Environmental Assessment

Wilkins Ranch

Rehabilitation and Public Use

Rehabilitation of Septic and Water System



Historic Wilkins Ranch: View to Bolinas Lagoon

Point Reyes National Seashore

National Park Service

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Abstract

This document is an *Environmental Assessment (EA)* for the Wilkins Ranch Rehabilitation and Public Use Project. The Wilkins Ranch is located in the southern Olema Valley within Golden Gate National Recreation Area (GGNRA) near the towns of Stinson Beach and Bolinas. The area is administered by Point Reyes National Seashore. The project objectives are to provide public access to the facilities, rehabilitate and preserve historic buildings and features, and implement the objectives of the General Management Plan for GGNRA and Point Reyes National Seashore.

The EA evaluates three alternatives that include a no-action alternative and two action alternatives. The alternatives are: Alternative A: No Action—Continue to Operate Private Facilities; Alternative B: Residential Use and Additional Public Access; Upgrade Buildings, Sewage Disposal, and Water System; Alternative C: Rehabilitate Facilities for Two Residences and Conservation and Education Center; Additional Public Access; Upgrade Buildings, Sewage Disposal, and Water System (Preferred Alternative).

The Environmental Consequences section analyzes each alternative for environmental impacts. The following impact topics are analyzed: vegetation, wildlife, wetlands, cultural resources, visual quality, public health and safety, housing, visitor experience, park operations, traffic, and noise.

Alternative A— The no action alternative is not preferred because it does not provide public access and use of the project area. In addition, the alternative does not meet the objectives of the General Management Plan (GMP). Alternatives B and C both provide public access, enhance cultural resource protection, and have similar impacts on wildlife, vegetation, noise, housing, and public services. Alternatives B and C have minor impacts on transportation and housing. Alternative C is the preferred alternative because it provides cultural and natural resource protection and provides for visitor and education use. In turn, it meets the objectives of the National Park Service and the GMP. No impacts associated with any of the three alternatives are considered to be significant. Measures are included to minimize any impacts.

The project requires consultation with the United States Fish and Wildlife Service for potential impacts to critical habitat of the California red-legged frog and northern spotted owl. The National Marine Fisheries will be consulted regarding any potential impacts to threatened steelhead trout. Regarding cultural resources, the State Historic Preservation Office and Advisory Council for Historic Preservation will be consulted. A consistency determination will also be required from the California Coastal Commission.

Table of Contents

Purpose and Need	3
Environmental Compliance Requirements	6
Alternatives, Including the Preferred Alternative	13
Affected Environment	18
Environmental Consequences	22
Summary Comparison of Impacts by Alternatives	72
Consultation and Coordination	74
Plan Preparers and Contributors	75
References	76

Appendices

Appendix A: Location Map	78
Appendix B: Main Complex and Ranch Area Map	80
Appendix C: Summary Mitigation Matrix for Preferred Alternative	83
Appendix D: Vegetation Type Map and Planning Areas	85
Appendix E: Glossary of Terms and Acronyms	87
Appendix F: Management Objectives from General Management Plan	91
Appendix G: Projects Considered for Cumulative Effects	95
Appendix H: Programmatic Agreement with State Historic Preservation Office	96
Appendix I: Proposed Locations of Trail Upgrades for Existing Informal Trails	110
Appendix J: Additional Guidelines for Use of Wilkins Ranch	112

Purpose and Need

This *Environmental Assessment (EA)* has been prepared to assist National Park Service (NPS) planning and decision making, and to determine if an Environmental Impact Statement (EIS) is required for the proposed use at the Wilkins Ranch in Golden Gate National Recreation Area. The area is within the north district of Golden Gate National Recreation Area (GGNRA) and is administered by Point Reyes National Seashore (PRNS). The facilities are located at the former Wilkins Ranch on Highway One in the southern Olema Valley near the towns of Bolinas and Stinson Beach (See Appendix A for Location Map and Appendix B for Complex and Ranch Map).

This proposed action will implement a component of the *1980 Point Reyes National Seashore/Golden Gate National Recreation Area General Management Plan* (GMP) with respect to the Wilkins Ranch. The GMP calls for public use of the facilities as an environmental education center. A preliminary proposal and background information to implement the GMP were circulated during the public scoping process for this project in November 2000.

As federal facilities, PRNS and GGNRA are subject to the provisions of the National Environmental Policy Act (NEPA). NEPA requires an interdisciplinary study of impacts associated with federal actions. For PRNS and GGNRA, these requirements were initially met with preparation of the *PRNS/Golden Gate National Recreation Area General Management Plan (GMP) and Environmental Analysis (*NPS 1980*)*. Because of the proposed rehabilitation of the historic complex and development of public access, this EA was prepared to address site-specific impacts to determine if further environmental review is necessary.

The project site consists of several historic structures (main barn, main house, caretaker's house, former milking barn, and several outbuildings). The overall ranch complex is approximately 1,360 acres. The complex was determined to be eligible for the National Register of Historic Places by the State Historic Preservation Officer in 1979.

The area is zoned for natural landscape management in the GMP. Natural landscape management is defined for areas *"where natural resources and natural processes will remain as undisturbed as possible given a relatively high level of park use. Management activities will be focused on protecting wildlife and vegetation from misuse and overuse and on maintaining a variety of landscape settings that are conducive to public recreational use (open grasslands as well as forest)."*

The purpose and need for this federal action is to implement the objectives of the 1980 GMP (See Appendix F for full listing of objectives) and the education mission of the National Park Service. Because these objectives and the educational mission are derived from park legislation and the NPS Organic Act, they remain valid and guiding forces in park management at PRNS and GGNRA. The objectives and mission also have been reiterated in the recent update of the National Park Service Management Policies (2001). The Management Policies state "Through interpretation and educational programs, the National Park Service will instill in park visitors an understanding, appreciation, and enjoyment of the significance of parks and their resources."

Additionally, the National Parks Omnibus Management Act of 1998 (SB 1693) introduced by

Senator Craig Thomas (R-WY), provides for improved management and increased accountability for National Park Service programs. Specifically, Title I, Sec. 101 states, "Recognizing the ever increasing societal pressures being placed upon America's unique natural and cultural resources contained in the National Park System, the Secretary shall continually improve the ability of the National Park Service to provide state-of-the-art management, protection, and interpretation of and research on the resources of the National Park System."

In Title II, Sec 201, the stated purposes of the National Park System resource inventory and management programs are to 1) more effectively achieve the mission of the NPS, 2) enhance the management and protection of national park resources by providing clear authority and direction for the conduct of scientific studies and to use the information gathered for management purposes, 3) ensure appropriate documentation of resource conditions in the National Park System, and 4) encourage others to use the National Park System for study to the benefit of park management as well as broader scientific value where consistent with the Organic Act.

The GMP objectives that guide this project include the following:

For Golden Gate National Recreation Area:

To reuse existing buildings for visitor and management needs in order to help preserve historic structures and reduce building costs.

To offer recreational opportunities to a diversity of park users and to impart knowledge necessary for full enjoyment of park resources through a particular emphasis on interpretation, education, and an information program.

To encourage community organizations to utilize park areas and facilities as a setting for their own recreation and education programs.

To develop a trail system for the use of hikers, bicyclists, and equestrians.

To recognize the importance of the cultural resources within the recreation area through a positive program of their identification, evaluation, preservation, management, and interpretation.

For adjacent Point Reyes National Seashore land applicable GMP objectives include:

To identify, protect, and preserve the significant historic and cultural resources of Point Reyes.

To preserve and protect all structures in or nominated to the National Register of Historic Places, and to stabilize and protect other structures and sites pending their historical evaluation.

To offer interpretive programs and services which further an awareness and appreciation of the wide diversity of seashore ecosystems and cultural resources, their variety and similarity,

their interdependence, and their fragile nature.

To provide opportunities for emphasizing environmental education and programs related to the resource, including the coastal environment.

In addition to fulfilling the objectives of the GMP, the project will bring the Wilkins Ranch into compliance with state, federal, and county health and safety regulations. Because the project would rehabilitate historic buildings and utility systems, Wilkins Ranch structures and water and sewage treatment facilities would meet federal, state, and county health and safety codes at project completion.

The project will also help the park meet demands for education use, and will provide building space for park partners to assist with educational programs. In 2000, the park received over 300 requests from teachers for educational programs that were not met.

Environmental Compliance Requirements

Applicable Laws, Regulations, and Executive Orders

This section describes key pieces of legislation that form the legal context for development of the *Wilkins Ranch Plan and Environmental Assessment.* These pieces of legislation have guided development of this document and will continue to guide its implementation.

National Park Service Legislation

Congress established Golden Gate National Recreation Area by Public Law 92-589 "in order to preserve for public use and enjoyment certain areas of Marin and San Francisco Counties, California (San Mateo County added by P.L. #96-607), possessing outstanding natural, historic, scenic, and recreational values, and in order to provide for the maintenance of needed recreational open space necessary to urban environment and planning, the Golden Gate National Recreation Area (hereinafter referred to as the "recreation area") is hereby established. In the management of the recreation area, the Secretary of the Interior (hereinafter referred to as the "Secretary") shall utilize the resources in a manner which will provide for recreation and educational opportunities consistent with sound principles of land use planning and management. In carrying out the provisions of this Act, the Secretary shall preserve the recreation area, as far as possible, in its natural setting, and protect it from development and uses which would destroy the scenic beauty and natural character of the area."

Congress established the Seashore on September 13, 1962 (PL 87-657) "to save and preserve, *for purposes of public recreation, benefit and inspiration, a portion of the diminishing seashore of the United States that remains undeveloped.*" An amendment to the legislation passed in 1976 (PL 94-544) stated that the property was to be administered "*...without impairment of its natural values, in a manner which provides for such recreational, educational, historic preservation, interpretation, and scientific research opportunities as are consistent with, based upon, and supportive of the maximum protection, restoration, and preservation of the natural environment within the area.*"

Act of August 25, 1916 (National Park Service Organic Act), PL 64-235, 16 USC §1 et seq. As amended. On August 15, 1916, Congress created the National Park Service with the National Park Service Organic Act. This act, as reaffirmed and amended in 1970 and 1978, establishes a broad framework of policy for the administration of national parks:

> *"The Service thus established shall promote and regulate the use of the Federal areas known as National Parks, Monuments, and Reservations... by such means and measures as to conform to the fundamental purpose of the said Parks, Monuments, and Reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."*

General Legislation and Regulations

Americans with Disabilities Act, PL 101-336, 104 Stat. 327, 42 USC §12101. This act states that all new construction and programs will be accessible to individuals with disabilities. Additionally, National Park Service Special Directive 83-3 states that accessibility will be proportional to the degree of development (i.e., areas of intense development such as visitor centers, museums, drive-in campgrounds, etc., will be entirely accessible, and areas of lesser development such as backcountry trails and walk-in campgrounds may have fewer accessibility features). This project should be consistent with this act.

Architectural Barriers Act of 1968, PL 90-480, 82 Stat. 718, 42 USC §4151 et seq. This act establishes standards for design/construction or alteration of buildings to ensure that physically disabled persons have ready access to and use of such buildings. The act excludes historic structures from the standards until they are altered.

Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) (40 CFR Parts 1500-1508). The Council on Environmental Quality regulations for implementing the National Environmental Policy Act (NEPA) establishes the process by which federal agencies fulfill their obligations under the NEPA process. The Council on Environmental Quality regulations ascertains the requirements for environmental assessments and environmental impact statements that document the NEPA process. The Council on Environmental Quality regulations also define such key terms as "cumulative impact," "mitigation" and "significantly" to ensure consistent application of these terms in environmental documents. This environmental analysis was prepared as directed in the Council on Environmental Quality regulations.

National Environmental Policy Act (NEPA) of 1970. PL 91-190, 83 Stat. 852, 42 USC §4341 et seq. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. Regulations implementing NEPA are set forth by the Council on Environmental Quality. The NEPA process guides the overall planning process for this project.

Rehabilitation Act of 1973, PL 93-112, 87 Stat. 357, 29 USC §701 et seq. As amended by the Rehabilitation Act Amendments of 1974, 88 Stat. 1617, this act sets forth a broad range of services and basic civil rights for individuals with disabilities. It prohibits discrimination against persons with visual, hearing, mobility, and mental impairments. All development proposed in the *Wilkins Ranch Plan and EA* must be consistent with this act.

Natural Resources Legislation

Clean Air Act, as amended, PL Chapter 360, 69 Stat. 322, 42 USC §7401 et seq. Section 118 of the Clean Air Act requires all federal facilities to comply with existing federal, state, and local air pollution control laws and regulations.

Federal Water Pollution Control Act (commonly referred to as the Clean Water Act) of 1977 (33 USC 1251 et seq.). The Clean Water Act provides for the restoration and maintenance of the

physical, chemical, and biological integrity of the nation's waters. Section 404 of the act prohibits the discharge of fill material into navigable water of the United States, including wetlands, except as permitted under separate regulations by the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency.

Clean Water Act Amendments of 1987. The 1987 amendments to the act required that the Environmental Protection Agency establish regulations for the issuance of municipal and industrial storm-water discharge permits as part of the National Pollutant Discharge Elimination System. The final Environmental Protection Agency regulations were published in November 1990.

Endangered Species Act of 1973, as amended, PL 93-205, 87 Stat. 884, 16 USC §1531 et seq. The Endangered Species Act protects threatened and endangered species, as listed by the U.S. Fish and Wildlife Service, from unauthorized take, and directs federal agencies to ensure that their actions do not jeopardize the continued existence of such species. Section 7 of the act defines federal agency responsibilities for consultation with the U.S. Fish and Wildlife Service and requires preparation of a Biological Assessment to identify any threatened or endangered species that is likely to be affected by the proposed action. The National Park Service initiated and maintains informal consultation with the U.S. Fish and Wildlife Service.

Cultural Resources Legislation

Antiquities Act of 1906, PL 59-209, 34 Stat. 225, 16 USC §432 and 43 CFR 3. This act provides for the protection of historic or prehistoric remains, "or any antiquity," on federal lands. It protects historic monuments and ruins on public lands. It was superseded by the Archeological Resources Protection Act (1979) as an alternative federal tool for prosecution of antiquities violations in the National Park System.

Archeological Resources Protection Act of 1979, PL 96-95, 93 Stat. 712, 16 USC §470aa et seq. and 43 CFR 7, subparts A and B, 36 CFR. This act secures the protection of archeological resources on public or Indian lands and fosters increased cooperation and exchange of information between private, government, and the professional community in order to facilitate the enforcement and education of present and future generations. It regulates excavation and collection on public and Indian lands. It requires notification of Indian tribes who may consider a site of religious or cultural importance prior to issuing a permit. The act was amended in 1988 to require the development of plans for surveying public lands for archeological resources and systems for reporting incidents of suspected violations.

National Historic Preservation Act of 1966, as amended, PL 89-665, 80 Stat. 915, 16 USC §470 et seq. and 36 CFR 18, 60, 61, 63, 68, 79, 800. The National Historic Preservation Act requires agencies to take into account the effects of their actions on properties listed in or eligible for listing in the National Register of Historic Places. The Advisory Council on Historic Preservation has developed implementing regulations (36 CFR 800), which allow agencies to develop agreements for consideration of these historic properties. GGNRA, in consultation with the Advisory Council, the California State Historic Preservation Officer (SHPO), American Indian tribes and the public, has developed a Programmatic Agreement for operations and maintenance activities on historic structures. This Programmatic Agreement (See Appendix H) provides a process for compliance with

National Historic Preservation Act, and includes stipulations for identification, evaluation, treatment, and mitigation of adverse effects for actions affecting historic properties.

American Indian Religious Freedom Act, PL 95-341, 92 Stat. 469, 42 USC §1996. This act declares policy to protect and preserve the inherent and constitutional right of the American Indian, Eskimo, Aleut, and Native Hawaiian people to believe, express, and exercise their traditional religions. It provides that religious concerns should be accommodated or addressed under NEPA or other appropriate statutes.

Executive Orders

Executive Order 11593: Protection and Enhancement of the Cultural Environment. This Executive Order instructs all federal agencies to support the preservation of cultural properties. It directs them to identify and nominate cultural properties under their jurisdiction to the National Register of Historic Places and to "exercise caution… to assure that any federally owned property that might qualify for nomination is not inadvertently transferred, sold, demolished, or substantially altered."

Executive Order 11988: Floodplain Management. This Executive Order requires federal agencies to avoid, to the extent possible, adverse impacts associated with the occupancy and modification of floodplains, and to avoid development in floodplains whenever there is a practical alternative. If a proposed action is found to be in the applicable regulatory floodplain, the agency shall prepare a floodplain assessment, known as a Statement of Findings.

Executive Order 11990: Protection of Wetlands. This Executive Order established the protection of wetlands and riparian systems as the official policy of the federal government. It requires all federal agencies to consider wetland protection as an important part of their policies and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.

Presidential Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This Executive Order requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.

Presidential Executive Order 13123: Energy Efficiency and Water Conservation. This Executive Order directs each agency involved in the construction of a new facility to design and construct it to use energy efficiently, conserve water, and employ renewable energy technologies. The requirements of this Executive Order would be met during the design phase for rehabilitating buildings.

Executive Order No. 13112: Invasive Species. This Executive Order prevents the introduction of invasive species and directs federal agencies to not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species. Actions

proposed in the *Wilkins Ranch Plan and EA* include measures to prevent the introduction and spread of invasive species.

California Zone Management Act. This act protects coastal environments. While this act transferred regulatory authority to the States and excluded federal installations from the definition of the "coastal zone," it requires that federal actions be consistent with state coastal management plans. Activities taking place within the coastal zone under the definition established by the California Coastal Management Plan require a federal consistency determination.

Relationship to Other Plans and Policies

General Management Plan (GMP), Golden Gate/Point Reyes National Seashore (NPS 1980) designates the Wilkins Ranch as an environmental education facility for park visitors. The GMP zoned the area surrounding the complex as natural environment zoning. The plan also states the importance of adaptive use for preservation of historic structures. The GMP states "Adaptive use is very important if many of the 410 historic structures are to be maintained or preserved over the long-term." The GMP also states "Subsequent to the full development of a consolidated environmental education center in Rodeo Valley, the historic buildings of Rancho Bolinas at the head of Bolinas Lagoon may be adapted as another center to accommodate the outdoor education programs of Bay Area schools." The NPS has determined there is demand for the use of the facilities by the public for education.

Marin County Local Coastal Program, Unit 1 (LCP)(1980) supports and encourages the enhancement of public recreational opportunities. Referring to PRNS and GGNRA, the LCP states "public access to these lands seems to be assured." The LCP assumes that a major portion of the access and visitor services needs within Unit I would and can be successfully integrated into federal park development and management programs.

Marin County Community Plan. PRNS and the GGNRA North District are part of the Marin County Coastal Recreation Corridor. The Countywide Plan recommends that PRNS and GGNRA be retained in their natural state to the greatest extent possible, and that recreation uses be low intensity.

Bolinas Community Plan. The Wilkins Ranch property is not in the planning area in the Bolinas Community Plan (1975). However, the Bolinas Public Utility District (BPUD) has established an Ad Hoc Planning Committee for this project and has provided comments to the NPS during scoping.

The Secretary of the Interior Standards for Rehabilitation and Illustrated Guidelines for Rehabilitation of Historic Buildings. The Standards for Rehabilitation (1992) have been developed to guide rehabilitation work undertaken on historic buildings. The intent of the standards is to assist the long-term preservation of a property's significance through the preservation of historic materials and features. The standards emphasize repair over replacement. The NPS has determined the preferred alternative meets the standard.

National Park Service Management Policies, 2001. This document is the basic Service-wide

Policy of the National Park Service. Adherence to policy is mandatory unless specifically waived or modified by the Secretary, the Assistant Secretary, or the Director. The policies encourage educational programs which "encourage the development of personal stewardship ethic, and broaden public support for preserving resources."

Resources Management Plan. The Resources Management Plan for the park was updated in 1999. The plan presents an inventory and description of natural and cultural resources; describes and evaluates the current resources management program; and prescribes an action program based on legislative mandates, National Park Service policies, and provisions of related planning documents. The actions in the *Wilkins Ranch Plan and Environmental Assessment* have been developed in harmony with the goals of the Resources Management Plan.

General Management Plan Update

Although the GMP is twenty years old and some members of the public have asked for an update, many have requested the existing GMP be implemented. The GMP update process is expected to take approximately 4-5 years. Until the GMP is updated (scoping has been conducted), the NPS will follow the general management direction provided by the existing Plan. The PRNS has determined this specific project is consistent with the mission and objectives of the NPS and the existing GMP. As a result, the National Park Service will continue to move forward to implement the broad goals of the GMP and the direction and guidance it provides, while updating specific actions through the planning and compliance process. This approach will allow the National Park Service to continue to build on accumulated knowledge.

Issues and Impact Topics

The purpose of scoping is to identify issues and concerns related to the planning process and to determine the scope of issues that will be addressed in the EA. Typically, scoping occurs at the beginning of a planning process. The initial scoping period for the Wilkins Ranch began with a public meeting of the Golden Gate NRA/Point Reyes NS Citizen's Advisory Commission meeting held on October 21, 2000. At that time, a document (*Wilkins Ranch Conservation and Education Center, Preliminary Proposal*) was released for a public comment period that ended on November 30, 2000.

Forty comment letters were received during the initial scoping period; 29 letters and 11 were emails. An interdisciplinary team of park staff evaluated the scoping comments and prepared a summary report.

This EA, prepared by the NPS, evaluates three alternatives and the impacts associated with these actions. Public scoping and evaluations of the project site have identified the following issues of potential concern and provides the basis for the analysis of alternatives: impacts on vegetation, endangered and threatened species, wetlands, and wildlife; impacts on visual quality; impacts on noise; impacts on human health and safety; impacts to visitor experience; impacts to housing; impacts on traffic, and impacts on cultural resources including the cultural landscape. Comments received from the Bolinas Public Utility District, Ad-hoc Committee were sought after and

included by the NPS planning team. Issues that were identified as potential concerns are evaluated in the Environmental Consequences section of the document.

Alternatives, including the Preferred Alternative

For purposes of this EA, the project area (1360 acres) has been broken into three sub-areas—main ranch complex (14 acres); open grassland and shrub area which is currently grazed (242 acres); and heavily wooded area with very limited grazing (1104 acres). A map showing these planning areas is in Appendix D. Actions that would occur in each area are described under the appropriate heading.

Alternative A: No Action—Continue to Operate Private Facilities

General Actions Related to the Alternative

This alternative would continue the current use and activities now at the Wilkins Ranch. The ranch would be permitted to a private tenant for nominal grazing, private horse boarding, and residential purposes through a competitive process.

Main Ranch Complex (14 acres)
This alternative will leave the project site in its present condition as a private residential and horse boarding facility. No building or utility system improvements would be completed for new or existing uses. Under this alternative, the Wilkins Ranch complex would fail to comply with current county, state, and federal regulations related to health, safety, and building codes.

Historic structures and cultural landscape would continue to be maintained in their existing condition without rehabilitation.

No additional signage is proposed at the main complex under this alternative. Parking (approximately 15 informal and formal spaces) would continue to occur behind the main barn, near the former creamery, and near the main house.

Group use of the premises would continue to be allowed by permission granted by private tenant.

Open Grassland and Shrub Area (242 acres)
The open grassland and shrub area (along with portions of the 14 acre main complex) would continue to be used to graze a small number of animals (currently five cows, three calves and 17 horses - 25 animal grazing units per year). This area would continue to decrease in size due to the encroachment of heavily wooded vegetation. The grassland/shrub area would continue to have extremely limited public access for recreational purposes such as hiking and horseback riding. Existing informal trails, which are eroding, steep, and do not meet NPS standards for public safety, would continue to be used in their present condition. The existing trails are not signed for public use and no formal trailheads exist. No new signage is proposed under this alternative; some signage exists for horseback riders from the Ranch.

Heavily Wooded Area (1104 acres)
This area would continue to not be grazed and would continue to increase in size, resulting in added fire fuel loads. It would continue to have restricted public access for recreational purposes such as hiking and horseback riding. Three trails maintained by the current tenant would continue to not

meet NPS standards. Current trails are eroding and steep, and need outsloping and general maintenance. One trail bisects an area that supports a special status plant species, Marin manzanita (*Arctostaphylos virgata*). The informal trails in this area would continue to not be signed for public use. No formal trailheads would be developed. No new signs are proposed for the area under this alternative.

Alternative B: Residential Use and Additional Public Access; Upgrade Buildings, Sewage Disposal, and Water System

General Actions Related to the Alternative

This alternative would include rehabilitating existing historic and non-historic buildings, and upgrading utility systems. Main use at the complex would be residential and additional public access would be allowed to the complex and 1360 acres of the former ranch. A vegetation management plan would be prepared for the open grassland shrub and the heavily wooded area. The ranch would be permitted to a partner for livestock grazing and permitted to a public purpose park partner(s) for residential purposes. NPS may also use the site for residential purposes.

Main Ranch Complex (14 acres)
Main buildings--including the main house, main barn, and outbuildings--would be rehabilitated to ensure long-term preservation and protection. Two residences would be retained at the site. The second residence in the former creamery and main residence would be upgraded to meet current codes.

Public access under a reservation system, approximately 25 groups per year, would occur at the main complex including the picnic area. Septic and water systems would be upgraded to meet current health and safety standards.

The historic buildings and cultural landscape would be rehabilitated and preserved. The rehabilitation would be based upon the Secretary of Interior's Standards for Preservation of Historic Properties and Landscapes. Guidance for rehabilitation activities would come from inventories, condition assessments, and feature-specific treatment recommendations prepared by the NPS in consultation with the California State Historic Preservation Officer.

To ensure that the rural character of the ranch is maintained, grazing would continue in areas adjacent to the ranch complex. The facilities would provide year-round pasture for park, permitted or concessionaire horses/livestock.

The National Park Service and its residential partner would maintain the gardens and grounds.

A small sign along the driveway near the main complex is proposed. No other signage is proposed at the main complex under this alternative. Exhibitry would be limited to the interior of main complex buildings.

Parking would be dispersed around the complex in small existing formal and informal spaces and would be limited to 25 spaces.

Open Grassland and Shrub Area (242 acres)
The existing grassland and shrub area would be maintained through the use of seasonal grazing, prescribed fire, and mechanical removal. Existing visual qualities would be preserved. The size of this area would be maintained, thus protecting adjacent communities from a major fire. This area would have public access for recreational purposes such as hiking and horseback riding. Two existing informal trails would be upgraded to NPS standards and signed appropriately for public access. (These trails travel through both the open grassland/shrub area and heavily wooded area. See Appendix I for map of proposed trails.) Small trail signs would be installed at appropriate locations; no other signage is proposed. Fences would be maintained; additional exclusionary fencing would be constructed along major riparian corridors and fencing would be used to restrict access to the marsh.

Heavily Wooded Area (1104 acres)
This area would have additional public access for recreational purposes such as hiking and horseback riding. Two existing trails would be upgraded to NPS standards and signed for public access. (Same as above. These trails travel through both the open grassland and shrub area and heavily wooded area. See Appendix I for map of proposed trails.) An informal trailhead would be established along Bolinas-Fairfax Road. Other access to trails would include the existing McCurdy and Bolinas Ridge Trailhead. Trails signs would be the only signage in this planning area. A vegetation management plan would be prepared to guide vegetation treatments such as prescribed fire.

Alternative C: Rehabilitate Facilities for Two Residences and Conservation and Education Center; Additional Public Access; Upgrade Buildings, Sewage Disposal, and Water System. (Preferred Alternative)

General Actions Related to the Alternative

This alternative would be similar to Alternative B, but would have additional use of the site by a park partner(s) for office space. Park partner would have a public purpose that would further the objectives of the NPS and the Conservation and Education Center described in the GMP. The site would also be more accessible to passive recreational activities. A vegetation management plan would be prepared for the open grassland shrub area and the heavily wooded area. The ranch would be permitted to a partner for seasonal livestock grazing.

To further clarify the intent of this Alternative, draft additional guidelines for use of the Wilkins Ranch have been prepared and placed in Appendix J. These would be used for the development of permit conditions for future use of the site where appropriate.

Main Ranch Complex (14 acres)
As described in the GMP, the historic facilities at the Wilkins Ranch are proposed for re-use as a Conservation and Education Center. The overall goal would be to provide educational and research programs that promote preservation of the cultural landscape and natural systems of the Olema Valley.

The existing structures would be used primarily for offices and residences. There would be no net loss of housing. Two residences would be available at the main complex; one in the former creamery and one in the pump house, which would require an expansion of approximately 200 square feet.

Residential use of the complex would continue by providing housing for the site park partner(s). This residential use would also provide site security. There would be improvements and minor alterations of the exterior appearance of the of the ranch buildings within the complex as they are rehabilitated to the Secretary of Interior's Standards for Preservation of Historic Landscapes. The septic system would be upgraded to meet the needs of new uses and to satisfy the requirements of health and safety codes.

To ensure that the rural character of the ranch is maintained, year-round grazing would continue in the pastures within the main complex. The main complex will provide pasture for park, permitted or concessionaire horses/livestock.

Public access under a reservation system, approximately 25 groups per year, would occur at the main complex including the picnic area.

The historic landscape would be rehabilitated and preserved. The original, oak-shaded character of the site would be restored over time, with the rehabilitation guided by the Secretary of Interior's Standards for Preservation of Historic Landscapes.

The National Park Service and its partner(s) would maintain the gardens and grounds.

A small sign along the driveway near the main complex is proposed. No other signage is proposed at the main complex under this alternative. Exhibits would be limited to the interior of main complex buildings.

Parking would be dispersed around the complex in small existing informal and formal spaces and would be limited to 25 spaces.

Open Grassland and Shrub Area (242 acres)
Same as Alternative B. The existing grassland and shrub area would be maintained through the use of seasonal grazing, prescribed fire, and mechanical treatments. Existing visual qualities would be preserved. The size of this area would be maintained, thus protecting adjacent communities from a major fire. This area would have public access for recreational purposes such as hiking and horseback riding. Two existing informal trails would be upgraded to NPS standards and signed appropriately for public access. (These trails travel through both the open grassland/shrub area and heavily wooded area. See Appendix I for map of proposed trails.) Small trail signs would be installed at appropriate locations; no other signage is proposed. Fences would be maintained; additional exclusionary fencing would be constructed along major riparian corridors and fencing would be used to restrict access to the marsh.

Heavily Wooded Area (1104 acres)
Same as Alternative B. This area would have additional public access for recreational purposes such as hiking and horseback riding. Two existing trails would be upgraded to NPS standards and signed for public access. (Same as above. These trails travel through both the open grassland and shrub area and heavily wooded area. See Appendix I for map of proposed trails.) An informal trailhead

would be established along Bolinas-Fairfax Road. Other access to trails would the existing McCurdy and Bolinas Ridge Trailhead. Trail signs would be the only signage in this planning area. A vegetation management plan would be prepared to guide vegetation treatments such as prescribed fire.

Alternatives Considered but Rejected

A proposal to purchase or lease the property to operate a lodge was rejected. Since additional lodging is not a current need and the 1980 GMP calls for an educational facility, this proposal was rejected as an alternative.

A proposal to operate a NPS visitor center at the Wilkins Ranch was rejected. Although the there was never a NPS proposal to operate a visitor center at the Wilkins Ranch, concerns were raised during the scoping period. To address those concerns, a visitor center proposal was considered but rejected. There is no need to operate a visitor center within the southern Olema Valley and the site is not suited to accommodate a visitor center operation. The NPS operates three visitor centers located throughout the park and another at this location is not needed.

Identification of Environmentally Preferred Alternative

The environmentally preferred alternative is the alternative(s) that causes the least damage to the biological and physical environment. It also means the alternative which best protects, preserves and enhances historic, cultural and natural resources. This Wilkins Ranch Plan has both important cultural preservation elements and natural resource feature.

Alternative A does not provide long-term preservation of the site's historic resources nor does it ensure preservation of the cultural landscape. In addition, native vegetation is adversely impacted long-term by Alternative A. For this reason, Alternative A is not preferred from an environmental perspective.

Alternatives B and C have very similar impacts on natural resources, cultural resources, and visual quality. Both alternatives provide long-term beneficial impacts to cultural and natural resources. In addition, these alternatives all have minimal impact on human health and safety, noise, public services and facilities.

Based on the environmental analysis prepared for the Wilkins Ranch Plan, both Alternatives B and C are environmentally preferred alternatives.

The Affected Environment

Project Site Description
The Wilkins Ranch is located in southern Olema Valley on Highway 1 near Bolinas and Stinson Beach. The site is approximately ten miles south of park headquarters at Bear Valley (See Appendix A for Regional Map and Appendix B for Main Complex and Ranch Map).

The main project site has nine buildings (See Appendix B). Eight of the buildings are considered historic: main barn, main residence, creamery (caretaker's house), horse barn, garage/shop (recreation room), shed, pump house, bull house, well house. The overall ranch complex is approximately 1,360 acres. The Wilkins Ranch has been determined eligible for the National Register of Historic Places with a regional level of significance. The State Historic Preservation Officer concurred with this determination in 1979. Along with the main ranch complex, a number of other historic sites have been identified for long-term protection, including the former copper mine in Copper Mine Gulch. Although the Wilkins Ranch area has not been fully surveyed for archeological resources, due to its topography and proximity to Bolinas Lagoon the NPS fully expects that pre-historic archaeological sites will be found when surveys are complete.

Buildings and Utility Systems
Park staff and private consultants have evaluated the buildings and utilities at the site. A specific analysis and description of each follows.

Main Historic House. Constructed in 1876, the main house has been altered over time but still retains its historic integrity. It is in fair condition. During the summer of 2000 the NPS replaced a porch and several windows (which were extremely deteriorated and in poor condition), made structural repairs, and painted the exterior of the building. Subsequent inspections have revealed termite infestation, dry rot, and other deterioration. During 2001 the NPS plans to treat the termite infestation, replace the roof, and repair exterior siding, windows, and other features. The work will be conducted by contractor, NPS preservation staff, and the University of Oregon's Preservation Field School.

Main Barns. Built in 1868, the main wood barn is approximately 57 feet by 93 feet. Attached to the main barn is a 30-foot by 57-foot concrete and metal Grade A dairy barn. It has not been used for cows for many years and is now used for horse stalls. The main barn floor structure was stabilized in 1997 at a cost of $50,000 by the National Park Service Williamsport Preservation Center. The two barns are in fair condition.

Creamery. The creamery was built in 1870 but has been remodeled and enlarged into a 27-foot by 40-foot residence. The building needs structural work and other upgrades to bring it into compliance with health and safety codes.

Horse Barn/Calf Shed. This 18-foot by 30-foot structure was built in 1870. It was damaged by a falling tree several years ago and is in poor condition.

Garage/Shop. Located adjacent to the main residence, this building, ca. 1880, has been converted to a recreation room and is in poor condition. The NPS will replace the roof in 2001. The floor structure of this building is badly deteriorated and unsafe.

Shed. Located on a slope behind the residence, the structure is non-historic and approximately 8 feet by 12 feet in size. It is in poor condition.

Pump House. This building (ca. 1900) is approximately eight feet by eighteen feet and was originally a granary and later a pump house.

Bull House. This small barn (ca. 1900) housed livestock and is now used for storage. The building is 12 feet by 18 feet. The building is in fair condition (but is deteriorating) and retains its historic integrity.

Well House. The 6.5 feet square building contains a small pump to bring water from a nearby gulch for water. The structure is in fair condition and its historic integrity is fair.

Gates, Fences, and Corrals. Fences seem to follow original lines, but have been replaced over time.

Water System. Located in Wilkins Gulch, the current water system consists of a creek box with intake system and screen. The current system does not meet current health and safety codes for a public potable water system nor does it provide minimum structural fire protection for the historic structures. A major upgrade is needed. NPS will drill a new well and prepare a water system in 2001/02.

Sewage System. Located between the main barn and main residence, the current system is failing and needs major repair. Surface investigations indicate the leach field is not functioning properly.

Other Utilities. The Pacific Gas and Electric Company provides the overhead electric service and Pacific Bell currently provides telephone service.

History of the Ranch

Gregorio Briones officially became owner of the Rancho Las Baulines in 1857. At that time, the tract was approximately 9,000 acres. He and Rafael Garcia sold exclusive timber rights for ten years. In 1869, the Wilkins Ranch was formed on 1,397 acres. Over the years, the land was logged and used for beef and dairy cattle production. Dairy operations ended in the mid-1960s. Faced with increasing taxes and low production at the ranch, the Wilkins family sold the site in 1970 to Nicholas Charney, the founder of *Psychology Today,* and, at the time, publisher of *Saturday Review*.

Mr. Charney and his friends transformed the ranch into a communal experiment in creative agriculture and living. Meanwhile, Congress established the ranch as part of Golden Gate National Recreation Area. Mr. Charney sold the Wilkins Ranch to the Trust for Public Land in 1973 and it was conveyed by purchase ($2.2 million) to the NPS a few months later on July 19, 1973.

At the time of the acquisition, because the NPS had no immediate use for the property, a tenant, Ms. Mary Tiscornia was allowed to remain in resident on the property under a special use permit. Ms. Tiscornia's occupancy continued for sixteen years under special use permits. In 1989, a lease was authorized for a five-year period and was renewed by mutual agreement in 1994. That lease expired on December 31, 1998. The ranch is currently under a special use permit for private horse boarding, cattle grazing, and residential use that expires May 30, 2001.

Geology, Topography, Soils

The Wilkins Ranch is comprised of diverse soils that support a variety of native vegetation types. Lower elevation portions of the ranch consist of the Cronkite-Barnabe complex of loams and gravelly loams with a native cover of grass, herbs, and shrubs. Similar cover also dominates the flat on which the ranch buildings are located, which is an alluvial fan emanating from the mouth of Wilkins Gulch. The fan is comprised of the Blucher-Cole soil complex. The silt and clay alluvium is typically more than five feet deep, but due to an underlying clay layer can have moderately poor drainage and a seasonally high water table. Erosion hazard is slight on this flat to gently sloping soil. The upper one-third of the ranch, on the backbone of Bolinas Ridge and several of its sub-ridges, occurs on Maymen –Maymen variant gravelly loam. This shallow soil, with slopes of 30-75% supports a "hard" chaparral community unusual for PRNS-GGNRA. Midslopes of Bolinas Ridge largely consist of the Centissima-Barnabe complex, which includes moderately deep clay loams that support a natural cover dominated by Douglas-fir, redwoods, and hardwoods. These soil types and their respective vegetation interdigitate along the face of Bolinas Ridge according to slope, aspect, and parent material derived from the complex underlying Franciscan formation.

Vegetation

The eastern section of the original ranch is heavily wooded with redwoods, coast live oaks, bay laurel, and Douglas-fir. The edge of the woodland area is characterized by a dense shrub layer less than six feet tall interspersed with grassy openings supporting primarily non-native grass species, with patches of native grasses. Typical shrub species include California sagebrush, bush lupine, coyote brush, manzanita, bush monkey flower, and poison oak. Grasses dominate about 146 acres of the project area. Dispersed weedy exotic species such as introduced grasses and French broom are also present on the site in both grazed and ungrazed areas. Estimates indicate approximately 113 acres in the northwest corner of the ranch have been afflicted with non-native invasive French broom and approximately seven acres are afflicted with invasive Cape ivy (some treatment by NPS and tenant has occurred on the site). See Appendix D for vegetation map of project area.

Wildlife

Coyote, gray fox, mountain lions, raccoon, bobcat, black-tailed deer, brush rabbit, striped skunk and other small mammals are known to occur in the area. Common bird species in the area include wrentit, scrub jay, turkey vulture, American robin, bushtit, white-crowned sparrow, and house sparrow.

Special Status Species

Federally listed species such as the California red-legged frog, steelhead trout, and northern spotted owl are known to occur in the direct vicinity of the project area. Two species of concern Marin manzanita (*Arctostaphylos virgata*) and Gairdner's yampah (*Perideridia gairdneri* var. gairdneri) may occur in the area, but comprehensive surveys have not been conducted.

Recreation and Visitor Use Analysis

Since the establishment of the park, visitation has increased dramatically and since 1984 visitation has surpassed two million every year. However, primarily because of regional transportation constraints, visitation has stabilized at approximately 2.4 million visitors each year for the last ten years.

The Northern District of the GGNRA trail system is estimated to receive about 30,000 visitors per year or 2,500 visitor per month. The most heavily used trail is the Bolinas Ridge Trail, which is a popular bicycling route.

Environmental Consequences

This section describes the probable consequences (or impacts) of each alternative on the resources in the project area. In addition, the effects to historic properties are considered in accordance with the National Historic Preservation Act (NHPA). This chapter begins with a description of the methods, relevant policies and regulations, and assumptions for each impact topic. The analysis for each impact topic includes the identification of impacts of the various actions comprising the alternative; characterization of the impacts, including duration and intensity; applicable mitigation measures and their effect on reducing impacts; and a conclusion, followed by an assessment of cumulative impacts.

Impact Analysis

As required by the National Environmental Policy Act (NEPA), direct, indirect, and cumulative impacts are identified and characterized in the impact analysis for each alternative. Indicators of the intensity of an impact, whether it is negligible, minor, moderate, or major, are included in the impact analysis and specifically defined by topic area in the methods section that follows. The duration of an impact is noted as either short- or long-term and is defined in a range of years. Where duration is not noted in the impact analysis, it is assumed to be long-term. Mitigating actions would be taken during implementation of the alternatives.

With the exception of the cultural resource analysis, all impacts have been assessed assuming that mitigating measures already have been implemented. Section 106 of the National Historic Preservation Act requires a federal agency to take into account the effects of its undertaking on properties included, or eligible for inclusion, in the National Register of Historic Places, and to provide the Advisory Council on Historic Preservation a reasonable opportunity to comment. This also applies to properties not formally determined to be eligible, but that are considered to meet eligibility criteria. Cultural resource impact analysis in this environmental assessment is described in terminology consistent with the regulations of the Council on Environmental Quality (CEQ) and will comply with requirements of both the National Environmental Policy Act and Section 106 of the National Historic Preservation Act. The determination of effect for the undertaking (implementation of the alternative) required by the Golden Gate National Recreation Area Programmatic Agreement is included in the "conclusion" section of each alternative.

Cumulative Impacts

A cumulative impact is described in the Council on Environmental Quality regulations (1508.7) as follows: *"Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.* Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. To assist in evaluating potential cumulative impacts, reasonably foreseeable future and past projects within the North District of GGNRA and PRNS were identified. Reasonably foreseeable future projects include any planning or development activity that was currently being implemented or would be implemented in the reasonably foreseeable future. A comprehensive list of reasonably foreseeable future actions is provided in Appendix G. These actions are evaluated in the cumulative impact analysis in conjunction with the impacts of each

alternative to assess whether they have any additive effects on a particular environmental, cultural, or social resource. Because some of these cumulative actions are in the early planning stages, the evaluation of cumulative impacts has been based on a general description of the project.

Alternative A: No Action--Continue to Operate Private Facilities

Impacts on Vegetation

Methodology and Policies

Vegetation in the project area was surveyed in 1999/2000 and the resulting vegetation map (NPS 2001) was transferred to a geographic information system (GIS) database. Impacts to vegetation types were estimated using the best available knowledge through reviews of literature, aerial photography, and GIS analysis.

Impacts on vegetation communities have been assessed in terms of duration, type, and intensity. Two primary parameters were used to evaluate the intensity of impacts on vegetation: (1) the size and continuity of the plant community, and (2) the natural structure, productivity, and diversity (integrity) of the plant community. Highly valued resource designations have also been factored into this analysis.

The natural structure of a plant community is measured by the presence or absence of non-native species, the opportunity for natural processes to occur such as fire and flood, and the presence or absence of natural structural layers, or strata. Biotic integrity can be defined as the ability to support and maintain a balanced, integrated, adaptive community of organisms having species composition, diversity, and functional organization comparable to that of a natural habitat of the region. Diversity and productivity are important for vegetation communities as a whole because the interaction of species and presence of different components provides for ecosystem health and habitat for other species.

The measure of these parameters includes the ability to control, eradicate, or prevent the establishment of non-native plant species, and the ability to manage vegetation with a full range of management options to maintain natural structure and diversity. For example, the presence of non-native species decreases the value of any particular area of vegetation by altering the contribution the vegetation makes towards habitat (food, shelter, etc.) for wildlife and other organisms. Non-native species also alter the effects of natural processes such as flooding or fire by changing the physical characteristics (e.g., surface roughness, fuel loads) of the plant community. Developed areas have varying degrees of potential for non-native plant establishment.

In landscaped areas the encroachment of non-native species can be controlled, but housing areas and campgrounds where trampling and ground disturbance occur on a regular and unconfined basis are much more likely to be invaded and overrun by invasive non-native species. Management tools available to the National Park Service include removal of trees that are considered to be hazardous to visitors and staff (hazard trees), modifications to hydrology that affect species composition, mechanical removal, and the use of controlled burning (prescribed fire).

Although the applicability of full scale controlled burning is outside the scope of the *Wilkins Ranch Plan*, it is a valid management tool that will continue as set forth in the 1994 *Fire Management Plan* and the 1999 *Resources Management Plan*. Mechanical methods of vegetation control are used when the use of prescribed burning will not meet environmental conditions such as safety,

minimization of smoke, and visitor disturbance. Site-specific prescriptions are developed for these mechanical removal projects, similar to prescriptions followed during prescribed burns.

Duration of Impact. Long-term impacts have been defined as those that can be detected for longer than two years. Short-term impacts have been defined as those lasting less than two years.

Intensity of Impact. Negligible impacts would have no measurable or perceptible changes in plant community size, integrity, or continuity. Minor impacts would be measurable or perceptible but localized within a relatively small area. This means the overall viability of the plant community would not be affected. Moderate impacts would cause a change in the plant community (e.g., size, integrity, and continuity); however, the impact would remain localized. The change would be measurable and perceptible, but could be reversed. Major impacts would be substantial, highly noticeable, and could be permanent (irreversible) in their effect on plant community size, integrity, continuity, productivity, and structure.

Type of Impact. Impacts were classified as adverse if they would reduce the size, continuity, or integrity of a plant community. Conversely, impacts were classified as beneficial if they would increase the size, continuity, or integrity of a plant community.

Analysis

Using the vegetation map assembled in the GIS at Point Reyes National Seashore, the Wilkins Ranch vegetation can be assembled into the following nine general groups or types: Douglas fir/redwood - 554 acres; evergreen shrub - 203 acres; grasslands - 146 acres; hardwood forest - 426 acres; other herbaceous - 3.53 acres; pasture - 7.4 acres; riparian - 6.30 acres; freshwater or brackish marsh - 0.17 acres; and unvegetated - 6.87 acres. They can be further categorized into four major classes: Heavily Wooded (forest) - 980 acres; open grassland and shrub - 348 acres; marsh freshwater or brackish - 0.17 acres; and other vegetation - 32 acres. For purposes of impact assessment, vegetation was divided into three categories: heavily wooded, grassland and shrub, and pasture/unvegetated areas (main complex).

Heavily Wooded Vegetation Communities (980 acres) The majority of Wilkins Ranch vegetation falls within the heavily wooded area. Most of this area has been disturbed to some extent in the past, primarily by logging and grazing operations. Alternative A would provide no comprehensive approach to improvements, restoration, or management of these previously disturbed uplands or adjacent communities, resulting in continued and long-term degradation.

Size and Continuity. The size and extent of heavily wooded plant communities have changed dramatically over time due to past logging and the lack of fire. Since logging ceased, the heavily wooded plant community has grown dramatically and has resulted in the encroachment of redwoods and Douglas-fir into former grassland, evergreen shrub, riparian areas, and oak woodlands. This expansion would continue under Alternative A due to the current management practices at the site. These heavily wooded communities would continue to expand and become more continuous through the area as existing and newly established conifers dry out soils, and woody debris and duff accumulate, gradually raising and drying the underlying substrate over time.

Natural Structure, Diversity, and Productivity. A forest community's diversity and productivity are directly related to the integrity of its structure (overstory, understory, and ground layers). The natural structure of the developed and disturbed upland communities in the Wilkins area has been degraded due to lack of fire, resulting in an increasingly dense overgrown understory and a shift in species composition over time to more shade-tolerant coniferous species such as Douglas-fir and redwood trees.

- Therefore, under Alternative A, the integrity, diversity, and overall productivity of the heavily wooded plant communities would continue to be adversely affected by a lack of native species, lack of a diverse understory, and an overall trend toward homogeneity.

Continued degradation of this heavily wooded vegetation type would occur under the No Action Alternative and impacts would continue to be adverse, long-term and moderate.

Grassland and Shrub Plant Communities (349 acres). Most of the area supporting these communities has been disturbed to some extent in the past, primarily by logging, road building, and grazing operations. Native grasslands have been severely impacted and non-native grasses dominate the area. Alternative A would provide no comprehensive approach to improvements, restoration, or management of these previously disturbed grasslands or adjacent communities, resulting in continued long-term degradation.

Size and Continuity. The size and extent of grassland and shrub communities has changed dramatically over time due to the lack of fire, heavy grazing, and disturbance due to logging. Over the last sixty years, redwoods and Douglas-fir have been encroaching into former grassland, evergreen shrub, riparian areas, and oak woodlands. Evergreen shrubs are expanding into the grassland area. This would continue under Alternative A due to the current management practices at the site. Eventually, over the long-term, in the absence of fire or mechanical treatment, the shrub-dominated areas would succeed to forest-dominated plant communities. These grassland and shrub communities would continue to decline and become less continuous through the area without specific treatments such as mechanical removal, seasonal grazing, and prescribed fire.

Natural Structure, Diversity, and Productivity. Native species diversity is directly related to the composition of grassland and shrub areas. With the continuation of exotic plant expansion in this area and the loss of grassland area, productivity and diversity of native species is expected to decline. In addition, the natural structure of the grassland and shrub communities in the Wilkins area has been degraded due to lack of fire and long-term grazing pressure.

- Therefore, under Alternative A, the grassland and shrub areas would continue to degrade and integrity, diversity, and overall productivity would continue to decline due to a lack of diverse native vegetation and an increase in exotic vegetation.

Continued degradation of this vegetation type would occur under the No Action Alternative and impacts would continue to be adverse, long-term, and moderate.

Pasture/Unvegetated Areas (Main Complex: 14 acres). The main complex is approximately 14 acres and has been significantly altered during the last 100 years. Intentional planting of non-native

species and heavy use have severely impacted native grasslands and non-native grasses dominate in the area. Alternative A would provide no comprehensive approach to improvements, restoration, or management of these previously disturbed grasslands, resulting in continued and long-term degradation.

Size and Continuity. The size and extent of grassland communities has changed dramatically over time due to the lack of fire, heavy grazing, and historic planting. This would continue under Alternative A due to the current management practices at the site.

Natural Structure, Diversity, and Productivity. Species diversity is limited in the main complex area. This area is dominated by exotic plants and a cultural landscape is dominant. Under this treatment, productivity is expected to be reduced. In addition, the natural structure of the grassland and shrub communities in the main complex area has been severely degraded due to planting and grazing pressure.

- Therefore, under Alternative A, the main complex area would continue to degrade and integrity, diversity, and overall productivity would continue to be impacted by a lack of diverse native vegetation and an increase in exotic vegetation.

Continued degradation of this vegetation type would occur under the No Action Alternative and impacts would continue to be long-term and adverse.

Conclusion
Under Alternative A, no actions would be taken to change existing conditions. The existing condition of the Wilkins Ranch would not change and the ecological function (natural structure, diversity, and productivity) of plant communities would continue to be adversely affected by the lack of fire, increasing exotic plant populations, and past heavy grazing. The impact of this alternative would therefore be long-term and moderate on the majority of the 1,360 acre ranch. No indirect or direct short-term impacts are anticipated. No long-term impacts will result in an impairment of resources.

Cumulative Impacts
Other cumulative impacts to vegetation in Olema Valley include plant community fragmentation from grazing allotments and the potential for continued introduction and spread of non-native plant species. Other NPS projects planned and initiated in Olema Valley, such as prescribed fire, riparian fencing, and mechanical mowing, are likely to positively affect plant communities in Olema Valley and would generally result in increasing natural structure, productivity, and diversity. The Pacific Coast Learning Center has been initiated in Olema Valley and will not result in any vegetation change. Therefore, it will not have a cumulative impact with this project. Other planned projects are not expected to have cumulative impacts on vegetation.

Overall, the No Action Alternative, in conjunction with known plans and projects within the Golden Gate North District and Point Reyes National Seashore, would not result in a significant cumulative impact.

Impacts on Wetlands

Methodology and Policies

The National Park Service is committed to minimizing wetland loss. The wetland protection mechanisms used by the National Park Service include Executive Order 11990, *Protection of Wetlands*; Director's Order #77-1, *Wetland Protection,* and its accompanying Procedural Manual #77-1; Clean Water Act Section 404; and the "no net loss" goal outlined by the White House Office on Environmental Policy in 1993. Executive Order 11990 requires that leadership be provided by involved agencies to minimize the destruction, loss, or degradation of wetlands and water quality. National Park Service's Director's Order #77-1 and Procedural Manual #77-1 provide specific procedures for carrying out the Executive Order. In this project, wetland impacts were estimated using National Wetlands Inventory information (USFWS 1984), supplemented with information from a vegetation map of the Golden Gate NRA (NPS 2001). An assumption was made that all meadow and riparian communities on the vegetation map were likely to be classified as wetlands in future site-specific wetland delineation.

The approximate number of acres impacted were developed using the GIS vegetation map. Using the GIS computer system, the numbers of acres proposed for protection and restoration were calculated based on target vegetation for each proposed alternative.

Duration of Impact. A short-term impact has been defined as lasting less than two years following the implementation of an alternative. A long-term impact has been defined as lasting longer than two years after implementation of an alternative.

Intensity of Impact. Three primary measures were used to evaluate the intensity of impacts on wetlands and water quality: the size and type of the wetland, the integrity of the wetland, and the connectivity of the wetland to adjacent habitats. The greater the size of a wetland and the strength of its linkages with neighboring plant communities, the more valuable the wetland for the integrity and maintenance of biotic processes. The intensity of impacts has been described as negligible, minor, moderate, or major. Negligible impacts would be imperceptible or not detectable. Minor impacts would be slightly detectable, localized within a small area, and would not affect the overall viability of wetlands in the park. Moderate impacts would be apparent and have the potential to become major impacts. Major impacts would be substantial, highly noticeable, and could be permanent (irreversible).

Type of Impact. Adverse impacts are those that would degrade the size, integrity, or connectivity of wetlands. Conversely, beneficial impacts would enlarge wetlands, or enhance their integrity and connectivity.

Analysis

There are approximately 7 acres of wetlands, including stream corridors, within the Wilkins Ranch area. In addition, approximately 0.17 acres of freshwater or brackish marsh is located within the project area. The size and type of wetlands are not expected to change under this no-action alternative; however, the integrity of the wetland is expected to continue to be degraded long-term. Cattle and horse access to riparian systems has resulted in minor levels of degradation of wetlands and riparian systems. The connectivity of the wetland to adjacent habitats is not expected to change.

Conclusion

Because of the lack of riparian protection fencing and limited grazing within the marsh and riparian areas, minor long-term adverse impacts are expected to continue under Alternative A. No direct or indirect impacts would result in riparian areas being impaired in the long-term.

Cumulative Impacts

The NPS has initiated several riparian protection projects in Olema Valley for coho salmon and steelhead restoration. These projects include riparian fencing on Blueline Creek, Cheda Creek, Giacomini Creek, and other tributaries. They are expected to increase the size of riparian zones, protect the integrity of these wetlands, and enhance the connectivity of these wetland systems. The results of this these projects should be a long-term beneficial effect on wetland protection. The effect of this project and other projects listed in Appendix G will be a long-term beneficial cumulative effect.

Impacts to Wildlife

Methodology and Policies

This section addresses the effects of alternatives on wildlife and their habitat. Nearly all wildlife concerns can be addressed by considering the effects of alternatives on wildlife habitat as represented by general vegetation types. The correlation of how the vegetation impacts would affect wildlife is described within this section.

In general, adverse effects on wildlife can be minimized by reducing and limiting habitat fragmentation; that is, by preserving and restoring large areas as well as patches of habitat, and maintaining connections within and among habitat types. Larger patches of habitat tend to support higher numbers and diversity of wildlife species than smaller ones, and connections between habitat patches enable the movement of wildlife between areas, enhancing reproduction and survival. Small patches of habitat can serve as stepping stones for wildlife moving between larger blocks.

The value of habitat patches for wildlife is also affected by adjacent human activities and development. Severe disruption of habitat between patches can impede wildlife movements. Impacts radiating into habitat patches (referred to in the analysis as radiating impacts), such as light, noise, non-native species, and human use, can adversely affect habitat quality. These impacts are severe in larger habitat patches because the ratio of volume to edge is greater than in smaller patches, and wildlife prefer a core of habitat that is more isolated from radiating impacts.

Impacts on wildlife have been assessed in terms of changes in the amount and distribution of wildlife habitat, the size and connectivity of habitat, the integrity of the site (including past disturbance), and the relative importance of habitats.

Duration of Impact. Long-term impacts have been defined as those lasting two years or longer. Short-term impacts would be expected to last for less than two years. All short-term impacts to wildlife and habitat from implementation of the alternative would relate to construction activities

and their immediate effects on wildlife. These impacts end with cessation of construction activity, or soon thereafter, and include:

- Noise, dust, and light emanating from construction sites could affect the use of surrounding habitats by wildlife.
- Vegetation removed, trampled, or run-over during temporary use of some habitat as areas for staging of machinery or materials would affect wildlife until such areas could be restored after the project.
- Wildlife could be killed by traffic or machinery associated with construction.
- Spills of fuel, oil, hydraulic fluid, antifreeze, and other toxic chemicals could affect wildlife, especially those in aquatic environments.
- Construction personnel, at work sites, could provide a source of human food to wildlife, resulting in conditioning of wildlife and in human/wildlife conflicts.

Intensity of Impact. Negligible impacts are impacts that would not be measurable or perceptible. Minor impacts would be measurable or perceptible and would be localized within a relatively small area; however, the overall viability of the resource would not be affected. Without further impacts, minor adverse effects would be reversed, and the resource would recover. Moderate impacts would be sufficient to cause a change in the resource (e.g., abundance, distribution, quantity, or quality); however, the impact would remain localized. The change would be measurable and perceptible, but negative effects could be reversed. Major impacts would be substantial, highly noticeable, and could be permanent (irreversible).

Type of Impact. Impacts were classified as adverse if they would negatively affect the size, continuity, or integrity of wildlife habitat. Conversely, impacts were classified as beneficial if they would positively affect the size, continuity, or integrity of wildlife habitat.

Analysis

Within the 1360 acre ranch there is a diversity of large plant communities and habitat fragmentation is not an issue. The continuous riparian corridors, grasslands, and extensive wooded areas provide substantial wildlife habitat. Adjacent areas are managed as public open space and provide additional habitat for wildlife. However, there is a lack of vegetation treatments such as prescribed fire to create a diverse, dynamic mosaic of plant communities. In addition, exotic plant populations are expanding. Therefore, under this alternative there would be long-term, minor adverse impacts on wildlife.

Since there is no new construction proposed under this alternative, noise, dust, and light emanating from construction sites would not affect the use of surrounding habitats by wildlife.
In addition, vegetation removed, trampled, or run-over during temporary use of some habitat as areas for staging of machinery or materials would not affect wildlife because no construction is proposed.

Federally-listed species such as the California red-legged frog, steelhead trout, and northern spotted owl are known to occur in the project area. Under this no-action alternative, no short or long-term adverse impacts to these particular species are anticipated.

Conclusion

Because of the lack of a vegetation management plan and limited treatment of vegetation within the Wilkins Ranch area, the impacts on wildlife are expected to be adverse, long-term and minor. Wildlife diversity would be slightly reduced as vegetation changes from grassland and shrub to a more wooded area. The lack of fire, resulting in a more uniform plant community, will result in long-term adverse minor impacts to wildlife. Adjacent public land provides additional wildlife habitat and is expected to provide long-term protection for most wildlife species. Since no new construction is planned, no short-term impacts related to construction are anticipated. Some short-term impacts to wildlife would occur when maintenance activities are conducted, but these would be minor. Regarding special status species, no short or long-term adverse impacts are anticipated to steelhead, northern spotted owls, or red-legged frogs. There would be no known long-term impairment to wildlife.

Cumulative Impacts

The NPS has initiated several riparian protection projects in Olema Valley for coho salmon and steelhead restoration. These projects include riparian fencing on Blueline Creek, Cheda Creek, Giacomini Creek, and other tributaries. They are expected to increase the size of riparian zones, protect the integrity of these wetlands, and enhance the connectivity of these wetland systems. The results of these projects should be a long-term beneficial effect on wildlife. The effect of this project and other projects listed in Appendix G will not result in long-term significant cumulative effect.

Impacts to Cultural Resources

Methodology and Policies

Section 106 of the National Historic Preservation Act requires a federal agency to take into account the effects of its undertakings on properties included in, eligible for inclusion in, or potentially eligible for inclusion in the National Register of Historic Places, and provide the Advisory Council on Historic Preservation the reasonable opportunity to comment. A Programmatic Agreement was developed among the National Park Service at Golden Gate NRA, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation, in consultation with American Indian tribes and the public, to take into account the effects of park planning and operations on historic properties (see Appendix H: Programmatic Agreement with State Historic Preservation Office and Advisory Council on Historic Preservation).

The methodology for assessing impacts to historic resources includes: (1) identifying areas that could be impacted; (2) assessing information regarding historic properties within this area and conducting any necessary inventories and resource evaluations; (3) comparing the location of the impact area with that of resources listed, eligible, or potentially eligible for listing in the National Register of Historic Places; (4) identifying the extent and type of effects; (5) assessing those effects according to procedures established in the Advisory Council on Historic Preservation's regulations; and (6) considering ways to avoid, reduce, or mitigate adverse effects.

Cultural resource impacts in this document are described in terminology consistent with the regulations of the Council on Environmental Quality, and in compliance with the requirements of

both the National Environmental Policy Act and Section 106 of the National Historic Preservation Act.

Duration of Impact. Impacts to historic properties (cultural resources) could be of short term, long term, or permanent duration. Analysis of the duration of impacts is required under National Environmental Policy Act, but is not required and is not usually considered in assessing effects in terms of National Historic Preservation Act.

Type of Impact. Impacts are considered to be either adverse or beneficial to historic properties (cultural resources) when analyzed under the National Environmental Policy Act. However, impact type is not viewed this way when conducting analysis under Section 106 of the National Historic Preservation Act. For the purposes of assessing effects to historic properties under the National Historic Preservation Act, effects are either adverse or not adverse. Effects under both the National Environmental Policy Act and the National Historic Preservation Act are considered adverse when they diminish the significant characteristics of a historic property.

Impacts can be either direct or indirect. Direct impacts result from specific actions, such as demolition of historic structures. Indirect impacts generally occur after project completion, and are a result of changes in visitor-use patterns or management of resources fostered by implementation of an action.

Intensity of Impact. The intensity of an impact on a cultural resource can be defined as negligible, minor, moderate, or major. Negligible impacts would be barely perceptible changes in significant characteristics of a historic property. Minor impacts would be perceptible and noticeable, but would remain localized and confined to a single element or significant characteristic of a historic property (such as a single archeological site containing low data potential within a larger archeological district, or a single contributing element of a larger historic district). Moderate impacts would be sufficient to cause a noticeable but not substantial change in significant characteristics of a historic property (such as an archeological site with moderate data potential or a small group of contributing elements within a larger historic district). Major impacts would result in substantial and highly noticeable changes in significant characteristics of a historic property (such as an archeological site with high data potential or a large group of contributing elements within a larger historic district).

Cultural Landscape Resources, Including Individually Significant Historic Sites and Structures. Impacts to cultural landscape resources result from physical changes to significant characteristics of a resource or its setting. Beneficial impacts can occur as a result of restoration or rehabilitation of resources, or removal of incompatible or noncontributing facilities. Direct, adverse impacts generally occur as a result of modifying a significant characteristic of a historic structure or landscape; removal of a significant structure or landscape resource; or addition of new, incompatible feature or structure in proximity to a historic site or structure. Indirect adverse impacts can also occur following project completion. These impacts are generally associated with changes in historic vegetation, or continued deterioration of historic structures. They are considered indirect impacts as they are not directly associated with project construction, but rather result from increased visitor use or change in management of resources fostered by the completed plan.

Impacts to historic structures and cultural landscape resources are considered short term if they involve activities such as temporary removal of vegetation or other contributing resources, road closures, or prescribed burns, where the impacts are noticeable for a period of from one to five years. Other examples of short-term impacts to historic structures include constructing scaffolding surrounding a building during rehabilitation work, or minor deterioration of historic materials that is repairable as part of routine maintenance and upkeep. Impacts are considered long term if they involve a reversible change, lasting from five to twenty years, in a significant characteristic of a historic structure or landscape. These changes could include such actions as alteration of contributing resources or construction of an incompatible building addition or adjacent facility.

Negligible impacts would be barely perceptible and not measurable and would be confined to small areas or a single contributing element of a larger National Register district. Minor impacts would be perceptible and measurable but remain localized and confined to a single contributing element of a larger National Register district. Moderate impacts would be sufficient to cause a change in a significant characteristic of an individually significant historic structure, or would generally involve a single or small group of contributing elements in a larger National Register district. Major impacts would result from substantial and highly noticeable changes in significant characteristics of an individually significant historic structure, or would involve a large group of contributing elements in a National Register district.

Analysis

Based on analysis of previous archeological survey maps and references, no archeological sites are known to occur in the area. Therefore, under this alternative, there would be no indirect or direct positive or negative impact on archeological sites or material, either short-or long-term. Previous site surveys have located several remnant historic sites (including the former Copper Mine) within the 1360 acre complex. Under this alternative, no short or long-term impacts to these sites would occur. If archeological or historic material is found, project work would stop and a qualified archeologist would investigate the situation and recommend measures to minimize impacts.

The main complex has eight historic buildings. In addition, the landscape around the main complex contains features that contribute to the historic character of the cultural landscape. Much of the original vegetation and planting, including several large oak trees, have been lost over time. Under this no action alternative, historic structures and the cultural landscape would not be rehabilitated. However, cyclic maintenance would be conducted. Based on building condition assessments by private contractors conducted over the last four years, many of the structures including the main house, calf shed, horse barn, and other outbuildings are in fair to poor condition and require major repairs. As a result of this alternative major rehabilitation work would not be completed and adverse moderate long-term impacts to the cultural landscape and historic structures would result.

Conclusion

As a result of this no-action alternative, adverse moderate long-term impacts to the cultural landscape and historic structures will occur. In addition, there would be indirect, long-term impairment to the cultural resources of the Wilkins Ranch and the Olema Valley Historic District.

Cumulative Impacts

Several cultural resource preservation projects have been completed in the Olema Valley during the last five years. The Wilkins Ranch main barn timber framing was repaired and rehabilitated in 1997. The Giacomini Ranch house foundation and roof was repaired in 2000. The Hagmaier Ranch House was completely rehabilitated for use as the Pacific Coast Learning Center. The historic bunkhouse at Truttman Ranch, northern Olema Valley, is currently being reroofed and will be rehabilitated in 2003. These projects contribute positively to the long-term preservation of the Olema Valley Historic District. The effect of this project and together with other projects listed in Appendix G will not result in a significant adverse cumulative effect.

Impacts on Visual Quality

Methodology and Policies

The assessment of potential impacts to visual resources was based on comparisons between the No Action Alternative and the two action alternatives. The effects of each alternative were evaluated by analyzing potential impacts both on the physical component of the landscape (quantitative) and how the change may be experienced (qualitative).

In its current configuration, the Wilkins Ranch has approximately 14 acres of development. This baseline figure is presented in Alternative A, the No Action Alternative, and is the basis for comparison of changes that would result from implementation of either of the action alternatives. Potential impacts related to the physical component of the landscape were evaluated by analyzing the change in acreage of development and contributing features within the scenic resource areas.

Duration of Impact

The duration of the impacts considers whether the impact would be short-term or long-term. A short-term impact would be short-lived or temporary due to construction, restoration, or demolition activities, and a long-term impact would be permanent and continual.

Intensity of Impact. The magnitude of impacts to the scenery within the view from specific vantage points and to specific scenic features is described as negligible, minor, moderate, or major as described below.

- Negligible impacts would be imperceptible or not detectable.
- Minor impacts would be slightly detectable and localized within a relatively small area.
- Moderate impacts would be substantial, highly noticeable, and/or result in changing the character of the landscape.
- Major impacts would be substantial, highly noticeable, and/or result in changing the character of the landscape.

Type of Impact. Impacts were considered beneficial if they decreased the number of acres disturbed within the main complex, and considered adverse if actions increased the number of human-caused visual intrusions in this area. Impacts also were considered beneficial if the quality of the visual experience would be improved and adverse if the visual quality would be degraded.

Analysis

Wilkins Ranch is viewed by tens of thousands of travelers to Golden Gate NRA and Point Reyes National Seashore and local residents that use Highway 1 for access to Stinson Beach, and Olema and Point Reyes Station. The view of the cultural landscape from Highway One is considered a scenic resource. Under the no action alternative, 14 acres of development would continue and no quantitative changes in contributing and non-contributing elements to the cultural landscape would occur. Over the next ten years, moderate adverse qualitative changes could occur if the buildings do not receive major rehabilitation work. In addition, grazing levels would continue at current levels resulting in long-term vegetation changes. This vegetation change could result in moderate adverse impacts to the visitor experience and scenic viewing.

Conclusion

No direct or indirect short-term negative impacts of any nature to archeological or cultural resources would occur due to construction activity or rehabilitation of buildings. However, negative long-term impacts to the buildings that need major repair could result in short-term moderate adverse impacts to scenic viewing from Highway One. Long-term vegetation change associated with the current grazing level and lack of other treatments could also result in a moderate adverse impact. However, there would be no long-term significant impairment to scenic viewing in this no action alternative.

Cumulative Impacts

Several cultural resource preservation projects have been conducted in the Olema Valley within the last five years. The historic bunkhouse at Truttman Ranch, in the northern Olema Valley, has been reroofed and is slated as a project for restoration in early 2002. The Giacomini Ranch house and barn, in southern the Olema Valley, have received preservation treatments to ensure long-term preservation. In 1997, the main barn at the Wilkins Ranch was stabilized. These projects contribute positively to the long-term preservation of the Olema Valley Historic District and the scenic qualities of Olema Valley. The effect of this project and other projects listed in Appendix G will not result in a significant cumulative effect.

Impacts on Human Health and Safety

Methodology and Policies

The *National Park Service Management Policies,* 2001, provide general guidance in provision of safe facilities for the visiting public. Various National Park Service Director's Orders provide specific policy guidance in providing a specific component of park operations and maintenance. For example, Director's Order #50 provides guidance in Visitor Safety and Director's Order #58 in Structural Fire Safety. Marin County provides guidance for water and sewage system. For all buildings, the NPS follows the Uniform Building Code and other applicable codes and regulations.

Duration of Impact. Long-term impacts have a permanent effect on human health and safety. For example, contamination of a water source for domestic use would be a long-term impact. Short-term impacts are temporary in duration and would be associated with transitional types of impacts (for example, safety concerns related to construction activity is usually a short-term impact).

Intensity of Impact. Negligible impacts would not be detectable. Minor impacts would be slightly detectable. Moderate impacts would be clearly detectable and could have an appreciable effect on public health and safety; moderate adverse impacts may include introduction of noise, public health hazards or safety hazards into an area. Major impacts would be clearly introducing a significant public health hazard such as the introduction of air or water pollution.

Type of Impact. Beneficial impacts result in less public health and safety concerns, and adverse impacts result in additional public health and safety concerns.

Analysis
Under this alternative, the Wilkins Ranch would fail to comply with local, state, and federal health and safety regulations. The septic and water systems would not be upgraded to current codes and the buildings would not be rehabilitated to current building codes. This alternative would have a moderate adverse impact on health and human safety. In addition, failure to comply with life and safety building codes would pose a minor potential threat to anyone in or near the buildings.

No additional public use is anticipated; therefore, no change would occur in use of public utilities and programs.

Conclusion
Moderate adverse negative impacts to human health and safety would continue to occur due to non-compliance with health and safety codes. No other impacts to public utilities or systems would occur. There would be no long-term impairment to public health and safety by this no action alternative.

Cumulative Impacts
Three other projects are occurring in the Olema Valley to correct potential sewage treatment problems. Two housing units will receive new systems in the next year. One housing sewage system was replaced approximately five years ago. The main sewage system at park headquarters is being replaced in 2001. These projects have a positive overall effect on water quality and public health and safety. The effect of this project and other projects listed in Appendix G will not result in a significant cumulative effect.

Impacts on Noise

Methodology and Policies
In the analysis of noise, the following definitions were used:

- Human-caused sounds are considered noise including: heavy equipment (trash removal, snow removal, construction), service vehicles (custodial, guest services, stock trailers, etc.), sirens, idling service vehicles, vehicle fueling areas, music, generators, voices and barking dogs, etc.
- Naturally occurring sounds (i.e., natural quiet) are not considered noise including: watercourses, wildlife, wind, etc.

- Ambient noise is the all-encompassing sound associated with a given environment, usually a composite of sound from many sources from many directions, near and far, including the specific sources of interest.

In addition, the following assumptions were used:

- There are two receptors of noise: visitors and residents. All noise impacts are experienced by both receptors to some degree.
- Residential activity is not confined to residential areas, and visitor activity is not restricted from residential or operational areas.
- An increase in the number of people (e.g., visitors, employees, or residents) in an area generally would result in an increase in the amount of noise (more voices, more service vehicles, more trash removal, etc.), but not necessarily an increase in peak noise levels.
- An increase in facilities (e.g., buildings, campsites, parking areas, etc.) in an area generally would result in an increase in the amount of noise (more voices, more heavy equipment, more trash removal, etc), but the peak noise produced would be a function of the types of facilities introduced.
- Aircraft noise would not vary among the three alternatives (i.e., the aircraft noise of the No Action Alternative is the same as the aircraft noise of the two action alternatives).

Duration of Impact. Long-term impacts have a permanent effect on ambient noise levels (visitor and operational activity). Short-term impacts are temporary in duration and would be associated with transitional types of impacts (construction activity is usually a short-term impact).

Intensity of Impact. Negligible impacts would not be detectable. Minor impacts would be slightly detectable in close proximity to the source, but are not expected to have an appreciable effect on ambient noise levels. Moderate impacts would be clearly detectable and could have an appreciable effect on ambient noise levels; moderate adverse impacts may include introduction of noise associated with an activity or facility into an area with little or no ambient noise. Major impacts would be clearly audible against ambient noise levels; or would have a substantial, highly noticeable effect on ambient noise levels.

Type of Impact. Beneficial impacts are those impacts that result in less noise, and adverse impacts are those impacts that result in more noise.

Analysis

Under the no-action alternative, noise levels would continue to be at the same levels; no short or long-term positive or negative impacts are anticipated at any level. Limited short-term noise is currently generated by residential and horse boarding activity and by occasional use of heavy equipment. Peak noise levels would not change.

Conclusion

Since there would be no construction activities, there would be no new disturbance or generation of noise or inconvenience to park visitors or local residents as a result of this alternative. There would be no long-term impairment to noise levels in this no action alternative.

Cumulative Impacts

Several other minor rehabilitation projects to buildings and historic structures are planned for the

Olema Valley. In addition, sewage upgrade projects and riparian exclusionary fencing projects are planned. These projects will have a cumulative effect on noise, but it will be short-term and minor.

Impacts on Housing

Methodology and Policies

An analysis was conducted of the potential housing impacts associated with each of the project alternatives for the Wilkins Ranch. The analysis focuses on whether a change in use on the project site and the rehabilitation of the Wilkins Ranch, and the attendant new temporary and permanent jobs, will have an impact on the dynamics of the local housing market. Since households typically seek to live within a reasonable commuting distance from the workplace, local job generation often increases local housing demand. Not all new jobs will result in new local market area housing demand, however, since many of the jobs will be filled by employees already living in the area. Other employees will be part of two-income households that either already live in the market area, or live elsewhere and will not move simply for the commuting convenience of the second-income worker.

Therefore, the analysis specifically addresses the adequacy of the local housing stock to accommodate employees recruited to the market area to work at the Wilkins Ranch. If an adequate number of rental and for-sale units are available within the market area, as measured by an adequate supply of vacant rental units and for-sale housing turnover rates, then the impact would be considered insignificant. If the housing supply has an insufficient number of vacancies or turnover to absorb new workers, employees would compete for the limited housing supply, hence potentially creating upward pressures on prices. Alternatively, the new employees may be required to seek housing outside the local market area, resulting in increased commute times and traffic, and its associated environmental impacts. Under this scenario, the housing impacts could be considered significant.

Duration of the Impact. The expected duration of impacts is described as long-term or short-term. Short-term impacts would be defined as those lasting less than two years. Long-term impacts are those lasting over two years. For the assessment of housing impacts, short-term impacts are associated with temporary workers that are employed during the construction phase of the project. Long-term housing impacts would be those attributable to new permanent employees at Wilkins Ranch.

Type of Impact. A project's impact on the local housing market can vary from adverse to beneficial. For example, a project that results in a net increase in the local housing stock would be considered beneficial if the market previously had an inadequate supply of housing units to meet demand. Conversely, an adverse impact would result if a large employment-generating project were to increase demand for housing units beyond the number available in the market area

Intensity of the Housing Impact. For any project, the intensity of housing impacts can range from negligible to significant. Negligible or insignificant impacts would occur, for example, where the number of new recruits to the area is small, or the availability of housing is sufficient to absorb new workers without impacting prices or vacancy rates. This would be the case if the majority of any

future employees at the new offices at Wilkins Ranch were already housed within the market area. Potential negative housing impacts could occur if new employees were recruited to the offices at Wilkins Ranch from outside the area. However, the magnitude of the impact depends on the number of workers relative to the total number of residential units available within the local market area.

A significant impact would be associated with a project that perceptibly increases local demand for housing, in a market that does not have sufficient vacancies to absorb the new workers without creating an upward pressure on prices. If a substantial increase in housing demand occurs within a market characterized by low vacancy rates, the following impacts could occur: (1) the increased competitiveness for the limited housing stock creates an upward pressure on prices; (2) existing households could be priced out of the market as their leases expire; or (3) new employees may be priced out of the local market, adding to commute distances, increased traffic and associated environmental impacts.

Analysis

Under Alternative A, the project would retain two residential units available for rent. No additional housing demand would be generated by the project. Temporary employees involved with maintaining the Wilkins Ranch are expected to be drawn exclusively from local contractors. Preliminary discussions have commenced with prospective contractors, and the expertise and availability of quality local contractors is not expected to be a constraint to undertaking the project. For purposes of this analysis, these temporary workers are not projected to impact the local housing market.

Conclusion

Alternative A would not create any short- or long-term housing impacts. No long-term impairment to housing resources in the area would occur under this alternative.

Cumulative Impacts

A review of other National Park Service projects reveals that cumulative housing impacts associated with Wilkins Ranch in conjunction with other projects are insignificant. Appendix G highlights other National Park Service projects planned to occur within the next several years. The majority of these projects involve upgrades to existing facilities to enhance physical, cultural or environmental resources. A few projects involve new construction, and will result in the addition of a small number of housing units. However, these new units will provide the majority of housing needed for new or newly relocated staff. Implementing all projects on the list may result in a very small number of new staff in excess of housing added, however, these staff will consist primarily of temporary staffing for fire prevention. Any adverse cumulative housing impact due to increased housing needs beyond that addressed in the above analysis is expected to be negligible.

Impacts on Traffic

Methodology and Policies

A Wilkins Ranch Traffic Study was conducted by Lee Engineering during April 2001. Traffic conditions were first analyzed for Alternative A—No Action which includes residential use only

and some group use of the site. Easter Sunday counts were used for the existing case analysis and adjusted based on other traffic data collected in 1998. It should be noted that sections of the analysis for Alternative A, B and C used adjusted traffic volumes to account for days where traffic might be considered at design volume levels.

Roadway level of service (LOS) is a measurement of operational conditions within a traffic stream, as well as the perception of those conditions by drivers and/or passengers. LOS on a given road is a composite measure of speed and travel time, the freedom of individual vehicles to maneuver, and the likelihood of traffic interruptions or delays. The comfort, convenience and relative safety of travel are affected by the quality of traffic flow, as measured by LOS.

Six levels of service are defined in the *Highway Capacity Manual 2000* for several types of roadway facilities. The levels of service are given letter designations, from A to F. LOS A represents optimal operating conditions, while LOS F represents the poorest operating conditions. Accident rates, weather, and pavement condition are not considered in determining LOS for a road or intersection.

The analyses of each alternative were based on traffic data collected on Easter (April 17, 2001) at Highway 1/Wilkins Ranch. The two-way peak hour volume on Highway 1 of 352 (an average of two-way volumes on the north and south legs) falls well below the Highway 1 projected Average Daily Traffic (ADT) of 585, a number which was factored from 1998 data collection using visitation data. Therefore, it is likely that overall traffic volumes at the Highway 1/Wilkins Ranch intersection were less on Easter Sunday than on a typical Sunday in April. To address these lower Easter Sunday traffic volumes, the Highway 1/Wilkins Ranch intersection was analyzed by increasing Highway 1 and Olema-Bolinas Road turning movements by a factor of 1.66 (585 / 352).

Since westbound volumes on Wilkins Ranch Driveway were "zero" in the peak hour, the ADT will be used to determine peak hour traffic on the segment. Based on the peak daily two-way volume of 98 vehicles, and a K-factor of 15%, a peak-hour volume of 15 vehicles (98 vehicles x 15%) would result on Wilkins Ranch Driveway. This volume is higher than the actual peak hour volume that was collected in the field. However, the volume of 15 vehicles was used so that the intersection could be analyzed assuming less likely conditions of higher volumes on the segment. Since the eastbound traffic (entering Wilkins Ranch) in the peak hour already had a volume of 7 vehicles (based on manual counts), 8 vehicles were inserted into the westbound volumes to result in a total of 15 vehicles on the Wilkins Ranch Driveway segment. The 15% K-factor represents the highest value that would be expected for a roadway segment such as Wilkins Ranch Driveway.

The intersection and segment analyses for Alternative B and Alternative C were analyzed using these modified traffic volumes.

Analysis

The table below presents the resulting LOS analysis for existing conditions. As shown, the Highway 1/Wilkins Ranch intersection currently operates at LOS C. LOS C represents favorable operating conditions. The average control delay of 15.9 seconds/vehicle for the Highway 1/Wilkins Ranch intersection falls very near the LOS B threshold of 15 seconds/vehicle. The worst minor street movement is eastbound from Olema-Bolinas Road. Highway 1 operates at LOS C in the peak hour, while Olema-Bolinas Road operates at LOS A.

LOS Analysis for Alternative A (Existing Case)

Case	Type	Peak Hour LOS
Highway 1/Wilkins Ranch Driveway	Unsignalized Intersection	C (15.9 sec/veh control delay)
Highway 1	Two-lane highway	C (62% time-spent-following)
Olema-Bolinas Road	Two-lane highway	A (40% time-spent-following)

Conclusion
Under the existing conditions, the Highway 1/Wilkins Ranch intersection operates at LOS C in the peak hour. In addition, Highway 1 operates at LOS C. Olema-Bolinas Road operates at LOS A in the peak hour with a percent-time-spent-following of 40%. Because this a non-action alternative, no adverse or beneficial impacts are anticipated. Because of traffic, there would be no long-term impairment to resources.

Cumulative Impacts
This project, along with other projects listed in Appendix G would not have a significant cumulative effect on traffic.

Impacts on Park Operations

Methodology and Policies
Impacts associated with each action alternative were evaluated by assessing changes that would be required to meet various operational requirements outlined in each of the action alternatives. Relative costs were generated, using staff estimates of funding and labor required to implement these actions. These effects were compared to existing operations, staffing, and funding at Point Reyes National Seashore. The park currently has about 100 full-time employees and an operating budget of approximately $4.7 million. In addition, the park receives annually about $2.6 million in one-time funding from fees, and from special NPS funds for natural resource, education, cultural resource, and maintenance projects (maintenance projects include repair and rehabilitation funding for buildings).

Existing staffing levels were inventoried and assessments were made of current park operations. In addition, professional judgments by individuals who are most knowledgeable about various activities were used to anticipate the operational changes that would be needed under each action alternative. Estimates were made of the personnel required to: (1) provide various services to the public; (2) maintain utilities, infrastructure, grounds, and buildings; and (4) preserve and restore natural and cultural resources. These assessments were compared to existing staffing levels. It should also be noted that staffing and funding impacts for the action alternatives are difficult to project until final proposals for the use of the site are completed. Thus, the estimates are intended to

provide a general description of potential effects, considering the variability within the range of possible operational scenarios.

The discussions of impacts are for operations that would be new, undergo major operational change, or show susceptibility to increases or decreases in operational activity.

Rehabilitation of the buildings to good condition is estimated to cost approximately $607,000. Projects funded to date for repair of the utility systems and rehabilitation of buildings is $257,000. This includes $50,000 to upgrade to safe standard the proposed trail system. Therefore $350,000 is estimated to be needed to complete rehabilitation. Once the buildings and utilities are upgraded, annual maintenance operating costs are estimated at $52,000 per year.

Duration of Impact. Short-term impacts would last only until all action items are completed. Long-term impacts would have a permanent effect on operations.

Intensity of Impact. With negligible impacts, there would not be a measurable difference in costs from existing levels. With minor impacts, measurable additions or reductions in cost would be less than 15% of existing levels. With moderate impacts, additions or reductions in cost would be between 15% and 30% of existing levels. With major impacts, additions or reductions in cost would exceed 30% of existing levels.

Type of Impact. Adverse impacts represent an increase in operating costs. Beneficial impacts represent a decrease in operating costs.

Analysis

Under Alternative A—No Action, no building rehabilitation would occur and the sewage and water system would not be upgraded. Therefore, no major expenditures are anticipated and any impacts to park operational costs would be negligible. Current levels of cyclic maintenance (small repairs, painting, and other cyclic maintenance) are estimated at approximately $25,000 annually (rough estimate; currently paid for by tenant) and would continue to be a necessary expense. Over time, because of the lack of upgrading of the main complex buildings and utility systems, maintenance requirements would be expected to grow. Because the National Park Service does not currently provide visitor services at the site, no new costs or impacts would occur in providing facilities for visitors.

Conclusion

Under Alternative A—No Action, the current repair and rehabilitation costs for the site would remain the same and no adverse or positive impacts in operating costs would occur. Cyclic maintenance is expected to have a long-term minor adverse impact on park operations because of on-going needs, if the tenant cannot increase maintenance activities as the buildings deteriorate.

Cumulative Impacts

Several cultural resource preservation projects have been conducted in the Olema Valley within the last five years. The historic bunkhouse at Truttman Ranch, northern Olema Valley, has been reroofed and is slated as a project for restoration in early 2002. The Giacomini Ranch house and main barn, in southern Olema Valley, have received preservation treatments to ensure long-term

preservation. In 1997, the main barn at the Wilkins Ranch was stabilized. These projects along with others listed in Appendix G, with Alternative B, have a short-term moderate adverse impact on park operations.

Impacts on Visitor Experience

Methodology and Policies

Impacts on visitor experience may occur as a result of changes to road circulation, interpretation facilities, trails, and other facilities and resources that contribute to the type and quality of visits to Golden Gate NRA and Point Reyes National Seashore. They may also occur from direct actions altering the availability of a specific experience or activity.

Visitor experience is also directly affected by actions influencing natural resources such as air quality, scenic resources, and cultural resources. Though impacts to these resources are not considered again in this analysis of visitor experience, enhancement or degradation of these resources also enhances or degrades the quality of the visitor experience.

Impacts on visitor experience have been assessed using professional judgement to develop a qualitative analysis of the effects of actions on the activities of different visitor populations. These conclusions have been considered in combination with data on the proportion, when known, of visitors who participate in different activities while in the park.

Duration of Impact. A short-term impact on visitor experiences would be temporary in duration due to construction, restoration, or demolition activities. A long-term impact would have a permanent effect on the visitor experience.

Intensity of Impact. The intensity of impacts has been defined as negligible, minor, moderate, and major. Negligible impacts would result in little noticeable change in visitor experience. Minor impacts would result in changes in desired experiences but without appreciably limiting or enhancing critical characteristics. Moderate impacts would change the desired experience appreciably, (i.e., changes one or more critical characteristics, or appreciably reduces/increases number of participants). Major impacts would eliminate or greatly enhance multiple critical characteristics or greatly reduce or increase participation.

Type of Impact. Impacts were evaluated in terms of whether they would be beneficial or adverse to visitor experience. Beneficial impacts would enhance visitor participation, quality of visitor experience, and service level. Adverse impacts would be effects that reduce visitor participation, quality of visitor experience, and service level.

Analysis

Under this alternative, no construction or rehabilitation would occur. Therefore, no beneficial or adverse impacts to visitor experience would occur due to construction. Since visitor use at the Wilkins Ranch would remain the same (limited to private use of horses and community groups by request), the intensity of any visitor experience impacts would be negligible and little noticed by visitors.

Conclusion
No adverse or beneficial visitor experience change would occur. The intensity of any impacts would be negligible.

Cumulative Impacts
No change in the park trail system is anticipated in other park areas. The Hagmaier Complex has been rehabilitated and will provide additional access to researchers and scientists (approximately eight to ten scientists) as part of the Pacific Coast Learning Center. Visitor experience as a result of this science facility is expected to be beneficial by increasing visitor participation. However, the cumulative impacts on visitor experience with this project and others listed in Appendix G would be negligible.

Alternative B: Residential Use and Additional Public Access; Upgrade Buildings, Sewage Disposal and Water System

Impacts on Vegetation

Methodology and Policies
Same as Alternative A.

Analysis
Using the vegetation map assembled in the GIS at Point Reyes National Seashore, the Wilkins Ranch vegetation can be assembled into nine general groups or types: Douglas fir/redwood - 554 acres; evergreen shrub - 203 acres; grasslands - 146 acres; hardwood forest - 426 acres; other herbaceous - 3.53 acres; pasture - 7.4 acres; riparian - 6.30 acres; freshwater or brackish marsh - 0.17 acres; and unvegetated - 6.87 acres. They can be further categorized into four major classes: heavily wooded (forest) - 980 acres; open grassland shrub - 348 acres; freshwater or brackish marsh - 0.17 acres; and other vegetation - 32 acres. For purposes of impact assessment, vegetation was divided into three categories: heavily wooded, grassland and shrub, and pasture/unvegetated areas (main complex).

Heavily Wooded Vegetation Communities (980 acres). The majority of Wilkins Ranch vegetation is heavily wooded. Most of this has been disturbed to some extent in the past primarily by logging and grazing. Under Alternative B, a vegetation management plan would be developed for the area which would provide a comprehensive approach to improvements, restoration, and management of these previously disturbed uplands. This would result in beneficial short-term and long-term impacts.

Size and Continuity. The size and extent of heavily wooded community has changed dramatically over time due to a lack of fire that has resulted in the encroachment of redwoods and Douglas-fir into former grassland, evergreen shrub, riparian areas, and oak woodlands. This would change under Alternative B because of the development of a vegetation management plan and strategy for long-term preservation. By managing vegetation using prescribed fire or mechanical removal, the heavily wooded communities would be kept in a dynamic state, resulting in greater and additional biodiversity. Using prescribed fire and other treatments, the size of this heavily wooded area would remain approximately the same over time.

Natural Structure, Diversity, and Productivity. A forest community's diversity and productivity are directly related to the integrity of its structure (overstory, understory, and ground layers). The natural structure of the developed and disturbed upland communities in the Wilkins area has been severely altered due to lack of fire, resulting in increasingly dense overgrown stands in some areas. There has also been a shift in species composition over time to more shade-tolerant coniferous species such as Douglas-fir and redwood.

Under Alternative B, the understory integrity, diversity, and overall productivity would be enhanced by treatments (such as prescribed fire) as directed in vegetation management and fire management plans. Therefore, Alternative B would ensure long-term maintenance and enhancement of

biodiversity, productivity, and understory integrity. Long-term moderate beneficial impacts to heavily wooded vegetation communities would occur under this alternative because of the enhancement of the forest community's diversity and productivity.

Grassland and Shrub Plant Communities (348 acres). Approximately 348 acres support grassland and shrub communities. Most of this has been disturbed to some extent in the past primarily by logging, road building, and grazing operations. Native grasslands have been severely impacted and non-native grasses dominate in certain areas. Alternative B would provide a comprehensive approach to improvement, restoration, and/or management of these previously disturbed grasslands and adjacent communities, resulting in beneficial long-term and short-term enhancements.

Size and Continuity. The size and extent of grassland and shrub communities have changed dramatically over time due to lack of fire, heavy livestock grazing, and other past land use practices. Over the last sixty years, there has been an encroachment of redwoods and Douglas-fir into former grassland, evergreen shrub, riparian areas, and oak woodlands. Evergreen shrubs have also expanded into the grassland area. This would not continue under Alternative B due to the development and application of a comprehensive vegetation management strategy. These shrub communities would be treated—using mechanical removal, seasonal grazing, and prescribed fire--to ensure grasslands areas remain continuous and of at least the size identified in the 2001 vegetation map.

Natural Structure, Diversity, and Productivity. Species diversity is directly related to the composition of the grassland and shrub area. With continued exotic plant spread in this area and the loss of grassland habitat, productivity is expected to be reduced. In addition, the natural structure of the grassland communities and shrub area in the Wilkins Ranch area has been degraded due to lack of fire, increased exotic plants, and grazing pressure.

Under Alternative B, the grassland and shrub areas would be managed using mechanical treatments, seasonal grazing, and prescribed fire to ensure there is dynamic structure and enhanced diversity. Treatments would target exotic (weed) species to ensure the long-term preservation of diverse native vegetation

Impacts to grassland and shrub plant communities would include enhancement of biodiversity and native species under Alternative B. These are considered beneficial, long-term and moderate.

Pasture/Unvegetated Areas (Main Complex: 14 acres). The main complex is approximately 14 acres and has been severely altered during the last 150 years. Intentional planting and heavy use have severely impacted native grassland and non-native grasses dominate in the area. Under Alternative B the cultural landscape in this area would be maintained. No comprehensive approach to natural resource improvements, restoration, or management of these previously disturbed grasslands would be implemented resulting in continued, long-term degradation to native vegetation.

The new septic system would result in a short-term minor negligible impact on one acre of vegetation.

Size and Continuity. The size and extent of grassland communities has changed dramatically over time due to lack of fire, heavy grazing, and historic planting. This would continue under Alternative B because under this alternative the cultural landscape would be preserved.

Natural Structure, Diversity, and Productivity. Plant species diversity is limited in the main complex area. With the continuation of exotic plant spread and the cultural landscape, productivity will continue to be reduced. In addition, the natural structure of the grassland and shrub communities in the Wilkins Complex area has been severely degraded due to lack of fire, planting, and grazing.

Under Alternative B, the main complex area would continue to degrade and the integrity, diversity, and overall productivity of native vegetation would continue to be adversely impacted by a lack of diverse native vegetation and an increase in exotic vegetation.

Continued degradation of this vegetation type would occur under this Alternative and impacts would continue to be long-term, moderate, and adverse.

The proposed trail system repair and maintenance of two trails would have direct adverse effects on approximately one acre of vegetation. This disturbance would be short-term and along existing, informal trails.

Conclusion

Under Alternative B, specific actions would be taken to change existing conditions and a comprehensive vegetation management plan would be developed and implemented. The existing condition of the vegetation at Wilkins Ranch would change and the ecological function (natural structure, diversity, and productivity) of plant communities would be enhanced by specific treatments such as prescribed fire, mechanical removal, and seasonal grazing. Increasing exotic plant populations would be treated and population areas reduced. Some minor degradation to native vegetation would occur at the main complex to preserve the historic gardens. The new septic system would result in a short-term minor negligible adverse impact on one acre of vegetation. The proposed trail system maintenance and repair would have minor short-term adverse impacts.

The impact of this alternative on vegetation would, therefore, be beneficial long-term and moderate on the majority of the 1,360 acre ranch. No impacts will result in an impairment of resources.

Cumulative Impacts

Other cumulative impacts to vegetation in Olema Valley include plant community fragmentation from grazing allotments and the potential for continued introduction and spread of non-native plant species. Other NPS projects planned in Olema Valley, such as prescribed fire and mowing, are likely to positively affect plant communities in Olema Valley and would generally result in increasing natural structure. The Pacific Coast Learning Center has been initiated in Olema Valley and will not result in any vegetation change. Therefore, it will not have a cumulative impact with this project.

Overall, Alternative B, in conjunction with known plans and projects within Golden Gate and Point Reyes National Seashore, would have little or no new impacts and not result in a significant cumulative impact to vegetation.

Impacts on Wetlands

Methodology and Policies
Same as Alternative A.

Analysis
There are approximately 7 acres of wetlands, including stream corridors within the Wilkins Ranch area. In addition, approximately 0.17 acres of marsh are located on the property. The size and type of wetlands are not expected to change under this alternative; however, the integrity of wetlands is expected to change under this alternative. This alternative provides for 6000 feet of fencing to protect the integrity of the wetland communities and water quality. The connectivity of the wetland to adjacent habitats is expected to be enhanced by allowing additional riparian vegetation growth that has been altered and reduced by livestock grazing.

Conclusion
With the addition of riparian fencing and other wetland protection, moderate long-term beneficial impacts are expected under Alternative B. No long-term impairment to resources would occur under this alternative.

Cumulative Impacts
The NPS has initiated several riparian protection projects in Olema Valley for coho salmon and steelhead restoration. These projects include riparian fencing on Blueline Creek, Giacomini Creek, and other tributaries. These projects are expected to increase the size of riparian zones, protect the integrity of wetlands, and enhance the connectivity of wetland systems. These projects, combined with Alternative B, would have long-term cumulative beneficial effects on wetland protection.

Impacts to Wildlife

Methodology and Policies
Same as Alternative A.

Analysis
Within the 1360 acre ranch there is a diversity of large plant communities; habitat fragmentation is not an issue. The continuous riparian corridors, grasslands, and extensive wooded areas provide substantial wildlife habitat. Adjacent areas are managed as public open space and provide additional habitat for wildlife. Under this alternative, a comprehensive vegetation management plan would be developed to ensure more a diverse, dynamic mosaic of plant communities and to reduce the expansion of exotic plants. The implementation of the vegetation plan would have beneficial long-term moderate impacts.

Since building rehabilitation, trail upgrades, and utility systems upgrades are proposed under this alternative, noise, dust, and light from construction sites around the main complex and along upgrade trails would have minor short-term adverse impacts on wildlife. In addition, vegetation removed, trampled, or run-over during temporary use of areas for staging of machinery or materials would affect wildlife until such areas could be restored after the project.

Conclusion
Building rehabilitation, utility upgrades, trail construction, and maintenance activities will result in short-term, minor impacts to wildlife. However, with implementation of a comprehensive vegetation management plan (including application of prescribed fire) overall impacts on wildlife are expected to be long-term, beneficial, and moderate. Wildlife diversity would be enhanced as vegetation management reduces exotic plants and enhances ecological integrity. No long-term impairment of wildlife would occur.

Cumulative Impacts
The NPS has initiated several riparian protection projects in Olema Valley for coho salmon and steelhead restoration. These projects include riparian fencing on Blueline Creek, Cheda Creek, Giacomini Creek, and other tributaries. These projects are expected to increase the size of riparian zones, protect the integrity of the wetlands, and enhance the connectivity of the wetland systems and enhance water quality. These projects, and others listed in Appendix G, should have long-term cumulative beneficial effects on wildlife.

Impacts to Cultural Resources

Methodology and Policies
Same as Alternative A.

Analysis
Using previous archeological survey maps and references, no archeological sites are known to occur in the area. Therefore, under this alternative, there would be no indirect or direct positive or negative impact on archeological sites or material, short-or long-term. Previous site surveys have located several remnant historic sites (former Copper Mine) within the 1360 acre complex. Under this alternative, no impacts to these sites would occur. If archeological or historic material is found, project work would stop and a qualified archeologist would investigate the situation and recommend measures to minimize and eliminate and impacts.

The main complex has eight historic buildings. In addition, the landscape around the main complex contains features that contribute to the historic character of the cultural landscape. Much of the original vegetation and planting, including several large oak trees, have been lost over time. Under this no action alternative, historic structures and the cultural landscape would be rehabilitated and restored. Cyclic maintenance would also be conducted to ensure long-term preservation of the historic complex. Based on building condition assessments by private contractors conducted over the last four years, many of the structures including the main house, calf shed, horse barn, and other

outbuildings are in fair to poor condition and require major repairs. As a result of this alternative, the buildings would be repaired and rehabilitated, resulting in the short and long-term beneficial effects on the historic district.

Conclusion
As a result of this alternative, beneficial major long-term impacts to the cultural landscape and historic structures will occur. Building repairs and cyclic maintenance would ensure the preservation of the historic qualities of the site. The results of these projects with Alternative B would be a long-term beneficial effect on cultural resources.

Cumulative Impacts
Several cultural resource preservation projects have been completed in the Olema Valley during the last five years. The Wilkins Ranch main barn timber framing was repaired and rehabilitated in 1997. The Giacomini Ranch house foundation and roof was repaired in 2000. The Hagmaier Ranch House was completely rehabilitated for use as the Pacific Coast Learning Center. The historic bunkhouse at Truttman Ranch, northern Olema Valley, is currently being reroofed and will be rehabilitated in 2003. These projects contribute positively to the long-term preservation of the Olema Valley Historic District. The effect of this project and together with other projects listed in Appendix G will be a long-term beneficial effect on cultural resources.

Impacts on Visual Quality

Methodology and Policies
Same as Alternative A.

Analysis
Wilkins Ranch is viewed by tens of thousands of travelers to Golden Gate NRA and local residents that use Highway One for access to Stinson Beach, Olema, and Point Reyes Station. The view from Highway One of the cultural landscape is considered a scenic resource. Under this alternative, 14 acres of development would continue and no quantitative changes in contributing and non-contributing elements to the cultural landscape would be altered. In addition, through various treatments—seasonal grazing, mechanical removal, and prescribed fire—the open grassland areas would be preserved. This would have a long-term beneficial effect on scenic views of the pastoral landscape.

Conclusion
Beneficial long-term impacts to the historic buildings that need major repair would result in increased scenic viewing from Highway 1. In addition, vegetation treatments would have long-term beneficial effects on the integrity of the cultural (pastoral) landscape and visual quality. No long-term visual quality impairments would occur.

Cumulative Impacts
Several cultural resource preservation projects have been conducted in the Olema Valley within the last five years. The historic bunkhouse at Truttman Ranch, northern Olema Valley, has been reroofed and is slated as a project for restoration in early 2002. The Giacomini Ranch house and

barn, in the southern Olema Valley, have received preservation treatments to ensure long-term preservation. In 1997, the main barn at the Wilkins Ranch was stabilized. These projects contribute positively to the long-term preservation of the Olema Valley Historic District and the scenic qualities of Olema Valley. The results of these projects and Alternative B would be a long-term cumulative beneficial effect on visual quality.

Impacts on Human Health and Safety

Methodology and Policies
Same as Alternative A.

Analysis
Under this alternative, the Wilkins Ranch would be repaired to comply with local, state, and federal regulations. The septic and water systems would be improved to meet Clean Water Act and Safety Drinking Water Act. With these improvements, this alternative would have a moderate beneficial impact on health and human safety. In addition, compliance with building codes for life and safety would increase potential safety to anyone in or near the buildings.

Under this alternative, additional public use would occur on the trail system, resulting in additional fire and emergency response needs for the area. Visitor use at the Wilkins Ranch would increase to an estimated 2000 hikers on trails and 750 per year (groups by reservation). These additional visitors would be spread over a 12 month period. The park currently has 11.4 accident or incidents per 100,000 visitors. Therefore, the addition of 2,750 visitors results in an increase of less than 1% in possible accidents. This year, the NPS has funded an additional first response fire crew that will be trained as emergency medical technicians to provide assistance to the Marin County Fire Department, Bolinas Fire Department, and existing Point Reyes National Seashore emergency staff. Therefore, the additional projected adverse impacts on emergency services would be minor and the above measure would reduce any impacts to public services.

Conclusion
Moderate positive impacts to human health and safety would occur due to compliance with health and safety codes and other regulations. Adverse impacts to emergency public services would be minor.

Cumulative Impacts
Three other projects are occurring in the Olema Valley to correct potential sewage treatment problems. Two housing units will receive new sewage systems within the next few years. One housing sewage system was replaced approximately five years ago. The main sewage system at park headquarters is being replaced in 2001. In addition, the park has initiated major sewage upgrades at the Point Reyes Hostel and McClures Ranch. Increases in visitation associated with any of these projects would be insignificant and would not result in a significant increase in numbers of visitor accidents. These projects and this alternative would have a positive overall long-term effect on public health and safety in Olema Valley.

Impacts on Noise

Methodology and Policies
Same as Alternative A.

Analysis
Under this alternative, long-term noise levels would continue to be approximately at the same level as under Alternative A. Some additional minor noise impacts could occur due to an increase in hikers on trails. No long-term positive or negative impacts are anticipated at any significant level. Limited short-term noise would be generated by construction activity on trails and within the main complex. Construction would be limited to daytime work hours to reduce any impacts to local residents and park visitors. No neighbors are within a 100 yards of the complex; thus, construction noise would be attenuated to accepted levels.

Conclusion
Since there will be construction activities under this alternative, there would be short-term adverse minor noise impacts and disturbance to park visitors and local residents as a result of this alternative. No long-term impairments associated with noise would occur due to this alternative.

Cumulative Impacts
Several other minor rehabilitation projects are planned for the Olema Valley. These projects will have a cumulative effect on noise, but it will be short-term and minor. Noise increases by any of the projects in Appendix G are minor (short-term and dispersed) and would not result in a cumulative significant increase in park noise levels.

Impacts on Housing

Methodology and Policies
Same as Alternative A.

Analysis
Under Alternative B, two units would continue to be available for rent. Public access would become available, but no new employment would be added on site. No additional housing demand would be generated by the project. Temporary employees involved with renovating Wilkins Ranch, are expected to be drawn exclusively from local contractors. Preliminary discussions have commenced with prospective contractors, and the expertise and availability of quality local contractors is not expected to be a constraint to undertaking the project. For purposes of this analysis, these temporary workers are not projected to impact the local housing market.

Conclusion
Alternative B would not create any short- or long-term housing impacts. No long-term impairment to housing resources would occur under this alternative.

Cumulative Impacts

A review of other National Park Service projects reveals that cumulative housing impacts associated with Wilkins Ranch in conjunction with other projects are insignificant. Appendix G highlights other National Park Service projects planned to occur within the next several years. The majority of these projects involve upgrades to existing facilities to enhance physical, cultural or environmental resources. A few projects involve new construction, and will result in the addition of a small number of housing units. However, these new units will provide the majority of housing needed for new or newly relocated staff. Implementing the entire project list may result in a very small number of new staff in excess of housing added, however, these staff will consist primarily of temporary staffing for fire prevention. Any adverse cumulative housing impact due to increased housing needs beyond that addressed in the above analysis is expected to be negligible.

Impacts on Traffic

Methodology and Policies

Same as Alternative A.

Analysis

The table below presents the results of the Alternative B analysis of Highway 1/Wilkins Ranch intersection, as well as the Highway 1 and Olema-Bolinas Road segments. The Highway 1/Wilkins Ranch intersection and Highway 1 operate at LOS C, the same as Alternative A. Olema-Bolinas Road operates at LOS A under both Alternatives A and B.

LOS Analysis for Alternative B

Case	Type	Peak Hour LOS
Highway 1/Wilkins Ranch Driveway	Unsignalized Intersection	C (15.9 sec/veh control delay)
Highway 1	Two-lane highway	C (62% time-spent-following)
Olema-Bolinas Road	Two-lane highway	A (40% time-spent-following)

Conclusion

Under Alternative B, the Highway 1/Wilkins Ranch intersection performs at LOS C with an average control delay of 15.9 seconds per vehicle. In addition, Highway 1 operates at LOS C. Olema-Bolinas Road operates at LOS A in the peak hour under this alternative, with a percent-time-spent-following of 40%. This analysis indicates this alternative has a minor effect on traffic and is similar to Alternative A. Therefore, no long-term impairment to resources would occur due to traffic.

Cumulative Impacts

This project, along with other projects listed in Appendix G would not have a significant cumulative effect on traffic.

Impacts on Park Operations

Methodology and Regulations
Same as Alternative A.

Analysis
Rehabilitation of the buildings and other features at the project area to good condition is estimated to cost $607,000. Projects funded to date for repair of the utility systems and rehabilitation of the buildings is $257,000. This includes $50,000 to upgrade the proposed two trails. Therefore $350,000 is estimated to be needed to complete rehabilitation of buildings and repair trails. Once the buildings, utilities, trails are upgraded, annual maintenance operating costs are estimated at $52,000 per year.

Under Alternative B, building rehabilitation would occur and sewage and water systems would be upgraded. Impacts caused by this expenditure of $350,000 are expected to be short-term and minor (13% of one-time special funding) to park operations for one-time funding. Levels of cyclic maintenance needed are estimated at approximately $52,000 annually (currently paid for by tenant) and would be a necessary expense incurred by the NPS. Therefore, expenditures are anticipated, and negligible negative impacts to park operational costs ($52,000 is approximately 1% of the park's operating budget) would occur. Over time, as buildings are upgraded, maintenance requirements would be expected to be reduced. Because the National Park Service would provide visitor services at the site, there would be new costs and negligible impacts that would occur in providing services for visitors. However, reservations and education programs would be handled by existing staff.

Conclusion
Under Alternative B, the rehabilitation and operational costs for the Wilkins Ranch would be increased for the NPS. A one-time expenditure of $350,000 is estimated to be needed to completely rehabilitate buildings and repair trails. However, impacts are expected to be short-term and minor (13% of one-time funding). Increased cyclic maintenance initially would be needed but would be less over time as buildings and trails are upgraded and repaired. For example, once the roof of the main house is replaced, it should last approximately 20 years. Impacts to the park operations budget are considered to be negligible for operations and short-term and minor for special funding.

Cumulative Impacts
Several cultural resource preservation projects have been conducted in the Olema Valley within the last five years. The historic bunkhouse at Truttman Ranch, northern Olema Valley, has been reroofed and is slated as a project for restoration in early 2002. The Giacomini Ranch house and main barn, in southern Olema Valley, have received preservation treatments to ensure long-term preservation. In 1997, the main barn at the Wilkins Ranch was stabilized. These projects along with others listed in Appendix G, with Alternative B, have a short-term, moderate adverse impact on park operations.

Impacts on Visitor Experience

Methodology and Policies
Same as Alternative A.

Analysis
Under this alternative, construction and rehabilitation would occur at the main complex and along the two trail corridors. Therefore, there will be short-term minor impacts to visitor experience due to construction activity. However, long-term beneficial impacts to visitor experience would occur due to enhanced recreational use and public access. Future visitor use at the Wilkins Ranch is estimated at approximately 2000 hikers on trails and 750 visitors per year (groups by reservation). Adverse impacts from additional visitors would be negligible and little-noticed by visitors and local residents. These additional visitors would be spread over a 12 month period.

Conclusion
Some beneficial impacts on visitor experience would occur due to increased public access. The intensity of impacts from short-term construction activities would be minor. No long-term impairments to visitor experience would result from this alternative.

Cumulative Impacts
No change in the overall park trail system is anticipated. The Hagmaier Complex has been rehabilitated and will provide additional access to researchers and scientists (approximately 8-10 scientists). Visitor experience as a result of this science facility is expected to be beneficial by increasing visitor participation. Additional use of the Learning Center classroom at Bear Valley may increase visitation to the park (expected to be less than 1000 students). The cumulative impacts of this alternative and other projects on visitor experience would be long-term, beneficial, and minor.

Alternative C: Rehabilitate Facilities for Two Residences and Conservation and Education Center; Additional Public Access; Upgrade Buildings, Sewage Disposal, and Water System (Preferred Alternative)

Impacts on Vegetation

Methodology and Policies
Same as Alternative A.

Analysis
Same as Alternative B. Using the vegetation map assembled in the GIS at Point Reyes National Seashore, the Wilkins Ranch vegetation can be assembled into nine general groups or types: Douglas fir/redwood - 554 acres; evergreen shrub - 203 acres; grasslands - 146 acres; hardwood forest - 426 acres; other herbaceous - 3.53 acres; pasture - 7.4 acres; riparian - 6.30 acres; freshwater or brackish marsh - 0.17 acres; and unvegetated - 6.87 acres. They can be further categorized into four major classes: heavily wooded (forest) - 980 acres; open grassland shrub - 348 acres; freshwater or brackish marsh - 0.17 acres; and other vegetation - 32 acres. For purposes of impact assessment, vegetation was divided into three categories: heavily wooded, grassland and shrub, and pasture/unvegetated areas (main complex).

Heavily Wooded Vegetation Communities (980 acres). The majority of Wilkins Ranch vegetation is heavily wooded. Most of this has been disturbed to some extent in the past primarily by logging and grazing. Under Alternative C, a vegetation management plan would be developed for the area which would provide a comprehensive approach to improvements, restoration, and management of these previously disturbed uplands. This would result in beneficial short-term and long-term impacts.

Size and Continuity. The size and extent of heavily wooded community has changed dramatically over time due to a lack of fire that has resulted in the encroachment of redwoods and Douglas-fir into former grassland, evergreen shrub, riparian areas, and oak woodlands. This would change under Alternative C because of the development of a vegetation management plan and strategy for long-term preservation. By managing vegetation using prescribed fire or mechanical removal, the heavily wooded communities would be kept in a dynamic state, resulting in greater and additional biodiversity. Using prescribed fire and other treatments, the size of this heavily wooded area would remain approximately the same over time.

Natural Structure, Diversity, and Productivity. A forest community's diversity and productivity are directly related to the integrity of its structure (overstory, understory, and ground layers). The natural structure of the developed and disturbed upland communities in the Wilkins area has been severely altered due to lack of fire, resulting in increasingly dense overgrown stands in some areas. There has also been a shift in species composition over time to more shade-tolerant coniferous species such as Douglas-fir and redwood.

Under Alternative C, the understory integrity, diversity, and overall productivity would be enhanced by treatments (such as prescribed fire) as directed in vegetation management and fire management

plans. Therefore, Alternative C would ensure long-term maintenance and enhancement of biodiversity, productivity, and understory integrity. Long-term moderate beneficial impacts to heavily wooded vegetation communities would occur under this alternative because of the enhancement of the forest community's diversity and productivity.

Grassland and Shrub Plant Communities (348 acres). Approximately 348 acres support grassland and shrub communities. Most of this has been disturbed to some extent in the past primarily by logging, road building, and grazing operations. Native grasslands have been severely impacted and non-native grasses dominate in certain areas. Alternative C would provide a comprehensive approach to improvement, restoration, and/or management of these previously disturbed grasslands and adjacent communities, resulting in beneficial long-term and short-term enhancements.

Size and Continuity. The size and extent of grassland and shrub communities have changed dramatically over time due to lack of fire, heavy livestock grazing, and other past land use practices. Over the last sixty years, there has been an encroachment of redwoods and Douglas-fir into former grassland, evergreen shrub, riparian areas, and oak woodlands. Evergreen shrubs have also expanded into the grassland area. This would not continue under Alternative C due to the development and application of a comprehensive vegetation management strategy. These shrub communities would be treated—using mechanical removal, seasonal grazing, and prescribed fire--to ensure grasslands areas remain continuous and of at least the size identified in the 2001 vegetation map.

Natural Structure, Diversity, and Productivity. Species diversity is directly related to the composition of the grassland and shrub area. With continued exotic plant spread in this area and the loss of grassland habitat, productivity is expected to be reduced. In addition, the natural structure of the grassland communities and shrub area in the Wilkins Ranch area has been degraded due to lack of fire, increased exotic plants, and past grazing pressure.

Under Alternative C, the grassland and shrub areas would be managed using mechanical treatments, seasonal grazing, and prescribed fire to ensure there is dynamic structure and enhanced diversity. Treatments would target exotic (weed) species to ensure the long-term preservation of diverse native vegetation

Impacts to grassland and shrub plant communities would include enhancement of biodiversity and native species under Alternative C. These are considered beneficial, long-term and moderate.

Pasture/Unvegetated Areas (Main Complex: 14 acres). The main complex is approximately 14 acres and has been severely altered during the last 150 years. Intentional planting and heavy use have severely impacted native grassland and non-native grasses dominate in the area. Under Alternative B the cultural landscape in this area would be maintained. No comprehensive approach to natural resource improvements, restoration, or management of these previously disturbed grasslands would be implemented resulting in continued, long-term degradation to native vegetation.

The new septic system would result in a short-term minor negligible impact on one acre of vegetation.

Size and Continuity. The size and extent of grassland communities has changed dramatically over time due to lack of fire, heavy grazing, and historic planting. This would continue under Alternative C because under this alternative the cultural landscape would be preserved.

Natural Structure, Diversity, and Productivity. Plant species diversity is limited in the main complex area. With the continuation of exotic plant spread and the cultural landscape, productivity will continue to be reduced. In addition, the natural structure of the grassland and shrub communities in the Wilkins Complex area has been severely degraded due to lack of fire, planting, and grazing.

Under Alternative C, the main complex area would continue to degrade and the integrity, diversity, and overall productivity of native vegetation would continue to be adversely impacted by a lack of diverse native vegetation and an increase in exotic vegetation.

Continued degradation of this vegetation type would occur under this Alternative and impacts would continue to be long-term, moderate, and adverse.

The proposed trail system repair and maintenance of two trails would have direct adverse effects on approximately one acre of vegetation. This disturbance would be short-term and along existing, informal trails.

Conclusion

Under Alternative C, specific actions would be taken to change existing conditions and a comprehensive vegetation management plan would be developed and implemented. The existing condition of the vegetation at Wilkins Ranch would change and the ecological function (natural structure, diversity, and productivity) of plant communities would be enhanced by specific treatments such as prescribed fire, mechanical removal, and seasonal grazing. Increasing exotic plant populations would be treated and population areas reduced. Some minor degradation to native vegetation would occur at the main complex to preserve the historic gardens. The new septic system would result in a short-term minor negligible adverse impact on one acre of vegetation. The proposed trail system maintenance and repair would have minor short-term adverse impacts.

The impact of this alternative on vegetation would, therefore, be beneficial long-term and moderate on the majority of the 1,360 acre ranch. No impacts will result in an impairment of resources.

Cumulative Impacts

Other cumulative impacts to vegetation in Olema Valley include plant community fragmentation from grazing allotments and the potential for continued introduction and spread of non-native plant species. Other NPS projects planned in Olema Valley, such as prescribed fire and mowing, are likely to positively affect plant communities in Olema Valley and would generally result in increasing natural structure. The Pacific Coast Learning Center has been initiated in Olema Valley and will not result in any vegetation change. Therefore, it will not have a cumulative impact with this project.

Overall, Alternative C, in conjunction with known plans and projects within Golden Gate and Point Reyes National Seashore, would have little or no new impacts and not result in a significant cumulative impact to vegetation.

Impacts on Wetlands

Methodology and Policies

Same as Alternative A.

Analysis

Same as Alternative B. There are approximately 7 acres of wetlands, including stream corridors within the Wilkins Ranch area. In addition, approximately 0.17 acres of marsh are located on the property. The size and type of wetlands are not expected to change under this alternative; however, the integrity of wetlands is expected to change under this alternative. This alternative provides for 6000 feet of fencing to protect the integrity of the wetland communities. The connectivity of the wetland to adjacent habitats is expected to be enhanced by allowing additional riparian vegetation growth that has been altered and reduced by livestock grazing.

Conclusion

With the addition of riparian fencing and other wetland and water quality protection, moderate long-term beneficial impacts are expected under Alternative C. No long-term impairment to resources would occur under this alternative.

Cumulative Impacts

The NPS has initiated several riparian protection projects in Olema Valley for coho salmon and steelhead restoration. These projects include riparian fencing on Blueline Creek, Giacomini Creek, and other tributaries. These projects are expected to increase the size of riparian zones, protect the integrity of wetlands, and enhance the connectivity of wetland systems. These projects, combined with Alternative C, would have long-term cumulative beneficial effects on wetland protection.

Impacts to Wildlife

Methodology and Policies

Same as Alternative A.

Analysis
Same as Alternative B. Within the 1360 acre ranch there is a diversity of large plant communities; habitat fragmentation is not an issue. The continuous riparian corridors, grasslands, and extensive wooded areas provide substantial wildlife habitat. Adjacent areas are managed as public open space and provide additional habitat for wildlife. Under this alternative, a comprehensive vegetation management plan would be developed to ensure more a diverse, dynamic mosaic of plant communities and to reduce the expansion of exotic plants. The implementation of the vegetation plan would have beneficial long-term moderate impacts.

Since building rehabilitation, trail upgrades, and utility systems upgrades are proposed under this alternative, noise, dust, and light from construction sites around the main complex and along upgrade trails would have minor short-term adverse impacts on wildlife. In addition, vegetation removed, trampled, or run-over during temporary use of areas for staging of machinery or materials would affect wildlife until such areas could be restored after the project.

Conclusion
Building rehabilitation, utility upgrades, trail construction, and maintenance activities will result in short-term, minor impacts to wildlife. However, with implementation of a comprehensive vegetation management plan (including application of prescribed fire) overall impacts on wildlife are expected to be long-term, beneficial, and moderate. Wildlife diversity would be enhanced as vegetation management reduces exotic plants and enhances ecological integrity. No long-term impairment of wildlife would occur.

Cumulative Impacts
The NPS has initiated several riparian protection projects in Olema Valley for coho salmon and steelhead restoration. These projects include riparian fencing on Blueline Creek, Cheda Creek, Giacomini Creek, and other tributaries. These projects are expected to increase the size of riparian zones, protect the integrity of the wetlands, and enhance the connectivity of the wetland systems. These projects, and others listed in Appendix G, should have long-term cumulative beneficial effects on wildlife.

Impacts to Cultural Resources

Methodology and Policies
Same as Alternative A.

Analysis
Same as Alternative B. Using previous archeological survey maps and references, no archeological sites are known to occur in the area. Therefore, under this Alternative C, there would be no indirect or direct positive or negative impact on archeological sites or material, short-or long-term. Previous site surveys have located several remnant historic sites (former Copper Mine) within the 1360 acre complex. Under this alternative, no impacts to these sites would occur. If archeological material is found, project work would stop and a qualified archeologist would investigate the situation and recommend measures to minimize and eliminate and impacts.

The main complex has eight historic buildings. In addition, the landscape around the main complex contains features that contribute to the historic character of the cultural landscape. Much of the original vegetation and planting, including several large oak trees, have been lost over time. Under this no action alternative, historic structures and the cultural landscape would be rehabilitated and restored. Cyclic maintenance would also be conducted to ensure long-term preservation of the historic complex. Based on building condition assessments conducted over the last four years, many of the structures including the main house, calf shed, horse barn, and other outbuildings are in serious need of major repair. As a result of this alternative, the buildings would be repaired and rehabilitated, resulting in the short and long-term beneficial effects on the historic district.

To accommodate office use in the Main House, adaptive-use rehabilitation would be completed based on the Secretary of the Interior's Guidelines for Rehabilitation of Historic Structures. Preliminary research indicates that it is likely that portions of the original floorplan and original features could be restored during this process to the benefit of both the historic structure and the new use. To accommodate two residences, an addition of approximately 200 square feet would be added to the existing pump house structure that has been used as a residence. This addition will be designed in accordance with the Secretary's Guidelines for Rehabilitation of Historic Structures. Thus, no long-term adverse effects to cultural resources of the site would occur. Some limited short-term impacts would occur due to construction.

Conclusion
As a result of this alternative, beneficial major long-term impacts to the cultural landscape and historic structures will occur. Building repairs and cyclic maintenance would ensure the preservation of the historic qualities of the site.

Cumulative Impacts
Several cultural resource preservation projects have been conducted in the Olema Valley within the last five years. The historic bunkhouse at Truttman Ranch, northern Olema Valley, has been reroofed and is slated as a project for restoration in early 2002. The Giacomini Ranch house and main barn, in southern Olema Valley, have received preservation treatments to ensure long-term preservation. In 1997, the main barn at the Wilkins Ranch was stabilized. In addition, the Hagmaier Ranch complex has been rehabilitated. These projects contribute positively to the long-term preservation of the Olema Valley Historic District. Along with Alternative C, the results of these projects and others listed in Appendix G would be a long-term beneficial effect on cultural resources.

Impacts on Visual Quality

Methodology and Policies
Same as Alternative A.

Analysis
Same as Alternative B. Wilkins Ranch is viewed by tens of thousands of travelers to Golden Gate NRA and local residents that use Highway One for access to Stinson Beach, Olema, and Point

Reyes Station. The view from Highway One of the cultural landscape is considered a scenic resource. Under this alternative, 14 acres of development would continue and no quantitative changes in contributing and non-contributing elements to the cultural landscape would be altered. In addition, through various treatments—seasonal grazing, mechanical removal, and prescribed fire—the open grassland areas would be preserved. This would have a long-term beneficial effect on scenic views of the pastoral landscape.

Conclusion
Beneficial long-term impacts to the historic buildings that need major repair would result in increased scenic viewing from Highway 1. In addition, vegetation treatments would have long-term beneficial effects on the integrity of the cultural (pastoral) landscape and visual quality. No long-term visual quality impairments would occur.

Cumulative Impacts
Several cultural resource preservation projects have been conducted in the Olema Valley within the last five years. The historic bunkhouse at Truttman Ranch, northern Olema Valley, has been reroofed and is slated as a project for restoration in early 2002. The Giacomini Ranch house and barn, in the southern Olema Valley, have received preservation treatments to ensure long-term preservation. In 1997, the main barn at the Wilkins Ranch was stabilized. These projects contribute positively to the long-term preservation of the Olema Valley Historic District and the scenic qualities of Olema Valley. The results of these projects and Alternative C would be a long-term cumulative beneficial effect on visual quality.

Impacts on Human Health and Safety

Methodology and Policies
Same as Alternative A.

Analysis
Same as Alternative B. Under this alternative, the Wilkins Ranch would be repaired to comply with local, state, and federal regulations. The septic and water systems would be improved to meet Clean Water Act and Safety Drinking Water Act. With these improvements, this alternative would have a moderate beneficial impact on health and human safety. In addition, compliance with building codes for life and safety would increase potential safety to anyone in or near the buildings.

Under this alternative, additional public use would occur on the trail system, resulting in additional fire and emergency response needs for the area. Future visitor use at the Wilkins Ranch would increase to an estimated 2000 hikers on trails and 750 per year (groups by reservation). These additional visitors would be spread over a 12 month period. The park currently has 11.4 accident or incidents per 100,000 visitors. Therefore, the addition of 2,750 visitors results in an increase of less than 1% in possible accidents. This year, the NPS has funded an additional first response fire crew that will be trained as emergency medical technicians to provide assistance to the Marin County Fire Department, Bolinas Fire Department, and existing Point Reyes National Seashore emergency staff.

Therefore, the additional projected adverse impacts on emergency services would be minor and the above measure would reduce any impacts to public services.

Conclusion

Moderate positive impacts to human health and safety would occur due to compliance with health and safety codes and other regulations. Adverse impacts to emergency public services would be minor.

Cumulative Impacts

Three other projects are occurring in the Olema Valley to correct potential sewage treatment problems. Two housing units will receive new sewage systems within the next few years. One housing sewage system was replaced approximately five years ago. The main sewage system at park headquarters is being replaced in 2001. In addition, the park has initiated major sewage upgrades at the Point Reyes Hostel and McClures Ranch. Increases in visitation associated with any of these projects would be insignificant and would not result in a significant increase in numbers of visitor accidents. These projects and this alternative would have a positive overall long-term effect on public health and safety in Olema Valley.

Impacts on Noise

Methodology and Policies

Same as Alternative A.

Analysis

Under this alternative, long-term noise levels would continue to be approximately at the same level as under Alternative A. Some additional minor noise impacts could occur due to an increase in hikers on trails. No long-term positive or negative impacts are anticipated at any significant level. Limited short-term noise would be generated by construction activity on trails and within the main complex. Construction would be limited to daytime work hours to reduce any impacts to local residents and park visitors. No neighbors are within a 100 yards of the complex; thus, construction noise would be attenuated to accepted levels.

Conclusion

Since there will be construction activities under this alternative, there would be short-term adverse minor noise impacts and disturbance to park visitors and local residents as a result of this alternative. No long-term impairments associated with noise would occur due to this alternative.

Cumulative Impacts

Several other minor rehabilitation projects are planned for the Olema Valley. These projects will have a cumulative effect on noise, but it will be short-term and minor. Noise increases by any of the projects in Appendix G are minor (short-term and dispersed) and would not result in a cumulative significant increase in park noise levels.

Impacts on Housing

Methodology and Policies

Same as Alternative A.

Analysis

In the Preferred Alternative, the Wilkins Ranch will be comprised of two housing units and the conservation and education center ("Center"). The two residential units will be reserved for two on-site employees, with additional Center employees located in private housing off site. The following analysis evaluates the impact of the Preferred Alternative on the local housing market. Housing impacts associated with this alternative are a result of housing demand generated by the new Center employees.

Projected Generated Employment

Temporary employment. Temporary employees involved with renovating Wilkins Ranch are expected to be drawn exclusively from local contractors. Preliminary discussions have commenced with prospective contractors, and the expertise and availability of quality local contractors is not expected to be a constraint to undertaking the project. For purposes of this analysis, these temporary workers are not projected to impact the local housing market.

Permanent Employment. Based on the Secretary of Interior Standards for Rehabilitation of historic structures, NPS determined that the maximum offices and associated employees of the Center would be 20 individuals at full occupancy. This number is corroborated as generally reasonable for the 3,500 square foot building, by applying typical nonprofit organizations' office density standards of 250 square feet per employee. Using this approach, an estimated 14 employees could be accommodated. However, a slightly larger overall number of workers would be expected given the use of some of the outbuildings for support and other related uses.

For purposes of this analysis, a conservative approach has been undertaken to estimate the number of non-local employees recruited to the new Center. Two of these new employees seeking new residences could be housed at the on-site units. It is assumed that another eight employees will be recruited from within the market area, and that half, or ten individuals, will relocate to the area to work at the Center. This analysis represents a "worst case" scenario and actual impacts would be expected to be substantially less.

Delineation of the Relevant Housing Market. The delineation of a local housing market area ("market area") involves establishing a geographic region in which home seekers are indifferent to the housing units' precise location. For purposes of this study, the local housing market area is defined as political jurisdictions that reflect similar demographic and locational characteristics in relation to Olema, including the cities in Marin County (excluding Tiburon, Sausalito and Belvedere), the unincorporated communities in western Marin, and the City of Petaluma in Sonoma County. These areas are located within a commuting distance of approximately 45 minutes of Wilkins Ranch. Furthermore, a survey of NPS employees, Point Reyes National Seashore Association and Park Partners revealed that of 120 employees, approximately 85 percent live within this market area. The remaining employees live in the counties of Sonoma, Alameda and San

Francisco. Of the total park-related employees, about 80 percent are renters and 20 percent homeowners.

Current Housing Conditions

As of January 2000, there were 116,476 housing units in the market area. Of the total housing stock, an estimated 37.9 percent of the Marin County units are rental and 62.1 percent are owner occupied. In Sonoma County, approximately 37.1 percent of the units are rental and 62.9 percent are owner occupied.

The Marin housing market is extremely constrained, reflected by low vacancy rates and historically high prices. The median single-family home price in Marin County was $652,000 in February 2001 and rental vacancy rates were only 1.3 percent. A healthy vacancy rate, considered 4.5 percent, allows households to easily move within the market area. Even constrained residential markets provide an inventory of rental and for-sale units on the market at any one time. The following analysis quantifies the availability of housing units within the market area.

Housing Availability. The availability of housing within the market area is calculated below. The number of available rental units was calculated by applying the vacancy rate to the total inventory of rental units for the market area. As of January 2000, there were an estimated 51,745 rental units within the market area. Applying the relevant vacancy rate to the total inventory of units results in an estimated total available supply of 640 units.

The availability of for-sale units was calculated based on the number of annual sales of new and re-sale homes within the market area. During 2000, approximately 5,094 units were sold within the market area. Assuming that a prospective homeowner will look for and acquire a new home within a three-month period, one quarter of the annual sales activity is assumed to be available to new employees, or 1,274 units. In addition, building permits have been issued for 443 new single-family homes and 156 multifamily units in Marin County.

Implications for Wilkins Ranch. Of the ten Center employees assumed to be recruited from outside the market area, an estimated 80 percent (eight employees) are likely to seek rental units and 20 percent (two employees) are likely to seek for-sale housing based on the occupancy patterns of current park-related employees. Based on these assumptions and housing inventory data, the demand for eight rental units by the Center's employees represent approximately one percent of the total available rental units in the local market area. Similarly, the demand for two for-sale homes by the Center's employees represents only $2/10^{th}$ of one percent of the for-sale units in the local market.

Conclusion

Based upon the above analysis, the conversion of Wilkins Ranch to a conservation and education center would not adversely affect the local housing market. Even under the "worst case" scenario, the combined impacts would amount to less than one percent of the total housing inventory within the local market area. More likely, the Center's new employees will be recruited from within the market area, resulting in an insignificant impact on the housing market.

Cumulative Impacts

A review of other National Park Service projects reveals that cumulative housing impacts associated

with Wilkins Ranch in conjunction with other projects is insignificant. Appendix G highlights other National Park Service projects planned to occur within the next several years. The majority of these projects involve upgrades to existing facilities to enhance physical, cultural or environmental resources. A few projects involve new construction, and will result in the addition of a small number of housing units. However, these new units will provide the majority of housing needed for new or newly relocated staff. Implementing the entire project list may result in a very small number of new staff in excess of housing added, however, these staff will consist primarily of temporary staffing for fire prevention. Any adverse cumulative housing impact due to increased housing needs beyond that addressed in the above analysis is expected to be negligible.

Impacts on Traffic

Methodology and Policies

Same as Alternative A.

Analysis

Site Traffic. Traffic conditions were analyzed assuming a non-profit office use for part of the Wilkins Ranch. The assumptions used in the analysis for estimating the number of trips generated are shown in the table below.

Wilkins Ranch Information

	Variable	Data
Population	People residing in Wilkins Ranch	4
Employment	People employed in Wilkins Ranch	20
Education/Picnic Area	Trips/day	--

The number of trips generated by the proposed modifications in Alternative C were calculated based on trip rates contained in the *ITE Trip Generation, Sixth Edition, 1997*, published by the Institute of Transportation Engineers (ITE). Total weekday, and PM peak hour trips were calculated. Trips were generated for the development based on the number of employees for the office space, which was assumed to be twenty.

The use of the area for education is likely to only be used once or twice a month. Likewise, the picnic facilities are expected to be used sparingly, and therefore attract a very few number of trips to the site. Since the education and picnic facilities are not expected to be used on a daily basis, these trips were not considered. When designing a roadway facility, the 30^{th} or 50^{th} highest hour of the year is typically used as the design hour volume. The fact that the site for education will be used only about once a month (perhaps 8-10 times per year) suggests that it not be considered in the recurring traffic analysis. Even when it occurs, it is typically only one or two buses, which have negligible effect on the traffic operations. Similarly, the picnic area is expected to only be used about once a month and will have minimal effect on the operations.

It should also be noted that the number of residential trips in Alternative C could decrease from its existing case, as the number of residential events may decline. However, Alternative C was analyzed assuming the same volume of residential traffic as in Alternative B.

The trip generation for the office portion of the site is shown below.

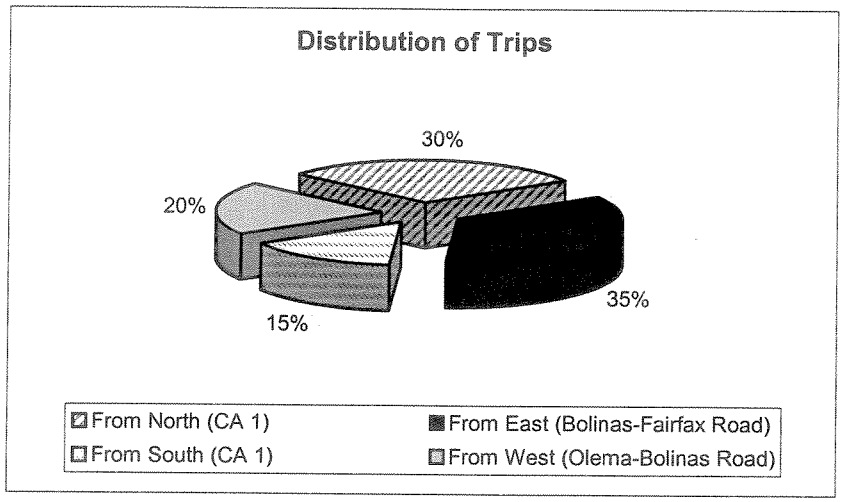
Average Weekday Trip Generation for Office Space

Land Use	Office Space
ITE Land Use Code Number	710
Land Use Variable	Employees
Amount	20
Weekday Trip Rate	3.32
PM Peak Hour Trip Rate	0.46
PM Inbound Percentage	17%
PM Outbound Percentage	83%
Weekday Trips	66
PM Peak Hour Trips Inbound	2
PM Peak Hour Trips Outbound	8

Source: Trip Generation, Sixth Edition, Institute of Transportation Engineers, 1997.

Based on the information provided, the proposed re-use in Alternative C will result in 10 additional trips on Wilkins Ranch Driveway (2 inbound, and 8 outbound) in the peak hour. It is possible that at least a portion of these trips will consist of re-directed traffic, and a lesser amount of additional trips would be generated on the surrounding roadway network. For example, an employee who currently commutes from Olema to a nearby location near Bolinas Bay becomes employed at Wilkins Ranch. In this situation, the employee would only add trips on Wilkins Ranch Driveway, but not on Highway 1 (assuming that person used Highway 1 to drive to the previous location). However, to present an analysis of more critical traffic conditions, it is assumed that all site trips are "new" trips into the area.

Trip Distribution. The distribution of Wilkins Ranch traffic is shown below. The distribution was based on the residential locations in the vicinity of Wilkins Ranch, with some weighting given to the major traffic generators located in the area.



2001 Total Traffic. The total traffic conditions for 2001 were estimated by adding the site traffic to the 2001 background conditions. The table below shows the projected traffic conditions (Total Traffic) as a result of the proposed re-use in Alternative C.

Analysis

Analysis of Alternative C resulted in LOS C at the Highway 1/Wilkins Ranch intersection, with an average control delay of 15.9 seconds/vehicle for the worst movement (eastbound on Olema-Bolinas Road). The average control delay falls just beyond the LOS B threshold of 15 seconds/vehicle. The LOS and average control delay is identical as in Alternative B. Highway 1 and Olema-Bolinas Road also operates at the same LOS in both Alternative A and B (LOS C and LOS A, respectively). It is therefore shown that additional traffic brought by the office use has a negligible effect on traffic operations at Highway 1/Wilkins Ranch.

LOS Analysis for Alternative C

Location	Type	Peak Hour LOS
Highway 1/Wilkins Ranch Driveway	Unsignalized Intersection	C (15.9veh/sec average control delay)
Highway 1	Two-lane highway	C (62% time-spent-following)
Olema-Bolinas Road	Two-lane highway	A (40% time-spent-following)

Conclusion

Existing traffic volumes were factored by 1.66 to account for the possibility of lower counts occurring on Easter Sunday. Under Alternative C, the Highway 1/Wilkins Ranch intersection performs at LOS C with an average control delay of 15.9 seconds per vehicle. The results show that additional traffic generated by the office space has a very small effect on traffic conditions at the intersection.

Highway 1 operates at LOS C under Alternative C, with a percent-time-spent following of 62%. Olema-Bolinas Road operates at LOS A in the peak hour under Alternative B, with a percent-time-

spent-following of 40%. Alternative C is estimated to generate 10 additional peak hour trips on Wilkins Ranch Driveway, however this may be lower due to the likely removal of some of the traffic associated with the current residential use.

Alternative C is expected to generate 10 trips in the peak hour. One additional trip will be distributed on Olema-Bolinas Road, four trips from the north leg of Highway 1, and five trips from the south leg of Highway 1.

Overall, it has been shown that any additional trips generated by Alternative C will have a negligible effect on traffic operations on Highway 1, Wilkins Ranch Driveway, Olema-Bolinas Road, or the Highway 1/Wilkins Ranch intersection. Therefore, no long-term impairment to park resources would occur due to traffic.

Cumulative Impacts
This project, along with other projects listed in Appendix G would not have a significant cumulative effect on traffic. The projects listed in Appendix G are not expected to adversely increase traffic volumes.

Impacts on Park Operations

Methodology and Regulations
Same as Alternative A.

Analysis
Rehabilitation of the buildings and other features at the project area to good condition is estimated at approximately $607,000. Projects funded to date for repair of the utility systems and rehabilitation of buildings is $257,000. This includes $50,000 to upgrade the proposed two trails. Therefore $350,000 is estimated to be needed to complete rehabilitation of buildings and repair trails. Once the buildings, utilities, trails are upgraded, annual maintenance operating costs are estimated at $52,000 per year.

Under Alternative C, building rehabilitation would occur and the sewage and water system would be upgraded. Impacts caused by this expenditure of $350,000 are expected to be short-term and minor (13% of one-time special funding) to park operations for one-time funding. Levels of cyclic maintenance needed are estimated at approximately $52,000 annually (currently paid for by tenant) and would be a necessary expense by NPS. Therefore, expenditures are anticipated and negligible negative impacts to park operational costs ($52,000 is approximately 1% of park operating budget) would occur. Over time, as buildings are upgraded, maintenance requirements would be expected to be less substantial. Because the National Park Service would provide visitor services at the site, there would be new costs and negligible impacts that would occur in providing services for visitors. However, reservations and education programs would be handled by existing staff.

Under this alternative, a park partner would be expected to provide financial contributions to the rehabilitation of the buildings and cyclic maintenance of the site. For analysis purposes, the worst

case scenario was analyzed. The analysis assumes the NPS will be responsible for all costs associated with site rehabilitation and maintenance.

Conclusion
Under Alternative C, the rehabilitation and operational costs for the Wilkins Ranch would be increased for the NPS. A one-time expenditure of $350,000 is estimated to be needed to completely rehabilitate buildings and repair trails. However, impacts are expected to be short-term and minor (13% of special one-time funding). Increased cyclic maintenance initially would be needed but would be less over time as buildings and trails are upgraded and repaired. For example, once the roof of the main house is replaced, it should last approximately 20 years. Impacts to the park operations budget are considered to be negligible for operations and short-term and minor for special funding.

Cumulative Impacts
Several cultural resource preservation projects have been conducted in the Olema Valley within the last five years. The historic bunkhouse at Truttman Ranch, northern Olema Valley, has been reroofed and is slated as a project for restoration in early 2002. The Giacomini Ranch house and main barn, in southern Olema Valley, have received preservation treatments to ensure long-term preservation. In 1997, the main barn at the Wilkins Ranch was stabilized. These projects along with others listed in Appendix G, with Alternative B, have a short-term moderate adverse impact on park operations.

Impacts on Visitor Experience

Methodology and Policies
Same as Alternative A.

Analysis
Under this alternative, construction and rehabilitation would occur at the main complex and along the two trail corridors. Therefore, there will be some short-term minor impacts on visitor experience due to construction activity. However, long-term beneficial impacts to visitor experience would occur due to enhanced recreational use and public access. Future visitor use at the Wilkins Ranch would increase to approximately 2000 hikers on trails and 750 per year (groups by reservation), but adverse impacts from additional visitors would be negligible and little noticed by visitors and local residents. These additional visitors would be spread over a 12 month period.

Conclusion
Some minor beneficial impacts on visitor experience would occur due to increased public access. The intensity of impacts from short-term construction activities would be minor. No long-term adverse impairments to visitor experience would result from this alternative.

Cumulative Impacts

No other change in the overall park trail system is anticipated. The Hagmaier Complex has been rehabilitated and will provide additional access to researchers and scientists (approximately 8-10 scientists). Visitor experience as a result of this science facility is expected to be beneficial by increasing visitor participation. Additional use of the Learning Center classroom at Bear Valley may increase visitation to the park (expected to be less than 1000 students). The cumulative impacts of this alternative and other projects on visitor experience would be long-term beneficial and minor.

Summary Comparison of Impacts by Alternative

Environmental Criteria	Alternative A: No Action	Alternative B: Residential and Public Access	Alternative C: Conservation and Education Center and Public Access
Vegetation	Long-term moderate adverse impact to native vegetation.	Long-term moderate adverse impact. Short-term impacts to two acres for new septic system and upgrading of trails.	Long-term moderate adverse impact. Short-term impacts to two acres for new septic system and upgrading of trails.
Wetlands	Long-term minor adverse impact to riparian areas and wetlands due to lack of exclusionary fencing.	Long-term moderate beneficial impacts due to the installation of riparian protection fencing. Short-term impacts during construction	Long-term moderate beneficial impacts due to the installation of riparian protection fencing. Short-term impacts during construction.
Wildlife	Long-term minor adverse impacts to wildlife.	Long-term beneficial moderate impacts to wildlife due to vegetation treatments. Some short-term minor impacts during rehabilitation of trails and buildings.	Long-term beneficial moderate impacts to wildlife due to vegetation treatments. Some short-term minor impacts during rehabilitation of trails and buildings.
Cultural Resources	Long-term moderate adverse impacts to cultural resources would occur due to lack of rehabilitation.	Long-term beneficial impacts to cultural resources by rehabilitation of structures.	Long-term beneficial impacts to cultural resources by rehabilitation of structures.
Visual Quality	Long-term adverse impacts related to lack of rehabilitation of structures would lead to visual quality impacts.	Beneficial long-term impacts due to preservation of historic structures and cultural landscape. Some minor short-term impacts during rehabilitation of buildings.	Beneficial long-term impacts due to preservation of historic structures and cultural landscape. Some minor short-term impacts during rehabilitation of buildings.
Human Health and Safety	Moderate adverse impacts if water and sewage systems are not upgraded.	Moderate beneficial impacts due to upgrades of water and sewage systems. Site would comply with applicable federal, state, and local codes. Some minor impacts to public services.	Moderate beneficial impacts due to upgrades of water and sewage systems. Site would comply with applicable federal, state, and local codes. Some minor impacts to public services
Noise	No change.	Minor short-term impacts due to building rehabilitation activities. No change long-term to noise levels.	Minor short-term impacts due to building rehabilitation activities. No change long-term to noise levels.
Housing	No change.	No short or long-term impacts on housing market.	Some minor impacts on local housing market.
Traffic	No change.	Negligible adverse impacts to traffic.	Negligible adverse impacts to traffic.

Environmental Criteria	Alternative A: No Action	Alternative B: Residential and Public Access	Alternative C: Conservation and Education Center and Public Access
Visitor Experience	No change.	Short-term minor adverse impacts due to building rehabilitation activity. Long-term minor beneficial impacts due to additional public access. Adverse impact due to additional visitors would be negligible.	Short-term minor adverse impacts due to building rehabilitation activity. Long-term minor beneficial impacts due to additional public access. Adverse impact due to additional visitors would be negligible.
Park Operations	Negligible adverse impacts if cyclic maintenance increases.	Short-term minor impacts due to costs of building rehabilitation. Long-term negligible impacts due to on-going maintenance needs at site.	Short-term minor impacts due to costs of building rehabilitation. Long-term negligible impacts due to on-going maintenance needs at site.

Consultation and Coordination

Public scoping for the project was held between October 21 and November 30, 2000. To initiate the scoping, a preliminary proposal for the Wilkins Ranch complex was presented to the public at the October 21, 2000 meeting of the Point Reyes Committee of the Golden Gate National Recreation Area and Point Reyes National Seashore Citizen's Advisory Commission.

Several informal briefings with governmental agencies and organized interested groups have been held to discuss the project in general. These meetings included a discussion and presentation to the Bolinas Public Utility District (BPUD) in November 2000 and several other discussions with the BPUD Ad Hoc Planning Committee.

Copies of the assessment are being made available to interested private organizations, government agencies, and individuals for a minimum period of 30 days. News releases to local and regional media have announced the document's availability.

Informal consultation regarding Threatened and Endangered Species is underway with the U.S. Fish and Wildlife Service.

Section 106 Historic Preservation Act compliance is being completed.

Consistency with the California Coastal Act will be determined after consultation with the staff of the California Coastal Commission.

Plan Preparers and Contributors

The plan alternatives and environmental assessment were prepared by the Point Reyes National Seashore staff with assistance from planning staff in the Pacific Great Basin Support Office, NPS.

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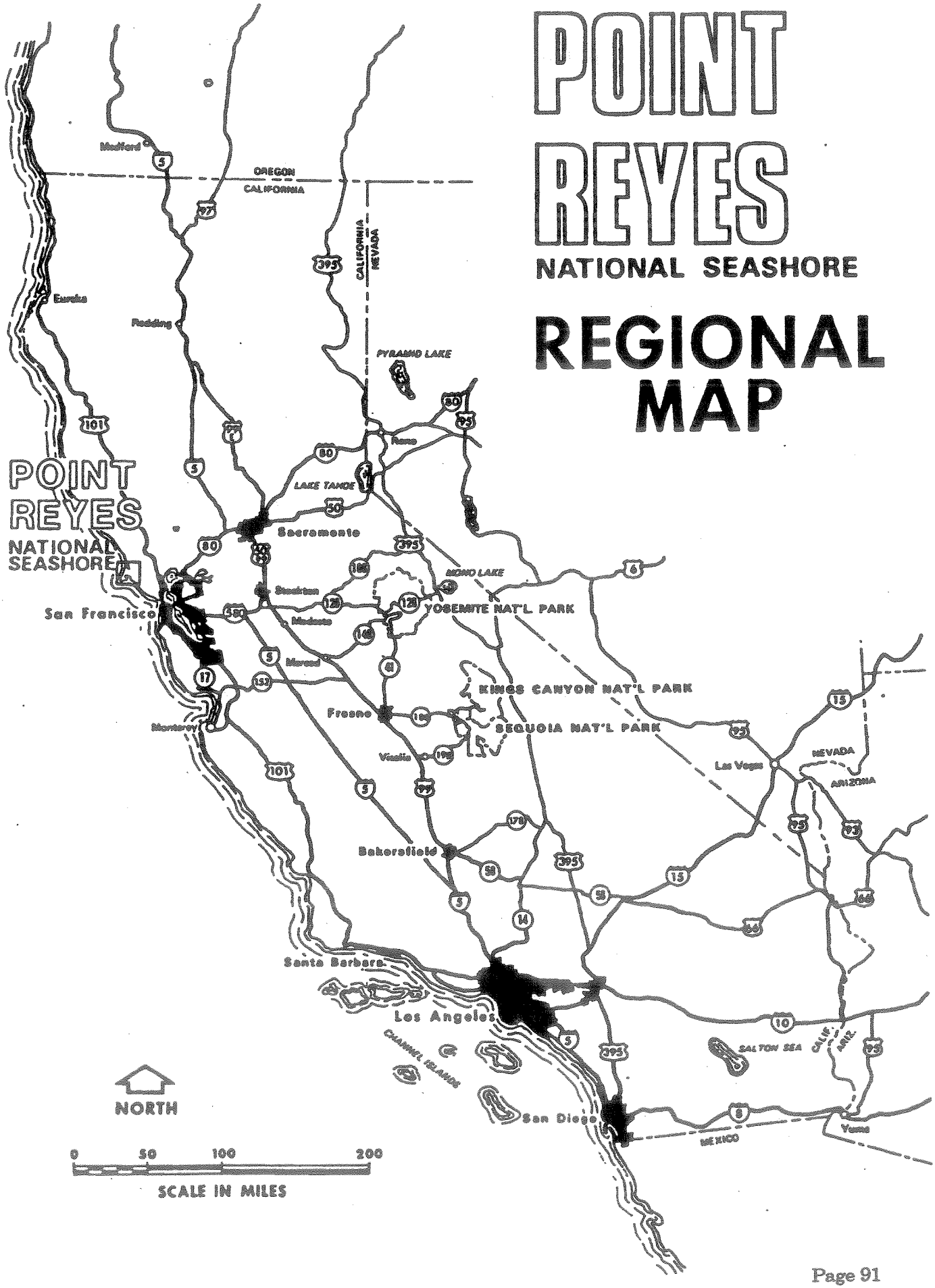
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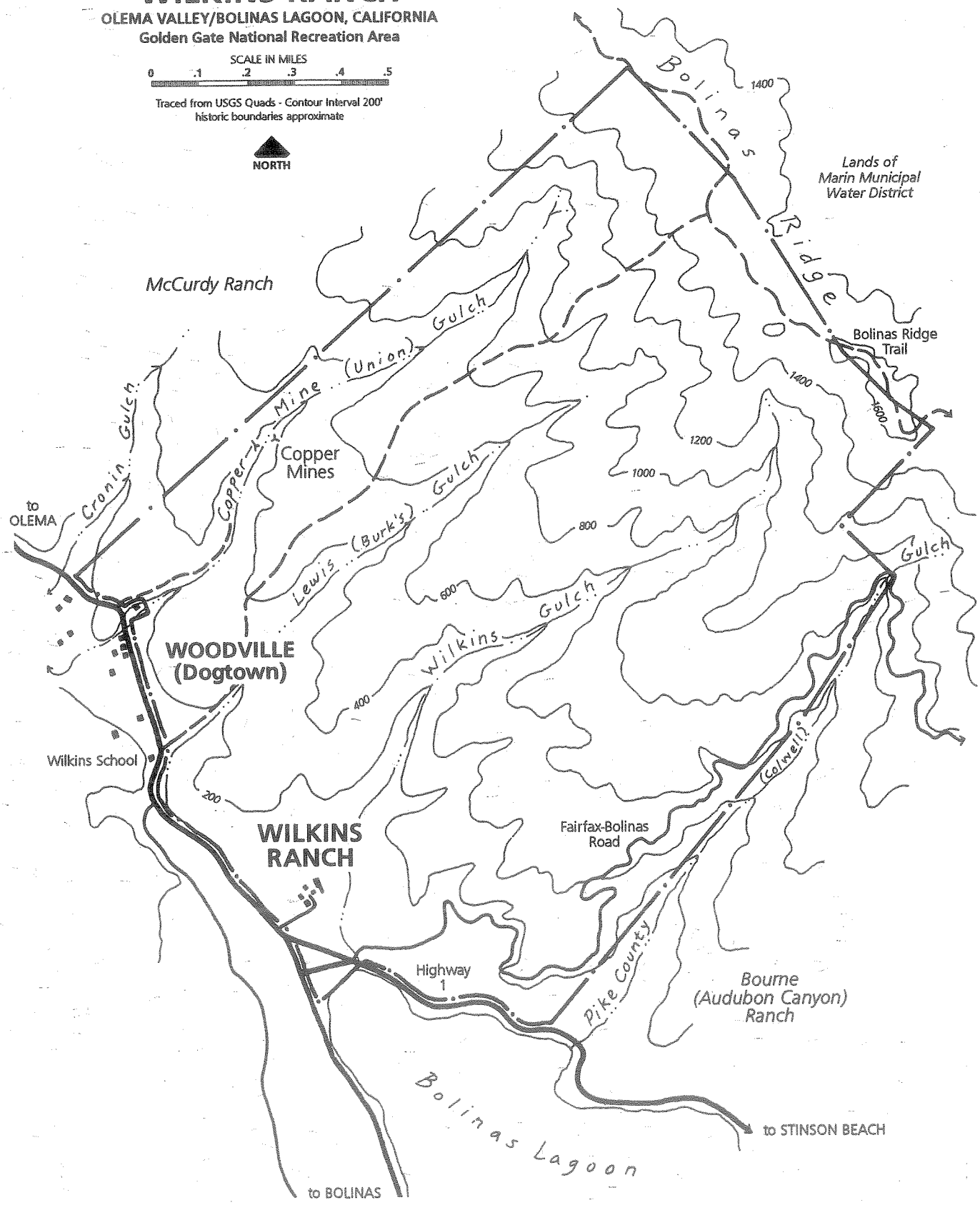
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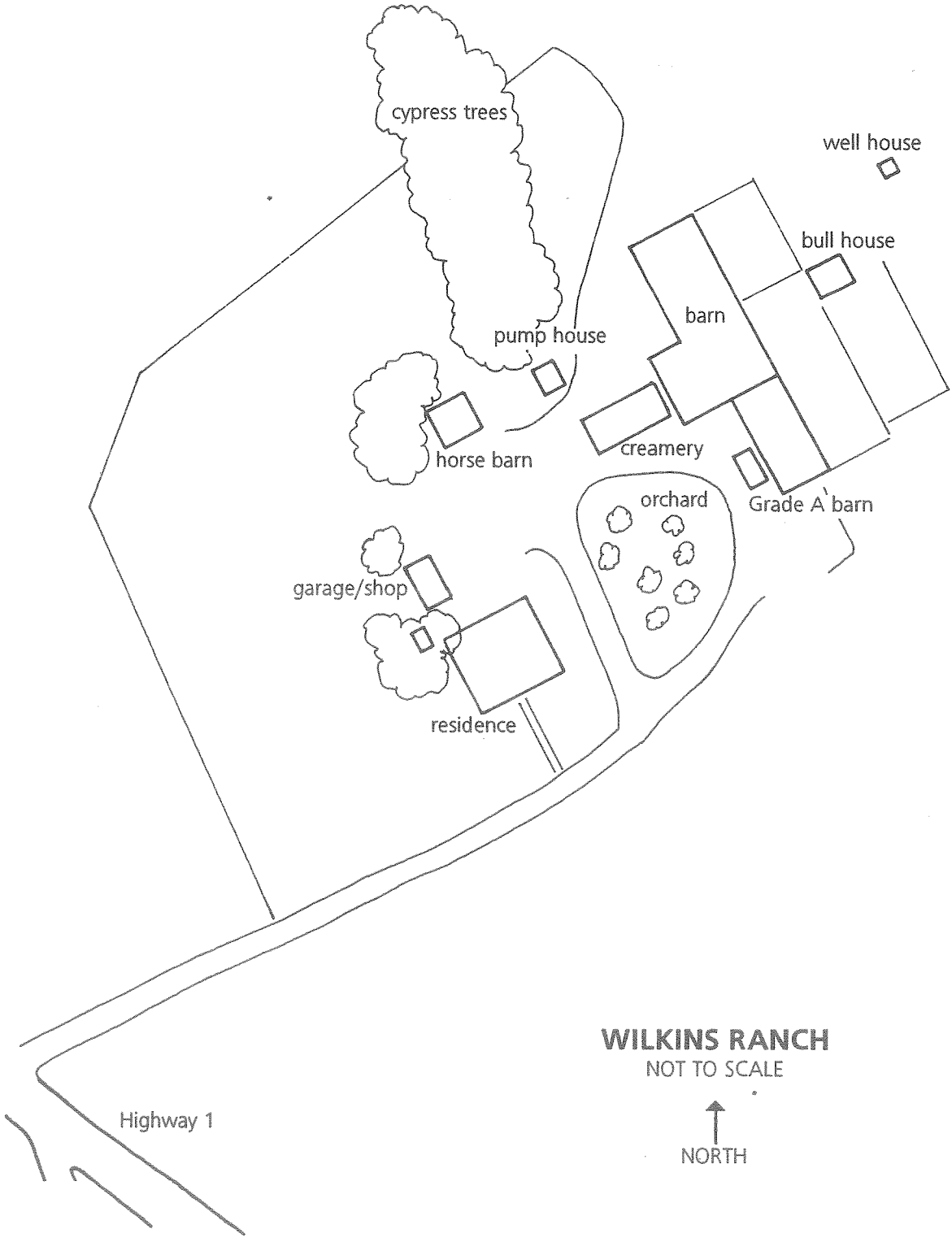
Appendix A: Location Map

POINT REYES
NATIONAL SEASHORE
REGIONAL MAP



Appendix B: Main Complex and Ranch Map


WILKINS RANCH
OLEMA VALLEY/BOLINAS LAGOON, CALIFORNIA
Golden Gate National Recreation Area
SCALE IN MILES
0 .1 .2 .3 .4 .5
Traced from USGS Quads - Contour Interval 200'
historic boundaries approximate
NORTH
Bolinas Ridge
1400
Lands of Marin Municipal Water District
McCurdy Ranch
Cronin Gulch
Copper-Mine (Union) Gulch
Copper Mines
Bolinas Ridge Trail
1400
1600
1200
1000
800
600
400
200
to OLEMA
Lewis (Burk's) Gulch
Gulch
Wilkins Gulch
WOODVILLE (Dogtown)
Wilkins School
WILKINS RANCH
Fairfax-Bolinas Road
(Colwell)
Highway 1
Pike County
Bourne (Audubon Canyon) Ranch
to STINSON BEACH
Bolinas Lagoon
to BOLINAS


cypress trees
well house
bull house
barn
pump house
horse barn
creamery
Grade A barn
orchard
garage/shop
residence
Highway 1
WILKINS RANCH
NOT TO SCALE
NORTH

Appendix C: Summary of Mitigation Measures for Preferred Alternative

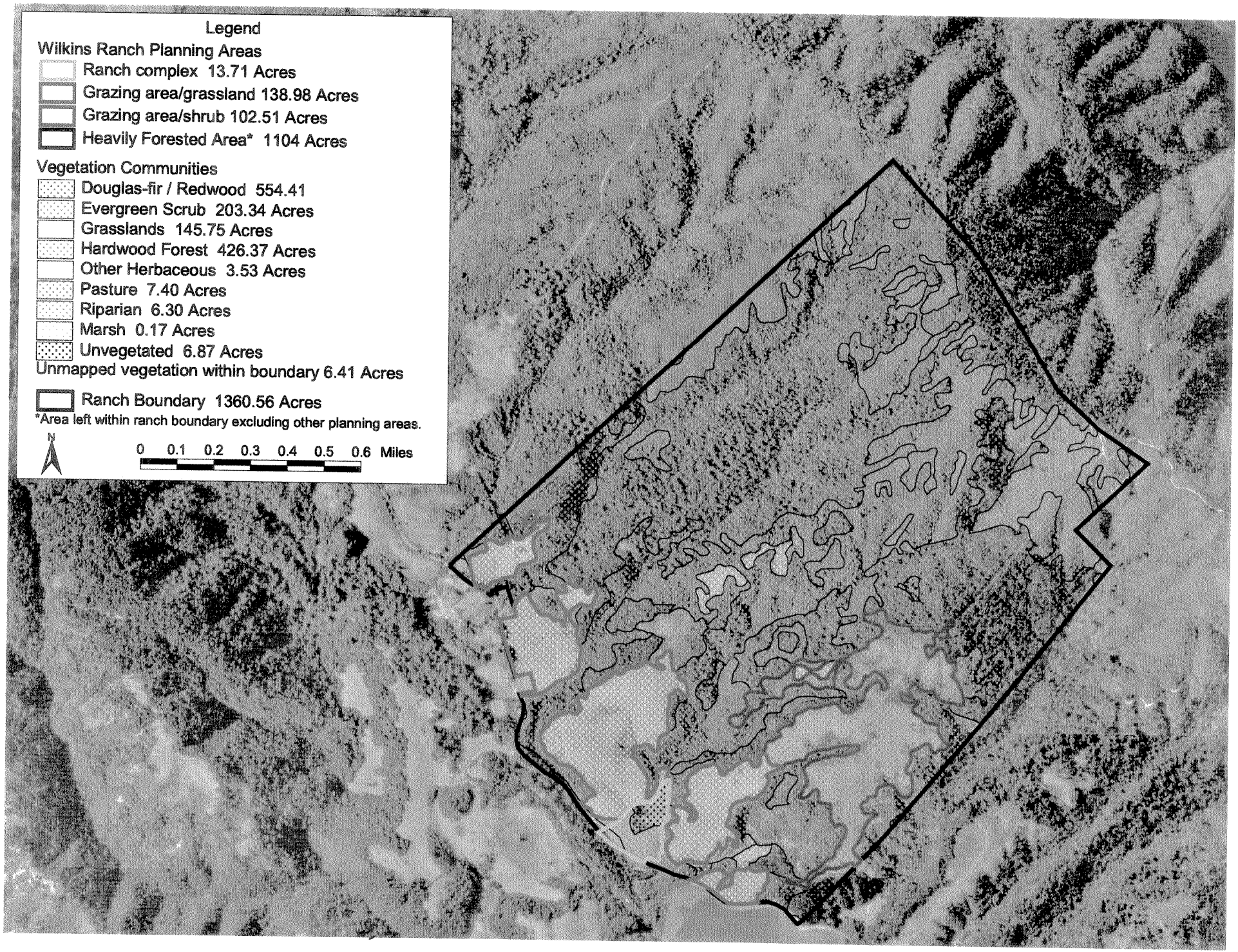
Park: Golden Gate National Recreation Area/Point Reyes National Seashore

Project: Conservation and Education Center at Wilkins Ranch and Public Access

IMPACT	PRESCRIBED MITIGATION AND RESPONSIBILITY
Vegetation	To mitigate the potential invasion of non-native vegetation, disturbed areas will be monitored and non-native plants removed after construction if appropriate. Areas will be replanted with native plants where needed. If necessary, planting with native plants will occur. Long-term management will be guided by a vegetation management plan and fire management plan (PRNS Resource Management).
Wetlands	Construction sites will be monitored during rehabilitation of the buildings, trail maintenance and utility upgrades and appropriate measures taken to ensure Bolinas Lagoon and other water courses are not contaminated with sediments and construction debris. Soil and straw bale berms and plastic fencing will be established, as necessary.
Wildlife	PRNS Resources Management Staff will monitor species before, during, and after the proposed project to insure disturbance is minimal. Resident bird nesting season will be avoided.
T/E Species	Before any work is initiated, the NPS will survey the area and consult with USFWS if necessary.
Cultural Resources	If any archeological or historic material is located during construction, the project will be stopped and the area evaluated by the NPS Regional Archeologist. All rehabilitation work on historic structures and the cultural landscape will be monitored by the park Historic Architect.
Visual Quality	NA
Health and Safety	NA
Noise	Short-term noise impacts will occur only during normal business hours on weekdays as crews rehabilitate structures and trails. Residents will be notified of construction activity and hours of all

	construction activity will be regulated. No construction activity can will occur before 7:00 am or after 7:00 pm.
Public Services	NA
Visitor Experience	NA
Park Operations	NA

Appendix D: Vegetation Types Map and Planning Area Zones


Legend
Wilkins Ranch Planning Areas
Ranch complex 13.71 Acres
Grazing area/grassland 138.98 Acres
Grazing area/shrub 102.51 Acres
Heavily Forested Area* 1104 Acres
Vegetation Communities
Douglas-fir / Redwood 554.41
Evergreen Scrub 203.34 Acres
Grasslands 145.75 Acres
Hardwood Forest 426.37 Acres
Other Herbaceous 3.53 Acres
Pasture 7.40 Acres
Riparian 6.30 Acres
Marsh 0.17 Acres
Unvegetated 6.87 Acres
Unmapped vegetation within boundary 6.41 Acres
Ranch Boundary 1360.56 Acres
*Area left within ranch boundary excluding other planning areas.
N
0 0.1 0.2 0.3 0.4 0.5 0.6 Miles

Appendix E: Glossary of Terms and Acronyms

Definitions

The controlling definitions for terms under CEQ's NEPA regulations are contained at 40 CFR. The numbers in parentheses refer to the appropriate section of 40 CFR. These definitions are provided as a supplement to those regulatory definitions.

Categorical exclusion (CE) (1508.4)—An action with no measurable environmental impact which is described in one of the categorical exclusion lists in section 3-3 or 3-4 and for which no exceptional circumstances (section 3-5) exist. NPS also uses the acronym "CX" to denote a categorical exclusion.

Connected actions (1508.25)—Actions that are closely related. They automatically trigger other actions that have environmental impacts, they cannot or will not proceed unless other actions have been taken previously or simultaneously, or they are interdependent parts of a larger action and/or depend on the larger action for their justification.

Conservation planning and impact assessment—Within NPS, this process is synonymous with the NEPA process. This process evaluates alternative courses of action and impacts so that decisions are made in accord with the conservation and preservation mandate of the NPS Organic Act.

Cooperating agency (1508.5)—A federal agency other than the one preparing the NEPA document (lead agency) that has jurisdiction over the proposal by virtue of law or special expertise and that has been deemed a cooperating agency by the lead agency. State or local governments, and/or Indian tribes, may be designated cooperating agencies as appropriate (see 1508.5 and 1502.6).

Cultural resources (NPS-28, appendix A)—Aspects of a cultural system that are valued by or significantly representative of a culture or that contain significant information about a culture. A cultural resource may be a tangible entity or a cultural practice. Tangible cultural resources are categorized as districts, sites, buildings, structures, and objects for the National Register of Historic Places, and as archeological resources, cultural landscapes, structures, museum objects, and ethnographic resources for NPS management purposes.

Cumulative actions (1508.25)—Actions that, when viewed with other actions in the past, the present, or the reasonably foreseeable future, regardless of who has undertaken or will undertake them, have an additive impact on the resource the proposal would affect.

Cumulative impact (1508.7)—The impacts of cumulative actions.

Direct effect (1508.8)—An impact that occurs as a result of the proposal or alternative in the same place and at the same time as the action.

Environmental assessment (EA) (1508.9)—A brief NEPA document that is prepared to (a) help determine whether the impact of a proposal or alternatives could be significant; (b) aid NPS in compliance with NEPA by evaluating a proposal that will have no significant impacts, but that may have measurable adverse impacts; or (c) evaluate a proposal that either is not described on the list of categorically excluded actions, or is on the list but exceptional circumstances (section 3-5) apply.

Environmental impact statement (EIS) (1508.11)—A detailed NEPA document that is prepared when a proposal or alternatives have the potential for significant impact on the human environment.

Environmental screening process—The analysis that precedes a determination of the appropriate level of NEPA documentation. The minimum requirements of the environmental screening process are a site visit, consultation with any agency that has jurisdiction by law or special expertise, and the completion of a screening checklist. The process must be complete for all NPS actions that have the potential for environmental impact and are not described in section 3-3.

Environmentally preferred alternative (1505.2, Q6a)—Of the alternatives analyzed, the one that would best promote the policies in NEPA section 101. This is usually selected by the IDT members. It is presented in the NPS NEPA document (draft and final EIS or EA) for public review and comment.

Exceptional circumstances—Circumstances that, if they apply to a project described in the NPS categorical exclusion lists (sections 3-3 and 3-4), mean a CE is inappropriate and an EA or an EIS must be prepared because the action may have measurable or significant impacts. Exceptional circumstances are described in section 3-5.

Finding of no significant impact (FONSI) (1508.13)—A determination based on an EA and other factors in the public planning record for a proposal that, if implemented, would have no significant impact on the human environment.

Human environment (1508.14)—Defined by CEQ as the natural and physical environment, and the relationship of people with that environment (1508.14). Although the socioeconomic environment receives less emphasis than the physical or natural environment in the CEQ regulations, NPS considers it to be an integral part of the human environment.

Impact topics—Specific natural, cultural, or socioeconomic resources that would be affected by the proposed action or alternatives (including no action). The magnitude, duration, and timing of the effect to each of these resources is evaluated in the impact section of an EA or an EIS.

Indirect impact (1508.8)—Reasonably foreseeable impacts that occur removed in time or space from the proposed action. These are "downstream" impacts, future impacts, or the impacts of reasonably expected connected actions (e.g., growth of an area after a highway to it is complete).

Issues—In NEPA, issues are environmental, social, and economic problems or effects that may occur if the proposed action or alternatives (including no action) are implemented or continue to be implemented.

Lead agency (1508.16)—The agency either preparing or taking primary responsibility for preparing the NEPA document.

Major federal action (1508.18)—Actions that have a large federal presence and that have the potential for significant impacts to the human environment. They include adopting policy, implementing rules or regulations; adopting plans, programs, or projects; ongoing activities; issuing permits; or financing projects completed by another entity.

Memo to file—A memo to the planning record or statutory compliance file that NPS offices may complete when (a) NEPA has already been completed in site-specific detail for a proposal, usually as part of a document of larger scope, or (b) a time interval has passed since the NEPA document was approved, but information in that document is still accurate.

Mitigated EA (Q40)—An EA that has been rewritten to incorporate mitigation into a proposal or to change a proposal to reduce impacts to below significance.

Mitigation (1508.20)—A modification of the proposal or alternative that lessens the intensity of its impact on a particular resource.

NEPA process—The objective analysis of a proposal to determine the degree of its environmental and interrelated social and economic impacts on the human environment, alternatives and mitigation that reduce that impact, and the full and candid presentation of the analysis to, and involvement of, the interested and affected public.

Notices of availability—Separate notices submitted to the *Federal Register* that the draft EIS and the final EIS are ready for distribution.

Notice of intent (1508.22)—The notice submitted to the *Federal Register* that an EIS will be prepared. It describes the proposed action and alternatives, identifies a contact person in NPS, and gives time, place, and descriptive details of the agency's proposed scoping process.

Preferred alternative (1502.14 (e))—The alternative an NPS decision-maker has identified as preferred at the draft EIS stage or EA. Identification of the preferred alternative helps the public focus its comments during review of the NEPA document.

Programmatic documents—Broader scope EAs or EISs that describe the impacts of proposed policy changes, programs, or plans.

Proposal (1508.23)—The stage at which NPS has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal. The goal can be a project, plan, policy, program, and so forth. NEPA begins when the effects can be meaningfully evaluated.

Record of decision (ROD) (1505.2)—The document that is prepared to substantiate a decision based on an EIS. It includes a statement of the decision made, a detailed discussion of decision rationale, and the reasons for not adopting all mitigation measures analyzed, if applicable.

Scoping (1508.25)—Internal NPS decision-making on issues, alternatives, mitigation measures, the analysis boundary, appropriate level of documentation, lead and cooperating agency roles, available references and guidance, defining purpose and need, and so forth. External scoping is the early involvement of the interested and affected public.

Tiering (1508.28)—The use of broader, programmatic NEPA documents to discuss and analyze cumulative regional impacts and define policy direction, and the incorporation by reference of this material in subsequent narrower NEPA documents to avoid duplication and focus on issues "ripe for decision" in each case.

Acronyms

CE	Categorical exclusion
CEF	Categorical exclusion form
CEQ	President's Council on Environmental Quality
CX	Categorical exclusion
DEC	Division Environmental Comment request issued by NPS Environmental Quality Division-WASO
DM	Departmental manual
DOI	Department of the Interior
EA	Environmental assessment
ECM	Environmental compliance memorandum
EIS	Environmental impact statement
EO	Executive order
EPA	Environmental Protection Agency
ER	Environmental Review issued by the Department of the Interior
ERM	Environmental review memorandum
ESA	Endangered Species Act
ESM	Environmental statement memorandum
ESF	Environmental screening form
EQD	Environmental Quality Division
FONSI	Finding of no significant impact
GGNRA	Golden Gate National Recreation Area
GIS	Geographic Information System
GMP	General management plan
IDT	Interdisciplinary team
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOA	Notice of availability
NOI	Notice of intent
NPS	National Park Service
PRNS	Point Reyes National Seashore

REO	Regional environmental officer
ROD	Record of decision
SSO	System support office
SHPO	State Historic Preservation Office
USFWS	United States Fish and Wildlife Service
WASO	Washington, D.C., Office of the National Park Service

Appendix F: Management Objectives from General Management Plan (1980)

MANAGEMENT OBJECTIVES
GOLDEN GATE NATIONAL RECREATION AREA

Achievement of the following key management objectives will ensure that the purpose for which the parks were established is fulfilled.

Preservation and Restoration of Natural Resources

To maintain the primitive and pastoral character of the parklands in northern Marin County by providing only minimum, dispersed development. Necessary concentrated developments will be confined to the southern Marin County and San Francisco portions of the recreation area.

To locate development in areas previously disturbed by human activity whenever possible.

To maintain grazing in certain suitable areas and at appropriate levels for the purpose of helping to control fire fuels and as an educational and aesthetic element for visitor enjoyment.

To maintain and restore the character of natural environment lands by maintaining the diversity of native park plant and animal life, identifying and protecting threatened and endangered plant and animal species, marine mammals, and other sensitive natural resources, controlling exotic plants, and checking erosion whenever feasible.

Preservation and Restoration of Cultural Resources

To reuse existing buildings for visitor and management needs in order to help preserve historic structures and reduce building costs.

To retain the current character of cultural resources pending completion of detailed resource management plans.

To recognize the importance of the cultural resources within the recreation area through a positive program of their identification, evaluation, preservation, management, and interpretation.

Making the Recreation Area Readily Available to the Broadest Variety of Park Users

To pursue the extension of transit service between the park and transit dependent neighborhoods.

To offer recreational opportunities to a diversity of park users and to impart knowledge necessary for full enjoyment of park resources through a particular emphasis on interpretation, education, and information programs.

To develop facilities and programs that respond to the special n6eds of senior citizens, the handicapped, and cultural and ethnic minorities.

To encourage community organizations to utilize park- areas and facilities as a setting for their own recreation and, education programs.

Provision of a Broad Variety of Park Experiences

To plan facilities to offer a wide variety of uses.

To retain opportunities for recreational activities pursued in the park today.

To develop a trail system for the use of hikers, bicyclists, and equestrians.

To offer visitors a more extensive exposure to the park's resources through the provision of a variety of overnight experiences.

To enhance the visitors' enjoyment of park resources by providing food and rental services where the need is demonstrated.

Consideration of Park Neighbors

To alleviate traffic impacts on adjacent communities and on park resources by the use of transit systems.

To balance the responsibility of meeting the needs of park visitors with the need to protect the interests of residents of adjacent communities.

MANAGEMENT OBJECTIVES: POINT REYES NATIONAL SEASHORE

Natural Resource Management

To identify, protect, and perpetuate the diversity of existing ecosystems which are found at Point Reyes National Seashore and are representative of the California seacoast.

To protect marine mammals, threatened and endangered species, and other sensitive natural resources found within the seashore.

To enhance knowledge and expertise of ecosystem management through research and experimental programs relating to wildlife, prescribed burning techniques, exotic plant and animal reduction, regulation and control of resource use, and pollution control.

To preserve and manage as wilderness those lands so designated under Public Law 94-567 and to also manage as wilderness to the extent possible those tidelands and lands legislatively designated as potential wilderness.

To retain research natural area status for the Estero de Limantour and the Point Reyes Headlands reserves and propose other suitable sites if found highly desirable for research and necessary for resource protection.

To manage seashore activities in the pastoral and estuarine areas in a manner compatible with resource carrying capacity.

To monitor grazing and improve range management practices in the pastoral zone in cooperation with the ranchers and the Soil Conservation Service.

To monitor and improve maricultural operations, in particular the oyster farm operation in Drakes Estero, in cooperation with the California Department of Fish and Game.

To monitor activities occurring on nonfederal properties within the national seashore owned by the Radio Corporation of America, the American Telephone and Telegraph Company, and the Vedanta Society, to ensure that land uses are in agreement with the legislative acquisition exemption.

Cultural Resource Preservation

To identify, protect, and preserve the significant historic and cultural resources of Point Reyes.

To identify features and events that have played a vital part in the recorded history of Point Reyes, such as earthquakes, shipwrecks, land and water uses, the voyage of Sir Francis Drake, and the former U.S. Coast Guard lighthouse and lifeboat station.

To enhance knowledge of the Miwok Indian culture through research and investigation of the numerous archeological sites located at Point Reyes.

To preserve and protect all structures in or nominated to the National Register of Historic Places, and to stabilize and protect other structures and sites pending their historical evaluation.

To monitor and support productive land uses and activities which are consistent with historical patterns.

To ensure that agricultural and maricultural activities are consistent with the historical evolution of land and water use at Point Reyes.

Interpretation

To offer interpretive programs and services which further an awareness and appreciation of the wide diversity of seashore ecosystems and cultural resources, their variety and similarity, their interdependence, and their fragile nature.

To develop programs for interpretation which foster an environmental preservation. awareness of the conditions imposed by preservation.

To offer visitor orientation and information programs which furnish a general knowledge of the wide diversity of the seashore and enhance visitor appreciation and knowledge.

To provide opportunities for emphasizing environmental education and programs related to the resource, including the coastal environment.

To continue to interpret the replica Miwok Indian village to further visitor understanding and appreciation of the Miwok Indian heritage.

Visitor Activities

To provide for and permit only those cultural, educational, and recreational activities which are compatible with the preservation of an undeveloped coastline.

Development

To ensure that park development is the minimum necessary for efficient and essential management and that visitor services are consistent with the seashore purposes and compatible with natural resource limitations and the special requirements imposed by the coastal environment.

Access and Circulation

To provide access to and circulation within the seashore which is compatible with other park objectives and considers a full range of alternative means of transportation.

Appendix G: Other Projects Considered in Cumulative Analysis

1. The proposed McClure Dairy Barn and Resource Enhancement Project. Located in the North District of Point Reyes NS, the project would construct an 81,000 square foot loafing barn and develop manure holding ponds to enhance water quality. The project would enhance the viability of the ranch and exclusionary fencing will increase natural resource protection in the project area. One housing unit will be added to the complex.

2. The Pacific Coast Learning Center has been initiated in existing buildings in Olema Valley at the former Hagmaier Ranch. The site is used for office space, housing, and fire fighting and maintenance equipment. No new construction has occurred and park and visitor use has occurred on the site for over 20 years.

3. Sewage systems upgrades have been conducted at one residential unit on NPS lands and three new systems in residential units are planned for this fiscal year. The three units are all located in upper Olema Valley. The NPS headquarters buildings are receiving a new sewage system.

4. The NPS has initiated several riparian protection projects in Olema Valley for coho salmon and steelhead restoration. These projects include riparian exclusionary fencing on Blueline Creek, Giacomini Creek, Cheda Creek, and other tributaries.

5. Several cultural resource preservation projects have been conducted in the Olema Valley within the last five years. The historic bunkhouse at Truttman Ranch, northern Olema Valley, has been reroofed and is slated as a project for restoration in early 2002. The Giacomini Ranch house, in southern Olema Valley, and main barn have received preservation treatments to ensure long-term preservation. In 1997, the main barn at the Wilkins Ranch was stabilized. The main barn at Truttman will be stabilized in FY2001.

6. The MCI building in the North District of Point Reyes National Seashore is receiving rehabilitation and will provide office space for district rangers. Ranger staff will be moved from existing office. Fire staff will also use the office space. No additional construction will occur.

7. The Point Reyes Hostel has developed a proposal for upgrading housing, a new sewage system, and for providing additional overnight lodging. The proposal will increase lodging capability from 44-52 persons. Housing for staff will increase from 2 to 4 units.

8. The Red Barn at park headquarters is being rehabilitated for curatorial storage and classroom space. There will also be office space for existing Marine Sanctuary staff and park staff.

Appendix H: Programmatic Agreement with State Historic Preservation Office and Advisory Council on Historic Preservation

PROGRAMMATIC AGREEMENT AMONG THE WESTERN REGION, NATIONAL PARK SERVICE, USDI (NPS-WR), GOLDEN GATE NATIONAL RECREATION AREA, NATIONAL PARK SERVICE, USDI (NPS-GOGA) THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER (SHPO), AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP) REGARDING THE OPERATION AND MAINTENANCE ACTIVITIES IN GOLDEN GATE NATIONAL RECREATION AREA

WHEREAS, the Golden Gate National Recreation Area (GOGA), Western Region, National Park Service, operates, manages, administers, maintains, preserves, and interprets the historic properties of the Park to leave them unimpaired for the enjoyment of future generations; and,

WHEREAS, Public Law 92-589 (October 27, 1972), established the Golden Gate National Recreation Area to preserve for public use and enjoyment certain areas possessing outstanding natural, historic, scenic, and recreational values, and provided for the inclusion of the Presidio of San Francisco within GOGA should the Department of Defense determine it to be excess to its needs; and,

WHEREAS, by Public Law 100-526, the Base Closure and Realignment Act of 1988, the U.S. Army will transfer, over several years, the Presidio of San Francisco to the National Park Service; and,

WHEREAS, the resulting Golden Gate National Recreation Area will contain one of the largest complexes of historic properties in the National Park System and nation, including an estimated 2,000 historic buildings and structures, over 14 properties on the National Register of Historic Places (NR), 5 National Historic Landmarks (NHL), and 4 properties determined eligible for the National Register (NR-E); and,

WHEREAS, the NPS has established Management Policies, Cultural Resource Management Guidelines (NPS-28) and utilizes the Standards/Guidelines established by the Secretary of the Interior for the treatment and management of historic properties consistent with the spirit and intent of the National Historic Preservation Act of 1966, Amended (NHPA; 16 U.S. 470f et seq.); and,

WHEREAS, the GOGA has a staff of historic preservation specialists (archeologist, curator, historian, and historical architect) who are qualified or under the direct supervision of a person or persons meeting at a minimum the appropriate qualifications set forth in the Department of the Interior's "Professional Qualifications Standards" (48 FR 44738-46739) to carry out programs for historic properties, or, in the absence of one or more of these specialists, direct access to the historic preservation staff of the Western Regional Office, NPS; and,

WHEREAS, the NPS has consulted with the State Historic Preservation Officer and the Advisory Council regarding ways to ensure that NPS operate, manage, administer, maintain, and preserve GOGA historic properties in accordance with the NPS policies and guidelines; and,

NOW, THEREFORE, the NPS, SHPO, and ACHP agree that the NPS shall carry out its responsibilities under Sections 101, 106, 110, 111 of the NHPA as applicable, with respect to the management of GOGA in accordance with the following stipulations:

STIPULATIONS

A. POLICY

The GOGA shall manage and preserve the historic properties of the park through undertakings and research, consistent with good historic preservation management and stewardship. These efforts are, and will remain, in keeping with the NHPA, the National Environmental Policy Act of 1969 (NEPA), the American Indian Religious Freedom Act, the Archeological Resources Protection Act, and the NPS Management Policies for Historic Properties. It remains the NPS goal to implement these programs with public review coordinated by the Golden Gate Advisory Commission, a Congressionally-established Commission (PL 92-589, Section 5) in consultation with other federal agencies, State Historic Preservation Officer, Indian Tribes, city and county governments and their respective authorities, and the public.

Guidelines, Standards, and regulations that are relevant to this Agreement and will provide guidance and performance standards for management of historic properties include:

ACHP	The Section 110 Guidelines: Annotated Guidelines for Federal Agency Responsibilities under Section 110 of the National Historic Preservation Act.
ACHP	Treatment of Archeological Properties: A Handbook
FHWA	Manual for Uniform Traffic Control Services
NPS	Maintenance Management Program, Operations Manual, Parts 1&2
NPS	Museum Handbook
NPS-2	Planning Process Guideline
NPS-6	Interpretive and Visitor Services Guidelines
NPS-12	NEPA Compliance Guidelines
NPS-28	Cultural Resource Management Guidelines
NPS-38	Historic Property Leasing Guideline
NPS-61	Guidelines for National Cemetery Operations
NPS-76	Housing Design and Rehabilitation Guidelines
USDI	Abandoned Shipwreck Guidelines
USDI	Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines
USDI	The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings
USDI	The Secretary of the Interior's Standards for Historic Preservation Projects with Guidelines for Applying the Standards
	Uniform Federal Handicapped Accessibility Standards (49 FR 31528-31617)

B. IDENTIFYING HISTORIC PROPERTIES

NPS-GOGA through NPS-WR will consult with the SHPO on activities to locate, inventory, and nominate to the National Register properties which may qualify, in accordance with Section 110, NHPA. NPS-GOGA through NPS-WR will consult with the SHPO on broad research and studies.

NPS-GOGA will perform intensive archeological surveys of limited areas subject to a potential effect by a proposed undertaking. NPS-GOGA will make available the results of these surveys and provide the SHPO the opportunity to comment in accordance with the November 21, 1979, Agreement between the SHPO and NPS-WR on an Archeological Clearance Process (Appendix III), a program to protect archeological resources.

C. PRESERVATION ASSESSMENT PROCESS

All projects will be identified on the attached Preservation Assessment form to initiate the Section 106 process pursuant to the agreement. Based on historic preservation personnel review, the proposal may be approved by the General Superintendent, GOGA, if meeting the Criteria set forth in Stipulation D. or if the project does not, be converted to a separate compliance action pursuant to stipulation to be processed in accordance with 36 CFR 800.

If questions exist on whether criteria located in Stipulation D are met, the NPS-GOGA through NPS-WR will consult with the SHPO. The SHPO will respond within 30 days after receiving adequate information on the resources, proposed action, and potential effects. NPS-GOGA shall include alternatives to avoid, reduce or minimize effects of the undertaking in the information provided with analysis.

D. UNDERTAKING REVIEW

I. Review Criteria

The undertakings listed in Section II (following) will be reviewed and documented for Section 106 purposes within the NPS-GOGA without further review by the Council or SHPO, provided:

- That the applicable GOGA management office submit proposed undertakings to GOGA historic preservation staff with sufficient time for review; and

- That GOGA has completed and reviewed preservation assessments that provide adequate information to identify and evaluate the potential effects of proposed undertakings on a historic property or properties; and

- That the GOGA finds that proposed undertakings will not adversely effect historic properties based on criteria found in 36 CFR 800.9; and

- That GOGA ensure that decisions regarding proposed undertakings are made and carried out through the performance standards and guidelines in USDI and NPS Policies, Standards, and Guidelines identified in Stipulation B; and

- That proposed undertakings are documented and reviewed using the Preservation Assessment form found in Appendix II; and,

- That proposed undertakings involving ground-disturbing activities will include archeological clearances in accordance with the NPS and SHPO agreement of November 21, 1979, found in Appendix III; and

- That an annual documented review of the operation of this Agreement be completed with the State Historic Preservation Officer and the Advisory Council on Historic Preservation invited by the Park Historic Preservation Division, Western Regional Office, NPS.

II. UNDERTAKINGS COVERED BY THIS AGREEMENT

a. Preservation maintenance (housekeeping, routine maintenance, cyclic maintenance, stabilization, and building monitoring), which includes:

1. Repair, replacement of roofing, damaged flashings, roof gutters, installation of roof gutters to solve particular problems of damage occurring to a building, chimney repair that includes flue liner replacement, chimney capping, and wooden facia treatment;

2. Painting of historic structures (exterior and interior) to match existing color or based on paint analysis by an architect or exhibit specialist (structures);

3. Regrading of terrain adjacent to a building to achieve positive water run-off provided an Archeological Clearance as outlined in Appendix III has been obtained prior to any ground-disturbing activity.

b. Routine grounds maintenance, such as grass cutting and treatment, maintenance of shrubs, tree trimming, and removal of hazardous trees;

c. Installation of environmental monitoring units, such as weather, water, air quality, and natural science monitoring units, provided that such installations are done in an unobtrusive manner and do not impact historical fabric;

d. Archeological monitoring and testing required to develop information necessary for consultation with the SHPO regarding National Register eligibility and/or Section 106 purposes;

e. Architectural, engineering, and geologic fabric investigation of structures, utilities, and infra-structures;

f. Rehabilitation and widening (for handicapped accessibility) of existing trails, walks, paths, and sidewalks;

g. Repaving of existing roads or existing parking areas within previously disturbed areas, rehabilitation of associated drainage structures, and re-striping of roads and parking areas;

h. Rehabilitation, maintenance, or replacement of utility lines, transmission lines, fences, and walls within previously disturbed areas;

i. Rehabilitation of historic buildings and structures undertaken consistent with the Secretary of the Interior's Standards for Archeology and Historic Preservation Projects and other guidelines in Stipulation A;

j. Health and safety activities such as radon testing and mitigation, asbestos testing and removal of asbestos, lead paint, lead pipes, buried fuel tanks, and hazardous chemicals and materials;

k. Maintenance and installation of fire detection and suppression systems and security alarm systems, if done in an unobtrusive manner and without impacting historical fabric;

l. Erection of signs, wayside exhibits, and memorial plaques;

m. Rehabilitation of HVAC systems including replacement of furnaces;

n. Energy conservation actions, to meet mandated reductions in use;

o. Rehabilitation, upgrading of building electrical systems to meet codes if sensitive to visual and fabric aspects of historic buildings;

p. Drilling tests for water and geological and soil stability testing;

q. Projects to provide handicapped accessibility if proposed in a sensitive way protecting historic fabric and setting and in conformance with the Uniformed Federal Handicapped Accessibility Standards;

r. Removal of pests such as termites and other insects and rodents.

III. PROCESSING QUESTIONS

Should a dispute arise among NPS staff, that cannot be resolved internally, as to the effects of a proposed action, NPS-GOGA through NPS-WR shall consult with the SHPO, providing necessary information that will include alternatives considered. The SHPO shall respond within 30 days after receipt with comments that will include either a recommendation to proceed with the Preservation Assessment or to convert the proposal to a separate compliance action pursuant to 36 CFR 800. Should the NPS and SHPO disagree regarding process, NPS will consult with Council.

IV. FAILURE TO MEET CRITERIA

All proposed projects which do not meet the criteria established in Section I will be handled as separate compliance actions in accordance with 36 CFR 800: Protection of Historic Properties.

V. REQUIRED CONSULTATION

GOGA will consult pursuant to 36 CFR 800 on all proposals involving the construction of new buildings and structures, the removal buildings, or any other action having an adverse affect.

E. EMERGENCY REPAIRS

The GOGA area contains numerous utility systems in poor condition. As a result, sudden failures (breaks) in water, sewage, storm drainage, electric lines, telephone lines, gas lines are expected.

I. NPS-GOGA shall undertake emergency repairs to the infra-structure with on-site monitoring by historic preservation staff. GOGA will notify the SHPO by telephone that such repairs will be undertaken. Repairs by the park will be documented on the preservation assessment form along with an additional statement of fact on the circumstances, signed by the requesting park official and the historic preservation person accomplishing the monitoring.

II. Should historic properties be discovered during emergency repair activity, work in the immediate area of the discovery will cease provided the NPS-GOGA determines that work cession will not impede emergency repairs. If NPS-GOGA determines that work stoppage at the discovery site will impede emergency repairs, emergency repair will continue and NPS-GOGA shall immediately notify the SHPO by telephone and provide the following information:

- description of the emergency and steps necessary to address the emergency situation
- description of the discovery and its apparent significance
- description of the emergency work and potential effect on discovery feature

Within 15 days following notification under parts I and II, NPS-GOGA through NPS-WR will provide the SHPO a written report. This report shall document NPS actions to minimize effects, present status and condition of the discovery feature, and recommendations for subsequent evaluation and treatment of the feature.

F. NATURAL DISASTERS

The GOGA area has in the past experienced major fires, earthquakes, major wind damage from storms, earth slides, flooding, major wave damage, and other natural disasters/emergencies which are

likely to reoccur in the future. In the past, and it is quite likely in the future, all communication outside San Francisco has been closed for lengthy periods of time. During such a time, NPS would not be able to contact the SHPO regarding stabilization of historic properties.

NPS-GOGA shall undertake emergency actions pursuant to the terms of this agreement to stabilize historic properties and prevent further damage without SHPO consultation. All such emergency measures will be undertaken in a manner that does not foreclose future preservation or restoration. When telephone communications are re-established, NPS-GOGA will consult with SHPO and Advisory Council and within 45 days after initiating emergency repairs, NPS-GOGA through NPS-WR will provide a written report with illustrations to the SHPO and ACHP. Permanent repairs to historic properties are not authorized by this stipulation.

G. PERMITS

Permits and other (including, but not limited to, special necessary permits, leases, concessions, contracts, and easements) legal agreements for the use of lands and structures in GOGA will be extensive, reflecting a diversity of utilities and uses. All such agreements shall contain terms and conditions the NPS deems necessary to protect and preserve historic properties.

NPS-GOGA shall ensure that permits provide for identification and treatment of historic properties in a manner that meets guidelines and standards set forth in Stipulation A above, require archeological clearances for any ground-disturbing activity, and require advance project review and approval on the same basis as required of park-proposed undertakings. NPS-GOGA will ensure that permit language provides for permanent cancellation should any project be undertaken without compliance with sections 106 and 110 NHPA and/or in a manner that does not meet standards and guidelines set forth in Stipulation A above.

H. RELATIONSHIP TO PLANS

Separate Section 106 compliance will be undertaken for all major planning efforts (including general management plans, development concept plans and comprehensive plans) and will be in accordance with the 1990 Programmatic Agreement among the National Park Service, Advisory Council on Historic Preservation, and National Conference of State Historic Preservation Officers.

I. FUTURE AGREEMENTS

Programmatic agreements, or memoranda of agreements specific to a program, project, or plan, may be negotiated by the Western Region, National Park Service, SHPO and, as appropriate, the Council, and may supplement this Agreement.

J. RELATIONSHIP TO OTHER EXISTING AGREEMENTS

I. Undertakings identified in plans previously reviewed and approved under the 1976 Memorandum of Understanding or the 1979 Programmatic Memorandum of Agreement or its 1981 amendment are subject to stipulations of this Agreement, including individual review under 36 CFR 800, with the following exceptions:

a. Consultation will be limited to issues of cultural resource identification and evaluation and/or assessment of effects which were not resolved in earlier stages of the planning process;

b. If an undertaking has reached the comprehensive design stage of implementation as of the effective date of this Agreement, it will not be subject to further review by SHPO or the Council;

K. DISPUTE RESOLUTION

Should the California SHPO or the Council object in writing within 30 days after receipt, to any plans or actions submitted by the NPS pursuant to this Agreement, the NPS-GOGA through NPS-WR shall consult with the objecting party to resolve the objection. If the NPS determines that the objection cannot be resolved, the NPS-WR shall forward all documentation relevant to the dispute to the Council. Within 20 days after receipt of all pertinent documentation, the Council will either:

I. Provide the NPS-WR with recommendations, which the agency will take into account in reaching final decision regarding the dispute; or

II. Notify the NPS-WR that it will comment pursuant to 36 CFR 800.6 (b), and proceed to comment. Any Council comment provided in response to such a request will be taken into account by the NPS in accordance with 36 CFR 800.6 (c) (2) with reference to the subject of the dispute. Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; the NPS responsibility to carry out all actions under this Agreement that are not the subjects of the dispute will remain unchanged.

L. AMENDMENT

Any party to this Programmatic Agreement may request that it be amended, whereupon the parties will consult in accordance with 36 CFR 800.13 to consider such amendment.

M. TERMINATION

Any party to this Programmatic Agreement may terminate it by providing thirty (30) days notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the NPS will comply with 36 CFR 800.4 through 800.6 with regard to individual undertakings covered by this Programmatic Agreement.

NATIONAL PARK SERVICE

By: _____

General Superintendent, Golden Gate Date

_____

Regional Director, Western Region Date

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

By: _____
State Historic Preservation Officer Date

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: _____
Chairman, Advisory Council Date

APPENDIX I

GOLDEN GATE NATIONAL RECREATION AREA DESIGNATED PROPERTIES	6/16/91
Presidio of San Francisco (includes Fort Point) NHL,HR,HABS	10/15/1966
San Francisco Port of Embarkation (Lower FM and b. 201) NHL,NR	02/04/1985
Fort Mason Historic District NR,HABS	04/23/1979
San Francisco Bay Discovery Site NHL	05/23/1968
Alcatraz NHL,NR,HABS	06/23/1976
Forts Baker, Barry and Cronkhite NR	12/12/1973
Fort Miley Military Reservation NR	05/23/1980
Pumping Station No. 2, San Francisco, Fire Dept. NR, HAER (NE corner Fort Mason)	05/03/1976
Six Inch Disappearing Rifle NR	02/07/1979
Point Lobos Archeological Site NR	11/07/1976
Muir Beach Archeological Site NR	01/26/1981
SS RIO DE JANERIRO (shipwreck site) NR	11/04/1988
SS TENNESSEE Remains NR	04/15/1980
KING PHILLIP (ship) and REPORTER (schooner) Ship wreck site NR	05/08/1986

DETERMINED ELIGIBLE FOR NATIONAL REGISTER

Fort Funston
Hill 640 Military Reservation
Point Lobos Marine Lookout Stations
Point Bonita Lighthouse
Olema Valley Historic District

APPENDIX II

PRESERVATION ASSESSMENT (XXXX FORM)
GOLDEN GATE NATIONAL RECREATION AREA
CALIFORNIA

PROGRAMMATIC AGREEMENT
OF 1991 - NPS, SHPO, ACHP

This form is required for all actions/undertakings which may have the potential to effect, or will effect, cultural properties in the Golden Gate National Recreation Area. Attached continuation sheets and data as indicated to describe proposed project. Pursuant to Section 106 of the National Historic Preservation Act of 1966 Amended.

A. Originating Office

1. Park: GOGA NRA Management Unit:
2. Date Submitted by Management Unit:
3. a. Description of proposed action:

b. Does action fall under existing Agreement, Section 106?

( ) Compliance for a Plan (eg. GMP)?
( ) under this PA
( ) Under a separate PA, if so list?

( ) New compliance agreement needed, under
36 CFR Part 800 - Regulations Advisory Council

4. Explain why the action is needed:

5. Cultural resource affected by the proposed action. (Name, building number, LCS number if applicable)

6. The proposed action will (check as many as apply):

___ Destroy historic fabric
___ Remove historic fabric

___ Replace historic fabric in kind
___ Replace missing historic fabric
___ Add nonhistoric elements to a historic structure
___ Alter historic ground cover or vegetation
___ Introduce nonhistoric elements (visible, audible, or atmospheric) into historic setting/environment
___ Reintroduce historic elements in a historic setting or environment.
___ Remove historic elements from a historic environment.
___ Will disturb ground surface. Has archeological clearance been accomplished?
___ Incur gradual deterioration of historic fabric, terrain, setting.
___ Other-Describe briefly:

7. Identify professional planning or engineering documents involved, firms or offices.

8. Describe the effects of the undertaking on cultural resources (36 CFR Part 800.5) reference.

9. Identify relevant policies, standards, guidelines (USDI Rehabilitation of Historic Buildings, NPS Management Policies):

10. Describe any measures planned to minimize or lessen the loss or impairment of historic fabric, setting, integrity, or data:

Attach drawings, specifications, photographs and/or detailed project descriptions to this form before submittal.

11. Prepared by: _____ Title
Telephone Number:

Submit form to Park Historical Architect, Golden Gate National Recreation Area.

Form Received by Park Historical Architect:

B. Park Historic Preservation Staff Review and Certification

1. The foregoing assessment is adequate; the proposed action is consistent with all applicable NPS Management Policies, standards, guidelines or USDI Standards and Guidelines, Rehabilitation of Historic Buildings or others and incorporate measures to avoid adverse effects.

2. Proposed undertaking will be adequate only if the attached stipulations are incorporated into the undertaking.

3. Proposed undertaking will need separate compliance under the Advisory Council on Historic Preservation Regulations (36 CFR Part 800).

Review Certification:

(ABOVE)

1 ( )
2 ( ) _____
3 ( ) Park Archaeologist Date

1 ( )
2 ( ) _____
3 ( ) Park Curator Date

1 ( )
2 ( ) _____
3 ( ) Park Historical Architect Date

1 ( )
2 ( ) _____
3 ( ) Park Historian Date

C. Additional requirements/stipulations required for this proposal to be approved:

D. General Superintendent, Golden Gate National Recreation Area, Approval of Proposed Action Including Additional Requirements.

_____ _____
General Superintendent Date

E. Copies of this document sent to (without massive enclosures, e.g. of drawings). Date Sent:_____

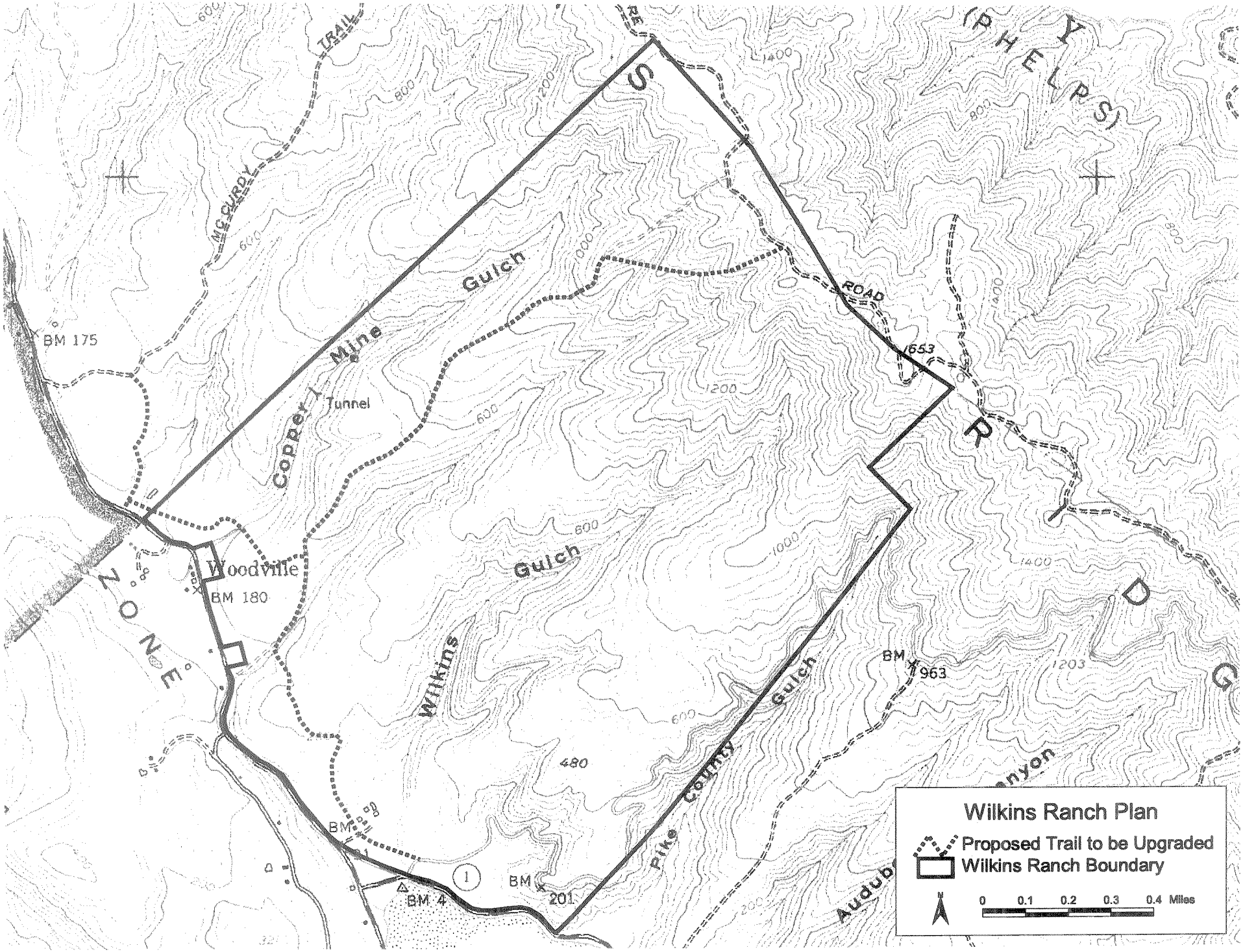
Park Historic Preservation Division, Western Regional Office, NPS
State Historic Preservation Officer, California

Park Management Areas, from General Management Plan of 1980, page 139 through page 152. These are the structures on the NPS list of Classified Structures which meet the National Register Criteria as single structures or if in historic districts as contributing structures. Since 1980 additional structures have been added retaining the area classification system.

AL	Alcatraz
AP	Aquatic Park
FM	Fort Mason
PE	Presidio
SH	Cliff House
OB	Ocean Beach
FM	Fort Miley
FF	Fort Funston
FB	Fort Baker
FA	Fort Barry
FC	Fort Cronkhite
MT	Mount Tamalpais
OV	Olema Valley*
FP	Fort Point
PR	Point Reyes*

*Some lands formally part of the Golden Gate National Recreation Area are administered by Point Reyes National Seashore under an agreement. This particularly involves lands with operating farms and ranches. The historic preservation staff at Golden Gate will review proposed undertakings pursuant to this agreement.

Appendix I: Proposed Locations of Trail Upgrades for Existing Informal Trails


Wilkins Ranch Plan
Proposed Trail to be Upgraded
Wilkins Ranch Boundary
0 0.1 0.2 0.3 0.4 Miles
Woodville
BM 180
BM 175
BM 963
BM 201
BM 4
Copper Mine Tunnel
Wilkins Gulch
Pike County Gulch
McGUROY TRAIL
ROAD
1653
ZONE
(PHELPS)

Appendix J: Additional Guidelines for Use of Wilkins Ranch

The following guidelines would be used to prepare any agreements with the use of the Wilkins Ranch by a park partner. These are additional statements to clarify the intent of the NPS Preferred Alternative C.

Goal: To provide for low-impact visitor use of the Wilkins Ranch for conservation research and education opportunities.

Main Complex: 14 acres

Park partner(s) would have a public purpose such as providing educational opportunities or research for public benefit.

Park partner(s) and/or NPS would maintain and upgrade the two existing residences. One residence will be used for the caretaker of the site. Park partner(s) may also use the site for office space provided that there are no changes to its historic structure and appearance.

One small sign (not to exceed 2' X 3') would be placed down the driveway for the purpose of site identification, not to attract visitation.

Other exhibits—if needed for historic information—would be placed in the interior of buildings.

Formal parking at main ranch would be limited to 25 spaces and would be located around the complex in existing parking areas.

Large fundraising events would be limited to two events per year.

Groups would access the main complex on a reservation basis for education and/or picnic area use on a limited basis, averaging not more than two groups per month. Local groups and those groups with a history of use of the site would be encouraged to apply for reservations.

No weddings or large-scale commercial filming will be allowed.

No trailhead parking would be established at the ranch complex.

The rural historic character of the area would be maintained. The house would be rehabilitated using the Secretary of the Interior's Standards for Rehabilitation. Partner(s) using the site for grazing would have access to the main facility (barn(s)) for storage of supplies and materials.

Goal: To improve the health of Bolinas Lagoon and surrounding watershed.

Main Complex: 14 acres

Riparian and other sensitive areas will be fenced from impacts of grazing.

Pastures on main ranch will be used year-round by park or concessionaires horses or by a party under special use permit. After research by range management specialist, limit on number of animals would be set to ensure water quality is not impaired and range is not adversely impacted. Initial number of horses or cows would be set by range management specialist. Pasture would be adaptively managed after data was collected over time on range conditions.

Open Grassland Shrub Area: 242 acres

Riparian and other sensitive areas will be fenced from impacts of grazing.

Seasonal grazing of cattle and/or horses would be allowed. Specific treatments for seasonal grazing, prescribed fire, and mechanical removal of vegetation will be developed in a long-term vegetation management plan. The goal would be to maintain the grassland area and develop a dynamic and productive plant community on the ranch. The number and length of time animals would be allowed on the 242 acres would compatible with long-term protection of soils and wildlife and for fire protection. Decisions relative to the number of cattle and/or horses grazed would not be economically driven. If possible, livestock on both the 14 acre Main Complex and the 242 acre Open Grassland Shrub areas would be moved from existing herds currently permitted on parklands, so that grazing pressure would be reduced in the areas from which the livestock were moved.

Goal: To provide more equitable, low impact public access to trails and facilities in cooperation with park partner(s).

Main Complex: 14 acres

No trailhead would be established at the main complex. An existing trail from McCurdy Trail would be enhanced to allow public access to Bolinas/Fairfax Road Area. This trail would bisect the main complex.

Open Grassland Shrub Area: 242 acres

From the existing non-public trails on the ranch, two trails would be upgraded for low-impact public access. One existing trail would start at McCurdy Trailhead and transect the main complex to Bolinas/Fairfax Road (as stated above). The second existing trail that would be used is part of the former road that traverses on the ridge south of Copper Mine Gulch. Both trails would need minor reroutes to ensure public safety and long-term resource protection.

Trailheads at McCurdy, Bolinas Ridge Trail, and on Bolinas/Fairfax Road would be used as access points. McCurdy, and Bolinas Ridge are already signed and will just need modification. A small trailhead sign would be placed at the lower section of Bolinas/Fairfax Road. Existing roadside area would be used for parking.

Heavily Wooded Area: 1106 acres

See above. From the existing trail from McCurdy to Bolinas/Fairfax Road, a second existing trail would be enhanced to transect the heavily wooded area of the Wilkins Ranch to the Bolinas Ridge Trail.

Goal: To strengthen agriculture within the park through advanced grazing techniques and research.

Over the next year, a plan for a long-term research program at the ranch will be developed by a working group of scientists and other interested members of the public. All research programs would require a permit and would be approved by the National Park Service. Research in the NPS has strict guidelines (e.g., cannot be destructive to park resources and cannot disturb the park experience) and must be peer reviewed by other scientists.

The main research goal would be to develop a long-term vegetation monitoring study to investigate trends in plant species and composition on the ranch. Transects would be established using small ground markers (not visible for a distance) and grazing exclosures to investigate the effectiveness of treatments—seasonal grazing, prescribed fire, and mechanical removal—at perpetuating native coastal species, increasing biodiversity, encouraging sustainable grazing, and retaining the rural historic character of the area. Other research would investigate long-term trends in distribution and numbers of small mammals, birds, amphibians, and reptiles. Members of the public interested in such matters and willing to be trained in monitoring techniques would be invited to participate as volunteers.