wide information and orientation as well as generalized interpretation of milling.

The Peirce Mill Barn would continue to be leased to a nonprofit organization for park-related recreation such as the current art gallery.

Urban Recreation Zone

Most facilities and activities in the Urban Recreation Zone (200 acres, 7 percent of the park) would be retained at their current levels. These include the community gardens off Oregon Avenue and at Melvin Hazen Park, the Rock Creek Horse Center and equitation field, the Rock Creek Golf Course, the clay tennis courts near Peirce Mill, and the reserve picnic areas. The Brightwood Recreation Area and Rock Creek Tennis Stadium, which are outside of the area covered by this general management plan, would continue to be managed as specified in the *Final Environmental Impact Statement, Tennis Stadium, Rock Creek Park, Washington, D.C.* (NPS 1995b). The Carter Barron Amphitheater would be repaired and rehabilitated as described in Alternative A.

Administration/Operations Zone

Under Alternative B, park administration and operations would continue in their present locations. This zone would occupy approximately 7 acres (0.2 percent of the park).

Peirce-Klingling Mansion at Linnaean Hill. The park administrative offices would continue to occupy the Peirce-Klingling Mansion at the Linnaean Hill site. The current level of preservation would be maintained, and only minor interior modifications would be made in the future to avoid further affecting the historic character of the building. Future staff increases would need to be accommodated elsewhere in the park in existing facilities.

Park Maintenance Area. Maintenance shops, equipment and materials storage, parking, and maintenance staff office space would continue to be located at the maintenance area. Administrative staff offices that could not be accommodated at Peirce-Klingling Mansion might also be located here. Consistent with the water resources requirements in the “Servicewide Mandates and Policies” section, best management practices (BMPs) would be developed and implemented to reduce the risk of environmental contamination from operations and to correct drainage problems at the site.

Lodge House. The Lodge House would continue to serve as the U.S. Park Police D-3 substation. All current police functions, including office spaces, holding cell, parking, and motorcycle and bicycle storage, would remain in the existing building.

H-3 Stables. U.S. Park Police horse stables would be maintained at the site off Oregon Avenue. The community gardens near this site also would continue to be used by the public.

Edgewater. The U.S. Park Police regional stables and training arena at Edgewater would remain unchanged in its current facilities. BMPs would be implemented to reduce the potential for polluted runoff from the site.

Urban Transit Zone

Existing rights-of-way in the park for non-NPS roads would be managed under the Urban Transit Zone (8 acres, 0.2 percent of the park). The National Park Service would continue to work with the district government to provide linkages to the surrounding city and to protect the historic character of road structures and scenic views in this zone.

COSTS

Cost estimates for implementing Alternative B, including both one-time capital costs and annual costs for operations and maintenance, are presented in table 5. Capital costs would total almost \$2 million. This money would be required to bring existing park features up to standards.

Annual costs would be \$7.3 million. This would include the \$6.25 million currently spent annually for park and parkway operations, plus additional funding of just over \$1 million to bring existing park operations up to existing NPS policy and regulatory requirements.

ALTERNATIVE C: NONMOTORIZED RECREATION EMPHASIS

This section describes Alternative C, including the concept that defines the alternative, where the management prescriptions that would be included in this alternative would be applied, and the approximate costs.

CONCEPT

The goals of Alternative C would be to

- manage northern portions of the park as an exclusion zone from urban automobile traffic and promote nonmotorized recreation throughout the week

- assert more control over nonrecreational use of park roads and improve visitor safety

- preserve most traditional visitor experiences and activities

- enhance natural, cultural, and scenic values in the park

- optimize the use of structures for purposes such as interpretation, visitor contact, and park administration

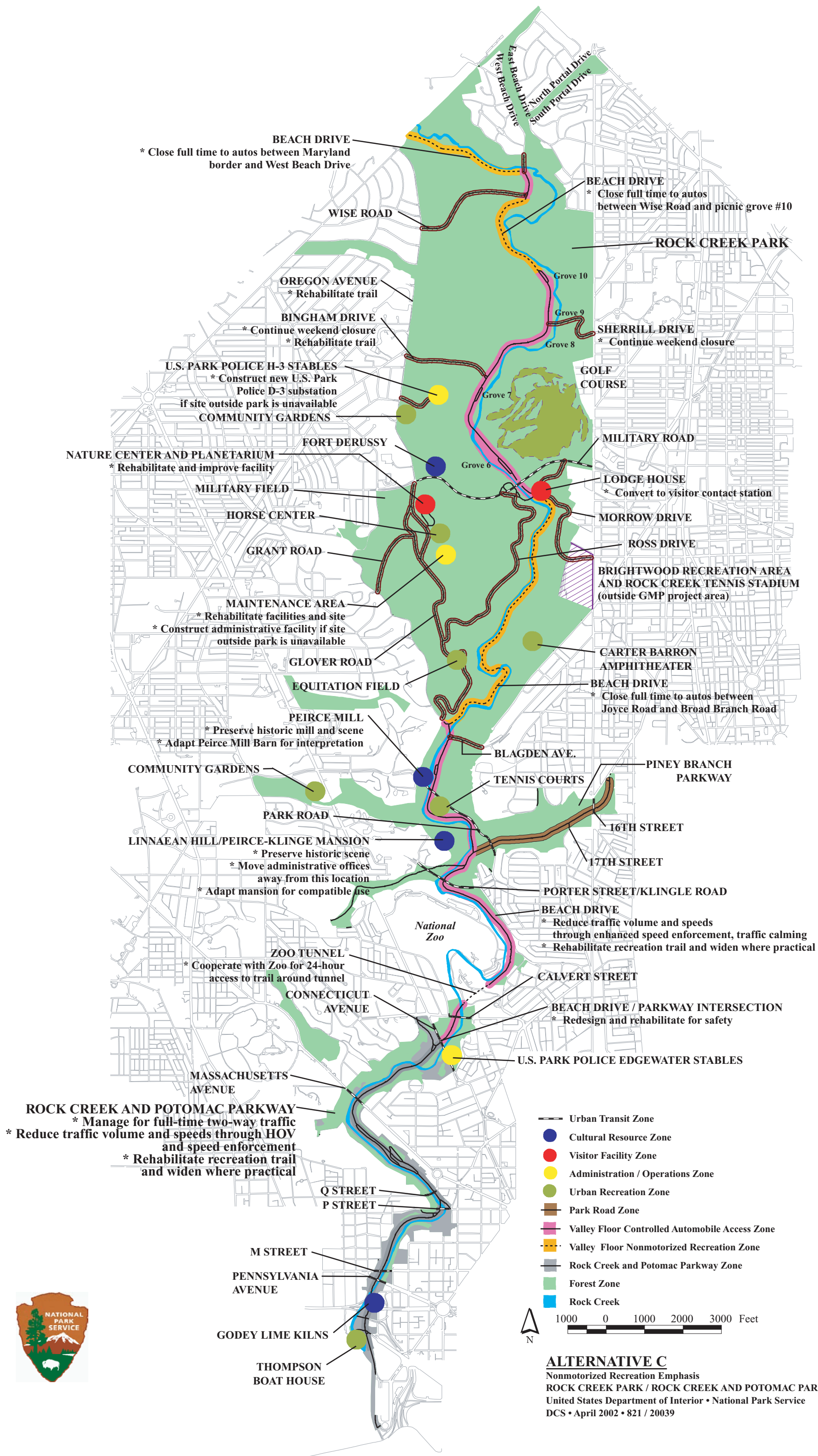
In this alternative, a portion of the northern part of the Rock Creek valley floor would be closed to automobile traffic at all times. The Alternative C map illustrates one possible closure configuration, which would close three segments of Beach Drive between the Maryland state line and Broad Branch Road. This configuration is the basis for the following Alternative C description and was evaluated in the environmental impact statement. However, the actual closure configuration would be selected at a later time, and may be adjusted.

The objectives of closing the road along portions of the Rock Creek valley floor would be to manage this area as a quiet refuge from urban automobile traffic, promote nonmotorized recreation throughout the week, and enhance natural resource protection. This section of the park would become a destination for nonmotorized activities. Alternative C also would create a paved route available throughout the week with little interference from automobile traffic through the Rock Creek valley and connecting to the Potomac River, as envisioned in regional bicycle plans (NPS 1990c; Metropolitan Washington Council of Governments 1995).

The current weekend and holiday closures of Sherrill Drive and Bingham Drive would be continued to promote recreational bicycling and other nonmotorized recreation in the park.

South of Broad Branch Road, including the Rock Creek and Potomac Parkway, the valley would support through-traffic for automobile motor touring and controlled urban transit. However, within the park, traffic would be managed to reduce levels compared to levels that would occur if current management practices were continued (Alternative B). The intent would be to improve visitor safety, the quality of the recreational visitor's experience, and resource protection.

Most traditional recreational experiences currently associated with Rock Creek Park would continue. In addition, all visitor facilities would remain accessible, including picnic groves 6 through



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10. (Locations of these picnic groves are shown on the Existing Conditions map.) However, access by automobile during weekdays would not be permitted in areas of new road closures.

Better use of the park's cultural resources would be made in Alternative C. This could include moving some park functions out of historic buildings and converting those structures to visitor contact, education, and interpretation. Improvements to existing facilities would also be made.

Alternative C would improve the protection of the park's natural resources. For example, poorly designed sections of foot and horse trails would be rerouted and abandoned trail sections would be restored to natural conditions. During these activities, each trail site would be evaluated to determine effects on safety and on cultural and natural resource values. Improvements would be designed to maximize the former while protecting the latter. To improve protection of terrestrial wildlife, the National Park Service would identify the most frequent locations of roadkill and would implement measures to reduce mortality to wildlife from collisions with vehicles.

Measures that could be taken to achieve the Alternative C goals and concept are embodied in the management prescriptions presented below. These are shown on the Alternative C map and summarized in table 4.

MANAGEMENT PRESCRIPTIONS

Management prescription zoning under Alternative C is shown in the Alternative C map. The management prescriptions were described previously.

Forest Zone

Under Alternative C, as with all of the other alternatives, the Forest Zone would be applied to 79 percent of the park (2,331 acres). This zone's features and management would be similar to those described for Alternative A. An estimated 2.5 miles of paved trail would be rehabilitated under Alternative C. Military Field and other meadows would be managed in a manner similar to that described in Alternative A, including protection of archeological resources.

Cultural Resource Zone

Alternative C would increase the area of the park primarily managed for protection of historic resources to about 6 acres (0.2 percent of the park). The types of actions that could be implemented at the various historic sites in the park would be identical to those described in Alternative A and could include the following.

The mill would be managed consistent with the recommendations of a historic structure report, currently nearing completion. The mill would provide demonstrations of the historic milling industry in the valley.

The Peirce Mill Barn would be rehabilitated and converted for use as an interpretive and education facility to support visitor programs at the mill.

The park administrative offices would be moved out of the Peirce-Klingling Mansion at the Linnaean Hill building complex and adaptive use of the buildings would be provided.

The landscapes of the Peirce Mill complex and the Linnaean Hill complex would be rehabilitated to retain their historic characters while allowing continued park use.

Other cultural features, including but not limited to Fort DeRussy, the Godey Lime Kiln, and the Miller cabin, would be maintained according to accepted NPS practices. Interpretive enhancements would be guided by future interpretive plans.

Valley Floor Nonmotorized Recreation Zone

The Valley Floor Nonmotorized Recreation Zone would be applied to 2 percent of the park (50 acres). The portions of Beach Drive within this zone would be closed to motorized vehicles at all times. Lands within this zone would be managed as a corridor providing a variety of nonmotorized recreation throughout the week, such as walking, bicycling, in-line skating, and quiet contemplation. Sections of Beach Drive within this zone would extend from

the Maryland State line to West Beach Drive

Wise Road to picnic grove 10

Joyce Road to Broad Branch Road

A paved surface would be maintained on the sections of Beach Drive in this zone to support wheeled recreation. The width of pavement may be reduced to minimize impervious surfaces and maintenance costs. However, at least a 16-foot-wide paved surface would be maintained. The closed sections would be gated to allow for maintenance and emergency vehicle access.

Valley Floor Controlled Automobile Access Zone

The Valley Floor Controlled Automobile Access Zone (134 acres, 5 percent of the park) would continue to be managed to preserve the valley's characteristic mix of forest, grassy openings, and floodplain terraces interspersed with rustic facilities. Types of actions that could be taken within this zone include the following.

Beach Drive. In the northern portions of the park, sections of Beach Drive from West Beach Drive to Wise Road and from picnic grove 10 to Joyce Road would be open to automobile traffic. They would be managed to provide access to the recreational opportunities of the park and would accommodate cross-park traffic.

Beach Drive south of Broad Branch Road would be managed for improved control of through-traffic volumes and speeds. The National Park Service would work with surrounding jurisdictions to reduce the volume of nonrecreational traffic through the park and to help mitigate traffic impacts on adjoining neighborhoods.

The following measures may be included as ways to reduce traffic speeds and the volume of non-recreational traffic on Beach Drive.

Impose high-occupancy vehicle (HOV) restrictions during rush-hours on segments of Beach Drive that would not interfere with cross-park traffic. HOV restrictions are consistent with regional transportation policies aimed at reducing reliance on single-occupant vehicles, reducing traffic congestion, improving air quality, and encouraging responsible commuting.

Strengthen speed limit enforcement on Beach Drive. This could include new technologies such as automated photography to more effectively ticket violators.

Implement traffic-calming measures to slow vehicle speeds. Such measures might include rumble strips, speed humps, and intersection modifications such as all-way stops, traffic circles, reduced turning radii, and raised intersections.

Adjustments over time may be required to determine the best methods of controlling nonrecreational traffic volume and vehicle speeds. To support modeling and environmental assessment in the “Environmental Consequences” section, the following conditions were used as a reasonable scenario to characterize management of traffic on Beach Drive south of Broad Branch Road under Alternative C.

Traffic-calming measures and improved enforcement would hold traffic speeds to the posted speed limit (25 miles per hour)

Two-way traffic would be maintained.

HOV-2 would be implemented directionally, in the southbound lane during morning rush-hours and in the northbound lane in the evening.

HOV-2 would be implemented from Porter Street / Klinge Road south to the parkway intersection near Connecticut Avenue. This would reduce through-traffic volume south of Broad Branch Road, while allowing for cross-park traffic between Broad Branch Road and Porter Street / Klinge Road.

Paved Recreational Trail. An estimated 5.3 miles of trail within the Valley Floor Controlled Automobile Access Zone would be rehabilitated for visitor safety. This could include improving and realigning some sections of the existing recreational paralleling Beach Drive south of Broad Branch Road.

The continuous alignment connecting the sections of Beach Drive that were closed to automobiles and segments of the paved recreation trail down the valley would be designated as an official bicycle route. The park would work with the National Zoological Park to keep the tunnel bypass trail open 24 hours a day.

Reduction of Roadkill. Within this zone, the National Park Service would improve monitoring of the frequencies and locations of animals killed or injured by collisions with vehicles. The mapping of roadkill sites would indicate locations where methods to reduce road mortality would be most effective. Techniques that could be implemented to reduce roadkill under Alternative C, either singly or in combination, may include public education about vehicle hazards to wildlife; warning signs, road striping, and speed humps to reduce speeds and enhance driver alertness; and strategically placed underpasses (culverts) for small animals such as reptiles and amphibians.

Rock Creek and Potomac Parkway Zone

Rock Creek and Potomac Parkway Zone, which covers 161 acres (5 percent of the park) would continue to be managed for a landscape mix of fields and forest. This would provide both a pleasant esthetic experience, and visual and sound buffers.

The paved recreational trail paralleling the parkway would be improved and realigned in segments. The goal would be to provide a safe pathway separated from the roadway. An estimated 2 miles of trails would be upgraded within the Rock Creek and Potomac Parkway Zone.

The measures that would be used to manage the parkway would include the following.

Rush-hour lane reversals would be ended and two-way traffic would be allowed at all times.

Traffic volume would be moderated by implementing HOV restrictions during rush-hours, southbound in the morning and northbound in the evening. This action would be taken in concert with HOV restrictions on Beach Drive south of Broad Branch Road.

The intersection of the parkway with Beach Drive near Connecticut Avenue would be improved to increase safety for pedestrians, cyclists, and motorists. The intersection redesign would not increase traffic capacity or encourage increased speeds through the intersection. Improvements may require reconfiguration of existing roads, potentially including closure of Cathedral Avenue access.

Speed limit enforcement on the parkway would be strengthened as described above for the Valley Floor Controlled Automobile Access Zone. This could include the use of automated photographic equipment. Actions to reduce wildlife roadkill also would be the same as those described for the Valley Floor Controlled Automobile Access Zone.

Park Road Zone

The Park Road Zone would include 74 acres (2 percent of the park). The park road system would be managed to provide access to park resources and to improve linkages between the park and the surrounding neighborhoods. Park roads would not be widened to increase capacity for nonrecreational traffic.

Improvements could include rehabilitating or constructing recreational trails adjacent to roads to minimize pedestrian and vehicular conflicts and incorporating better directional and informational signs for visitor orientation. About 0.5 miles of trail along Bingham Drive would be upgraded

within the Park Road Zone. Up to a mile of new trail also may be provided. A feasibility study would be conducted to determine the optimal locations for new pedestrian trails.

Bingham Drive and Sherrill Drive would continue to be closed on weekends and holidays for nonmotorized recreation. Following snow storms, several roads in this zone could be closed to provide winter recreational opportunities such as sledding and skiing. These could include, but may not be limited to, Glover Road, Ross Drive, Bingham Drive, Sherrill Drive, and Morrow Drive.

Speed limit enforcement on park roads would be strengthened as described above for the Valley Floor Controlled Automobile Access Zone. Actions to reduce wildlife roadkill also would be the same as those described for the Valley Floor Controlled Automobile Access Zone.

Visitor Facility Zone

Alternative C would improve park interpretive, educational, and information services. Under this alternative, the Visitor Facility Zone would occupy about 1 acre (less than 0.1 percent of the park). Potential actions that could be implemented to improve visitor services would be identical to those described for Alternative A and could include

- converting the Lodge House to a visitor contact station

- upgrading the Rock Creek Nature Center and Planetarium

Urban Recreation Zone

Most facilities and activities in the Urban Recreation Zone (200 acres, 7 percent of the park) would be retained at their current levels. These include the community gardens off Oregon Avenue and at Melvin Hazen Park, the Rock Creek Horse Center and equitation field, the Rock Creek Golf Course, the clay tennis courts near Peirce Mill, and the reserve picnic areas. The Brightwood Recreation Area and Rock Creek Tennis Stadium, which are outside of the area covered by this general management plan, would continue to be managed as specified in the *Final Environmental Impact Statement, Tennis Stadium, Rock Creek Park, Washington, D.C.* (NPS 1995b). The Carter Barron Amphitheater would be repaired and rehabilitated as described in Alternative A.

Administration/Operations Zone

Alternative C would address the problems associated with park administrative facilities in a manner similar to that described in Alternative A. This could include

- relocating the park's administrative offices to commercial space outside the park, or to a new facility at the park maintenance area

- relocating the D-3 U.S. Park Police substation to commercial space outside the park, or to a new facility at the H-3 site

- improving the use of the park maintenance area

implementing measures to prevent water pollution from runoff at Edgewater

The area within the Administration/Operations Zone would occupy approximately 5 acres (0.1 percent of the park).

Urban Transit Zone

Existing rights-of-way in the park for non-NPS roads would be classified under the Urban Transit Zone (8 acres, 0.2 percent of the park). The National Park Service would continue to work with the district government to provide linkages to the surrounding city and to protect the historic character of road structures and scenic views in this zone.

COSTS

Cost estimates for implementing Alternative C, including both one-time capital costs and annual costs for operations and maintenance, are presented in table 5. Capital costs would total more than \$13.4 million.

More than 60 percent of the capital costs (\$8.4 million) would be used to rehabilitate and improve the Rock Creek Nature Center and Planetarium, convert the Lodge House to a visitor contact station, and restore the historic Peirce Mill area.

Approximately \$2 million of the capital costs (15 percent) would be required to bring existing park features up to existing NPS policy and regulatory requirements.

Another \$2 million in capital costs would fund proposed trail improvements.

About \$1 million would pay for safety improvements at the intersection of the parkway and Beach Drive, and for traffic-calming devices on Beach Drive.

An estimated \$54,000 would be required to install permanent gates at six locations on Beach Drive to implement the road closures.

Annual costs would be almost \$8.2 million, about \$875,000 more than the annual costs for Alternative B.

The largest part of the new costs (43 percent) would be used to lease commercial space outside of the park for the new D-3 substation.

Almost a quarter of the increased operations costs would fund eight new full-time-equivalent staff positions, including two staff positions for HOV and speed enforcement, and six positions to improve visitor contact, education, and interpretation, primarily at the Lodge House, Peirce Mill complex, and nature center and planetarium.

About 15 percent would be used to lease administrative space for park headquarters outside of the park.

Ten percent would be used annually to lease mobile photo speed detection devices.

ALTERNATIVE D: MID-WEEKDAY RECREATION ENHANCEMENT

This section describes Alternative D, including the concept that defines the alternative, where the management prescriptions that would be included in this alternative would be applied, and the approximate costs.

CONCEPT

As stated in the January 2001 letter sent from the mayor of Washington, D.C. to the National Park Service (see appendix D), the traffic management goals of Alternative D would be to “reduc[e] automobile traffic in the most sensitive portions of Rock Creek Park, while minimizing any impact on surrounding neighborhoods and commuters.” This would be accomplished by “implementing weekday vehicular traffic restrictions on sections of upper Beach Drive in non-rush hour periods.” In addition, goals of this alternative would include

- preserving traditional visitor experiences and activities

- enhancing natural, cultural, and scenic values in the park

- asserting more control over nonrecreational use of park roads and improving visitor safety

- optimizing the use of structures for purposes such as interpretation, visitor contact, and park administration

In accordance with the mayor’s request, the concept for Alternative D would involve closing selected park road segments to motorized vehicles on weekdays between the morning and evening rush hours. These closures would enhance recreation opportunities for pedestrians and cyclists. Because mid-weekday motorized traffic typically is light, few drivers would have to alter their commuting patterns and very little traffic would be forced into surrounding neighborhoods.

Weekend and holiday closures under Alternative D would be the same as Alternative B, Continue Current Management/No Action. The road closure actions of Alternative D that are described below would be applied on weekdays.

The Alternative D map illustrates one possible closure configuration, which would close three segments of Beach Drive between the Maryland state line and Broad Branch Road. This configuration was evaluated in the environmental impact statement. However, the actual closure configuration may be adjusted. As shown in the map, Alternative D would close the following three segments of Beach Drive to motorized traffic during the middle part of weekdays:

- The Maryland border to West Beach Drive

- Wise Road to picnic grove 10

- Joyce Road to Broad Branch Road

These are the same three segments that currently are closed to motor vehicles on weekends.

Alternative D would not include the weekday closure of Sherrill Drive or Bingham Drive, but would continue their closure on weekends. Keeping these roads open would minimize weekday effects on cross-park traffic.

Consistent with current management practices, Alternative D would not include any requirements for high vehicle occupancy (such as HOV-2) in any part of the park or parkway. This alternative also would continue current rush-hour lane reversals (one-way traffic) on the Rock Creek and Potomac Parkway.

On weekdays, the road segments would be closed to motorized vehicles at 9:30 A.M. They would be re-opened at 3:30 P.M. to accommodate evening commuter traffic. This approach conforms with the mayor's request to consider "weekday vehicular traffic restrictions . . . in non-rush-hour periods."

(During development of Alternative D, other possible strategies for closing Beach Drive during non-rush-hour periods were considered. Descriptions of these approaches and reasons why they were not incorporated into this or any other alternative are included in the "Other Traffic-Related Actions" discussion of the "Alternatives or Actions Eliminated from Further Study" section.)

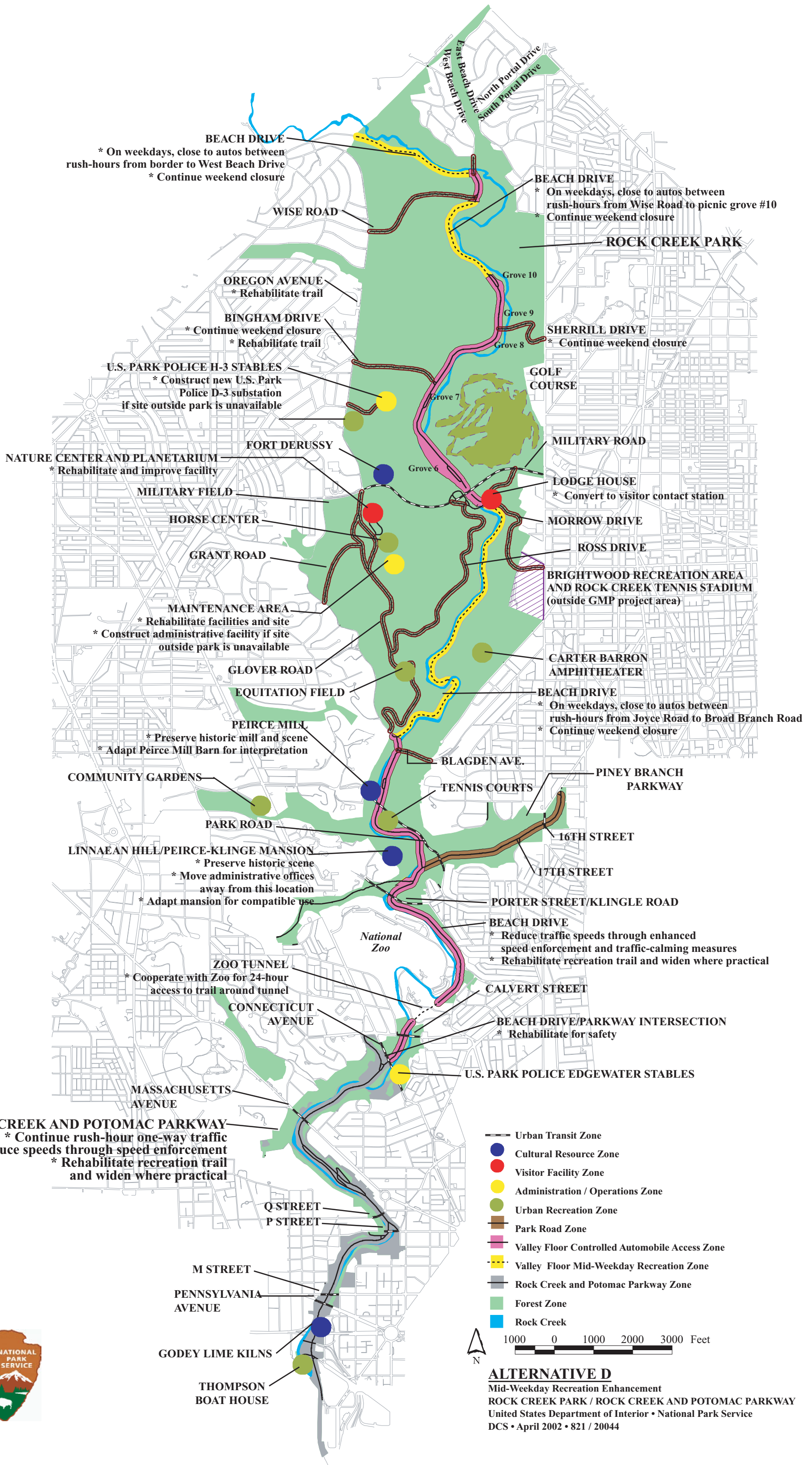
During weekdays from 3:30 P.M. to 9:30 A.M., the valley would support through-traffic, including commuter traffic. However, many of the traffic management measures described for Alternative A would be implemented to reduce speeds compared to speeds that would occur if current management practices were continued (Alternative B). The intent would be to improve visitor safety, the quality of the visitor's experience, and resource protection.

For these 18 hours each weekday, Alternative D would maintain driving for pleasure along the length of Beach Drive as an allowed activity. In the establishing legislation, the park managers were directed to provide "roadways . . . to be used for driving." Commuters could continue to enjoy the slower pace and scenery afforded by their morning and evening drive through the park. In addition, visitors with limited mobility would continue to have vehicular access throughout the park during popular periods such as weekday evenings.

For 6 hours during the middle of each weekday, Alternative D would create a paved trail through the Rock Creek valley and connecting to the Potomac River, as envisioned in regional bicycle plans (NPS 1990c; Metropolitan Washington Council of Governments 1995). During this time, the Rock Creek valley floor north of Broad Branch Road would be managed as a quiet refuge from urban automobile traffic. Nonmotorized recreation would be encouraged, and the increased safety may lead to increases in commuting via bicycle or on foot through the park.

All traditional recreational experiences currently associated with Rock Creek Park would continue. In addition, all visitor facilities would remain accessible by automobile. However, access by automobile during the middle part of each weekday would not be permitted in areas of new road closures.

Compared to Alternative B, Continue Current Management/No Action, Alternative D would make better use of the park's cultural resources, implementing the same measures proposed for Alternative A. This would include moving some park functions out of historic buildings and converting those structures to visitor contact, education, and interpretation. Improvements to existing facilities also would be made.



ALTERNATIVES

Alternative D would improve the protection of the park's natural resources. For example, poorly designed sections of foot and horse trails would be rerouted and abandoned trail sections would be restored to natural conditions. During these activities, each trail site would be evaluated to determine effects on safety and on cultural and natural resource values. Improvements would be designed to maximize the former while protecting the latter. To improve protection of terrestrial wildlife, the National Park Service would identify the most frequent locations of roadkill and would implement measures to reduce mortality to wildlife from collisions with vehicles.

Measures that could be taken to achieve the Alternative D goals and concept are embodied in the management prescriptions presented below. These are shown on the Alternative D map and summarized in table 4.

MANAGEMENT PRESCRIPTIONS

Management prescription zoning under Alternative D is shown in the Alternative D map. The management prescriptions were described previously.

Forest Zone

Under Alternative D, as with all of the other alternatives, the Forest Zone would be applied to 79 percent of the park (2,331 acres). This zone's features and management would be similar to those described for Alternative A. An estimated 2.5 miles of paved trail would be rehabilitated under Alternative D. Military Field and other meadows would be managed in a manner similar to that described in Alternative A, including protection of archeological resources.

Cultural Resource Zone

Alternative D would increase the area of the park primarily managed for protection of historic resources to about 6 acres (0.2 percent of the park). The types of actions that could be implemented at the various historic sites in the park would be identical to those described in Alternative A and could include the following.

The mill would be managed consistent with the recommendations of a historic structure report, currently nearing completion. The mill would provide demonstrations of the historic milling industry in the valley.

The Peirce Mill Barn would be rehabilitated and converted for use as an interpretive and education facility to support visitor programs at the mill.

The park administrative offices would be moved out of the Peirce-Klingel Mansion at the Linnaean Hill building complex and adaptive use of the buildings would be provided.

The landscapes of the Peirce Mill complex and the Linnaean Hill complex would be rehabilitated to retain their historic characters while allowing continued park use.

Other cultural features, including but not limited to Fort DeRussy, the Godey Lime Kiln, and the Miller cabin, would be maintained according to accepted NPS practices. Interpretive enhancements would be guided by future interpretive plans.

Valley Floor Controlled Automobile Access Zone

The Valley Floor Controlled Automobile Access Zone (134 acres, 5 percent of the park) would continue to be managed to preserve the valley's characteristic mix of forest, grassy openings, and floodplain terraces interspersed with rustic facilities. Types of actions that could be taken within this zone include the following.

Beach Drive. In the northern portions of the park, sections of Beach Drive from West Beach Drive to Wise Road and from picnic grove 10 to Joyce Road would remain open to automobile traffic at all times. They would be managed to provide access to the recreational opportunities of the park and would accommodate cross-park traffic.

Except during weekend and mid-weekday closure periods, the tradition of auto touring the length of Beach Drive would be maintained. Whenever Beach Drive was open to motorized vehicles, it would be managed for improved control of through-traffic volumes and speeds. The National Park Service would work with surrounding jurisdictions to reduce the volume of nonrecreational traffic through the park and to help mitigate traffic impacts on adjoining neighborhoods.

Alternative D would not include the use of high-occupancy vehicle (HOV) restrictions during rush-hours. Otherwise, it would incorporate the same types of traffic management actions that were described for Alternative A. These could include

- improved speed limit enforcement on Beach Drive, which could involve technologies such as automated photography to more effectively ticket violators

- traffic-calming measures, such as rumble strips, speed humps, and intersection modifications such as all-way stops, traffic circles, reduced turning radii, and raised intersections, to slow vehicle speeds

Adjustments over time may be required to determine the best methods of controlling nonrecreational traffic volume and vehicle speeds. To support modeling and environmental assessment in the "Environmental Consequences" section, the following conditions were used as a reasonable scenario to characterize management of traffic on Beach Drive south of Broad Branch Road under Alternative D.

- Traffic-calming measures and improved enforcement would hold traffic speeds to the posted speed limit (25 miles per hour)

- Two-way traffic would be maintained.

Paved Recreational Trail. An estimated 5.3 miles of trail within the Valley Floor Controlled Automobile Access Zone would be rehabilitated for visitor safety. This could include improving and realigning some sections of the existing recreational trail paralleling Beach Drive south of Broad Branch Road. The park would work with the National Zoological Park to keep the tunnel bypass trail open 24 hours a day.

Reduction of Roadkill. Within this zone, the National Park Service would improve monitoring of the frequencies and locations of animals killed or injured by collisions with vehicles. The map-

ping of roadkill sites would indicate locations where methods to reduce road mortality would be most effective. Techniques that could be implemented to reduce roadkill under Alternative D, either singly or in combination, may include public education about vehicle hazards to wildlife; warning signs, road striping, and speed humps to reduce speeds and enhance driver alertness; and strategically placed underpasses (culverts) for small animals such as reptiles and amphibians.

Valley Floor Mid-Weekday Recreation Zone

The Valley Floor Mid-Weekday Recreation Zone would be applied to 2 percent of the park (50 acres). On weekdays, the portions of Beach Drive within this zone would be closed to motorized vehicles from 9:30 A.M. to 3:30 P.M. During this period, lands within this zone would be managed as a corridor providing nonmotorized recreation, such as walking, bicycling, in-line skating, and quiet contemplation. At all other times, its management would be identical to that of the Valley Floor Controlled Automobile Access Zone.

Rock Creek and Potomac Parkway Zone

Rock Creek and Potomac Parkway Zone, which covers 161 acres (5 percent of the park) would continue to be managed for a landscape mix of fields and forest. This would provide both a pleasant esthetic experience, and visual and sound buffers.

The recreational trail paralleling the parkway would be widened, improved, and realigned in segments. The goal would be to provide a safe pathway separated from the roadway. An estimated 2 miles of trails would be upgraded within the Rock Creek and Potomac Parkway Zone.

Rush-hour lane reversals (one-way traffic) would continue on the parkway.

The intersection of the parkway with Beach Drive near Connecticut Avenue would be improved to increase safety for pedestrians, cyclists, and motorists. The intersection redesign would not increase traffic capacity or encourage increased speeds through the intersection. Improvements may require reconfiguration of existing roads, potentially including closure of Cathedral Avenue access.

Speed limit enforcement on the parkway would be strengthened as described above for the Valley Floor Controlled Automobile Access Zone. This could include the use of automated photographic equipment. Actions to reduce wildlife roadkill also would be the same as those described for the Valley Floor Controlled Automobile Access Zone.

Park Road Zone

Other park roads (74 acres, 2 percent of the park) would continue to be managed to provide vehicular routes into and through the park. However, park roads would not be widened to increase capacity for nonrecreational traffic. The management emphasis would be on improving linkages between the park and the surrounding neighborhoods, and ensuring that park road management would provide for cross-park traffic.

Improvements could include rehabilitating or constructing recreational trails adjacent to roads to minimize pedestrian and vehicular conflicts and incorporating better directional and information

signs for visitor orientation. About 0.5 miles of trail along Bingham Drive would be upgraded within the Park Road Zone. Up to a mile of new trail also may be provided. A feasibility study would be conducted to determine the optimal locations for new pedestrian trails.

Bingham Drive and Sherrill Drive would continue to be closed on weekends and holidays for nonmotorized recreation. However, they would remain open throughout weekdays and would not be subject to the mid-weekday closures that would characterize roads in the Valley Floor Mid-Weekday Recreation Zone.

Following snow storms, several roads in this zone could be closed to provide winter recreational opportunities such as sledding and skiing. These could include, but may not be limited to, Glover Road, Ross Drive, Bingham Drive, Sherrill Drive, and Morrow Drive.

Speed limit enforcement on park roads would be strengthened as described above for the Valley Floor Controlled Automobile Access Zone. Actions to reduce wildlife roadkill also would be the same as those described for the Valley Floor Controlled Automobile Access Zone.

Visitor Facility Zone

Alternative D would improve park interpretive, educational, and information services. Under this alternative, the Visitor Facility Zone would occupy about 1 acre (less than 0.1 percent of the park). Potential actions that could be implemented to improve visitor services would be identical to those described for Alternative A and could include

- converting the Lodge House to a visitor contact station

- upgrading the Rock Creek Nature Center and Planetarium

Urban Recreation Zone

Most facilities and activities in the Urban Recreation Zone (200 acres, 7 percent of the park) would be retained at their current levels. These include the community gardens off Oregon Avenue and at Melvin Hazen Park, the Rock Creek Horse Center and equitation field, the Rock Creek Golf Course, the clay tennis courts near Peirce Mill, and the reserve picnic areas. The Brightwood Recreation Area and Rock Creek Tennis Stadium, which are outside of the area covered by this general management plan, would continue to be managed as specified in the *Final Environmental Impact Statement, Tennis Stadium, Rock Creek Park, Washington, D.C.* (NPS 1995). The Carter Barron Amphitheater would be repaired and rehabilitated as described in Alternative A.

Administration/Operations Zone

Alternative D would address the problems associated with park administrative facilities in a manner similar to that described in Alternative A. This could include

- relocating the park's administrative offices to commercial space outside the park, or to a new facility at the park maintenance area

relocating the D-3 U.S. Park Police substation to commercial space outside the park, or to a new facility at the H-3 site

improving the use of the park maintenance area

implementing measures to prevent water pollution from runoff at Edgewater

The area within the Administration/Operations Zone would occupy approximately 5 acres (0.1 percent of the park).

Urban Transit Zone

Existing rights-of-way in the park for non-NPS roads would be classified under the Urban Transit Zone (8 acres, 0.2 percent of the park). The National Park Service would continue to work with the district government to provide linkages to the surrounding city and to protect the historic character of road structures and scenic views in this zone.

COSTS

Cost estimates for implementing Alternative D, including both one-time capital costs and annual costs for operations and maintenance, are presented in table 5. Capital costs would total more than \$13.4 million.

More than 60 percent of the capital costs (\$8.4 million) would be used to rehabilitate and improve the Rock Creek Nature Center and Planetarium, convert the Lodge House to a visitor contact station, and restore the historic Peirce Mill area.

Approximately \$2 million of the capital costs (15 percent) would be required to bring existing park features up to existing NPS policy and regulatory requirements.

Another \$2 million in capital costs would fund proposed trail improvements.

About \$1 million would pay for safety improvements at the intersection of the parkway and Beach Drive, and for traffic-calming devices on Beach Drive.

An estimated \$54,000 would be required to install gates to implement mid-day closures at six locations on Beach Drive to implement the road closures.

Annual costs would be more than \$8.2 million, about \$900,000 more than the annual costs for Alternative B.

The largest part of the new costs (42 percent) would be used to lease commercial space outside of the park for the new D-3 substation.

Almost a quarter of the increased operations costs would fund eight new full-time-equivalent staff positions, including two staff positions for HOV and speed enforcement, and six positions to improve visitor contact, education, and interpretation, primarily at the Lodge House, Peirce Mill complex, and nature center and planetarium.

ALTERNATIVES

About 15 percent would be used to lease administrative space for park headquarters outside of the park.

Ten percent would be used annually to lease mobile photo speed detection devices.

Mid-day closures of the three segments of Beach Drive would cost about \$30,000 (3.3 percent of the cost difference from Alternative B) annually to implement.

SUMMARY OF ALTERNATIVES

All of the action alternatives meet the overall objective of the National Park Service of preserving unimpaired the natural and cultural resources and values of Rock Creek Park and the Rock Creek and Potomac Parkway for future generations. In addition, all three action alternatives satisfy all of the purposes of the general management plan that were defined at the beginning of this document. The alternative of continue current management/no action does not fulfill any of these goals.

Table 4 summarized the area within each management prescription under each alternative. As shown in the table, five of the zones would be the same size in all of the alternatives. These include the Forest Zone, Rock Creek and Potomac Parkway Zone, Park Road Zone, Urban Recreation Zone, and Urban Transit Zone.

Table 6 summarizes the key differences among the alternatives for the management of Rock Creek Park and the Rock Creek and Potomac Parkway. In all areas, Alternative B, the no action alternative, would continue current management practices. Differences of the other three alternatives with current management practices are highlighted below.

Alternative A would continue weekday auto touring throughout the park, but would implement measures to encourage slower speeds and reduce the number of nonrecreational vehicles. This alternative would implement HOV restrictions on Beach Drive during rush-hour periods in the primary travel direction of the traffic.

Alternative C would permanently close selected segments of Beach Drive north of Broad Branch Road to automobiles and would promote nonmotorized recreation in this area. Other park roads would be managed to encourage slower speeds and reduce the number of nonrecreational vehicles.

On the Rock Creek and Potomac Parkway, Alternative C would end lane reversals and allow two-way traffic at all times. This alternative would implement HOV restrictions during rush-hours in the primary travel direction of the traffic.

During the middle part of each weekday, Alternative D would close portions of Beach Drive north of Broad Branch Road to motorized vehicles. It would continue auto touring throughout the park at all other times on weekdays. Traffic-calming measures would reduce speeds, but Alternative D would not include and HOV restrictions.

Recreation trails would be upgraded under Alternatives A, C, and D.

Alternatives A, C, and D would increase the use of park historic resources for interpretive and educational purposes. These alternatives would end the current use of the Peirce Mill Barn as an art gallery and use it as an interpretive and education facility to support visitor programs at the mill. They also would move the park administrative offices out of the Peirce-Klingel Mansion at the Linnaean Hill building complex and provide adaptive use of the buildings.

Alternatives A, C, and D would improve park introduction and information services by such measures as converting the Lodge House to a visitor contact station and upgrading the nature center and planetarium.

ALTERNATIVES

Alternatives A, C, and D would address the problems associated with park administrative facilities by finding a new location, preferably in commercial space outside the park, for the park's administrative offices; relocating the D-3 U.S. Park Police substation to commercial space outside of the park or a new facility at the H-3 site; and improving the use of the park maintenance area.

Table 7 summarizes the impacts of the alternatives. Detailed information on the impacts evaluation is provided in the "Environmental Consequences" section.

TABLE 6: SUMMARY OF KEY DIFFERENCES AMONG THE ALTERNATIVES

Park Feature	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Traffic Management				
Beach Drive	<p>Include in the Valley Floor Controlled Automobile Access Zone.</p> <p>Continue weekend closures of sections of this road.</p> <p>Allow auto touring along the length of Beach Drive on weekdays, but encourage slower speeds and fewer non-recreational vehicles.</p> <p>Implement HOV-2 in the primary direction of travel during rush hours.</p>	<p>Include in the Valley Floor Automobile Access Zone.</p> <p>Continue weekend closures of sections of this road.</p> <p>Allow auto touring along the length of Beach Drive on weekdays using current management techniques.</p>	<p>Include northern portions in the Valley Floor Nonmotorized Recreation Zone. Permanently close this zone to motorized vehicles and manage for nonmotorized recreation.</p> <p>Include the remainder in the Valley Floor Controlled Automobile Access Zone. Allow auto touring, but encourage slower speeds and fewer nonrecreational vehicles.</p>	<p>Include northern portions in the Valley Floor Mid-Weekday Recreation Zone.</p> <p>Between rush-hours on weekdays, close this zone to motorized vehicles and manage for nonmotorized recreation.</p> <p>Except during mid-weekday closures, allow auto touring along the length of Beach Drive on weekdays, but encourage slower speeds.</p> <p>Continue weekend closures of sections of this road.</p>
Rock Creek and Potomac Parkway	<p>Continue rush-hour lane reversals.</p> <p>Upgrade the recreational trail.</p> <p>Improve the intersection of the parkway with Beach Drive near Connecticut Avenue.</p>	<p>Continue current traffic management policies.</p> <p>Provide maintenance as needed.</p>	<p>End lane reversals and allow two-way traffic at all times.</p> <p>Implement HOV restrictions in the primary direction of travel during rush-hours.</p> <p>Upgrade the recreational trail.</p> <p>Improve the intersection of the parkway with Beach Drive near Connecticut Avenue.</p>	<p>Same as Alternative A.</p>

TABLE 6: SUMMARY OF KEY DIFFERENCES AMONG THE ALTERNATIVES (Continued)

Park Feature	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Other park roads	Rehabilitate or construct recreational trails adjacent to roads.	Continue current management practices.	Same as Alternative A.	Same as Alternative A.
Recreational trails	Upgrade 9.8 miles of trails.	Maintain trails and provide rehabilitation of deteriorated trail segments.	Same as Alternative A.	Same as Alternative A.
Interpretation and Education				
Peirce Mill complex	Include in the Cultural Resource Zone. Rehabilitate the mill to focus on history of milling and land use in the Rock Creek area.	Include in the Visitor Facility Zone. Rehabilitate the mill to focus on history of milling and land use in the Rock Creek area.	Same as Alternative A.	Same as Alternative A.
Peirce-Klingel Mansion and the Linnaean Hill building complex	Rehabilitate the Peirce Mill Barn and use it as an interpretive and education facility. Include in the Cultural Resource Zone. Rehabilitate the buildings for adaptive use compatible with park resource values.	Continue to lease the Peirce Mill Barn to a non-profit organization Include in the Administration/Operations Zone. Continue to use for park administrative offices.	Same as Alternative A.	Same as Alternative A.
Lodge House	Move the U.S. Park Police D-3 substation out of the structure. Include in the Visitor Facility Zone. Convert to a visitor contact station to provide park orientation, information, and interpretation.	Include in the Administration/Operations Zone. Continue to use for U.S. Park Police D-3 substation.	Same as Alternative A.	Same as Alternative A.

TABLE 6: SUMMARY OF KEY DIFFERENCES AMONG THE ALTERNATIVES (Continued)

Park Feature	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Rock Creek Nature Center and Planetarium	Rehabilitate the nature center and expand to improve effectiveness of public programs. Upgrade the planetarium.	Maintain current configuration.	Same as Alternative A.	Same as Alternative A.
Administration and Operations				
Administrative offices	Move out of the Peirce-Klingler Mansion. Relocate preferably to commercial office space outside the park, or to a new office facility constructed at the park maintenance yard.	Continue to use current space in the Peirce-Klingler Mansion.	Same as Alternative A.	Same as Alternative A.
U.S. Park Police D-3 substation	Move out of the Lodge House. Relocate preferably to commercial space outside the park, or to a new substation constructed at the H-3 area.	Continue to use current space in the Lodge House.	Same as Alternative A.	Same as Alternative A.
H-3 area	Construct a new park police substation only if suitable commercial space cannot be obtained outside of the park.	Continue current uses.	Same as Alternative A.	Same as Alternative A.
Maintenance yard	Rehabilitate the area. Construct new office facilities only if suitable commercial space cannot be obtained outside of the park.	Continue current uses. Relocate some administrative staff to existing facilities at this site.	Same as Alternative A.	Same as Alternative A.
Approximate cost				
Capital costs (one time)	\$13,375,000	\$1,920,000	\$13,429,000	\$13,429,000
Operating cost	\$8,178,000 per year	\$7,300,000 per year	\$8,178,000 per year	\$8,208,000 per year

TABLE 7: SUMMARY OF IMPACTS OF THE ALTERNATIVES

Impact Topic	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Air quality	<p>Little effect on air quality because rerouted traffic would remain in the airshed.</p> <p>Carbon monoxide levels would be below NAAQS.</p> <p>The airshed's ozone status would not be affected.</p> <p>Best management practices would ensure that effects from construction would be negligible.</p> <p>No impairment, or irretrievable or irreversible commitment of resources.</p>	<p>Effects would be similar to Alternative A because the same traffic volume would remain within the airshed.</p>	<p>Effects would be the same as Alternative A. Although Alternative C would reroute traffic that currently uses Beach Drive, no traffic would be diverted to outside of the airshed.</p>	<p>Effects would be similar to Alternative A because the same traffic volume would remain within the airshed.</p>
Rock Creek and its tributaries	<p>Application of best management practices (BMPs) to park areas known to be contributing pollutants would produce beneficial, long-term, measurable effects on water quality.</p> <p>Construction at several sites would produce negligible, adverse, short-term effects on water quality and hydrology.</p> <p>Reduced automobile traffic on roads adjacent to Rock Creek could have a beneficial, long-term, negligible to measurable effects on water quality.</p> <p>Better education of the public could help reduce upstream pollutant loadings and storm water flows.</p>	<p>The application of BMPs to park areas known to be contributing pollutants would produce beneficial, long-term measurable effects on water quality.</p> <p>Continued inter-agency measures to maintain and improve sanitary and combined sewer systems would produce beneficial, long-term, major effects on water quality. Coordination could also produce beneficial, long-term, major reductions in streambed alterations such as scour and sedimentation.</p>	<p>Elimination of automobile traffic on portions of Beach Drive, and reduced traffic on other park roads would slightly reduce pollutant loadings in Rock Creek.</p> <p>Other effects would be the same as Alternative A.</p>	<p>Elimination of automobile traffic on portions of Beach Drive during mid-weekdays would slightly reduce pollutant loadings in Rock Creek.</p> <p>Other effects would be the same as Alternative A.</p>

TABLE 7: SUMMARY OF IMPACTS OF THE ALTERNATIVES (Continued)

Impact Topic	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Rock Creek and its tributaries (continued)	Continued inter-agency measures to maintain and improve sanitary and combined sewer systems would produce beneficial, long-term, major effects on water quality. Coordination could also produce beneficial, long-term, major reductions in streambed alterations such as scour and sedimentation. No impairment, or irretrievable or irreversible commitment of resources.	No impairment, or irretrievable or irreversible commitment of resources.		
Wetlands and floodplains	No temporary or permanent adverse effects would occur to wetlands. Better education of the public on the need to control upstream storm water runoff could benefit wetlands. Minor, temporary adverse effects on floodplains would result from widening of some trails along Rock Creek. Effects would be controlled using BMPs. No impairment, or irretrievable or irreversible commitment of resources.	No effects would occur. Wetlands and floodplains would continue to be protected in conformance with Executive Orders 11990 and 11988, respectively. No impairment, or irretrievable or irreversible commitment of resources.	Effects would be the same as Alternative A.	Effects would be the same as Alternative A.
Deciduous forests	Current management practices would continue to protect the deciduous forest. Conversion of about a half acre of forested land to new paved trail area would be a long-term minor adverse effect on the deciduous forest.	Current management practices would continue to protect deciduous forests. Erosion problems along heavily used or improperly designed trails would continue and probably worsen.	Effects would be the same as Alternative A.	Effects would be the same as Alternative A.

TABLE 7: SUMMARY OF IMPACTS OF THE ALTERNATIVES (Continued)

Impact Topic	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Deciduous forests (continued)	<p>Disturbance of 4 to 5 acres of forest for a trail construction zone would be a minor short-term, adverse effect.</p> <p>Rerouting trails currently on steep slopes, erosion-prone areas, riparian zones, or rare biotic communities would be a major, long-term, beneficial effect.</p> <p>No impairment, or irretrievable or irreversible commitment of resources.</p>	No impairment, or irretrievable or irreversible commitment of resources.		
Protected and rare species	<p>Long-term protection of endangered amphipods could be enhanced by implementing more active protection.</p> <p>Improved education and interpretation may increase the public's appreciation for these species and lead to better protection outside of the park.</p> <p>No impairment, or irretrievable or irreversible commitment of resources.</p>	<p>The National Park Service would continue to protect rare species and their supporting habitats.</p> <p>No impairment, or irretrievable or irreversible commitment of resources.</p>	Effects would be the same as Alternative A.	Effects would be the same as Alternative A.
Other native wildlife	<p>Current management practices would continue to protect native wildlife.</p> <p>Minor, short-term, adverse effects from trail widening and realignments would be controlled using BMPs.</p> <p>Reduced traffic speeds and volumes would reduce wildlife roadkill, a beneficial effect. For most species, the effect would be negligible. Effects on box turtles would be moderate. Effects on gray fox would be major.</p>	<p>Current management practices would continue to protect native wildlife in the park.</p> <p>No impairment, or irretrievable or irreversible commitment of resources.</p>	<p>Closure of portions of Beach Drive to motorized traffic would further reduce the number of terrestrial wildlife roadkills compared to Alternative A. The effect would be beneficial but negligible for all wildlife species.</p> <p>Other effects would be the same as Alternative A.</p>	<p>Closure of portions of Beach Drive to motorized traffic during mid-weekdays would reduce the number of terrestrial wildlife roadkills, especially for species that are active during the day. The effect would be beneficial but negligible for all wildlife species.</p> <p>Other effects would be the same as Alternative A.</p>

TABLE 7: SUMMARY OF IMPACTS OF THE ALTERNATIVES (Continued)

Impact Topic	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Other native wildlife (continued)	<p>Better education of the public on the adverse effects of moving box turtles or removing them from the park would provide a moderate, long-term, beneficial effect on box turtles.</p> <p>No impairment, or irretrievable or irreversible commitment of resources.</p>			
Archeological resources	<p>No significant adverse effect would occur because the National Park Service would relocate any facilities that would disturb potentially NRHP-eligible sites.</p> <p>Increased monitoring and improved visitor education would reduce the potential for non-construction-related significant adverse effects.</p> <p>The disturbance of sites could result in some irretrievable and irreversible loss of archeological resources.</p>	Current incremental degradation of sites and features would continue.	Effects would be the same as Alternative A.	Effects would be the same as Alternative A.
Historic structures and cultural landscapes	<p>A significant beneficial impact would occur to the Peirce Mill Barn, Peirce-Klingler Mansion, and Lodge House, which would be rehabilitated to preserve their architecturally significant features and would be used in accordance with park resource values.</p> <p>A significant beneficial impact would occur to historic trails where improvements or rehabilitation would enhance their integrity and preservation.</p>	Historic structures and cultural landscapes would be protected, preserved, and interpreted in a manner consistent with NPS policies.	Effects would be the same as Alternative A.	Effects would be the same as Alternative A.

TABLE 7: SUMMARY OF IMPACTS OF THE ALTERNATIVES (Continued)

Impact Topic	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Historic structures and cultural landscapes (continued)	<p>Rehabilitation of the significant cultural landscape features and attributes of the Linnaean Hill and Peirce Mill areas would enhance park preservation and visitor understanding of park's historic settings.</p> <p>The disturbance of sites during new construction could result in some irretrievable and irreversible loss of resources.</p>			
Traditional park character and visitor experience	<p>The traditional character and appearance of the park would not change.</p> <p>Nonmotorized recreation and transportation would be better accommodated.</p> <p>HOV restrictions during rush-hours would inconvenience nonrecreational visitors who do not carpool.</p> <p>A major improvement in visitor safety would occur because of lower traffic volumes and slower traffic speeds.</p> <p>Improved education and interpretation facilities would provide greater opportunities to learn about and experience the park's natural and cultural resources.</p> <p>Visitor experience would be enhanced by increased efficiency of park administration and improved police services.</p> <p>No impairment, or irretrievable or irreversible commitment of resources.</p>	<p>The traditional character and appearance of the park would not change.</p> <p>Park visitors would be adversely affected by escalating nonrecreational traffic in the park and on the parkway.</p> <p>Visitor safety would likely decrease as traffic increased.</p> <p>Some exhibits would continue to be inaccurate, worn, and dated.</p> <p>No impairment, or irretrievable or irreversible commitment of resources.</p>	<p>The elimination of the traditional visitor experience of automobile touring along the length of the park, including the gorge area, would be a major adverse impact.</p> <p>Alternative C would provide the greatest benefits to non-motorized recreation and transit by providing a bike trail through the valley with little interference from motorized traffic.</p> <p>A major improvement in visitor safety would occur because of lower traffic volumes and slower traffic speeds.</p>	<p>The traditional character and appearance of the park would not change.</p> <p>Automobile touring along the length of the park would be maintained during weekday rush-hours, evenings, and nights.</p> <p>Nonmotorized recreation and transit would be enhanced by providing a bike trail with little interference from motorized traffic through the valley during mid-weekday closure periods.</p> <p>A major improvement in visitor safety would occur because of slower traffic speeds.</p>

TABLE 7: SUMMARY OF IMPACTS OF THE ALTERNATIVES (Continued)

Impact Topic	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Traditional park character and visitor experience (continued)			Alternative C would provide the greatest increase in safety through its traffic-calming and traffic-reducing measures, and by providing permanent trails to separate visitors participating in nonmotorized recreation from automobiles throughout the length of the valley. Other effects would be the same as Alternative A.	Safety would be improved by traffic-calming measures and during mid-day closures, when visitors participating in nonmotorized recreation could be separated from automobiles throughout the length of the valley. Time demands for erecting or removing barriers would limit the availability of park police for other activities. Other effects would be the same as Alternative A.
Regional and local transportation	Nonrecreational traffic would be substantially reduced in the park south of Bingham Drive. Nonmotorized travel would be enhanced. Traffic volumes and speeds would be reduced in the park and on the parkway, increasing visitor safety. Single-occupancy vehicles would have to use alternate routes during HOV restrictions.	During peak morning and evening hours, traffic would be very heavy or worse on 57 percent of modeled road segments. Only 44 percent of these segments had these conditions in 1990. Continued conflicts would occur between recreational and nonrecreational users of park roads.	Nonrecreational traffic would be eliminated or substantially reduced in the park. Nonmotorized travel would be enhanced. During the morning peak-hour, 15 road segments would have noticeable to considerable improvements in LOS. Five road segments would have noticeable to considerable declines.	During rush-hours, traffic speeds would be reduced in the park and on the parkway by traffic-calming measures. Other rush-hour conditions would be similar to those in Alternative B. During mid-weekday closures, Nonrecreational traffic would be eliminated or substantially reduced in the park. Nonmotorized travel would be enhanced.

TABLE 7: SUMMARY OF IMPACTS OF THE ALTERNATIVES (Continued)

Impact Topic	Alternative A: Improved Management of Established Park Uses	Alternative B: Continue Current Management/No Action	Alternative C: Nonmotorized Recreation Emphasis	Alternative D: Mid-Weekday Recreation Enhancement
Regional and local transportation (continued)	<p>During morning peak-hour, 13 segments would have noticeable to major improvements in level of service. Two segments would have noticeable LOS declines.</p> <p>During the evening peak-hour, nine segments would have noticeable to considerable improvements in LOS. Two segments would have noticeable LOS declines.</p>		<p>During the evening peak-hour, 11 segments would have noticeable to considerable improvements. Nine segments would have noticeable to considerable declines.</p> <p>Other effects would be the same as Alternative A.</p>	
Community character	<p>Changes in community character resulting from park traffic management would be minor compared to changes that would result from increased traffic associated with regional population growth.</p> <p>Five road segments outside of the park would have observable changes in community character, ranging from major improvements to noticeable adverse effects.</p> <p>Trail improvements and traffic control would improve nonmotorized recreation, benefiting citizens who use the park and park vicinity for these purposes.</p> <p>Environmental justice: No disproportionate routing of traffic to disadvantaged areas or ethnic neighborhoods.</p>	<p>Changes in community character from park traffic management would be minor compared to changes from increased traffic associated with regional population growth.</p> <p>Recreational opportunities and access to the park would continue to be compromised by traffic congestion.</p>	<p>Eight segments would experience noticeably improved community characteristics associated with lower traffic levels during one or both of the peak-hours on weekdays.</p> <p>Nine road segments would experience a noticeable to considerable decline during one or both of the peak-hours on weekdays.</p> <p>Opportunities for nonmotorized recreation would be enhanced, benefiting citizens who use the park and nearby trails for these purposes.</p> <p>Environmental justice: No disproportionate routing of traffic to disadvantaged areas or ethnic neighborhoods.</p> <p>Other effects would be the same as Alternative A.</p>	<p>Except during mid-day closures on weekdays, effects would be the same as Alternative B.</p> <p>During the middle portion of weekdays, opportunities for nonmotorized recreation would be enhanced, benefiting citizens who use the park and nearby trails for these purposes.</p> <p>Environmental justice: No disproportionate routing of traffic to disadvantaged areas or ethnic neighborhoods.</p> <p>Other effects would be the same as Alternative A.</p>