

## **Appendix H – Response to Comments on the Draft Environmental Impact Statement**

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## Appendix H – Response to Comments on the Draft Environmental Impact Statement

### I. Introduction

In accordance with the National Environmental Policy Act (NEPA) and National Park Service (NPS) policy on compliance with NEPA, the NPS has considered and responded to all substantive comments received during the public comment period for the Golden Gate National Recreation Area (GGNRA) Fire Management Plan Draft Environmental Impact Statement (DEIS). Substantive comments are generally defined by NPS NEPA guidance as those that raise debate or question the accuracy of the information presented, the adequacy of the range of alternatives, or assessment conducted. A total of twelve comment letters were received. Some comments called for the clarification of information presented in the DEIS while other comments required minor text modifications which have been made in the Final Environmental Impact Statement (FEIS). No responses are provided to comments that merely expressed opinions and did not identify a question or needed clarification, correction, or modification.

A notice of availability for the DEIS was published in the Federal Register and the document made available for public review and comment on March 18, 2005. The NPS also provided the notice of availability of the DEIS through a direct mailing and posting on the park's website. The DEIS was made available for review at park headquarters, park visitor centers, local and regional libraries, and on the park's website. The Federal Register noticed a 60-day public comment period ending on May 17, 2005 but this was extended to May 27, 2005 to ensure adequate review time. Notification to the public of the extended deadline was made on the park's website and through announcements at public presentations.

The NPS made two public presentations to provide an informational overview about the DEIS to the public. The first presentation was given at the Pacifica City Council chambers on the evening of April 11, 2005 during the regular City Council meeting. The second presentation was held at the park's regularly scheduled, bi-monthly public meeting on the evening of April 19, 2005 at the San Francisco Bay Model building in Sausalito. At each of the meetings, NPS staff gave an overview of fire management planning and the alternatives studied in the DEIS. The presentations were followed by informal discussion with park staff and the public was encouraged to submit comments on the DEIS via email, fax, or regular mail. The email and mailing addresses for submitting comments on the DEIS were prominently posted at each meeting, printed on workshop handouts and posted on the park's FMP website.

The Notice of Availability and copies of the FEIS will be mailed to the same distribution list as the DEIS. The FEIS will be available on the GGNRA website at: <http://parkplanning.nps.gov/goga> and upon request.

Appendix H to the FEIS is structured as follows:

#### I. Introduction

- II. Comment Letters and Response to Comments. The GGNRA received a total of twelve comment letters on the DEIS. The letters in Appendix H are organized by government agencies, organizations, and individuals. Each letter has been assigned a number (Letter 1, for example) with each substantive comment per letter assigned a corresponding additional number (Comment 1-1, for example). To help track the responses to comments, each specific comment is presented before the response in the form of a brief paraphrase. Any changes that have been made to the FEIS text in response to a specific comment are noted in the response to that comment with *italicized* text to mark additions and ~~strikeout~~ text to note deletions.

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## II. Comment Letters and Response to Comments

Letter 1



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

RECEIVED  
JUN 16 2005  
SUPERINTENDENT'S OFFICE

June 13, 2005

Brian O'Neill  
General Superintendent  
Golden Gate National Recreation Area  
Building 201, Fort Mason  
San Francisco, CA 94123  
Attention: Fire Management

Subject: Draft Environmental Impact Statement (DEIS) for the Golden Gate National Recreation Area Fire Management Plan, San Mateo, San Francisco, and Marin Counties, California (CEQ #050104)

Dear Mr. O'Neill:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) and Section 309 of the Clean Air Act. We are aware that comments on the above document were due to the Golden Gate National Recreation Area (GGNRA) on May 27, 2005. Our comments are provided in accordance with the EPA-specific extension to the deadline date from May 27, 2005 to June 13, 2005 granted by Wendy Poinsett, the Project Leader (telephone conversation between Laura Fujii and Wendy Poinsett, May 12, 2005).

EPA recognizes the need for fire management actions on GGNRA lands for fire hazard reduction and resource benefit. The Fire Management Plan will provide the framework for fire management actions for the GGNRA over the next 10-15 years. We commend the commitment to specific mitigation measures as described in Chapter 2 Section 2.7 (pps. 94-110). Of note is the reuse and recycling of mechanically removed wood such as eucalyptus wood into firewood, woody debris in stream restoration projects, and flooring (p. 83).

Based on our review, we have rated the DEIS as Environmental Concerns - Insufficient Information (EC-2). We have concerns regarding smoke management and protection of air quality, water quality, wetlands, and the use of herbicides. Please see the enclosed Detailed Comments for a description of these concerns and our recommendations. A *Summary of EPA Rating Definitions* is enclosed.

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We appreciate the opportunity to review this DEIS. When the Final EIS is released for public review, please send two copies to the address above (mail code: CED-2). If you have questions, please contact me or Laura Fujii, the lead reviewer for this project. Laura can be reached at 415-972-3852 or [fujii.laura@epa.gov](mailto:fujii.laura@epa.gov)

Sincerely,

A handwritten signature in black ink, appearing to read 'Nova Blazej', with a long horizontal stroke extending to the left.

Nova Blazej, Acting Manager  
Environmental Review Office  
Communities and Ecosystems Division

Enclosures:

Summary of EPA Rating Definitions  
EPA's Detailed Comments

cc: Bay Area Air Quality Management District

**U.S. Environmental Protection Agency Rating System for  
Draft Environmental Impact Statements  
Definitions and Follow-Up Action\***

**Environmental Impact of the Action**

**LO – Lack of Objections**

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC – Environmental Concerns**

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO – Environmental Objections**

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU – Environmentally Unsatisfactory**

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

**Adequacy of the Impact Statement**

**Category 1 – Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 – Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 – Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

**EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)  
FOR THE GOLDEN GATE NATIONAL RECREATION AREA FIRE MANAGEMENT PLAN, JUNE 13,  
2005**

**Air Quality**

1. Alternative C, the National Park Service (NPS) preferred alternative, would allow, annually, a maximum of 275 acres of mechanical fuel treatment and 320 acres subject to prescribed burning (p. 83). This is the greatest number of acres proposed for treatment, over twice the number of acres treated under Alternative A, No Action - 1993 Fire Management Plan. In addition, Golden Gate National Recreation Area (GGNRA) is adjacent to a highly populated region with approximately 38 miles of wildland urban interface (WUI) at risk from fires and smoke generated by fire management activities. The Fire Management Plan (FMP) and Final EIS (FEIS) should highlight measures to manage smoke and address adverse air quality effects.

Recommendations:

1-1a [ The Executive Summary should include information on smoke management and protection of air quality. For instance, Table ES-2: Summary of Impacts, Visitor Use and Visitor Experience, should include smoke impacts from prescribed burning such as potential adverse effects to public health, reduced visibility, and smoke irritation.

1-1b [ FMP Goals (pps. iv-v) should include a goal specific to smoke management and protection of air quality. This goal can emphasize the use of a Smoke Management Plan (SMP) to address smoke and air quality issues. ] Smoke

1-1c [ management practices that will be used to protect air quality and public health should be highlighted in the FEIS. ] An option is to include a separate heading in

1-1d [ Chapter 4 - Environmental Consequences for smoke management.

2. The DEIS states: "All prescribed burning at Point Reyes National Seashore (PRNS) and GGNRA would continue to be planned and performed under the auspices of the Bay Area Air Quality Management District (BAAQMD) Smoke Management Program, which in turn is incorporated into the State Implementation Plan (SIP)." (Chapter 4, p. 300). EPA does not have a SIP from BAAQMD that contains a Smoke Management Program.

Recommendation:

1-2 [ The FEIS should describe how the Smoke Management Plan relates to the SIP. State GGNRA compliance with State and local air district regulations.

3. Recommendations for reducing exposure of firefighters to carbon monoxide (CO), aldehydes, and particulates while working prescribed fires are described in the DEIS (p. 424). The increased amount of prescribed burning proposed in the preferred alternative would increase the exposure of NPS firefighters to the above irritants.



- Recommendation:
- 1-3 [ EPA recommends that the FEIS and the Record of Decision (ROD) commit to the recommended measures (p. 424) to reduce smoke exposure of firefighters during prescribed burning.

4. The GGNRA region is nonattainment for ozone and particulate matter and must conform to the federally approved SIP (p. 172). Historically GGNRA has ensured conformity of their fire management plan by ensuring all prescribed burning is planned and implemented in accordance with the BAAQMD Smoke Management Program (p. 175). While the DEIS lists requirements of Section 176 of the Clean Air Act regarding general conformity, it does not state de minimus levels that trigger the need for a conformity determination.

- Recommendation:
- 1-4 [ The FEIS should state the de minimus levels and whether general conformity is required.

### Water Quality

1. Fire roads can be a major cause of water quality problems and adverse impacts to aquatic ecosystems due to their contribution to sediment loads, subsequent in-stream habitat modifications and increased run-off. Other than Figure 2-7 Fire Roads (p.71) and a short description of roadside fuel reduction, the condition of fire roads and their contribution to water quality effects is not described or addressed.

- Recommendation:
- 1-5 [ The FEIS should address the water quality and aquatic effects of roads by describing the status and management of the GGNRA fire road system. The FEIS should identify avoidance and mitigation measures that are necessary to minimize impacts. For instance, the FEIS should describe the density of roads per watershed; whether fire roads are a major contributor to water quality and aquatic resource impacts; and direction for the maintenance, closure, and designated uses of the fire roads. Because of the environmental impacts of fire roads, we recommend retiring the roads identified on Figure 2-7 (p. 71) as “possibly retire” and identifying the miles of proposed road retirement.

2. The DEIS states that herbicides will be used to control nonnative trees and brush that vigorously resprout (p. 84). Use of herbicides is of concern because of their potential impacts to water quality, fish and wildlife, and human health and safety. We understand that all herbicide use would be administered through the GGNRA integrated pest management coordinator and applied by a state-licensed pesticide applicator (p. 234). However, in the interest of full disclosure, we recommend additional information on proposed herbicide use be included in the FEIS. A project-specific environmental analysis should be considered if extensive use of herbicides is proposed.

- Recommendations:
- 1-6 The FEIS should include additional information regarding herbicide use. Provide a description and environmental evaluation of frequently used herbicides (e.g., EPA Registration Number, key characteristics, environmental effects), frequency of use, the potential for multiple applications, and proposed measures to protect wetlands, sensitive resources, the public, and firefighters.
- The FEIS should specify that:
- 1) The pesticides used must be registered with EPA and the California Department of Pesticide Regulation and used according to the label directions and Federal and State pesticide laws (Executive Order 12088).
  - 2) Since the regulatory status of chemicals can constantly change, a review of the current status of all herbicides considered for use should be conducted prior to each application season.
3. Sensitive watersheds are located within GGNRA with highly erodible Franciscan Complex soils, steep slopes, and unstable geology, which can result in high erosion rates and sensitivity to disturbance (p. 165). In addition, there are specific water bodies such as Rodeo Lagoon which already experience water quality problems (p. 168).
- Recommendation:
- 1-7 The FEIS should commit to project-specific environmental analyses whenever fire management activities are proposed in sensitive watersheds, near water bodies with existing water quality problems, or near key resources, such as Bolinas Lagoon. The analyses should evaluate the potential for erosion and sedimentation, nutrient inputs, and other adverse impacts to resources at risk.
4. Although the DEIS states that water quality monitoring has been conducted, it does not provide a summary of monitoring results or describe the specific water quality of specific water bodies (p. 167). The FEIS should provide a detailed water quality analysis.
- Recommendation:
- 1-8 The FEIS should include water quality data obtained from the cited water quality monitoring projects. Provide a short description of the water quality characteristics of key water bodies and creeks, such as level of fecal coliform, sediment, nutrients, rate of stream flow, pH, biological oxygen demand, total dissolved solids, and temperature. State whether the water quality constituents meet water quality standards.

## Wetlands

1. The DEIS states that the intensity of impact to wetlands would be considered major if changes in the aerial extent, or in wetland vegetation, soils, or hydrology, would be measurable and would affect 20% or more of the total extent of the plant community in the FMP project area (p. 262).

### Recommendation:

- 1-9 [ The FEIS should provide the rationale, references, and data to support the proposed 20% aerial extent criteria. Describe why other percentages such as 10% or 40% were not used. We recommend the NPS consider “intensity of impact” criteria which includes the quality and functional value of the wetland or resource instead of only an aerial percent loss of the vegetation type.

2. The DEIS states that planning and fire management plans for specific projects should consider other projects in the area and design projects so that the combined impacts of unrelated projects and fire management activities do not exceed the threshold for minor impacts on wetlands (measurable changes but affect less than 5% of the total extent of the wetland type in the project area) (p. 337).

### Recommendation:

- 1-10 [ The goal of direct, indirect, and cumulative impacts to wetlands should be avoidance. The FEIS should commit to avoid all cumulative impacts to wetlands, whenever possible. Only if impacts are unavoidable should projects be designed to minimize and compensate or mitigate for wetland impacts. In these instances, project-specific analyses should be performed.

## Park Operations

1. The DEIS states that very few action items called for in the 1993 FMP have been implemented due in part to funding and staffing availability (p. 82). However, the preferred alternative would require additional funding and staffing (19 FTE versus the 13 FTE under the 1993 FMP, p. xxi, Table ES-2: Summary of Impacts). It is not clear whether, or how, GGNRA would obtain the funds and FTE required to fully implement the preferred alternative.

### Recommendations:

- 1-11 [ The FEIS should describe the funding and staffing issues encountered under the 1993 FMP. Describe what has not been completed under the 1993 FMP.  
Evaluate whether the funding and staffing issues will continue under the new FMP and what options are available to overcome these potential implementation barriers.

- 1-11 [ The FEIS should present management priorities and actions that will be taken if sufficient funding and staffing is not provided for full implementation of the new FMP. Describe the criteria, if any, used to prioritize implementation of FMP actions and to maximize the benefits and use of limited staff and funding resources.
- 1-12 [ Given the inability to completely implement the existing FMP, we recommend the NPS consider developing an alternative that can be fully implemented with existing authorized resources.

### Existing Conditions

1. While the DEIS describes the use of herbicides to control scrub and invasive species, it does not describe whether GGNRA lands are experiencing habitat conversions which would require future aggressive vegetation management. For example, other sites in California have experienced conversion of forest lands to scrub caused by wildland fires. As a result, the Forest Service has implemented extensive vegetation management projects using manual brush removal, prescribed burns, and multiple herbicide applications to eliminate and control brush.

#### Recommendation:

- 1-13 [ The FEIS should include additional information regarding invasive species and the conversion of forest and grasslands to scrub land , brush fields, or other habitat types that will require future vegetation management. Describe whether the FMP will include actions to control habitat conversions and to actively manage vegetation.

2. The vegetation map, acreages, and overall vegetation distribution are based upon 1994 aerial photography and interpolation (p. 186). It is possible that vegetation distribution and types may have changed in the intervening 11 years given invasive species, wildland fires, and climate change.

#### Recommendation:

- 1-14 [ The FEIS should evaluate the potential for vegetation change since 1994. If significant deviations from 1994 vegetation patterns are possible, the NPS should consider conducting additional vegetation surveys where such changes may have occurred.

### General Comments

1. The DEIS state that NPS is in consultation with the U.S. Fish and Wildlife Service (FWS) and National Oceanic and Atmospheric Administration (NOAA)- Fisheries in accordance with Section 7 of the Endangered Species Act (p. 94).

Recommend:

- 1-15 [ The FEIS should include a short description of the status or outcome of the Section 7 consultation, including FWS and NOAA-Fisheries mandatory and recommended reasonable and prudent measures and terms and conditions for incidental take, if approved. If available, include the Biological Opinions or concurrence/nonconcurrence letters in a FEIS appendix.

2. Appendix C of the DEIS provides a list of projects included in cumulative effects analysis. The criteria used to determine which projects were included is not provided.

Recommendation:

- 1-16 [ The FEIS should provide a short description of the criteria and process used to select the projects included in the cumulative effects analysis.

3. The DEIS describes the scheduling and implementation challenges for prescribed burns in GGNRA. For instance, it states there is only a narrow burning window for shrub lands and forested areas and that designated burn days often do not coincide with the weather conditions appropriate for burning in GGNRA (p. 144).

Recommendation:

- 1-17 [ The FEIS should describe how the NPS proposes to accomplish the level of prescribed burning proposed in the preferred alternative, which is more than double the amount proposed in the existing 1993 FMP.

## Responses to Comments in Letter 1

### United States Environmental Protection Agency, Region 9, San Francisco, CA.

**Comment 1-1(a).** The EPA recommends that the FMP FEIS should further highlight smoke management measures and provide more information on the adverse effects on air quality. Table ES-2, Summary of Impacts: Visitor Use and Visitor Experience should include smoke impacts from prescribed burning as potential adverse effects to public health, reduced visibility, and smoke irritation.

**Response to Comment 1-1(a)** Table ES-2 in the DEIS addresses the potential direct impact from prescribed burning on the public and firefighter staff from exposure to particulates and other toxins in smoke; however, it is addressed under Impacts on Human Health and Safety rather than Impacts on Visitor Use and Visitor Experience. Potential adverse impacts to air basin air quality standards are addressed under Air Quality in Table ES-2 in the DEIS. Impacts from burning on visibility are found to be long-term on the regional air basin air quality under the impact topic of Air Quality and as short-term during prescribed burns under the topic of Public Health and Safety. Text in Table ES-2 has been modified in the FEIS to clarify this as follows:

**Table ES-2: Summary of Impacts**

<b>Impact Topic</b>	<b>Alternative A – 1993 FMP (No Action)</b>	<b>Alternative B – Hazard Reduction/Restricted Fire Use</b>	<b>Alternative C – Hazard Reduction/ Resource Enhancement</b>
<b>Human Health and Safety and Nuisance Effects</b>	Overall, this alternative would have a long-term, minor benefit to the public and firefighter safety by decreasing the risk of catastrophic fire. <i>The potential to breathe in particulates and other toxins in the smoke produced by prescribed burning activities and fire suppression would have a <del>rather</del> short-term, negligible adverse effect on public and fire staff <u>health and</u> safety.</i>	Similar to Alternative A, except that increased treatments would render long-term, moderate benefits to public and firefighter safety.	Similar to Alternative B, except larger prescription burning component would yield long-term, moderate, beneficial effect.

**Comment 1-1 (b).** FMP goals should include a goal specific to smoke and air quality issues. This goal can emphasize the use of a Smoke Management Plan to address smoke and air quality.

**Response to Comment 1-1(b).** The NPS agrees with the EPA recommendation that a separate goal relating to smoke management and protection of air quality should be added to the FMP goals. A major challenge in managing national parks is the protection of human health and air quality while restoring fire-dependent ecosystems to their natural character. The increased use of fire as a management tool must not impede the progress being made in restoring visibility in national park areas as mandated by the Clean Air Act and stipulated in the report “Air Quality in the National Parks, Second Edition (NPS 200b). A new goal for smoke management has been added to the FMP Goals found in the Executive Summary and Section 1.4 of the FEIS. The wording for this smoke management goal is similar to the NPS smoke management statement adopted as part of the NPS

Management Policies 2001 (NPS 200a) and NPS fire management policy found in Resource Handbook 18, Wildland Fire Management (NPS 1999a). The following text has been added to the FEIS as the new smoke management goal found in the FMP Goals and Objectives cited above.

*Goal 10. Minimize smoke generation during prescribed burning through the use of a smoke management plan (SMP) that details best management practices or non-burning alternatives where these options would meet resource management and fuel reduction objectives and also achieve emissions reduction.*

*Objectives:*

*Confer regularly with Air Resources staff at the NPS Pacific West Regional Office, other parks, fire agencies, and the Bay Area Air Quality Management District (BAAQMD) to keep current on best management practices and non-burning alternatives.*

*Maintain current information on smoke-related health issues affecting firefighters such as exposure limits, exposure monitoring, risk minimization, and respiration technology.*

**Comment 1-1 (c).** Smoke management practices should be highlighted in the FEIS.

**Response to Comment 1-1 (c).** Smoke management practices as outlined in “The Smoke Management Guide for Prescribed and Wildland Fires” prepared by the Wild Fire and Fire Use Working Team of the National Wildfire Coordinating Group (NWCG, 2001) were used by NPS staff to develop the smoke management practices listed as mitigation measures on pages 96 and 97 of the DEIS. Alternatives to prescribed fire are described in the document “Non-burning Alternatives to Prescribed Fire on Wildlands in the Western United States,” prepared for the Fire Emissions Joint Forum of the Western Regional Air Partnership (Jones and Stokes, 2004).

In response to the EPA’s request to further highlight smoke management practices in the FEIS, a new appendix has been added to the FEIS that is a listing of smoke management techniques and non-burning alternatives that GGNRA could incorporate into a smoke management plan and/or that BAAQMD could require as part of the smoke management plan approval process. The referenced appendix is Appendix I – Non-burning Alternatives and Air Emissions Reduction Techniques for Fuel Reduction and Resource Benefiting Prescribed Burns in GGNRA. References to Appendix I have been added to the FEIS text where appropriate and mitigation measures AIR-1 and AIR-2 have been combined into revised mitigation measure AIR-1, reworded as follows:

**AIR-1** If recommended by BAAQMD, smoke management plans submitted by the NPS for BAAQMD review can be modified to reduce production of pollutants by reducing the amount of fuels available for burning. Options ~~include for reducing the amount of fuels available and emissions produced include reducing the area to be burned, modifying burns to reduce the area burned,~~ reducing fuel loading (e.g., mowing and understory thinning), ~~or~~ managing the rate of fuel consumption, ~~and redistributing the emissions.~~ Treatments to reduce overall air emissions from prescribed burns ~~can include~~ will be based on current smoke management techniques such as those listed in the Western

*Regional Air Partnership publication “Non-burning Alternatives to Prescribed Fire on Wildlands” (Jones and Stokes, 2004) and those listed in Appendix I of this FEIS.*

- ~~Mowing grass and reducing density of vegetation in brushlands;~~
- ~~Mechanically treating forested areas by removing standing or downed trees;~~
- ~~Understory thinning, thinning of forests, and creation of shaded firebreaks; and~~
- ~~Scheduling more frequent, less intense burns to prevent unwanted vegetation from becoming established in clearings or in forest understory.~~

~~AIR-2 If requested by BAAQMD, pile or windrow burning, rapid mop-up and shortened fire duration can be used to increase the rate of combustion efficiency and reduce air pollution emissions (except NOX) by shifting the majority of combustion away from the smoldering phase and into the more efficient flaming phase.~~

**Comment 1-1(d)** An option for the FEIS would be to include a separate heading in Chapter 4, Environmental Consequences, that addresses all smoke management issues.

**Response to Comment 1-1(d)** The NPS has considered the EPA’s recommendation to include a separate section in the Environmental Consequences chapter to address smoke management. However, the structure of NPS NEPA documents is based on an assessment of affects grouped by impact topic rather than project component, such as smoke management or mechanical fuel reduction. Smoke management may be viewed as either a mandatory component of a proposal or a mitigation to reduce effects of prescribed burning or wildland fire.

NPS Director’s Order 12 (NPS 2001a), which provides the NPS with guidance in preparing NEPA documents, advises that the “the impact section [of an EIS] can be organized by alternative, with impact topics as subheadings, or by impact topic, with alternatives as subheadings.” The impact topics’ structure facilitates public and agency review of a proposal’s potential effects on the park’s important physical and cultural resources. To facilitate the comparison of impacts to park resources, the FMP EIS is organized by these broad resource topics and each is analyzed under each alternative. Smoke management applies to potential impacts under three important resources areas in the EIS: Air Quality, Visitor Use and Visitor Experience and Public Health and Safety.

**Comment 1-2.** The FEIS should describe how the Smoke Management Plan relates to the State Implementation Plan (SIP). EPA requests GGNRA state compliance requirements with State and local air district regulations.

**Response to Comment 1-2.** References to GGNRA’s compliance with State and local air district regulations can be found in the following places of the DEIS: page 67, Prescribed Burning and Pile Burning; page 444, Research; page 85, Prescribed Burning; pages 96-97, Air Quality mitigation measures; pages 250-251 under Air Quality Policies and Regulation; pages 294-300, Impacts on Air Quality, Analysis, pages 418-433, Impacts on Human Health and Safety; and pages 443-444, Prescribed Burning and Research Burning, respectively.

With regard to the relation of the air district’s smoke management plan to the State Implementation Plan (SIP), the text in the FEIS in Chapter 4, Environmental Consequences, Impact Analysis for Air



Quality, Alternative A Cumulative Impacts (found on page 300 of the DEIS) has been modified as follows:

All prescribed burning at PRNS and GGNRA would continue to be planned and performed under the auspices of BAAQMD's Regulation 5 governing Open Burning, ~~Smoke Management Program~~, which functions as the air district's smoke management plan. ~~in turn is incorporated into the SIP. The SIP is managed by BAAQMD staff to ensure that all ambient air quality standards and provisions of the Clean Air Act are met and public health is protected. Since 2001, each air district in California must have an individual smoke management plan that meets state and federal requirements as directed by the Federal Interim Air Quality Policy on Wildland and Prescribed Fires. In conformance with Regulation 5 and p~~Prior to igniting a prescribed fire, NPS fire management staff must submit a smoke management plan to BAAQMD and must obtain meteorological approval to burn from BAAQMD. It is the responsibility of BAAQMD to coordinate the numbers of fires burning in one area in relation to ambient air quality. The oversight of BAAQMD would ensure that annual emissions from fire management actions implemented under the PRNS FMP do not exceed state or federal standards.

Additional text to explain the relationship between the smoke management plan and the SIP has been added to Chapter 4, Environmental Consequences, Regulations and Methodologies for Air Quality, under the heading "Effects on Bay Area Air Basin Air Quality and Conformance with the State Implementation Plan" as follows:

*When air quality within a region or airshed deteriorates below one or more of the National Ambient Air Quality Standards (NAAQS), a state must develop a State Implementation Plan (SIP) to improve the air quality. The means of achieving the standard is determined largely by the state. The regulators may decide to severely limit prescribed burning, or they may focus on some other pollutant source.*

*Voluntary Smoke Management Program (SMP) developed by states must then be certified by the EPA. Once the SMP is certified and in use, the EPA will allow two exceedances of the NAAQS for PM<sub>2.5</sub> attributable to prescribed burning without declaring the region out of attainment. The states will instead be allowed to review their SMP and make adjustments if it is found inadequate. If fires cause or significantly contribute to a third consecutive NAAQS violation, EPA will call for the SMP to be made part of the SIP and be federally-enforceable. If the area was designated nonattainment previously, EPA will also call on the State to review the effectiveness of the SMP and make appropriate improvements.*

**Comment 1-3.** The EPA recommends that the FEIS and Record of Decision (ROD) commit to the recommended measures (DEIS, p. 424) to reduce smoke exposure to firefighters during prescribed burning.

**Response to Comment 1-3.** The NPS agrees with this comment. The Record of Decision, to be signed by the National Park Service's Pacific West Regional Director, will commit GGNRA to the mitigation measures listed in the FEIS and ROD.

**Comment 1-4.** The FEIS should state the de minimus levels and whether general conformity is required.

**Response to Comment 1-4.** The de minimus levels are defined in 40 CFR 93 § 153. The de minimus levels and conformity determination are addressed in the DEIS in Chapter 4, Environmental Consequences, in the discussion of Air Quality Regulations and Methodology, Effects on Bay Area Air Basin Air Quality and Conformance with the SIP. Please refer to pages 257- 258 in the DEIS.

The goal of general conformity with the SIP is to ensure that the State does not exceed the NAAQS, including carbon monoxide (CO). The NPS would be willing to examine the times when the air basin has had exceedences in CO and avoid burning at that time of year. The NPS would also be willing to commit to burning only during the times of year when the NAAQS are not likely to be exceeded and when meteorological conditions are such that burning would have as minimal an impact as possible on air quality, and subsequently visibility and public health.

The GGNRA fire management program maintains a regular working relationship with regional air basin and state air quality regulators and meteorologists. GGNRA staff will submit all smoke management plans to BAAQMD for review and approval. The park relies on the expertise and approval authority of the BAAQMD for conformance with the federal Clean Air Act. The NPS recognizes the importance of protecting human health from smoke emissions. The air quality regulators also acknowledge the importance of the use of fire under managed conditions in contrast to that produced from uncontrolled wildfires. The objectives of both fire and air quality managers can be made more compatible through the use of models with meteorological, emissions, and fire behavior inputs; by gauging the public's tolerance for smoke; and by improved communication among air quality managers, fire managers, and the affected public. The park staff view this communication and coordination as cornerstones of a successful fire program.

In response to this comment, the following text and table have been added to the FEIS under the Effects on Bay Area Air Basin Quality and Conformance with the State Implementation Plan (page 257 in the DEIS):

*The de minimus levels are the minimum thresholds for which a conformity determination must be performed for the various criteria pollutants in nonattainment or maintenance status in the air basin. Federal agencies need to perform a general conformity analysis if emissions from a proposed action are not accounted for in the air district's State Implementation Plan (SIP) for that emission. The conformity determination shows how the emissions generated by the implementation of a project or plan will conform to the air basin's strategy to control emissions of a criteria pollutant.*

**Table 4-3b: De Minimus Levels for State Implementation Plan Conformance**

Pollutant	Area Type	Tons/Year
Ozone (VOC or NOx)	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
	Other areas outside an ozone transport region	100

Pollutant	Area Type	Tons/Year
Ozone (NO <sub>x</sub> )	Marginal and moderate nonattainment inside an ozone transport region	100
	Maintenance	100
Ozone (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
CO, SO <sub>2</sub> & NO <sub>2</sub>	All nonattainment & maintenance	100
PM-10	Serious nonattainment	70
	Moderate nonattainment and maintenance	100

Source: BAAQMD, 2005

Notes:

NO<sub>x</sub> = nitrogen oxides, VOC = volatile organic compounds, CO = carbon monoxide, SO<sub>2</sub> = sulfur dioxide,

NO<sub>2</sub> = nitrogen dioxide, PM10 = suspended particulate matter

*Though the Bay Area Air Basin is now in attainment with national air quality standards for CO, its maintenance status indicates that exceedences of the CO standard have occurred in the past. The air basin is implementing a plan to maintain a lower level of CO generation. According to the BAAQMD CO maintenance plan, urbanized areas of San Mateo and Marin counties are within the Bay Area Air Basin maintenance area for CO.*

In Chapter 4 of the FEIS, the following text has been added to the air quality impact assessment discussion (DEIS page 300):

*In the SIP for carbon monoxide, BAAQMD includes an annual level of prescribed burning for vegetation management within the maintenance area as a factor that contributes to annual CO emissions (D. Kolozsvari, BAAQMD, pers.comm.). In developing the SIP, BAAQMD estimated that some 34, 588 tons of woody fuels could be burned annually for non-agricultural, vegetation, and forest management practices in the Bay Area Air Basin. The assumptions of the SIP for CO, provided by BAAQMD, allow 37% of the annual total, or 12,800 tons of woody material, to be allocated to actions in Marin County and 17%, or 5,880 tons, in San Mateo County. This totals 18,680 tons for the two counties (Douglas Kolozsvari, BAAQMD, email 8/24/05).*

*Using the assumptions provided by BAAQMD, the maximum tonnage of prescribed burning allowed annually under the cumulative scenario, including Alternative A, would represent roughly 80% of the total annual tonnage factored into the SIP for CO for this type of prescribed burning in these two counties. The assumptions include factors for prescribed burning conducted on acreage with heavy fuels, acreage with light fuels, and include maximum allowable acreages on an annual basis from projects by GGNRA, Point Reyes National Seashore (PRNS), local fire agencies, and other land management agencies operating in the two counties.*

*As a contributor to the cumulative scenario, the park's proposed prescribed burning of the vegetation types at GGNRA under Alternative A would permit the burning of roughly 1,000 tons*

*of vegetation annually; the SIP's full cumulative scenario accounts for approximately 15,000 tons heavy and light fuels annually. The majority of the tonnage included in the cumulative impact assessment can be attributed to the PRNS FMP, which proposes a cap of 2,000 acres of prescribed burning annually (in contrast to the cap of 110 acres under Alternative A of this EIS). With tonnage for the cumulative scenario calculated at 20% less than assumed for Marin and San Mateo counties under the SIP, and the probability that PRNS would not achieve 2000 acres per year of prescribed burning, the NPS believes that prescribed burning emissions under Alternative A are included in the SIP for CO and that no further conformity analysis is warranted.*

The Cumulative Impacts text for Air Quality under Alternative B (page 304, DEIS) has been modified to address the SIP for CO and the need for a conformity determination:

*Annual tonnage of vegetation treated under the cumulative scenario in Alternative B is similar to that in Alternative A by both acreage and fuel type (110 tons in Alternative A and 120 tons in Alternative B of this EIS). As in Alternative A, the NPS concludes that the emissions of CO from prescribed burning that would be generated annually under Alternative B are included in the SIP for CO and that no further conformity analysis is warranted.*

The Cumulative Impacts text for Air Quality under Alternative C (page 308, DEIS) has been modified to include the following text:

*When considering the cumulative impact scenario under Alternative C, the total annual tons of vegetation treated by prescribed burning would be 20% less than the SIP assumption for these two counties. As a contributor to the cumulative scenario, Alternative C would permit burning of roughly 2,000 tons of woody fuels annually. The majority of the tonnage to be treated annually by prescribed burning under the cumulative scenario can be attributed to the PRNS FMP which proposes a cap of 2,000 acres of prescribed burning annually in contrast to a 320-acre annual cap proposed under Alternative C of this EIS. With tonnage for the cumulative scenario calculated at 20% less than assumed for Marin and San Mateo counties under the SIP, and the probability that PRNS would not achieve 2000 acres per year of prescribed burning, the NPS concludes that prescribed burning emissions from Alternative C are included in the SIP for CO and that no further conformity analysis is warranted.*

**Comment 1-5.** The FEIS should address the water quality and aquatic effects of roads by describing the status and management of the GGNRA road system. The FEIS should identify avoidance and mitigation measures that are necessary to minimize impacts.

**Response to Comment 1-5.** Roads within the park are managed by the GGNRA Maintenance Division for public safety, recreation, and park management purposes. Roads are not exclusively used by or maintained for fire management use. The focus of the FMP is fuel reduction and fire management for resource benefit and public safety. The effect of roads on water quality and aquatic resources is beyond the scope of the FMP since the proposed fire management actions would not change the status or management of park roads.

Language in Section 2.4, Actions Common to All Alternatives, Roadside Fuel Reduction (page 69, DEIS) has been reworded to clearly state that road maintenance and management is not the responsibility of the Fire Management program and is beyond the scope of this EIS. It also states that the condition and management of park roads and trails would not be changed through the course of implementing the FMP. Figures 2-7 and 2-8 of the DEIS, which incorrectly depict roads as “fire roads,” have been removed from the FEIS.

Modifications to the DEIS text on page 69, are as follows:

### **Roadside Fuel Reduction**

~~The park maintains routinely clears vegetation and debris from selected paved and unpaved roads that provide routes for emergency evacuation, public safety, recreation, and access for park management uses. Front-country roads that are paved are generally open to public motor vehicle traffic. Unpaved, back-country roads are generally open only to NPS vehicles, but may also be open to foot, horse, and/or bicycle users. fire suppression activities or conducting prescribed burns, or that Some roads may serve as control lines for during a prescribed fire or wildland fire suppression operation. projects. An assessment of road conditions is typically performed in early spring, and then a work plan is developed and priorities for vegetation clearing are established. Roadsides are inspected for standing snags and/or weakened trees that could fall and block roadways during fires.~~

~~Upkeep of park roads is the responsibility of the GGNRA Maintenance and Engineering Division. The FMP alternatives do not propose changes to the status or management of park roads and trails. All Designated fire roads would continue to be maintained to allow for safe and efficient access and egress by emergency vehicles, and at a minimum, to allow access by Type III fire engines. Maintenance standards for emergency vehicles access on back-country roads in Marin County existing fire roads would conform to those be modified from the actions described in the a Memorandum of Understanding (MOU) between the Marin Municipal Water District (MMWD) and the NPS for lands in northern Marin (MMWD 2001). FMP actions Road maintenance would may include grading of all road surfaces when necessary, placement of erosion control measures, and vegetation thinning and removal by mowing or cutting along the road corridor to a specified width based on fuel type, slope, and roadway composition. as well as mowing and cutting. For road clearing, Larger trees along the sides of the roadways may be are limbed up and smaller trees removed as needed to ensure for emergency vehicle clearance is met. Smaller diameter trees are removed from a corridor on each side of the road (measured from the edge of the roadway). Downed trees in or near the roads are cleared. Grass that grows within the roadways is may be cut or mowed. Tools used for these tasks include brush cutters, chain saws, pole saws, and a chipper towed onsite. Debris would can be cut up and broadcast in the immediate area, piled and burned, or chipped and hauled offsite. Regrading would occur where rills and gullies have formed. Where necessary, regrading should follow standard local practices established by the NPS. This would include outslowing of roads to prevent rill and gully erosion.~~

~~In separate actions, apart from the FMP, the park may will evaluate, on an ongoing basis, the condition of fire-park roads. for direct and safe access conditions. As a result of this evaluation, Unnecessary fire-roads may be eliminated or designated for non-vehicular use, in coordination with other park planning efforts such as the Trails Forever initiative. and the sites restored to address erosion problems. In some cases, existing roads may be reconfigured or rerouted to address erosion and/or maintenance concerns. but these actions would be subject to further study. The effects of these actions on cultural resources will be taken into account prior to implementation.~~

~~Figures 2-7 and 2-8 show proposed actions for existing fire roads.~~

**Comment 1-6.** The FEIS should include additional information regarding herbicide use. Provide a description and environmental evaluation of frequently used herbicides, frequency of use, the potential for multiple applications, and proposed measures to protect wetlands, sensitive resources, the public and firefighters. The FEIS should specify that pesticides must be registered with the EPA and California Department of Pesticide Regulation and used according to the label. A review of the current status of all herbicides should occur annually prior to the application season.

**Response to Comment 1-6.** Information regarding the proposed use of herbicides and the description of its use is found in the EIS in both Chapter 2 – Alternatives and Chapter 3 – Affected Environment. In response to this comment, text has been modified in both chapters of the FEIS to provide further details and clarification about the park's use of herbicides. In general, it should be noted that the pesticides used on GGNRA lands are registered with EPA and the California Department of Pesticide Regulation and are used according to the label directions and federal and state pesticide laws.

The text in Section 2.5, Alternative A, Mechanical Treatment (DEIS pages 83-84) has been modified in the FEIS as follows in response to this comment:

The most common method of mechanical fuel reduction is the use of chain saws to thin or remove targeted vegetation, which is then either piled to be chipped, removed, or burned at a later date through the use of pile burns. In some instances, the materials are left in place. Other equipment used during mechanical fuel reduction may include weedwackers, mowers, and masticators. If herbicides are used during any project, they are applied according to strict specifications provided by the park's Integrated Pest Management (IPM) coordinator per the product label and applicable regulations, on nonnative tree and brush species that vigorously resprout. Any application requires the approval of the park's integrated pest manager and the Washington office coordinator for herbicide application. *The pesticides used on GGNRA lands are registered with EPA and the California Department of Pesticide Regulation and are used according to the label directions and federal and state pesticide laws.*

*For all projects that propose an herbicide use, a site specific environmental analysis is conducted by GGNRA staff. This assessment is conducted by, at a minimum, the supervisory vegetation ecologist, the chief of natural resources, and the GGNRA IPM coordinator; the latter also reviews it under his/her capacity as a licensed California Pest Control Adviser. If terrestrial or*

*aquatic threatened or endangered wildlife species are in the vicinity of the application site, the park's wildlife biologist and/or aquatic biologist are also consulted. If there is the potential for the listed species to be affected, the park would contact the USFWS for consultation under Section 7 of the Endangered Species Act. Any stipulations provided by the NPS staff and USFWS biologists are included in the written pest control recommendation by the IPM coordinator and issued to the herbicide applicator(s) to provide exact herbicide usage and application requirements. No applications occur in riparian or wetland areas with the exception of the use of specifically formulated herbicides in or near ephemeral drainages of seasonal wetlands applied during the dry season. Using aquatic formulations of herbicide, these areas would only be treated when targeted non-native invasive plant species cannot feasibly or effectively be controlled by mechanical means and the threat posed by the infestation is considerable. This could be due to the plant's persistent resprouting, its high rate of spread, or the extensive size of the existing infestation. All use of herbicide must follow federal, state and county regulations.*

*To protect sensitive species found in the treatment area, a variety of application techniques are used. These techniques may include the use of stump treatment using paint brushes or wick applicators, and/or the use of "shields" to prevent herbicide drift. The use of landscape fabric may also be considered as an alternative to herbicide application in cases where a smaller number of trees are involved, and when other conditions permit.*

The text in Chapter 3, Human Health and Safety, Herbicide Use (DEIS page 233) has been modified to further explain the review and approval process for herbicide use in the park as follows:

*Fire management and vegetation management projects in GGNRA use herbicides, on a case-by-case approval basis, to control nonnative plant species within specific management areas. The NPS Integrated Pest Management Manual, Director's Order #77-7 (NPS 1991) requires that all park pesticide use be reviewed each calendar year prior to the application season to ensure that the product and the proposed use for it are still legally registered. NPS requests for herbicide use are written for site- and time-specific applications and do not remain valid beyond one year. The GGNRA IPM program, consistent with NPS Director's Order #77-7, states that the purchase, storage, and application of any herbicide will follow all federal, NPS, state, and local regulations. If California regulations are more stringent than federal, the former will supersede the applicable federal regulations. The potential for multiple applications of herbicides to any one site is considered very low. Historically, the GGNRA has been able to control the target vegetation with only one application.*

Various brand names of herbicides containing glyphosate are used to prevent resprouting of cut tree stumps within nonnative evergreen forests or shrub lands, especially on blue gum eucalyptus, acacias, cotoneaster, and various brooms. Foliar applications are approved in limited scenarios where nonnative vine or shrub species create a dense and dominant component of the site, and have included Cape-ivy and eupatory. These species can form dense thickets of impenetrable vegetation near developments and other critical resources, posing a fire hazard.

If there are trees within a grove that are to be retained due to cultural resources issues, application of herbicides to the cut stumps is avoided to avoid spread of the systemic treatment through the roots to the trees that were not to be treated with herbicide. In that case, a thick layer of chips could suppress some proportion of the regrowth, or nailing heavy roofing paper to the stump or applying landscape fabric onto the cut stump could serve to depress resprouting.

*The most commonly used herbicide for FMP actions in GGNRA is Roundup Pro, a low-toxicity, general use herbicide. The U.S. Environmental Protection Agency (EPA) has rated it as a Class 3, Caution-labeled herbicide; the EPA registration number is 524-475. Roundup Pro has also been approved and registered for use in California by the California Department of Pesticide Regulation. The active ingredient in Roundup Pro is glyphosate. Glyphosate, when applied to foliage, is absorbed by leaves and stems and rapidly moves through the plant. Glyphosate is a translocating herbicide that moves from the area where it was applied down to the roots of the plant via the active tissue – the cambium. It remains in the roots. Glyphosate is applied by painting it on the tree stump immediately after the tree is cut. If the trees are in a riparian area, no foliar spraying may occur, especially if the habitat supports anadromous fish. During the dry season (July 1 to November 15), cut stumps of nonnative trees and shrubs may be treated with herbicide.*

Foliar herbicide applications beyond the riparian corridor are not approved where saturated soils are present, at wind speeds over 5 miles per hour, or when weather conditions facilitate herbicide movement toward drainages.

If glyphosate is inadvertently dripped or sprayed onto soil, the product will bind with the soil. When used in accordance with label directions, when the product is bound it is no longer available for plant uptake and will not harm offsite vegetation if roots grow into the treatment area or if the soil is transported offsite. The strong affinity of this product to soil particles prevents the product from leaching out of the soil profile and entering groundwater. The affinity between this product and soil particles remain until this product is degraded, involving primarily a biological degradation process carried out under both aerobic and anaerobic conditions by soil microflora. When sprayed on leaves, the half-life for glyphosate is 1.6 to 26.6 days. In water, the half-life is 3.5 to 70 days, In soil, the half-life is 2.8 to 60 days (Badzik 2004).

*The surfactant in Roundup has a soil half-half life of less than one week, thus the potential for leaching of the herbicide is low. According to U.S. Forest Service research (Glyphosate fact sheet), the major products from burning vegetation treated with glyphosate are phosphorus pentoxide, acetonitrile, carbon dioxide and water. Phosphorus pentoxide forms phosphoric acid in the presence of water. None of these compounds are known to be a health threat to firefighters or the public at the levels which would be found in a vegetation fire.*

All herbicide use is administered through each park's integrated pest management coordinator. All herbicides must be applied by a state-licensed pesticide applicator. *The pesticides used on GGNRA lands are registered with EPA and the California Department of Pesticide Regulation and used according to the label directions and federal and state pesticide laws. All use is*



reported monthly to the coordinator, the county, and the State of California. A review of the current status of all herbicides considered for use is conducted prior to each application season.

**Comment 1-7.** The FEIS should commit to project specific environmental analyses whenever fire management activities are proposed in sensitive watersheds, near water bodies with existing water quality problems, or near key resources, such as Bolinas Lagoon. The analyses should evaluate the potential for erosion and sedimentation, nutrient inputs, and other adverse impacts to resources at risk.

**Response to Comment 1-7.** The NPS agrees with this comment. The NPS is required to conduct these types of analyses in accordance with the NPS Management Policies 2001 (NPS 2000a) and the agency's NEPA guidelines (NPS 2001a). GGNRA staff use the project review process, as described in Mitigation Measure FMP-1(a), to determine the appropriate level of NEPA analysis needed for each project. An analysis of potential project impacts is needed by staff to determine the level of potential effect; it is at this initial planning stage that the analysis recommended in this comment would be conducted. To make that decision, subject matter experts must first identify the sensitive resources that could be directly or indirectly affected by project implementation. One type of resource identified by this process would include water bodies that have water quality issues, provide important habitat values, or have special status. In considering the project, subject matter experts may tailor the project to avoid potential effects or set conditions on project implementation to reduce the degree of potential effect. In addition to the project review process, specific FMP mitigation measures have been developed to address potential effects of erosion and sedimentation to water resources (see mitigation measures SW-1, SW-2, SW-3, SW-4, SW-6, SW-7, SW-9 and SW-11 on pages 97 and 98).

**Comment 1-8.** The FEIS should include water quality data obtained from the cited water quality monitoring projects. Provide a short description of the water quality characteristics of key water bodies and creeks. State whether the water quality constituents meet water quality standards.

**Response to Comment 1-8.** As noted on page 160 of the DEIS, GGNRA is presently designing a park-wide monitoring program that will capture past data collection activities and include areas that have not been monitored to date. Until this program is developed, the park has no methodical summary of existing data that would allow for meaningful interpretation.

Edits have been made to the FEIS to describe the types of information and analysis that will be included in the upcoming Water Quality Data Inventory and Analysis Report. Text changes to the DEIS page 167, are as follows:

Work is in progress to document facilities/roads and trails and other water quality threats more thoroughly. For example, for the Redwood Creek watershed, a sediment budget study and a report of all sediment sources in the watershed were conducted. Trail maps are being updated for the park and erosion surveys continue throughout the Marin Headlands. ~~A dam inventory will be included in upcoming Water Quality Data Inventory and Analysis Report.~~ Culvert mapping has occurred in Rodeo Valley.

*A summary of existing data for GGNRA water resources and a description of future monitoring needs is included in a report entitled San Francisco Area Network Preliminary Water Quality Status Report (Cooprider, 2004), which is a review of the nine regional park units,. The following information summarizes the park watersheds that are described in the report.*

The following citation has been added to page B-5 of Appendix B - Literature Cited:

*Cooprider, Mary. 2004. San Francisco Area Network Preliminary Water Quality Status Report, National Park Service, San Francisco Bay Network.*

**Comment 1-9.** The FEIS should provide the rationale, references and data to support the proposed 20% aerial extent criteria. We recommend the NPS consider “intensity of impact” criteria which includes the quality and functional value of the wetland or resource instead of only an aerial percent loss of the vegetation type.

**Response to Comment 1-9.** GGNRA is developing methods to evaluate wetland function and value. Until these methods are developed, GGNRA subject matter experts are comfortable using the criteria of aerial extent of impact, as these criteria are consistent with other Service-wide planning documents.

**Comment 1-10.** The goal of direct, indirect and cumulative impacts should be avoidance. The FEIS should commit to avoid all cumulative impacts to wetlands, whenever possible. Only if impacts are unavoidable should projects be designed to minimize and compensate or mitigate for wetland impacts. In these instances, project-specific analyses should be performed.

**Response to Comment 1-10.** Text has been added to the FEIS in Chapter 4, Environmental Consequences, Wetlands Assessment Methodology (DEIS page 261):

Executive Order 11990 requires that agencies work to minimize the destruction, loss, or degradation of wetlands. Director’s Order 77-1: Wetlands Protection, and Procedural Manual 77 1 (NPS 2002a) provide specific procedures for implementing Executive Order 11990. *Director’s Order 77-1 states that NPS adopts a goal of "no net loss of wetlands." In addition, the NPS will strive to achieve a longer-term goal of net gain of wetlands Service-wide. For undertakings that could affect wetlands, the NPS will take the following measures:*

- a) avoid adverse wetland impacts to the extent practicable,*
- b) minimize impacts that cannot be avoided, and*
- c) compensate for remaining unavoidable adverse wetland impacts via restoration of degraded wetlands.*

*If the preferred alternative in an EA or EIS will result in adverse impacts to wetlands, a "Statement of Findings" documenting compliance with Director's Order 77-1 and Procedural Manual 77-1 will be completed. In addition, all applicable permits sought will be consistent with*

Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, *which* authorize the U.S. Army Corps of Engineers (USACE) to grant permits for construction and disposal of dredged material in waters of the United States, including wetlands.

**Comment 1-11.** The FEIS should describe the funding and staffing issues encountered under the 1993 FMP. Describe what has not been completed under the 1993 FMP. Evaluate whether the funding and staffing issues will continue under the new FMP and what options are available to overcome these potential implementation barriers. The FEIS should present management priorities and actions that will be taken if sufficient funding and staffing is not provided for full implementation of the new FMP. Describe the criteria, if any, used to prioritize implementation of FMP actions and to maximize the benefits and use of limited staff and funding resources.

**Comment 1-12.** Given the inability to completely implement the existing FMP, we recommend the NPS consider developing an alternative that can be fully implemented with existing authorized resources.

**Response to Comments 1-11 and 1-12.** In Chapter 2, Section 2.5 Alternatives, the FEIS describes some of the park's accomplishments in implementing the 1993 FMP. For example, on page 84 of the DEIS under Prescribed Fire, an account of prescribed burns conducted between 1996 through 1998 is given.

The park's implementation of the 1993 FMP has been limited due to a variety of factors, including a shift in the Federal Wildland Fire Management Policy and constraints on funding and staffing, as noted in the comment. Federal policy now requires fire management projects to emphasize the protection of life and property as a primary goal with an emphasis on the reduction of fuels along the federal wildland urban interface. Recently, several large-scale fuel reduction projects have been completed in and adjacent to park lands through the use of National Fire Plan funding granted to GGNRA. National Fire Plan funding is mostly earmarked for mechanical fuel reduction projects. The park's 1993 FMP focused primarily on natural resource management issues and the use of prescribed burning to accomplish natural resource objectives; by contrast, the focus of current fire policy is on fuel reduction within the wildland urban interface areas in the park.

In recent years, GGNRA has had adequate staffing to manage multiple projects. In addition, the park has benefited from access to fire management positions shared among the Bay Area Network of national parks and cooperative working relationships with local fire departments and Fire Safe councils. Overall, the park's fire management operations has steadily improved with an increase in staff, training, project funding, and partnerships with other agencies.

As noted in the EPA comments on Park Operations, funding and staffing issues for the fire management program at GGNRA may continue in the coming years. However, recent experience has demonstrated that undertakings done cooperatively between NPS units, local land management agencies and fire departments can greatly expand the number of projects that can be accomplished each year. The shared use of staff and equipment benefits the goals of all agencies involved. Furthermore, the park's use of local contractors to implement fuel reduction projects not only supports the local economy but leverages the work that can be done by park staff.

As described in the DEIS, NPS policy requires that each park develop five-year implementation plans for fire management projects. Multi-year planning allows parks to prioritize projects based on the size of an area, the difficulty of terrain, and/or the need for ongoing regular treatment to suppress vigorous non-native, highly flammable and invasive vegetation. The five year plans are reviewed, updated, and supplemented annually to reflect the past year's accomplishments and extend the planning horizon one additional year.

With regards to criteria the park uses for setting priorities, GGNRA fire management projects are developed with input from natural and cultural resource staff, park rangers, and local fire departments on an annual basis. Recommendations for fuel reduction projects are also submitted from adjacent homeowners' associations, individuals, and local Fire Safe councils. Fuel reduction projects for areas close to development and that demonstrate public/private or federal/local partnerships are also a federal priority. Projects are sought within the wildland urban interface that can successfully convert vegetation within the WUI from highly flammable non-native plants to more fire-resistant native vegetation.

This FMP FEIS sets forth a framework for the park's fire management at a strategic level. The plan will be used as the basis for future budget requests for implementation activities. The maximum acreages by treatment for each alternative are meant to provide an annual "cap" of work that could be done and to provide a means for meaningful impact assessment between the management alternatives. The NPS believes that each alternative could be implemented with existing funding and staff, but the rate at which each alternative would be implemented would vary due to the amount of work that could be accomplished each year. From year to year, the amount of acreage accomplished will vary based on numerous factors such as allocations from the overall park budget, special project funding from National Fire Plan programs, weather conditions, regional air quality, staffing changes, and requests from individual neighbors, communities, other agencies or jurisdictions.

**Comment 1-13.** The FEIS should include additional information regarding invasive species and the conversion of forest and grasslands to scrub land, brush fields or other habitat types that will require future vegetation management. Describe whether the FMP will include actions to control habitat conversion and to actively manage vegetation.

**Response to Comment 1-13.** The Federal Wildland Fire Management Policy and the National Fire Plan require the preparation of fire management plans by all units of the NPS that have burnable vegetation. Federal policy and the National Fire Plan funding for projects and staffing focus the FMPs on programs and projects that promote or support the National Fire Plan priorities of fire suppression, burned area rehabilitation, hazardous fuels reduction, and assistance to nearby communities. Because of this focused mandate, other types of vegetation management not directly related to fuel reduction or prescribed burning, are outside the scope of this FMP.

This FMP provides a framework for fire management activities and is not intended to fully address park-wide vegetation management goals and activities. Park-wide vegetation goals are addressed in the Natural Resources Section of the park's Resource Management Plan (NPS 1999c). If a vegetation

management project is designed strictly to achieve natural resource objectives without a companion objective of fuel reduction, the project is considered outside the scope of the FMP.

The FMP Goals and management objectives, specifically Goals 3 and 5 in Section 1.4 of the DEIS, address natural resource protection and include objectives to control invasive plant species and rehabilitate plant communities and habitat for sensitive species through the use of prescribed fire. As non-native invasive plants are extremely common within the wildland urban interface (WUI) of GGNRA, vegetation type conversion from non-native, pyrophytic invasive plants to more fire resistant native plant communities is an objective of many projects.

The FMP EIS addresses the range of vegetation type conversion issues in Chapter 3, Section 3.4, Plant Communities, under the subheadings of Fire Ecology under each plant community type. As a programmatic document, the FMP broadly describes areas of GGNRA which could benefit from type conversion through prescribed burns and areas where mechanical fuel reduction projects would promote type conversion to less flammable plant communities. The benefits of successful type conversion are discussed in Chapter 4, Environmental Consequences, as part of the impact analysis to vegetation, special status species, cultural resources, human health and safety, and the visitor experience. Examples of beneficial effects include conversion of areas that are solidly non-native Harding or velvet grasses to a mix of native and non-native grasses and forbs; understory burning of forested areas to address the presence of broom; and/or the conversion of a eucalyptus stand sited adjacent to a residential area to a less flammable vegetation species.

**Comment 1-14.** The FEIS should evaluate the potential for vegetation change since 1994. If significant deviations from 1994 vegetation patterns are possible, the NPS should consider conducting additional vegetation surveys where such changes may have occurred.

**Response to Comment 1-14.** As stated in Figure 3-9, the park acknowledges that some changes in vegetation communities have occurred since 1994 and are not here represented. Other areas were not included in the 1994 map and more recent photographic imagery was used to generally define vegetative cover. In addition, the stands of nonnative plants in GGNRA and the habitat supporting sensitive species are based on recent records. The park continues to update the vegetation survey data and maps as projects and needs arise, such as during the development of site-specific plans. New data are regularly incorporated into the park maps and planning efforts so that proposed projects and programs reflect current conditions that build from the 1994 base map data.

**Comment 1-15.** US EPA recommends that the FEIS includes a short description of the status or outcome of the Section 7 consultation, including FWS and NOAA Fisheries mandatory and recommended reasonable and prudent measures and terms and conditions for incidental take, if approved. If available, include the Biological Opinions or concurrence/nonconcurrence letters in a FEIS appendix.

**Response to Comment 1-15.** Text has been added to Chapter 5, Section 5.2 to summarize the findings of the USFWS consultation and gives the status of the consultation with NOAA Fisheries. The terms and conditions of the USFWS Incidental Take Permits have been added as new mitigation

measures SS-5 and SS-6 in the FEIS in Chapter 2, Section 2.7 under Special Status Species. The final USFWS Biological Opinion is included in the FEIS as Appendix K.

**Comment 1-16.** The FEIS should provide a short description of the criteria and process used to select the projects included in the cumulative effects analysis in Appendix C of the DEIS.

**Response to Comment 1-16.** The following text has been added to the introduction of Appendix C – Cumulative Actions.

*The cumulative project list was developed by an interdisciplinary team of GGNRA staff assigned to prepare the FMP. The team looked for past, present, and reasonably foreseeable future projects that could affect the same resources as the FMP. NPS NEPA guidance states that cumulative actions considered should be those that would have additive impacts on a particular environmental resource to allow for reasonable decision-making about the management of that resource. The list should be limited to projects that would clearly have potential effects and are far enough along in the planning process make some level of analysis feasible. As a general rule, the farther removed an action is from the project area or the project start date, the less need there is for detailed and exact analysis of the action's cumulative impacts.*

*Implementation of the FMP would have the greatest impact on resources within the federal parklands and on visitors to those parks. In addition, the FMP's implementation would affect air basin air quality and shared watersheds. Most projects in the cumulative actions list share the same affected area as the FMP or would impact similar receptors, whether they are park visitors or park neighbors. Some similar, non-park actions are also included in the cumulative list, such as vegetation management projects or prescribed burns conducted by other land management agencies, the Marin County Fire Department, and the California Department of Forestry and Fire Protection.*

*No known large scale development projects are currently proposed for western Marin, Woodside or Pacifica; all three areas are largely built out and have restrictive zoning requirements on remaining vacant parcels due to steep, unstable slopes, seismic hazard, viewshed impacts, or to protect the agricultural base of western Marin.*

**Comment 1-17.** Given the local weather and regulatory restrictions, the FEIS should describe how the NPS proposes to accomplish the level of prescribed burning proposed in the preferred alternative, which is more than double the amount in the existing 1993 FMP.

**Response to Comment 1-17.** The proposed acreage under Alternative C, the preferred alternative, given local air quality regulations and weather variables, is very achievable. Smoke emissions during the burn can be controlled using a variety of firing techniques, time of ignitions, and acceptable weather conditions. Point Reyes National Seashore has been successful in burning up to 500 acres a year in similar fuel types. Strict allowable weather parameters are determined and followed for every burn. The targeted acreage for prescribed fire, as proposed in the FEIS, will be accomplished by

utilizing park staff, local cooperators, and out-of-area resources. The amount of acres treated is not bound by existing park staffing levels. Each prescribed fire has an approved plan that includes a burn- specific worksheet that determines the number and types of resources (.i.e., engines and hand crews) needed to accomplish the project safely. These resource numbers are based on fuel types, weather parameters that fall within pre-determined prescription parameters, and calculated fire behavior. These required resources will be on site prior to any prescribed fire initiation.







Arnold  
Schwarzenegger  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Sean Walsh  
Director

May 31, 2005

Brian O'Neill  
National Park Service  
Building 201 Fort Mason  
San Francisco, CA 94123

Subject: Golden Gate National Recreation Area Fire Management Plan  
SCH#: 2005032135

Dear Brian O'Neill:

The State Clearinghouse submitted the above named Draft EIS to selected state agencies for review. The review period closed on May 27, 2005, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

A handwritten signature in cursive script that reads "Terry Roberts".

Terry Roberts  
Director, State Clearinghouse

### Document Details Report State Clearinghouse Data Base

**SCH#** 2005032135  
**Project Title** Golden Gate National Recreation Area Fire Management Plan  
**Lead Agency** National Park Service

**Type** EIS Draft EIS  
**Description** The DEIS for the Golden Gate NRA Fire Management Plan describes and analyzes three alternative strategies for implementing fire management actions on GGNRA lands in San Mateo, San Francisco, and Marin Counties. In conformance with federal wildland fire management policy, fire management actions address the range of mechanical treatments (from handtools to heavy equipment) and prescribed burning applied with the objectives of reducing fire hazard in the wildland urban interface zone.

#### Lead Agency Contact

**Name** Brian O'Neill  
**Agency** National Park Service  
**Phone** (415) 218-6551 (Wendy  
**Fax**  
**email** Poinso)  
**Address**  
**City** Building 201 Fort Mason  
 San Francisco  
**State** CA **Zip** 94123

#### Project Location

**County** San Mateo, San Francisco, Marin  
**City**  
**Region**  
**Cross Streets**  
**Parcel No.** Numerous  
**Township** **Range** **Section** **Base**

#### Proximity to:

**Highways** 1, 101  
**Airports**  
**Railways**  
**Waterways** San Francisco Bay, Pacific Ocean, Bolinas Lagoon, Rodeo Lagoon  
**Schools**  
**Land Use** Federal National Parklands

**Project Issues** Aesthetic/Visual; Air Quality; Archaeologic-Historic; Coastal Zone; Cumulative Effects; Drainage/Absorption; Economics/Jobs; Forest Land/Fire Hazard; Landuse; Noise; Recreation/Parks; Soil Erosion/Compaction/Grading; Vegetation; Wetland/Riparian; Wildlife

**Reviewing Agencies** Resources Agency; Regional Water Quality Control Board, Region 2; Department of Parks and Recreation; Native American Heritage Commission; Department of Health Services; Office of Historic Preservation; Department of Forestry and Fire Protection; Department of Fish and Game, Region 3; Department of Water Resources; California Coastal Commission; California Highway Patrol; Caltrans, District 4; San Francisco Bay Conservation and Development Commission; State Lands Commission

**Date Received** 03/29/2005 **Start of Review** 03/29/2005 **End of Review** 05/27/2005

Note: Blanks in data fields result from insufficient information provided by lead agency.

## **Response to Comment Letter 2**

### **State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit.**

The State Clearinghouse letter lists the State agencies that were sent a copy of the GGNRA FMP DEIS to review and notes that no comments were received back from these reviewing agencies by the close of comments date. The letter also acknowledges that GGNRA has complied with State Clearinghouse review requirements for draft environmental documents. No response required.



STATE OF CALIFORNIA—THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, Governor

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

P.O. Box 944246  
SACRAMENTO, CA 94244-2460  
Website: [www.fire.ca.gov](http://www.fire.ca.gov)  
(916) 653-9424

**RECEIVED**

MAY 27 2005

SUPERINTENDENT'S OFFICE

Superintendent  
Golden Gate National Recreation Area  
Building 201, Fort Mason  
San Francisco, CA 94123

May 26, 2005

Attention: Fire Management

We have reviewed the Fire Management Plan (FMP) Draft Environmental Impact Statement for the National Park Service (NPS) Golden Gate National Recreation Area (GGNRA), giving special attention to the areas within San Mateo County. Overall, we feel this document provides an excellent basis for current and future project planning. This document represents a synthesis from many sources of information regarding fire history, fire weather, and the impacts of vegetation management. Indeed, it will be a helpful addition for the California Department of Forestry and Fire Protection – San Mateo Santa Cruz Unit's (CDF-CZU) Vegetation Management and Community Wildfire Protection Programs.

The stated goals of the FMP are consistent with the California Fire Plan and CDF's Vegetation Management Program. We support the chosen alternative C, as this alternative will permit the broadest use of fire management strategies to reduce fuel loads within the wildland urban interface. The addition of properties within San Mateo to the GGNRA presents opportunities for CDF to coordinate efforts across ownership boundaries and to maximize the benefits of fuel management projects. There is already a proven track record in Marin County of successful implementation of fuel management projects across ownership boundaries in GGNRA and State Responsibility Area lands. In fact, we look forward to working cooperatively with the NPS to achieve our common goals.

Specific comments regarding the FMP are listed below:

- 3-1 [• Page 24, third paragraph, incorrectly refers to CDF as the "State Division of Forestry".
- 3-2 [• Maps throughout the plan showing Phleger Estates incorrectly identifies Skyline Road (Highway 35) as Canada Road.
- 3-3 [• It is unclear whether Phleger Estates contains non-native eucalyptus forest, as the maps on pages 50 and 190 are inconsistent. The map on page 50 shows the vegetation type as eucalyptus forest while the map on page 190 shows the same area as coastal scrub. The map on page 190 shows no Douglas-fire/redwood forest in Phleger Estates.
- 3-4 [• It will be helpful for future project planning to map and identify adjoining larger ownerships to GGNRA lands such as the Mid-Peninsula Open Space District, San

CONSERVATION IS WISE-KEEP CALIFORNIA GREEN AND GOLDEN

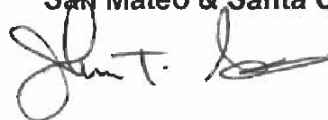
PLEASE REMEMBER TO CONSERVE ENERGY. FOR TIPS AND INFORMATION, VISIT "FLEX YOUR POWER" AT [WWW.CA.GOV](http://WWW.CA.GOV).

- 3-4 ↑ Francisco Watershed property, Department of Fish and Game holdings and other large ownerships.
- 3-5 | • Page 168 of the FMP discusses erosion and landslides in Phleger Estates associated with trails. It will be of critical importance to assess the condition of the roads and trails and correct problems, not only for water quality concerns but also for emergency access. It is expected that that project plans for Phleger Estates identify sources of sediment and stability problems and incorporate mitigations as appropriate.

We once again thank you for our opportunity to review the GGNRA FMP. We also look forward to working with your agency on future wildland fuel mitigation projects. It is the common goal of our two agencies to protect communities and the environment from large devastating wildfires. If you should have any questions, or if you require further information, please contact Assistant Chief John Sims at (650) 573-8844.

Sincerely;  
**John E. Ferreira, Chief**  
**San Mateo & Santa Cruz Unit**

By:



John T. Sims  
Assistant Chief, Operations  
CDF/San Mateo County Fire Dept.

Cc: John Ferreira, Chief  
Ken Massucco, Chief  
Allen S. Robertson, Deputy Chief  
file

## Response to Comments in Letter 3

### State of California – The Resources Agency, Department of Forestry and Fire Protection, San Mateo & Santa Cruz Unit

**Comment 3-1.** Page 24, 3<sup>rd</sup> paragraph incorrectly refers to CDF as the State Division of Forestry.

**Response to Comment 3-1.** The referenced text has been corrected in the FEIS as follows:

The 1994 Marin Countywide Plan directs the MCFD and other local fire protection agencies to work in concert with the Marin County Open Space District, the State Department ~~Division~~ of Forestry and Fire Protection, and the NPS to encourage and promote the maintenance of existing fuel breaks and emergency access routes for effective fire suppression.

**Comment 3-2.** Maps throughout the plan showing Phleger Estates incorrectly identify Skyline Road as Canada Road.

**Response to Comment 3-2.** The text on Figures 2-2, 2-4, 2-6, 3-6, 3-10 has been corrected in the FEIS to change Canada Road to Skyline Road.

**Comment 3-3.** Maps on pages 50 and 190 are inconsistent. Clarify whether Phleger Estates has eucalyptus forest and/or Douglas fir forest.

**Response to Comment 3-3.** Figure 2-2 has been corrected to show Douglas fir forest and no eucalyptus forest at the Phleger Estate.

**Comment 3-4.** It will be helpful for future planning projects to map and identify the larger adjoining public ownership areas such as Midpeninsula Open Space District Preserves, San Francisco Watershed property, Department of Fish and Game holdings and other large ownerships.

**Response to Comment 3-4.** The maps have been corrected to show larger public agency land management areas.

**Comment 3-5.** Page 168 of the DEIS discusses erosion and landslides in Phleger Estates associated with trails. It will be of critical importance to assess the condition of the roads and trails and correct problems, not only for water quality concerns but also for emergency access. It is expected that project-specific plans for Phleger Estates identify sources of sediment and stability problems and incorporate mitigations as appropriate.

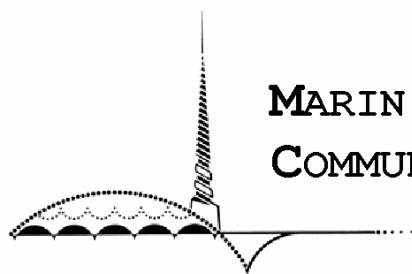
**Response to Comment 3-5.** The commenter is correct. In conformance with mitigation measure FMP-1(a), site-specific fire management actions proposed for the Phleger Estate would require additional NEPA review by NPS staff to assure that proposed projects conform with the findings of the FMP EIS. Site-specific mitigation measures would be developed at that point to address any potential impacts not sufficiently addressed in this programmatic EIS. As described in the Response to Comment 1-5, the assessment and rehabilitation of roads and trails on national park lands is the

## **Appendix H – Response to Comments on the Draft Environmental Impact Statement**

responsibility of the GGNRA Maintenance and Engineering Division. That Division would assist the Fire Management Office in roadbed or trail rehabilitation, relocation, or repair.



Letter 4



**MARIN COUNTY  
COMMUNITY DEVELOPMENT AGENCY**

ALEX HINDS, DIRECTOR

May 27, 2005

Superintendent  
Golden Gate National Recreation Area  
Building 201, Fort Mason  
San Francisco, CA 94123  
Attention: Fire Management


Subject: Golden Gate National Recreational Area Fire Management Plan Draft Environmental Impact Statement.

Dear Superintendent,

Thank you for providing us the opportunity to comment on the scope of the DEIR for the Golden Gate National Recreation Area Fire Management Plan (FMP). Please take the following into consideration when selecting the alternative for the FMP:

- 4-1 1. Regarding the information provided on page 24 on the Marin Countywide Plan, both a new Wildland Urban Interface and a Fire Risk map have been included in the update. The Fire Risk map illustrates which areas of the County have the greatest potential for large, damaging fires based on vegetation and slope. As depicted on this map, some of the most hazardous locations are in Marin Municipal Water District and federal lands, which interface with a variety of communities. This map should be consulted in the preparation of the final EIR.
- 4-2 2. Several areas adjacent to the GGNRA each have their own individual Community Plans, consistent with the policies in the Countywide Plan. Communities with Community Plans include Stinson Beach, Muir Beach, and Tamalpais Valley. These documents should also be consulted in the EIR.
- 4-3 3. The DEIR did not include a reference to the Marin County Local Coastal Program (LCP), Units I and II, which was certified by the California Coastal Commission on April 1, 1980 and April 1, 1981, respectively. Under the 1976 Coastal Act, the purpose of the LCP is to protect and conserve the coastal resources and maximize public use and enjoyment of them. The DEIR should include a reference to the LCP.
- 4-4 4. The DEIS addresses water quality and wetlands, but does not address water supply. Water supply is an important issue that should be addressed. For example, depending on which Alternative is selected, will adequate water be available for fire suppression and to avoid unacceptable risks, when and if the controlled burns occur, particularly during the summer months when peak demand is at its highest? Will additional water be needed, above and beyond what is currently being used, in the implementation of these alternatives?
- 4-5 5. Chapter 2, Section 2.5: Alternatives, describes specific research projects regarding the impacts under each alternative. With regards to the monarch butterfly, research should be taken to document the long-term impacts that the alternatives may have on them. A local biologist and

## Appendix H – Response to Comments on the Draft Environmental Impact Statement

- 4-5  expert on the monarch butterfly should be consulted to provide recommendations and possible mitigation measures.
- 4-6 6. The DEIR gives brief mention to monarch butterflies in SS-37 on page 105. This statement should be expanded to include all habitat areas, not just clustering sites. In March 2004 the Community Development Agency conducted a study of the monarch butterfly, mapping the current climax, transitional, and historic overwintering sites from Bolinas south to Fort Baker. This study included mapping the known area of monarch use for sunning, nectaring, watering, and shifting for protection during storm events. These areas should be included in addition to the cluster sites.
- 4-7 7. Herbicide use is discussed in Chapter 3 under Human Health and Safety on page 233. The Countywide Plan Update includes policies to restrict the use of herbicides, insecticides, or any toxic chemical substances in sensitive habitats, except when an emergency has been declared; the habitat itself is threatened; a substantial risk to public health and safety exists; or when such use is authorized pursuant to a permit issued by the Agricultural Commissioner. The DEIR should consider limiting the use of herbicides.

If you have any questions, please do not hesitate to contact me at (415) 499-6290.

Sincerely,

Kristin Drumm, Planner

Cc: Michele Rodriguez, Principal Planner

## Response to Comments in Letter 4

### Marin County Community Development Agency

**Comment 4-1.** The County's Wildland Urban Interface map and Fire Risk map have recently been updated and should be consulted in the preparation of the Final EIS.

**Response to Comment 4-1.** GGNRA staff consulted with Marin County Fire Department (MCFD) staff early in the FMP planning process. MCFD staff made a presentation to NPS staff on the factors and outcomes of the updated WUI and Fire Risk models; this presentation was followed by an extensive question and answer session. Information NPS staff gained from the MCFD presentation was used to develop the model described and maps shown in Appendix E, Fire Hazard Model.

**Comment 4-2.** The Community Plans of Stinson Beach, Muir Beach and Tamalpais Valley should be consulted in the EIS.

**Response to Comment 4-2.** The text on page 25 of the DEIS, in the section on Applicable County, Special District, and State Plans, has been modified to address conformance with the local community plans as follows:

#### *Marin County Community Plans*

*The principal unincorporated residential areas of Marin County have Community Plans that were developed through a CEQA process led by the County with the participation of local residents. The Community Plans guide land use and development for each residential area by setting goals, policies and objectives. Relevant to this FMP FEIS are the Marin City Community Plan (1992), Stinson Beach Community Plan (1985), the Muir Beach Community Plan (1972), the Bolinas Community Plan (1975), and the Tamalpais Area Community Plan (1992). The Tamalpais Area Community Plan includes the neighborhoods of Tam Valley, Homestead Valley, Almonte and Muir Woods Park. The section of the Tamalpais Area Plan addressing Homestead Valley includes an objective to reduce wildfire hazard by working with residents and landowners to catalog and remove stands of eucalyptus trees which pose a risk to persons and property (LU30.1a, page III-69). The Plan encourages homeowners in the urban/wildland interface areas to remove flammable vegetation and to plant fire-resistant landscaping around the perimeter of their properties (page V-4).*

Citations for the five community plans have been added to Appendix B – Literature Cited.

*Marin County. 1992. Marin City Community Plan. Department of Community Development.*

*\_\_\_\_\_. 1992b. Tamalpais Valley Community Plan. Department of Community Development.*

*\_\_\_\_\_. 1985. Stinson Beach Community Plan. Department of Community Development.*

*\_\_\_\_\_. 1975. Bolinas Community Plan. Department of Community Development.*

*\_\_\_\_\_. 1972. Muir Beach Community Plan. Department of Community Development.*

**Comment 4-3.** The EIS should include a reference to the County’s Local Coastal Plan.

**Response to Comment 4-3.** In response to this comment, a new paragraph has been added to the Marin Countywide Plan (page 25, DEIS) section after the listing of county implementation programs.

*The Marin County Local Coastal Plan, Units 1 and 2 (1980 and 1981), guides development in the coastal region of Marin County but does not address wildland fire hazard, fuel reduction, wildland urban interface, nor vegetation management.*

**Comment 4-4.** The DEIS addresses water quality and wetlands but does not address water supply. Under each alternative, will there be adequate water supply for fire suppression or for prescribed burns conducted during periods of high water demand? Will additional water be needed, above the current levels of use, if each alternative is implemented?

**Response to Comment 4-4.** All necessary water will be on-site prior to ignition of any prescribed fire. Water is stored in fire engines and water tenders. Portable water sources, such as 2,500 or 5,000 gallon folda-tanks, can also be pre-positioned at the site. For projects in Marin County, GGNRA could request from Point Reyes National Seashore or Stinson Volunteer Fire Department of Southern Marin Fire the use of a water tender truck for the duration of the prescribed burn. Water is typically filled from hydrants at the point of origin. For prescribed burns near communities with limited water supply, water can be shuttled to the site and transferred to the tanks using fire engines. Water shuttled from local fire district would be refilled during off-peak hours to avoid excessive drawdown of local supplies. Unplanned wildland fires are unpredictable in their location, intensities, duration, size, and timing. Therefore, it is difficult to predict the water usage requirements for wildland fire events.

**Comment 4-5.** Chapter 2, Section 2.5, Alternatives, describes specific research projects regarding the impacts under each alternative. With regard to the monarch butterfly, research should be taken to document the long-term impacts that the alternatives may have on them. A local biologist and expert on the monarch butterfly should be consulted to provide recommendations and possible mitigation measures.

**AND**

**Comment 4-6.** The DEIR gave brief mention to monarch butterflies in SS-37 on page 105. This statement should be expanded to include all habitat areas, not just clustering sites. The areas identified through the March 2004 monarch butterfly study conducted by the County Community Development Agency should be included in SS-37. That study mapped areas used by the monarch for sunning, nectaring, watering and shifting for protection during storm events.

**Responses to Comments 4-5 and 4-6.** Site-specific plans and actions will address these concerns on a case by case basis. Projects that have the potential to impact monarch butterfly use areas are evaluated by park staff, and if necessary, by a qualified monarch butterfly biologist. Through the park’s environmental review process, the impacts on this species will be carefully weighed in conjunction with impacts (both positive and negative) on other listed and species of concern, as well as overall habitat conditions. As needed for the assessment process, qualified monarch butterfly biologists will be used for surveying and assessment.

**Comment 4-7.** Pesticide use is discussed in Chapter 3 under Human Health and Safety on page 233. The Countywide Plan Update includes policies to restrict the use of pesticides or any toxic chemical substance in sensitive habitats, except when an emergency has been declared; the habitat itself is threatened; a substantial risk to public health and safety exists; or when such use is authorized pursuant to a permit issued by the Agricultural Commissioner. The Final EIS should consider limiting the use of herbicides.

***Response to Comment 4-7.*** Herbicide use within the park is carefully managed through the park's Integrated Pest Management coordinator within the division of Natural Resources and Science. Text describing the review procedure for projects proposing herbicides use, the type of herbicide applied, and the conditions for herbicide application has been added to the FEIS in Chapters 2 and 3. See the Response to Comment 1-6. Sensitive habitats and resources are considered as key components in the environmental review and evaluation process for approval of projects that include herbicide use. Typically, herbicide use is approved for restricted application to cut stumps of non-native invasive plant species that vigorously resprout, such as eucalyptus and broom.



Letter 5



May 23, 2005

Brian O' Neill, Superintendent  
Golden Gate National Recreation Area  
Building 201, Fort Mason  
San Francisco, CA 94123

**ENVIRONMENTAL  
SERVICES  
AGENCY**

Agricultural  
Commissioner/ Sealer of  
Weights & Measures

Animal Control

Cooperative Extension

RE: Golden Gate National Recreation Area (GGNRA) Fire Management  
Plan Draft Environmental Impact Statement

Dear Superintendent:

The San Mateo County Parks staff has reviewed the GGNRA Fire Management Plan Draft Environmental Impact Statement. As it pertains to the Phleger Estate we believe an agreement should be reached to share the costs to maintain a mile long stretch of Richards Road, which is the only access to the Phleger Estate through Huddart County Park. In addition, where there are overlaps between GGNRA and four other County Park facilities we need to clarify our relationship through an agreement, so that we are both working from the same set of assumptions regarding park planning, operations and maintenance and areas of collaboration in the future.

Over the past year, the San Mateo County Environmental Services Agency Parks and Recreation Division has been preparing a new Huddart/Wunderlich Master Plan. Richards Road, in Huddart Park, is the only main access into and out of the Phleger Estate, which is owned and managed by GGNRA. During the course of planning for the Huddart/Wunderlich Master Plan, staff had a meeting on February 22, 2005 with Nancy Horner, Planning Manager for GGNRA, regarding opportunities for collaboration and cooperation between our two park districts for the two adjacent parks. A variety of issues were discussed, among them the need to share joint management in the future improvements and maintenance of Richards Road, which is the only current access to the Phleger Estate through Huddart Park.

County Parks currently solely manages the one-mile stretch of Richards Road to the Phleger Estate. This is an old logging road that has served as a service road/trail since the County acquired Huddart County Park in 1948. The road is located very close to West Union Creek, which provides spawning habitat for Steelhead trout. The San Francisquito Creek watershed has been designated by the Regional Water Quality Control Board to be sediment

5/24 SUSPENDED CORRESPONDENCE

ACTION PERSON: N. Horner

REPLY DUE  
SUPT'S OFC: June 10, 2005  
PWR/OTHER: \_\_\_\_\_

COPIES PROVIDED O'Neill  
OR FORWARDED Bartling  
VIA E-MAIL File  
P.05- /1 7 A. Naar



**PARKS AND RECREATION DIVISION**

455 County Center, 4<sup>th</sup> Floor • Redwood City CA 94063 • Phone (650) 363-4020 • Fax (650) 599-1721

impaired in part due to the presence of the Steelhead trout. This section of road requires regular maintenance to ensure it drains properly and does not erode away. Since Richards Road is such an important road to both Huddart County Park and the Phleger Estate, it would make sense if there were some type of an agreement to jointly manage this section of road.

Recently, the San Francisquito Creek Watershed Council identified Steelhead trout migration barriers throughout the watershed under a California Department of Fish and Game SB 271 grant. One of the barriers that was identified was a 50-year-old rusted and perched culvert, which is part of Richards Road and drains McGarvey Gulch directly into West Union Creek. The San Francisquito Creek Watershed Council and County Parks Foundation worked with County Parks to apply for and secure a Bay Bridge Salmonid Mitigation Grant to replace this culvert with an arched culvert and a gravel bottom. Due to the road dipping at the culvert location and the tight turning radius, we will likely also be required to improve the road gradient and turning radius for vehicles of the California Department of Forestry and Fire Protection and Woodside Fire Department. In the process of applying for this grant, we talked to Nancy Horner about the possibility of GGNRA assisting in the matching cost share for this project because improvement of this road to enhance fire and service vehicle access serves both of our parks. Since we do not have any agreement in place to share in the cost to improve or maintain this section of road no matching costs from GGNRA could be secured.

5-1 County Parks would like to request that some agreement be developed at this time with GGNRA memorializing a financial contribution from GGNRA on future improvements and the ongoing maintenance of this one-mile section of Richards Road. In addition to maintenance of Richards Road, which benefits GGNRA, County Parks also currently provides mutual aid for GGNRA at the Phleger Estate for emergency tree removals, and medical and emergency response.

5-2 In addition to the Phleger Estate and Huddart Park, there are a number of other County Park facilities in which there is a relationship with GGNRA. At Sawyer Camp Trail and Edgewood County Park and Natural Preserve, GGNRA has a Scenic and Recreation Easement. GGNRA's jurisdiction overlaps both San Pedro Valley and Fitzgerald Marine Reserve County Parks. While we understand that staff has yet to be assigned to serve GGNRA's parklands in San Mateo County, we look forward to formalizing and growing our relationship between our agencies to promote communication, and collaboration on issues of mutual concern. If you have any further questions, please contact Senior Park Planner Sam Herzberg at 650/363-1823.

Sincerely,



Marcia Raines, Director  
Environmental Services Agency

C: Nancy Horner, Planning Manager, GGNRA  
Sam Herzberg, Senior Planner  
Dave Moore, Superintendent



## Responses to Comments in Letter 5

### County of San Mateo, Environmental Services Agency

**Comment 5-1.** San Mateo County Parks staff believes an agreement should be reached to share the costs to maintain the mile long stretch of Richards Road, the only access to the Phleger Estate through Huddart County Park. A recent improvement by the County improved a section of Richards Road that had a tight, steep turn making it easier to negotiate by California Department of Forestry and Woodside Fire Department engines responding to an emergency. County Parks is requesting an agreement be developed with GGNRA memorializing a financial contribution from GGNRA on future improvements and ongoing maintenance of Richards Road, the sole access for emergency vehicles into the Phleger Estate.

**Response to Comment 5-1.** The primary focus of the FMP is firefighter and public safety, pre-fire planning and vegetation management to achieve fuel reduction and resource benefits. These actions are within the purview of the GGNRA Fire Management Office. Capital improvements to park roads and other infrastructure are the responsibility of the GGNRA Maintenance and Engineering Division. It is recommended that representatives of San Mateo County Parks contact the GGNRA Fire Management Office to arrange a meeting between GGNRA staff from the Maintenance Division, the Fire Management Office, and other relevant GGNRA divisions, to pursue agreements necessary to carry out the FMP and to assess Richards Road access deficiencies.

**Comment 5-2.** In addition to Phleger Estate and Huddart Parks, Sawyer Camp Trail and Edgewood County Park and Nature Preserve are within the GGNRA Scenic and Recreation Easement. GGNRA's jurisdiction overlaps both San Pedro Valley County Park and the Fitzgerald Marine Reserve. County Parks looks forward to formalizing the relationship between our two agencies to collaborate on issues of mutual concern.

**Response to Comment 5-2.** These County park areas have been added to Figure 1-2 in the FEIS. Sawyer Camp Trail and the westernmost strip of Edgewood County Park, which parallel Interstate 280, are within the GGNRA Scenic and Recreation Easement. GGNRA staff will contact the County Parks staff when projects, such as mechanical fuel reduction, are being planned for areas near County parklands and where the collaboration could benefit both agencies.

Text on page 38 of the DEIS has been revised in the FEIS to reflect the County's land management within the GGNRA jurisdictional boundary as follows:

#### **State, County and City Managed Lands**

The FMP will not address fire management planning on lands within the legislated GGNRA boundary that are under the direct administration of other land management entities. The FMP will address conformance with fire management plans of adjacent public open space areas such as the northern lands administered by Point Reyes National Seashore, *San Pedro Valley County Park* and the City of San Francisco watershed lands.

In addition, text on page 65 of the DEIS has been amended as follows:

## Appendix H – Response to Comments on the Draft Environmental Impact Statement

The Sweeney Ridge/Cattle Hill project area is defined by the boundaries that constitute *these* two GGNRA parcels. The project area lies just east of Pacifica and *is bordered to the south extends* ~~southeast toward lands managed by the Midpeninsula Regional Open Space District and~~ The eastern boundary is largely *by* San Francisco watershed lands managed by the San Francisco Public Utilities Commission (SFPUC).



**SAN FRANCISCO PUBLIC UTILITIES COMMISSION**

***Water Supply and Treatment Division***  
**Land and Resources Management Section**

1657 Rollins Road, Burlingame, Ca 94010 ♦ Tel: (650) 652-3209 ♦ Fax: (650) 652-3219



May 26, 2005

Brian O'Neill  
Superintendent  
Golden Gate National Recreation Area  
Building 201, Fort Mason  
San Francisco, CA 94123  
Attention: Fire Management

**GAVIN NEWSOM**  
MAYOR

**RICHARD SKLAR**  
PRESIDENT

**ANN MOLLER CAEN**  
VICE PRESIDENT

**E. DENNIS NORMANDY**  
**ADAM WERBACH**  
**RYAN L. BROOKS**

**SUSAN LEAL**  
GENERAL MANAGER

Dear Mr. O'Neill:

The City and County of San Francisco, Public Utilities Commission (SFPUC), has reviewed the Draft Environmental Impact Statement (Draft EIS) for Golden Gate National Recreation Area's (GGNRA) Fire Management Plan.

The proposed plan involves the implementation of various fire management actions on GGNRA lands in San Mateo, San Francisco, and Marin Counties. As you are aware, the SFPUC manages the Peninsula Watershed Lands located in San Mateo County, protecting the water supply and maintaining the highest possible source water quality.

6-1 [ The SFPUC encourages the GGNRA to carry out its fire management operations in areas adjacent to the Watershed lands in a manner that is as consistent as possible with the Peninsula Watershed Management Plan, which the DEIS references.

6-2 [ The SFPUC fully supports the DEIS and will continue to cooperate with GGNRA on future fire management issues. The SFPUC is, however, particularly interested in the future plans for the Phleger Estate and would like to review and comment on all such plans.

Sincerely,

Joseph P. Naras  
Watershed Resources Manager

## Responses to Comments in Letter 6

### Water Supply and Treatment Division, Land and Resources Management Section, San Francisco Public Utilities Commission

**Comment 6-1.** The SFPUC encourages the GGNRA to carry out its fire management operations in areas adjacent to the Watershed lands in a manner that is as consistent as possible with the Peninsula Watershed Management Plan, which the DEIS references.

**Comment 6-2.** The SFPUC is particularly interested in the future plans for the Phleger Estate and would like to review and comment on all such plans [future fire management issues].

**Responses to Comments 6-1 and 6-2.** Comment noted. The text on page 27 of the DEIS has been revised by adding the following paragraph to the end of the top paragraph that addresses the SFPUC Watershed Management Plan.

*In implementing the GGNRA FMP, the NPS will coordinate with the SFPUC Land and Resources Management Section to ensure that NPS actions conform to the watershed's Watershed Management Plan and Fire Management Plan to the extent possible to meet NPS objectives. GGNRA staff meets annually with the SFPUC Land and Resources Management Section to discuss issues of joint interest and will inform SFPUC staff of proposed fire management actions at the Phleger Estate, particularly those that could affect management of the adjacent watershed lands.*

Letter 7



ron maykel  
<thamaykelfamily@sbcg  
lobal.net>

05/27/2005 04:29 PM  
MST

To: goga\_fire@nps.gov, crabtreem@ci.pacifica.ca.us  
cc:  
Subject: Public input on fire management

Hello Park Staff,

7-1

A source for fires on GGNRA property in Pacifica are the mature pine trees, many of them affected by pitch pine canker. I have noticed them on Mori Point, Milagra Ridge, and near the Sheldance Nursery. Removal of these trees would be in the best interest of GGNRA and the public, not only in fire prevention, but also in preventing the spread of these non-native species.

Thank you,  
Ron Maykel  
Pacifica City Council GGNRA Committee Liaison

## Response to Comment in Letter 7

### Pacifica City Council GGNRA Committee Liaison, Ron Maykel

**Comment 7-1.** A source of fire on GGNRA property in Pacifica is the mature pine trees, many of them affected by pitch pine canker. I have noticed these on Mori Point, Milagra Ridge and near the Shelldance Nursery. Removal of these trees would be in the best interest of GGNRA and the public, not only in fire prevention, but also in preventing the spread of these non-native invasive species.

**Response to Comment 7-1.** Pines infected with pitch pine canker and overly mature and dense stands of non-native, invasive pines can be highly flammable with large amounts of dry duff and dead branches that can quickly move a ground fire into the forest canopy. Trees or groups of trees that are identified as being a fire hazard and pose a threat to public safety may be removed during FMP project implementation. Fuel reduction projects will be proposed annually as part of the 5 year implementation plan and will be prioritized based on funding, cost, hazard potential, resource benefit, site accessibility, and environmental effect.



**Paul Jones**  
**<paulling@sbglobal.net>**

05/10/2005 07:11 PM  
 MST

To: Michael Crabtree <crabtreem@ci.pacifica.ca.us>, Chris Powell  
 <chris\_powell@nps.gov>, Noel Blincoe <noelblincoe@msn.com>, Hal  
 Bohner <hbohner@earthlink.net>, Carl Cahill <chcahill@juno.com>,  
 Don Eagleston <don@pacificachamber.com>, Julie Hartsell  
 <jjhcoastside@aol.com>, paul jones <jones.paul@epa.gov>, Joe  
 Murphy <murphyj@usfca.edu>, Sean Smith  
 <ssmith@bluewaternetwork.org>, Mike Vasey <mvassey@sfsu.edu>  
 cc: Julie Lancelle <ccjulie@knosys.com>  
 Subject: Fwd: Fire Plan Thoughts

8-1

Hello: here are Sean's comments in the forwarded email. I really don't have others to contribute with the exception of the following. I am admittedly a bit concerned about the fire potential at Pedro Point, as there is much fuel in the eucalyptus and pine forests adjacent to Hwy 1 and the PP community. If strong offshore winds blow in dry conditions, such as during the Oakland fire, and there is a fire started in Linda Mar or along the highway, that area could be seriously jeopardized. I didn't see specific plans to address this in the Fire Mgt Plan, but I also didn't go over it with a fine comb, so to speak.

If others have comments, perhaps you can pass them directly on to Chris Powell. By the way, I won't be at the next meeting...but will be somewhere out in the Pacific Ocean on an ocean sailing trip by that time.

Thanks,  
 Paul

## Response to Comment in Letter 8

### Email from Paul Jones

**Comment 8-1.** I am admittedly a bit concerned about the fire potential at Pedro Point, as there is much fuel in the eucalyptus and pine forests adjacent to Hwy 1 and the PP community. If strong offshore winds blow in dry conditions, such as during the Oakland fire, and there is a fire started in Linda Mar or along the highway, that area could be seriously jeopardized. I didn't see specific plans to address this in the Fire Management Plan but I also didn't go over it with a fine comb.

**Response to Comment 8-1.** The DEIS on pages 64-65 describe the Pedro Point lands as entirely within the Wildland Urban Interface FMU. The vegetation is described as “mostly coastal scrub, with nonnative evergreen forest encroaching from the northern boundary. The western portion of the area is nonvegetated coastal bluffs. The fire management issue here is the buildup of hazardous fuels adjacent to the Highway 1 corridor and other built-up areas.” The NPS shares the commenter’s concern regarding high fire hazard in this area. On page 89 of the DEIS, removal of the non-native evergreen trees at Pedro Point is listed as one of 5 goals to be accomplished in the WUI fire management unit park-wide. Table 3-10 (Draft EIS page 191) lists the Pedro Point parcel as 229 acres total of which 33 acres are vegetated with highly flammable non-native evergreen hardwood. There are no specific plans for the Pedro Point area in the FMP as this area is still under State of California and City of Pacifica ownership. The FMP goal of removal of non-native hardwood trees on Pedro Point lands will be further developed in future land management planning efforts. Pedro Point will likely become part of GGNRA in 2006.





**"Sean Smith"**  
**<ssmith@bluewaternetw**  
**ork.org>**

05/02/2005 04:09 PM  
MST

To: <Alanna\_Donahoe@nps.gov>  
cc:  
Subject: RE: Golden Gate NRA Fire Management Plan

Hey Alanna:

Here are my initial thoughts on the Fire GMP. Any insight you can give on the following would be appreciated.

Sean

Here are my quick thoughts on the GGNRA draft fire plan. Please let me know if you want more detail.

- 9-1 [ First, the plan is heavily Marin centered. While a majority of the GGNRA lands lie within Marin County, the most recent fire affecting GGNRA lands and resources actually took place in San Mateo County. In this light, the NPS is considering consolidating the Park's fire cache, thus all its equipment in Marin county. This will dramatically increase response times to San Mateo and San Francisco fires. At a minimum, a fire cache should be established in San Mateo County.
- 9-2 [ Next, the NPS needs to provide more detail on how it will rehabilitate burned areas to prevent landslides and exotic species spread.
- 9-3 [ Third, the NPS has stated that its position is that any unplanned fire will be extinguished. I am wondering if the NPS would consider loosening this policy for inland acres on the Marin headland. There appears to be ample acreage there to allow some natural fires that are in the right spot, occur under correct weather conditions, and at appropriate times of the year.
- 9-4 [ Finally, the final plan needs more discussion on how the NPS will partner and educate state and local fire departments to insure that fire fighting on park land will be done to minimize damage to park resources and wildlife habitat.

Sean Smith, M.S.  
Public Lands Director  
Bluewater Network  
311 California Street, Suite 510  
San Francisco, CA 94104  
P. 415/544-0790 x 19  
F. 415/544-0796  
ssmith@bluewaternetnetwork.org  
www.bluewaternetnetwork.org

## Responses to Comments in Letter 9

### Sean Smith, Bluewater Network

**Comment 9-1.** The FMP is heavily Marin centered. While a majority of the GGNRA lands lie within Marin County, the most recent fire affecting GGNRA lands and resources actually took place in San Mateo County. In this light, the NPS is considering consolidating the Park's fire cache, thus all its equipment in Marin County. This will dramatically increase response times to San Mateo and San Francisco fires. At a minimum, a fire cache should be established in San Mateo County.

**Response to Comment 9-1.** The DEIS, on page 80, explains that the new fire cache facility proposed for the Marin Headlands would combine fire equipment and vehicles currently stored in two separate locations at the southern end of the Marin Headlands (Fort Baker and Fort Cronkhite) to one central location at Fort Cronkhite. The GGNRA Fire Management Office is considering siting a fire cache in San Mateo County near the Pacifica parklands and has submitted a funding request for a structure and supplies (A. Naar, pers. comm. 6/29/05).

**Comment 9-2.** The FMP needs to provide more detail on how it will rehabilitate burned areas to prevent landslides and exotic species spread.

**Response to Comment 9-2.** Planning for burned area rehabilitation is determined by the type of fire incident. In the case of wildland fires, an emergency stabilization request is submitted through the Pacific West Regional Office primarily to address the potential for erosion and slope failure as a result of the burn. The NPS Burned Area Emergency Rehabilitation Handbook (BAER) is the primary source of guidance on rehabilitation policies and procedures following a fire. NPS Director's Order 18, Wildland Fire Management (2003a) calls for the use of the least environmentally intrusive yet effective BAER techniques to mitigate actual or potential damage from a fire. Potential problems that could arise from wildland fire include erosion on slopes and in stream channels, sediment and debris jams in streams, weed infestations, loss of vegetation and forest cover, hazards from fire-killed trees falling, and potential damage from post-fire activities like salvage logging. Runoff may increase after fire due to water-repellency in soils and lack of vegetation to absorb and use rainfall. The range of corrective treatments includes [revegetation](#), [erosion control blankets](#), [straw mulching](#), temporary check structures in ephemeral drainages such as [straw bale check dams](#) and [silt fences](#), [directional log felling](#) and [contour scarification](#). BAER requests are also submitted to address the need for funding of short-term and long-term exotic plant species removal and control actions.

**Comment 9-3.** The NPS has stated that its position is that any unplanned fire will be extinguished. Would the NPS consider loosening this policy for inland acres on the Marin Headlands? There appears to be ample acreage there to allow some natural fires that are in the right spot, occur under correct weather conditions, and at appropriate times of the year.

**Response to Comment 9-3.** The NPS is committed to implementing a flexible suppression strategy based on minimum impact suppression techniques (MIST), as described in Appendix G – MIST Guidelines Implementation. As explained on page 70 of the DEIS and in Appendix G, this gives the

firefighter the opportunity to choose a strategy that may have minimal environmental impacts. However, GGNRA cannot endorse a policy advocating “wildland fire use fires” wherein firefighters monitor a naturally ignited wildland fire, such as a lightning fire, as long as conditions stay within what is considered a safe prescription. Through the use of MIST tactics, the NPS can choose among a range of strategies to determine an approach that protects resources while suppressing the fire. Unlike a prescribed burn, wildland fires do not have a perimeter defined or cleared and are likely to occur under the least favorable conditions when there are not adequate resources to contain and control it. The DEIS on page 228 outlines some of the potentially hazardous conditions in the Marin Headlands – the area of the park that contains some of GGNRA’s more remote lands – that preclude the consideration of a “wildland fire use” strategy.

**Comment 9-4.** The final plan needs more discussion on how the NPS will partner and educate state and local fire departments to insure that fire fighting on park land will be done to minimize damage to park resources and wildlife habitat.

**Response to Comment 9-4.** GGNRA Fire Management Office staff will continue to meet on a regular basis with cooperating fire fighting agencies to discuss suppression strategies and concerns on NPS lands in conformance with Mitigation Measure FMP-2. These meetings will include discussion and study of maps of sensitive resources within the federal parklands, areas preferred for use for staging equipment or for helipads, and indication of which water resources within federal lands should and should not be used to fight fire. The NPS will also review with local agencies the conditions developed in the Programmatic Agreement between the NPS and the State Historic Preservation Officer to protect areas with known or high potential for finding cultural resources. See Appendix J in the FEIS. These areas should be avoided to the degree possible during fire suppression actions. Similarly, responsibilities under the Endangered Species Act will be discussed with neighboring fire agencies with reference to wildland fire response. Cooperative Agreements signed by the NPS and local fire departments will include the guidelines for implementation of Minimum Impact Suppression Tactic for wildland fires in the park. Annual update meetings will review sensitive area maps with local firefighters and inform them of changes that have been made to maps during the past year.

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Letter 10

"Drumm, Kristin" <KDrumm@co.marin.ca.us> To: <mia\_monroe@nps.gov>  
cc:

05/04/2005 04:04 PM MST

Subject: GGNRA Fire Management Plan DEIS

Hi Mia,

10-1

I did come across SS-37 on pg. 105. While I'm glad they mention the butterfly here, I don't think this is adequate. While I haven't read the entire document yet, I am concerned that the monarchs are being overlooked because they are not a federally listed species. Does it matter if the butterflies are listed in the CNDDDB? I think they should clearly identify what their mitigation measures are going to be for the butterfly. They provide more specific measures for the other species, so I don't see why they can't provide the same for the monarchs. Anyway, those are some of my thoughts.

## Response to Comment in Letter 10

### Kristin Drumm

**Comment 10-1.** Page 105, mitigation measure SS-37 mentions the monarch butterfly. I don't think this is adequate. I am concerned that the monarchs are being overlooked because they are not a federally listed species. Does it matter if the butterflies are listed in the CNDDDB? I think they should clearly identify what their mitigation measures are going to be for the butterfly. More specific measures are provided for the other species, so I don't see why it can't be the same for the monarchs.

**Response to Comment 10-1.** Please see responses to Comments 4-5 and 4-6. Projects that have the potential to impact monarch butterfly use areas are evaluated by park staff, and if necessary, by a qualified monarch butterfly biologist according to conditions of approval developed during the interdisciplinary review process described in FMP-1(a) and required for NEPA conformance. The impacts on this species are carefully weighed in conjunction with impacts (both positive and negative) on other listed and species of concern, as well as overall habitat conditions, through the park's project review process. This approach is taken for any species (or habitat) that is a species of concern.

82 Karen Court  
San Francisco, CA 94134  
Telephone 415-657-0253

RECEIVED  
MAY 16 2005  
GGNRA - FMO

Solden Gate National Regional Area;  
Attn: Fire Management Team;

Thank you for the opportunity to introduce you to my idea, for putting out grass and other fires more easily and faster!

PM Fire Fighting Method is about fighting fires from every angle, as we know the wonderful fire fighters, fight fires from the beginning or in front, however that is chasing the fires, most time the fires keep burning and burning destroying everything in its pass.

11-1  
PM Fire Fighting Method suggest that fireman be placed at the beginning of the fire, behind or at the ending of that fire and at the ending and everywhere that fire has spread!

11-1

Thus, When all Fire-Fighters  
Meet Near the Middle that  
Fire will be Extinguished!

I hope you will Consider this  
Idea, because I really believe  
this Method will enable Fire-  
men to put Fires out faster,  
thus helping to save Human  
Lives, Wild-Lives, Properties,  
Trees, Plants and etc including  
Millions of Dollars!

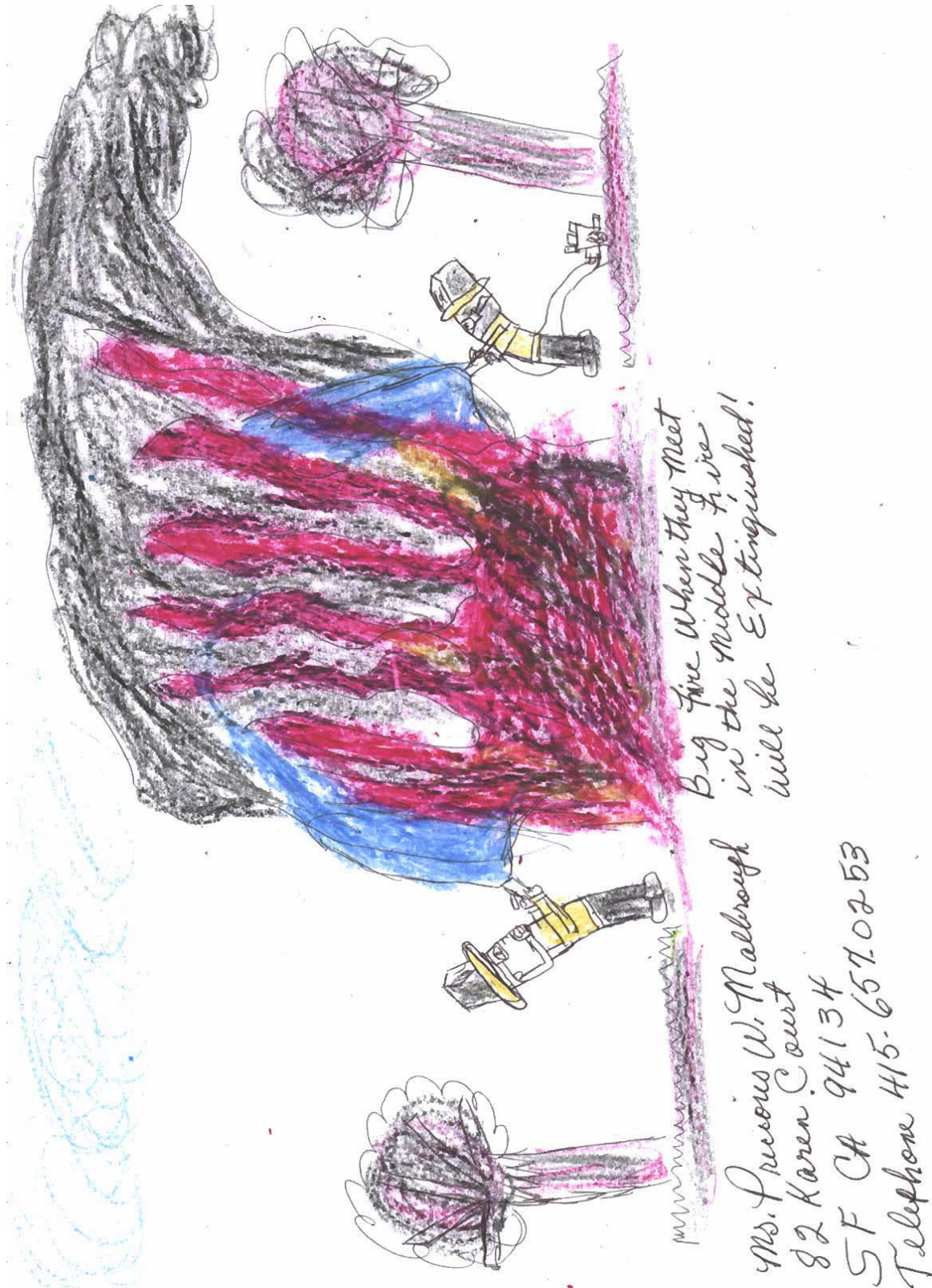
Thank you for Replying!

Yours Truly,  
Ms. Precious W. Mackrough

P.S. Sketch ENCLOSED!







## Response to Comment in Letter 11

### Letter from Ms. Precious Malbrough

**Comment 11-1.** Thank you for your letter. Proposes the idea of PM Fire Fighting Method to fight fires from every angle rather than from the beginning or in front which is chasing the fire which burns ahead. PM Fire Fighting Method suggests that firemen be placed at the beginning of the fire, behind or at the ending of that fire and everywhere that fire has spread. Thus when all the firefighters meet near the middle that fire will be extinguished.

***Response to Comment 11-1.*** Current firefighting strategies include using appropriate suppression efforts which can include the methods described above. All wildland fires are different and flexible suppression efforts must be used to provide for firefighter and public safety.

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**bk1492@aol.com**

03/24/2005 06:36 PM  
EST

To: goga\_fire@nps.gov  
cc: rodney.frelinghuysen@mail.house.gov  
Subject: public comment on federal register of 3/21/05 vol 70 no 53 pg 13538

us doi nps - eis -alleged fire Mgt plan (but really a plan to log and make money for timber barons)

golden gate NATIONAL recreation area -

12-1 [ i note prescribed burning being planned . prescribed burning pollutes the air that people breathe. it lets particulates fall into people's lungs so that they get lung cancer. if they dont get lung cancer they can have a heart attack or a stroke as a result. children get asthma from the release of these air particulates. why in california would anyone want to get the air any dirtier with this prescribed burning?

12-2 [ i oppose thinning of the forest so that lumber barons and friends of washington politicians can make big money out of the forests that american taxpayers have been spending their hard earned tax dollars for eons to protect. such burning and thinning destroys wildlife and bird habitats and give them no home -it makes them homeless and they die = a truly destructive anti environmental action by greedy humans. it is a scam to say its ffor fire managment when its really for forest profits.

i would like to receive a copy of the fmp deis. i oppose and object to this proposal.

b sachau  
15 elm st  
florham park nj 07932

## Appendix H – Response to Comments on the Draft Environmental Impact Statement

To: goga\_fire@nps.gov, rodney.frelinghuysen@mail.house.gov

From: Bk1492@aol.com

Date: 05/01/2005 02:39PM

Subject: public comment on golden gate fire "management" plan which will pollute air

i have some comments on the national park service deis for golden gate nra fire alleged "management" plan.

12-3 [ firstly, since the document is long, i think the comment period should be a minimum of three months.

i also think this plan stinks and is misguided.

12-4 [ Where does the spotted owl live when you burn down its tree? it doesnt live. It dies.

The long term will be nothing alive if you kill them short term. This plan does that.

12-5 [ i think the goal of preserving this area is too far down your list of goals and find that outrageous.

this plan hurts wildlife, vegetation, humans by burning pollution and birds.

There is no need for this - if there is a fire fight it then.

12-6 [ i think budget money should be spent on effective fire fighting equipment when needed so when fire breaks out it can be quickly put out. i do not think current policy is to do that - put all resources into fighting fires.

stop developers from building so close to the parks. buy up the land so that development is not the problem it is. it is the development that is the problem, not the park.

this plan was made by park staff with far too little public input although its the public's tax dollars that sustain this park.

b. sachau

15 elm st

florham park nj 07932

## Response to Comments in Letter 12

### B. Sachau

**Comment 12-1.** Prescribed burning pollutes the air that people breathe by creating particulates that fall into people's lungs and cause lung cancer, heart attack, stroke or asthma in children. Why in California would anyone want to get the air dirtier?

**Response to Comment 12-1.** The Purpose and Need for the GGNRA FMP is presented on pages 9 through 15 of the DEIS. One of the primary needs for preparing the FMP is to address the existing hazard presented to neighboring residential communities by high fuel loading along the park's wildland urban interface. The primary purpose is to provide a framework for all fire management activities in GGNRA in a manner that is responsive to natural and cultural resource objectives, reduces risks to developed facilities and adjacent communities, and provides for public and staff safety. The assessment of potential impacts on public health from prescribed burning is addressed in the DEIS on pages 411 through 433. Appendix I - Non-burning Alternatives and Air Emissions Reduction Techniques for Fuel Reduction and Resource Benefiting Prescribed Burns in GGNRA in the FEIS details the range of mitigation measures available to the Air District and GGNRA fire management staff to reduce the amount of particulates generated by prescribed burning. The primary recipients of particulates from prescribed burns are the firefighters monitoring and controlling the burns, especially when pile burning is involved. Public notification prior to prescribed burning near interface lands would alert those residents especially sensitive to smoke to stay indoors during the duration of the burn. All prescribed burns must have a smoke management plan approved by the Bay Area Air Quality Management District (BAAQMD) and receive day-of-burn authorization to proceed based on current air quality conditions and forecasts that allow the BAAQMD to limit the amount of pollution generated by burning throughout the nine counties of the Bay Area Air Basin and minimize public health effects.

**Comment 12-2.** I oppose thinning of the forest so that lumber barons and friends of Washington politicians can make big money out of the forests that American taxpayers have been spending their hard earned tax dollars for eons to protect. Such burning and thinning destroys wildlife and bird habitats and gives them no home and they die – a truly destructive anti environmental action by greedy humans. It is a scam to say it's for fire management when it's really for forest profits.

**Response to Comment 12-2.** GGNRA does not sell lumber taken from the park as part of fuel reduction projects nor are there leases for commercial logging operations in the park. The vast majority of trees removed are non-native evergreen hardwoods that have little or no commercial value other than biomass fuel<sup>1</sup> or firewood. Other uses can include the use of the stumps for habitat improvement in local stream channels. Very few native trees would be removed under the FMP. Exceptions may be permitted where targeted tree removal would improve access on fire roads for emergency vehicles or where weakened trees or snags could fall across fire roads during a wildland

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<sup>1</sup> Biomass fuels are carbonaceous waste of various human and natural activities derived from numerous sources, including the by-products from the timber industry, agricultural crops, raw material from the forest, major parts of household waste and wood.

fire. Smaller native trees could be removed in areas where shaded fuel breaks are constructed to achieve necessary fuel reduction and where understory vegetation is scant and saplings are densely packed.

**Comment 12-3.** The document is too long. The comment period should be a minimum of three months.

**Response to Comment 12-3.** The length of the document is dictated by the number of environmental issues that require assessment for affect for fire management implementation. The NPS follows agency-wide guidance in the preparation of NEPA documents and the FMP DEIS meets the requirements for an EIS. The NPS guidance document for NEPA is Director's Order 12 and the accompanying handbook (2001a). Director's Order 12 calls for a minimum 60 day public review period for an EIS prepared by the NPS. The GGNRA FMP DEIS was available for public review for 68 days.

**Comment 12-4.** Where does the spotted owl live when you burn down its tree. It doesn't live. It dies.

**Response to Comment 12-4.** Prescribed fires conducted in forested areas in GGNRA are not intended to remove mature trees but rather are planned to reduce the volume of understory vegetation in a forest. Reducing understory vegetation lowers the potential for a high intensity wildland fire to strike the forest which would result in widespread mortality. Prescribed burns are kept to the understory by pre-treating forest stands prior to the burn. During pre-treatment, firefighters cut branches, dead limbs and hanging bark and vines that run from the understory towards the tree canopy creating a ladder of fuels that flames can climb. Compared to a typical wildland fire in a forest, a prescribed burn would be timed for a day of cool weather with low winds and would be sited in an area pre-treated to reduce the potential for fire to spread to the canopy. Therefore, prescribed burns implemented under the FMP would not normally result in long-term damage to the larger diameter trees (greater than 8 inches diameter at breast height) used by the northern spotted owl as is suggested by the comment.

However, as explained on page 369 of the DEIS, there are fire management activities that do have potential to affect spotted owls. These impacts may include habitat alteration from wildfire, short-term reduction of understory vegetation after prescribed burning or from mechanical treatment; noise associated with suppression activities and mechanical treatment; and the potential for widespread habitat destruction from catastrophic wildfire. For this reason, the NPS initiated formal consultation with the US Fish and Wildlife Service (USFWS) to develop procedures for conducting fire management actions within the habitat of the northern spotted owl. The USFWS concluded that the NPS would not adversely affect the northern spotted owls or cause the "take" of any individuals of the species, provided that the avoidance measures in the FMP EIS in addition to those recommended by the USFWS are implemented for FMP projects (C. Nagano, pers. comm. 9/16/05). See Appendix K – USFWS Biological Opinion of the DEIS.



**Comment 12-5.** I think the goal of preserving this area is too far down your list of goals.

*Response to Comment 12-5.* With the exception of protecting life and property, which is the primary goal of Federal Wildland Fire Policy, the remaining goals are not listed in order of importance and have equal status.

**Comment 12-6.** I think budget money should be spent on effective fire fighting equipment when needed so when fire breaks out it can be quickly put out.

*Response to Comment 12-6.* The NPS, in conformance with Federal Wildland Fire Policy (1995), is implementing fuel reduction projects to reduce the overall intensity of wildland fires; to provide areas with reduced fuels from which firefighters can more safely stage suppression efforts; and to reduce the potential for wildfires to move from the parklands to adjacent residential developments along the park perimeter [also known as the wildland urban interface]. NPS funding of fuel reduction projects comes directly from the National Fire Plan budget which provides only limited funding to local fire agencies for equipment and vehicles. The principal focus of the National Fire Plan is vegetation management to reduce risk and protect life and property. Funding for the purchase of heavy equipment, vehicles and engines is provided by separate funding initiatives. Catastrophic wildfires in the 1990s convinced the federal government to redirect firefighting efforts to slowing the rate of spread of fires by strategically reducing fuels rather than focusing on increasing equipment and staffing. In developing the Federal policy, it was recognized that reducing fuels around and within rural residential neighborhoods provides the greatest protection from wildland fire and that there are logistical limits to what firefighters and equipment can do once fires grow in intensity in difficult terrain. Vegetation management provides safer access routes for firefighters and the evacuating public while contributing to an overall reduction in the intensity of the wildland fire and slowing the rate of spread. Strategically reducing fuel loading within parklands may reduce the potential for resource damage to occur from heavy equipment use during fire suppression.