



United States
Department of
Agriculture

**Forest
Service**

Pacific
Southwest
Region

R5-MB-062
November 2004

Environmental Assessment

COASTAL RANGELANDS ANALYSIS

MONTEREY RANGER DISTRICT
LOS PADRES NATIONAL FOREST
MONTEREY COUNTY, CALIFORNIA



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Chapter 1 – Summary

The Los Padres National Forest (LPNF) proposes to authorize continued livestock grazing on the Gorda, Alder Creek, Salmon Creek, and San Carpoforo grazing allotments; authorize continued livestock grazing and create a new allotment on the recently acquired Kozy Kove Ranch; authorize continued livestock grazing on recently acquired Sur Sur and Sea Vista Ranches and add them to the San Carpoforo allotment; close the Buckeye, Twitchell, and Torre Canyon allotments. Implementation will occur through incorporation of the selected alternative into an allotment management plan (AMP) specific to each allotment, providing management direction for the next ten years. The project area is located within the oceanfront watershed along the Big Sur coast extending from a few miles south of the Monterey/San Luis Obispo County line north about 40 miles to Grimes Point on the Monterey Ranger District, Los Padres National Forest, California.

Under the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.) project level decisions for livestock grazing must be consistent with the broad programmatic direction established in the Los Padres National Forest Land and Resource Management Plan (LRMP). Where necessary, grazing permits will be modified to ensure consistency with the LRMP.

The 1988 LRMP has determined which portions of the coastal rangelands are suitable for grazing (pages 4-20 to 4-174). The project area lies within Management Areas 42, 48, and 64. In addition, a suitability and capacity analysis (Howell et al. 1999) was completed for the project area providing suitable acres, acres of primary and secondary range and capacity expressed as animal unit months (AUMs). Table 2 provides a summary of this analysis.

Issues were based on comments and concerns expressed through scoping and public contacts. These issues helped the interdisciplinary team develop alternatives, or mitigation and monitoring requirements for the alternatives. The issues discussed below summarize the concerns raised during scoping, and may be applied across the coastal rangelands. Where these issues are site specific on an allotment are discussed in Chapter 2.

1. Rangeland Health – Localized heavy grazing can reduce foliage density and increase bareground thereby creating sites available to the invasion of noxious weeds. The timing and intensity of grazing can affect the health and vigor of desirable plant species. The amount of vegetation (forage) removed has a direct effect on plant species diversity.
2. Heritage Resources - Rangeland use can impact sites in a number of ways. Livestock trampling or wallowing can damage or displace artifacts or features. For Traditional Cultural Places valued by Native Americans, the presence of livestock or manure may be in conflict with their values.
3. Wilderness Values –Permanent structures such as campsite enclosure fencing may be compromising wilderness values.

4. Biological Resources – Cattle may cause injury or mortality to south-central steelhead trout or the Smith’s blue butterfly. Treading through anadromous streams can trample both steelhead eggs and fry. Where cattle graze in or near Smith’s blue butterfly habitat, trampling can result in loss of host plant parts and mortality to pupae, larvae or eggs.

In addition to the proposed action, the Forest Service also evaluated the following alternatives:

No Change

Under this alternative, livestock grazing on the existing allotments will continue to be permitted under current management, which includes all applicable standards and guidelines from the current Los Padres Land and Resource Management Plan, as well as any requirements from consultation under Section 7 of the Endangered Species Act, National Historic Preservation Act or other legal requirements.

No Grazing

Under this alternative, the Forest Service would not authorize livestock grazing. Grazing permits would not be re-issued after the current permits expire [36 CFR 221.4 (a) (1)]. On the recently acquired properties livestock grazing would not be authorized.

Based upon the effects of the alternatives, the responsible official will decide whether or not to continue to authorize livestock grazing on the coastal rangelands within the analysis area.

Chapter 2 – Introduction

Document Structure

The Forest Service has prepared this Environmental Assessment in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. This Environmental Assessment discloses the direct, indirect, and cumulative environmental impacts that would result from the proposed action and alternatives. The document is organized into five parts:

- **Introduction:** The section includes information on the history of the project proposal, the purpose and need for the project, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.
- **Comparison of Alternatives, including the Proposed Action:** This section provides a more detailed description of the agency's proposed action as well as alternative methods for achieving the stated purpose. Alternatives were also developed based on significant issues raised by the public and other agencies. This discussion also includes mitigation measures. Finally, this section provides a summary table of how each alternative addresses the issues.
- **Environmental Consequences:** This section describes the anticipated environmental effects of implementing the proposed action and other alternatives. For each site, an abbreviated affected environment is described first, followed by the effects of the proposed action and no management change. The no grazing alternative provides a baseline for evaluation and comparison of the action alternatives.
- **Agencies and Persons Consulted:** This section provides a list of agencies contacted during the development of the environmental assessment.
- **Appendices:** The appendices provide more detailed information to support the analyses presented in the environmental assessment.

For additional documentation, including more detailed analyses of project-area resources, contact Jeff Kwasny, Big Sur Ecosystem Manager, Big Sur Station #1, Big Sur, California, 831-667-1126

Background

The Los Padres National Forest administers the Range program through the issuance of term livestock grazing permits. The permits are generally issued for a period of ten years (Federal Land Policy and Management Act 1976, as amended). The management of the Range program is authorized by the Multiple Use Sustained Yield Act 1960, the Forest and Rangeland Renewable Resources Planning Act 1974, the Public Rangelands Improvement Act 1978, and the LRMP.

The Forest Service is required by Section 504 of the Rescissions Act of 1995 and Section 325 of the 2004 Appropriations Act to develop and implement decisions in accordance with the National Environmental Policy Act (NEPA) for grazing allotments.

In 1999, the Forest Service completed a Watershed Analysis Report (1999) for the Oceanfront Watershed on the Monterey Ranger District. Five key issues for the analysis area were developed by an interdisciplinary watershed analysis team and from public input. Rangeland management was one of those key issues analyzed.

Purpose & Need for Action

The purpose of this assessment is:

- For providing available forage to qualified livestock operators from lands suitable for grazing (FSM 2203.1) on the Coastal Rangelands.
- For management direction on the recently acquired ranches.
- For using opportunities and ecologically sustainable principles to adjust grazing use to move from existing condition toward desired condition.
- For insuring consistency with the 1988 Los Padres National Forest Land and Resource Management Plan [LRMP] Goals and Objectives (pages 4-6 to 4-7), Management Practices (pages 6A-4 to 6A-5), Standards and Guidelines (pages 4-7 to 4-19), Management Area Direction (pages 4-20 to 4-174), and Range Management Best Management Practices for water quality (Appendix B).
- For removing vacant allotments from the Los Padres National Forest grazing program that do not provide a viable livestock operation.

In addition, this action ensures that livestock grazing is in compliance with the National Historic Preservation Act, as well as consultation under Section 7 of the Endangered Species Act and other applicable laws, regulations and policies.

The need for this project is based on disparities between existing conditions described in the issue section later in this chapter and the desired conditions listed below.

Desired Conditions

Rangeland Health - Annual grasslands provide sufficient cover to defend against noxious weed spread, maintain health and vigor of desirable plant species, provide for conditions supporting plant species diversity, provide favorable microenvironments for early seedling growth, soil protection from erosion, adequate soil organic matter, and a source of low moisture fall forage for livestock feed.

Water Resources – Riparian and aquatic ecosystems provide quality habitat for south-central steelhead trout.

Heritage Resources – Tradition Cultural Places are protected from livestock use. High-risk heritage resource sites are preserved.

Wilderness Values – Conflicts between key wilderness recreational use areas and livestock use are mitigated.

Biological Resources – Habitats are managed for the protection of threatened and endangered species.

Proposed Action

The Los Padres National Forest (LPNF) proposes to authorize continued livestock grazing on the Gorda, Alder Creek, Salmon Creek, and San Carpoforo grazing allotments; authorize continued livestock grazing and create a new allotment on the recently acquired Kozy Kove Ranch; authorize continued livestock grazing on recently acquired Sur Sur and Sea Vista Ranches and add them to the San Carpoforo allotment; close the Buckeye, Twitchell, and Torre Canyon allotments.

A complete description of the proposed action is detailed in Chapter 3.

Decision Framework

Given the purpose and need, the deciding official will review the proposed action and the other alternatives in order to decide whether or not to authorize livestock on all, part, or none of the project area. If livestock grazing activities are to be authorized then what management prescriptions will be applied, limited to livestock numbers, season of use, rangeland practices and improvements for maximizing livestock distribution, to ensure that resource conditions will continue to meet or move towards desired conditions, and LRMP standards and guidelines are implemented.

Public Involvement

The proposal was first listed in the January – March 1999 issue of the Schedule of Proposed Actions. On July 22, 1999, the Forest Service hosted a public meeting at Pacific Valley Station to share information about the NEPA analysis for the coastal grazing permits. Approximately 22 members of the public were in attendance. On August 4, 1999, a scoping letter was sent to 69 addresses, including individuals, agencies, groups, and Native American representatives.

In response to additional inquiries, the Forest Service hosted an information meeting on May 22, 2000, at Alms Ridge for those who reside within or adjacent to the Gorda Allotment. Twelve local residents attended.

Obligations for consultation with local Salinan and Esselen tribes have been met through notification and request for comments, and responses to the comments (including site visits where appropriate).

On February 9, 2001, environmental assessments for this project were sent out for a 30-day comment period to those who responded to the scoping letter, appropriate government agencies, and local Native American representatives. In response to requests, the District Ranger extended the comment period until April 16, 2001.

The environmental assessments have been updated and rewritten into this one Coastal Rangelands Analysis. A new scoping letter describing the analysis area and proposed action was sent out to individuals, agencies, groups, and Native American representatives on March 15, 2004. On March 31, 2004, a legal notice was published in the Monterey County Herald providing the public a 30-day comment period as prescribed under regulations 36 CFR Part 215. Comments received are in the official project file, and are available for review at the Monterey Ranger District in King City, California.

Issues

Issues were developed from public, other agencies, and Native Americans comments. The Forest Interdisciplinary Team separated the comments into two groups: significant and non-significant issues.

Significant issues are defined as those directly or indirectly caused by implementing the proposed action. A significant issue is one that suggests different actions among the alternatives. The one significant issue identified by the public is the small permanent campsite enclosure at Dutra Camp creates a ‘fenced in’ atmosphere, negatively affecting wilderness values. Action to mitigate this issue was incorporated into the San Carpoforo allotment alternative 1 (Proposed Action).

Non-significant issues are identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence. The Council for Environmental Quality (CEQ) NEPA regulations require this delineation in Sec. 1501.7, “...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)...”. The non-significant issues and reasons regarding their categorization as non-significant may be found in the project record.

Site specific issues identified and addressed in this assessment are:

Rangeland Health

Localized heavy grazing can reduce foliage density and increase bareground thereby creating sites available to the invasion of noxious weeds. The timing and intensity of grazing can affect the health and vigor of desirable plant species. The amount of vegetation (forage) removed has a direct effect on plant species diversity.

Gorda Allotment – Mill Creek Unit

The Mill Creek watershed has areas of moderate (5-25% cover) infestation of French broom (Kwasny 2003). Noxious weeds present a risk due to their aggressive nature in both pristine and disturbed landscapes. This noxious weed is threatening to invade available bare ground within the grasslands. Too much grazing can reduce foliage density and increase bare ground thereby making sites available to invasion of noxious weeds if they are present on or nearby the allotment.

Potential effects of different alternatives can be anticipated by comparing the minimum allowed residual dry matter covering the soil at the end of the grazing season which in turn effects foliage density, bare ground and the spread of noxious weeds.

Some water sources are dry, or at minimum flows, by the end of the current grazing season resulting in improper distribution of livestock at or near the remaining water sources.

Potential effects of different alternative to achieve proper distribution and utilization across the unit can be anticipated by comparing the amount of available water from natural sources during the proposed season-of-use.

Gorda Allotment – Plaskett Unit

Some water sources are dry, or at minimum flows, by the end of the current grazing season resulting in improper distribution of livestock at or near the remaining water sources.

Potential effects of different alternative to achieve proper distribution and utilization across the unit can be anticipated by comparing the amount of available water from natural sources during the proposed season-of-use.

Gorda Allotment – Pacific Valley Unit

This Unit contains Italian thistle and kikuyu grass, both noxious weeds. Past cultivation and extended grazing seasons (early winter through late fall) have favored the spread of Italian thistle.

Potential effects of different alternatives can be anticipated by comparing the timing and duration of the grazing season and how that affects the desirable and undesirable plant species. Differences may also be displayed by comparing the minimum allowed residual dry matter to maintain site productivity.

Gorda Allotment – Prewitt Unit

Field observations indicate there is improper livestock distribution. Livestock spend much of the grazing season on lower Prewitt Ridge, while Alms Ridge receives little to no use. As a result, primary range on Lower Prewitt Ridge receives continuous grazing pressure throughout the season while Alms Ridge is often ungrazed.

Potential effects of different alternatives can be anticipated by comparing management options to achieve proper distribution and utilization across the unit.

Heritage Resources

Rangeland use can impact sites in a number of ways. Livestock trampling or wallowing can damage or displace artifacts or features. For Traditional Cultural Places valued by Native Americans, the presence of livestock or manure may be in conflict with their values.

Gorda Allotment – Pacific Valley Unit

This Unit contains high-risk heritage resource sites where livestock use may contribute to cumulative damage or be in conflict with cultural values.

Management can implement protection measures to comply with National Historic Preservation Act.

Wilderness Values

Permanent structures such as campsite enclosure fencing may be compromising wilderness values.

San Carpoforo Allotment

The small permanent campsite enclosure at Dutra Camp creates a ‘fenced in’ atmosphere, negatively affecting wilderness values.

The potential effects of different alternatives can be evaluated by comparing the design of the enclosure fence around Dutra Camp.

Biological Resources

Cattle may cause injury or mortality to the Federally listed threatened south-central steelhead trout or the Federally listed endangered Smith's blue butterfly. Treading through anadromous streams can trample both steelhead eggs and fry. Where cattle graze in Smith's blue butterfly habitat, trampling can result in loss of host plant parts and mortality to pupae, larvae or eggs.

All Allotments

There are approximately 55,000 acres of Smith's blue butterfly habitat along the Big Sur coast (USFWS 2003), of which 45 acres are located within or adjacent to primary range within the coastal allotments.

Management will comply with all terms and conditions set forth by the U.S. Fish and Wildlife Service (Biological Opinion 7/22/04).

Gorda Allotment – Pacific Valley Unit

The lower reaches of Prewitt and Plaskett creeks have been identified as accessible to south-central steelhead. Plaskett is accessible to livestock during a portion of the grazing season; Prewitt has a livestock enclosure preventing cattle access but cattle are herded across when changing pastures 3 or 4 times per year.

Management will comply with all terms and conditions set forth by NOAA Fisheries (Letter of Concurrence 9/6/01).

Cone Peak Research Natural Area

Management emphasis is for non-manipulative research and study.

Twitchell Allotment

The Establishment Record restricts management prescriptions and prevents improvements for maximizing livestock distribution.

Management can propose to close this allotment to complement RNA objectives.

Management Area Direction

The Forest Plan provides direction specific to management areas. Portions of the following newly acquired ranches have not been incorporated into specific Management Areas with LRMP direction and management emphasis.

Kozy Kove, Sea Vista, and Sur Sur Ranches

Kozy Kove ranch totals 398 acres: approximately 180 acres have been designated wilderness under the Big Sur Wilderness and Conservation Act of 2002 (BSWC), leaving the remainder without specific management area direction. Sea Vista ranch totals 211 acres: approximately 20 acres have been designated wilderness under the BSWC, leaving the remainder without specific management area direction. The total Sur Sur acreage of 2000 acres is without specific management area direction.

For LRMP consistency, management can propose to incorporate these lands without management area designation into adjacent management areas and identify as suitable for grazing through a minor Forest Plan amendment.

Vacant Allotments

There has been no use or demand for the Torre Canyon Allotment since 1989 and no demand or use for the Buckeye Allotment since 1991.

Management can identify allotments that no longer provide for a viable livestock operation and through a minor Forest Plan amendment remove them from the Los Padres Forest grazing program.

Chapter 3 - Comparison of Alternatives

This chapter describes and compares the alternatives developed in response to the issues while meeting the purpose and need for this Coastal Rangelands Analysis. It includes a description of each alternative considered. Allotment maps are located in Appendix D. This section also presents the alternatives in comparative form, defining the differences between each alternative and providing a clear basis for choice among options by the decision maker and the public. Information used to compare the alternatives is based upon the design of the alternative (i.e., deferred rotation grazing among pastures vs. season long one pasture) and information based upon the environmental or social effects of implementing each alternative (i.e., existing campsite enclosure fencing vs. enlarged campsite enclosure utilizing a combination of fencing and natural barriers).

Alternatives Considered but Eliminated from Detailed Study

Summer grazing season

The Forest Service Interdisciplinary (ID) Team considered a season-of-use that coincided with the summer or dry season to resolve the potential soil treading and compaction concern with winter grazing. This alternative was not studied in detail because of summer-time limited water sources within the existing and proposed allotments. Our Decision Framework calls for management prescriptions that when applied, limited to livestock numbers, season of use, rangeland practices and improvements to maximize livestock distribution, ensure that resource conditions will continue to meet or move towards desired conditions and LRMP standards and guidelines in an acceptable time frame. During winter months water is generally available throughout the coastal rangelands allowing for maximum livestock distribution and equal utilization across the unit as uniformly as natural features and facilities will allow (Best Management Practice 8.3). Summer grazing will result in cattle congregating in or near the limited water sources limiting livestock distribution, thus not meet our purpose and need and decision framework to maximize livestock distribution.

One to three year rest periods and reduction of stocking rate

Public comment proposed this alternative to provide rest on the rangeland and prevent over grazing of any given area. By resting up to 3 years does not accomplish our purpose and need to provide available forage or affect our ability to meet desired conditions. The Forest Service ID team has promoted and developed rotational grazing systems wherever the landscape, non-wilderness status and facilities allow. The adjusted grazing seasons in the proposed action will correspond with the maximum available water and green forage allowing for proper distribution and utilization throughout the unit.

In addition, the proposed action implements specific seasons of use to reduce the time period desirable plants are exposed to grazing, allowing them to recover vigor, produce seed and establish new reproduction.

Resource Protection Measures Common to All Action Alternatives

The grazing methodologies described in this environmental assessment are also considered to be resource protection measures. When applied in conjunction with LRMP Goals and Objectives, Management Practices, Standards and Guidelines, and Best Management Practices, these methodologies are effective in reducing the impact of grazing use on the coastal rangelands within the Monterey Ranger District. The following resource protection measures will be applied to all allotments under implementation of Alternative 1 or Alternative 2.

1. Livestock grazing will continue to be authorized under management systems designed to meet the 1988 Los Padres National Forest Land and Resource Management Plan [LRMP] Goals and Objectives (pages 4-6 to 4-7), Management Practices (pages 6A-4 to 6A-5), Standards and Guidelines (pages 4-7 to 4-19), Management Area Direction (pages 4-20 to 4-174), Range Management Best Management Practices for water quality (LRMP Appendix I).
2. Follow riparian area Standards and Guidelines developed under the interagency 1995 interim Pacific Anadromous Strategy (PacFish) that apply to grazing.
3. Remove livestock from individual pastures and/or National Forest System lands when moderate utilization has been reached, as defined in the LRMP final EIS (1988). This will be interpreted as an average of 1,000 lbs/acre of residual dry matter (RDM) carried over to the new forage year.
4. All rangeland management activities will be in compliance with the 2003 grazing strategy for the Los Padres National Forest, as covered under the Region 5 MOU for Grazing and the (national) Programmatic Agreement between the California Historic Preservation Officer, Advisory Council on Historic Preservation, and the USDA Forest Service.
5. The Forest will instruct the permittees on which non-native invasive plants to be aware of and report annually of any new infestations on their allotments.
6. Salt and/or other supplements will be located greater than 0.25 mile from: all perennial water sources including ponds; vernal pools; TEPCS species and habitat; livestock and wildlife water developments; concentrated and developed recreation areas; and other sensitive areas such as heritage resources, unless approved by the responsible Forest officer.
7. Follow all management requirements listed in Biological Opinions or Biological Assessments/Evaluations set forth in this environmental assessment (Cooper, Peckham 2001, Foster 2003, Kwasny 2003, NOAA Fisheries 2001, USFWS 2003).

- a) To protect the Smith's blue butterfly:

Livestock shall be removed from individual pastures and/or National Forest System lands within ten days of when the following utilization standards have been reached within selected monitoring sites adjacent to suitable Smith's blue butterfly habitat.

- Utilization for range dominated by annual forage will not exceed 55-60%.
- Utilization for range dominated by perennial bunchgrass will not exceed 45 -50% on perennial bunchgrasses.

Monitoring sites will be within 250 feet of suitable seacliff buckwheat stands (or close as possible given topographic restrictions). First preference for selected sites will be the allotment ‘key livestock use areas’¹ where monitoring for Forest standards and guidelines takes place; if no seacliff buckwheat stands exist within 250 feet of key livestock use areas, then the following order of preference will be used: Within 250 feet of Primary range²; within 250 feet of Secondary range³. Pastures without primary or secondary range within 250 of seacliff buckwheat stands will not be monitored for utilization as described above.

Where possible, if supplemental salt or minerals are provided the locations will be placed a minimum of 0.25 mile from seacliff buckwheat stands to guide livestock away from these areas.

New water developments will be located a minimum of 0.25 mile from seacliff buckwheat stands to guide livestock away from these areas.

Existing water developments located more than 0.25 mile from seacliff buckwheat stands will be maintained in a usable state.

Permittees are required to maintain all improvements that are assigned by the permits that they hold. Maintenance shall be completed prior to cattle entering the allotment, or pasture if a multiple pasture system is in effect.

Alternative 1 - Proposed Action

Authorize continued livestock grazing on the Gorda, Alder Creek, Salmon Creek, and San Carpoforo grazing allotments; create a new allotment on the recently acquired Kozy

¹ Key livestock use area is a portion of the rangeland selected because of its location, grazing value or use. It serves as a monitoring and evaluation point for range condition, trend, or degree of grazing use.

² Primary range is defined as that part of the allotment which livestock naturally prefer to use. Typically it includes the forage-producing areas that are readily accessible and have available water. Forage value and palatability is high in comparison to the rest of the allotment’s vegetation. Ordinarily primary range will be grazed to allowable use levels before livestock graze other parts of the allotment to any great extent.

³ Secondary range is where forage value and palatability of vegetation is lower than primary areas and terrain is steeper making it a less desirable area to livestock. Ordinarily secondary range is used very little or not at all under existing management.

Kove Ranch; add the Sea Vista and Sur Sur Ranches to the San Carpoforo allotment; close the Buckeye, Twitchell, and Torre Canyon allotments.

Adaptive Management process is used in the development of this alternative. It involves identification of future management options that may be needed to adjust management actions to meet desired objectives as determined through monitoring. The following monitoring will be used to evaluate whether the prescribed management is working and provide resource information necessary to evaluate and revise existing plans.

Implementation monitoring:

- Check compliance with annual operating instructions. This will include spot-checking on/off and pasture move dates, evaluating allowable use, verifying permittee maintenance of range improvements, and observations of concentrated cattle use.
- Within two weeks before or after the end of prescribed use period for allotments and/or individual pastures, determine utilization at designated key areas. On yearlong use allotments, Alder Creek and Salmon Creek, utilization will be measured during the months of August through September.
- On the Kozy Kove Ranch, monitor for livestock drift into lands designated wilderness prior to the Big Sur Wilderness and Conservation Act of 2002. If monitoring indicates a drift problem, construct drift fencing (Map D-9).

Effectiveness Monitoring

- Check for signs of livestock presence within sites of Traditional Cultural Practices or identified high-risk cultural resource sites
- Re-read and analyze permanent condition and trend transects at approximately 5-year intervals.
- Evaluate nonnative invasive weed monitoring reports.
- Complete range management BMP implementation and effectiveness evaluations (USDA Forest Service, 2002) at 2 to 3-year intervals.
- Utilize water quality data provided by the Regional Water Quality Control Board, Monterey Bay Sanctuary Citizen Watershed Monitoring Network, or other available data.

Validation Monitoring

To verify assumptions used to evaluate affects of livestock grazing on threatened, endangered and sensitive plant species, the following monitoring will occur within two seasons. If threatened, endangered, proposed, or sensitive plant species are discovered in areas prone to impact from livestock, this new information will be considered and a determination made as to whether or not avoidance or minimization measures should be incorporated into the allotment management plan and annual operating instructions.

SPECIES	VALIDATION MONITORING OBJECTIVES
Santa Lucia fir (SC)	Visit known stands to determine presence/absence of French broom.
Hickman's Onion (SaCr)	Validate that infrequent and low intensity use of Hickman's onion habitat is not having a substantial impact on the structure and composition of associated vegetation.
Hickman's Onion (SC, KK, AC, San Simeon Baccharis (SC, KK, AC, SaCr) Dwarf Goldenstar (SC) Late-flowered Mariposa Lily (G, SC, KK, AC, SaCr) San Benito Fritillary (SC, SaCr) Kellogg's Horkelia (SC) Ojai Fritillary (G, KK, SaCr) Davidson's Bush Mallow (KK)	Conduct cursory surveys for potential habitat to validate that habitat is not accessible by livestock. If habitat is accessible, determine what the intensity of livestock use is. If habitat is accessible and use is occurring, conduct complete surveys of accessible habitats for presence of sensitive plants and evaluate impacts.
Jolon Clarkia (G, SC, KK, AC, SaCr) Jones' Layia (G, SC, KK, AC, SaCr) Davidson's Bush Mallow (G, SC, AC, SaCr) Most Beautiful Jewelflower (G, SC, AC, SaCr) Caper-fruited Trepidocarpum (SC) Arroyo Seco Bush Mallow (G) Ojai Fritillary (AC) San Benito Fritillary (AC) Dwarf Goldenstar (SaCr) San Luis Sedge (SaCr)	Conduct surveys of potential habitat to determine if these species are present on the allotment. If occupied habitat is discovered, conduct effectiveness monitoring to validate that stocking levels and grazing standards are effective in minimizing impacts from livestock grazing.
Yellow-flowered Eriastrum (SC, AC) Cone Peak Bedstraw (SC) Hardham's Bedstraw (SC) Palmer's Monardella (SC) Cook's Triteleia (G)	Conduct surveys of potential habitat to determine if these species are present on the allotment. If any of these species are located, validate that their unpalatability provides effective defense from the direct and indirect effects of livestock management.

G=Gorda; AC=Alder Creek; SaCr=Salmon Creek; KK=Kozy Kove; SC=San Carpoforo.

Adaptive Management

If monitoring indicates that objectives are not being met within a five year timeframe following implementation of the proposed action, or if an evaluation indicates that progress is not being made towards those desired conditions that will result in meeting them within the implementation timeframe, or if validation monitoring indicates that a Forest Service listed sensitive plant(s) is likely to trend

toward federal listing or loss of viability, an interdisciplinary team with relevant expertise will determine adjustments. Adjustments will choose from one of the following rangeland management practices or a combination:

- Fencing and other structural improvements
- Adjustments in season of use
- Adjustments in allowable use levels
- Adjustments in numbers of livestock
- Period of rest

Changes will be reflected in the annual operating instructions and term grazing permit.

Gorda Allotment

Mill Creek Unit:

In order to distribute livestock and utilization across the Unit as uniformly as natural features and facilities will allow, the earliest on-date will be February 1 and the latest off-date will be June 30.

Authorized livestock may include cow/calf pairs; other mature cattle including bulls; yearling cattle.

Animal Unit Months⁴ will not exceed 230, based on historical use, available water, and estimated carrying capacity.

To maintain sufficient soil cover and plant vigor to impede the invasion and spread of French broom (or other noxious weeds), the standard for grass and forb utilization will be an average of 1200 lbs of residual dry matter remaining at the end of the grazing season measured at established key livestock use areas.

To maintain sufficient soil cover to impede the invasion and spread of noxious weeds, maintain 85% minimum ground cover at permanent Condition and Trend transect site, monitored at approximately 5-year intervals.

Prewitt Unit:

Improve distribution by constructing a ¼ mile (approximate) barbed wire drift fence above Wild Cattle Canyon to partition Alms Ridge from Prewitt Ridge (Map D-3), creating two separate pastures. Implement a 2-pasture rotation grazing system between Alms Ridge pasture and Prewitt Ridge pasture. The earliest on-date will be February 1 and the latest off-date will be August 15.

Authorized livestock may include cow/calf pairs; other mature cattle including

⁴ Animal Unit Month is the amount of feed required to support one Animal Unit for one month. Animal Unit values: cow with calf = 1.32; mature cow = 1; mature bull = 1.5; yearling < 9 mo. = 7; yearling >9 mo. = 1. AU x 1,000 = monthly forage requirement (lbs air dry forage).

bulls; yearling cattle.

Animal Unit Months will not exceed 450, based on historical use, available water, and estimated carrying capacity.

Plaskett Unit:

In order to distribute livestock and utilization across the Unit as uniformly as natural features and facilities will allow, the earliest on-date will be February 1 and the latest off-date will be August 1.

Authorized livestock may include cow/calf pairs; other mature cattle including bulls; yearling cattle.

Animal Unit Months will not exceed 316, based on historical use, available water, and estimated carrying capacity.

Pacific Valley Unit:

To maintain sufficient soil cover and plant vigor to impede the invasion and spread of Italian thistle (or other noxious weeds), the standard for grass and forb utilization will be an average of 1200 lbs of residual dry matter remaining at the end of the grazing season measured at established key livestock use areas.

To encourage consumption by livestock of undesirable plants, the earliest on-date will be March 1 and the latest off-date September 15.

To reduce the duration desirable forage is exposed to grazing, thus maintaining vigor, implement a 3-pasture deferred rotation system.

Authorized livestock may include cow/calf pairs; other mature cattle including bulls; yearling cattle.

Animal Unit Months will not exceed 343, based on historical use, available water, and estimated carrying capacity.

To maintain sufficient soil cover to impede the invasion and spread of Italian thistle (or other noxious weeds), maintain 85% minimum ground cover at permanent Condition and Trend transect site, monitored at approximately 5-year intervals.

South Pasture

To prevent livestock access to Plaskett Creek, construct new 100-foot long (approximate) drift fence on the north side of Plaskett Creek riparian zone (MAP D-5).

Middle Pasture

To prevent cattle access to a sensitive area, construct a 250-foot long (approximate) drift fence, with pedestrian passage (MAP D-5).

To improve protection of south-central steelhead, livestock movement through the Prewitt Creek enclosure will be prohibited between January 1 and April 30. Outside of this time period, cattle can be herded across Prewitt Creek at the designated cattle crossing/breezeway between the north and middle pastures 3 or 4 times per year. At such time, the cattle will be herded directly through the creek and riparian enclosure in an expedited fashion (approximately 15 minutes) so as to not linger in the stream.

North Pasture

To avoid concentrated cattle use within high-risk heritage resource sites, the existing stock corral will not be used by livestock; posted for non-use by the public; removed and relocated when funding allows (MAP D-5).

Alder Creek Allotment

The season of use will be yearlong.

Authorized livestock may include mature or yearling horses or mules; cow/calf pairs; other mature cattle including bulls; yearling cattle.

Animal Unit Months will not exceed 115, based on historical use, available water, and estimated carrying capacity.

Salmon Creek Allotment

The season of use will be yearlong.

Authorized livestock may include mature or yearling horses or mules; cow/calf pairs; other mature cattle including bulls; yearling cattle.

Animal Unit Months will not exceed 65, based on historical use, available water, and estimated carrying capacity.

Kozy Kove Ranch

To bring the Kozy Kove Ranch into compliance with the Los Padres National Forest Land and Resource Management Plan (1988), amend the Plan to incorporate lands within the ranch without management area direction into adjacent Management Area 42 with all applicable management direction and identify as suitable for grazing.

The earliest on-date would be December 15 and the latest off-date May 15 based on resource conditions.

Authorized livestock may include cow/calf pairs; other mature cattle including bulls; yearling cattle.

Animal Unit Months will not exceed 160, based on historical use, available water, and estimated carrying capacity.

Sea Vista and Sur Sur Ranches

To bring the Sea Vista and Sur Sur Ranch into compliance with the Los Padres National Forest Land and Resource Management Plan (1988), amend the Plan to incorporate lands within the ranches without management area direction into adjacent Management Area 42 with all applicable management direction and identify as suitable for grazing.

Incorporate these two ranches into the San Carpoforo allotment.

San Carpoforo Allotment

Modify the San Carpoforo Allotment to incorporate the Sur Sur and Sea Vista Ranches.

The earliest on-date would be November 1 and the latest off-date May 15 based on resource conditions.

Authorized livestock may include cow/calf pairs; other mature cattle including bulls; yearling cattle.

Animal Unit Months will not exceed 975, based on historical use, available water, and estimated carrying capacity.

To mitigate the confined nature of the Dutra Campsite, the enclosure fence will be dismantled and replaced with a drift type fence that when combined with natural brush barriers will enlarge the campsite and continue to prevent cattle entry.

Twitchell Allotment

To comply with direction in the Cone Peak Gradient Research Natural Area Establishment Record and to serve as a baseline or reference area for comparison with similar ecosystems where management prescriptions (such as grazing) are applied, remove this allotment from the Los Padres National Forest grazing program.

Buckeye Allotment

Due to no demand for use, low forage production in key livestock use areas, difficulty in distributing and controlling livestock, and no adjoining private lands that would produce a logical livestock operation, remove this vacant allotment from the Los Padres National Forest grazing program.

Torre Canyon Allotment

Due to no demand for use, resources and costly new improvements to keep livestock within the allotment (Map D11, Table 9), and conflicts with neighboring landowners and trespass livestock, remove this vacant allotment from the Los Padres National Forest grazing program.

Table 1. Summary of Proposed Action

Allotment/Unit	AUMs not to exceed	Season not to exceed	Improvements/New Standards
Gorda Mill Creek Unit	230	2/1 – 6/30	1200 lbs RDM at Key Areas *SBB terms and conditions 85% minimum ground cover at C&T transects
Gorda Prewitt Unit	450	2/1 – 8/15	Construct division fence / Implement 2-pasture rotation grazing system
Gorda Plaskett Unit	316	2/1 – 8/1	
Gorda Pacific Valley Unit	343	3/1 – 9/15	1200 lbs RDM at Key Areas 85% minimum ground cover at C&T transects
Gorda Total			Implement 3-pasture deferred rotation grazing system *SBB terms and conditions Construct drift fence on north side of Plaskett Creek Construct drift fence in Middle pasture to prevent livestock access to sensitive place Livestock crossing Prewitt Creek prohibited between 1/1-4/30 Relocate stock corral
Alder Creek	115	yearlong	*SBB terms and conditions
Salmon Creek	65	yearlong	*SBB terms and conditions
Kozy Kove Ranch	160	12/15-5/15	Minor Forest Plan amendment to incorporate into adjacent Management Area 42 with range suitability Authorize grazing *SBB terms and conditions
Sea Vista and Sur Sur			Minor Forest Plan amendment to incorporate into adjacent Management

Ranches			Area 42 with range suitability
			Authorize grazing
			*SBB terms and conditions
San Carpoforo	975	11/1-5/15	Incorporate Sur Sur and Sea Vista ranches into allotment
			Reconstruct Dutra Camp fence.
Twitchell			Close allotment.
Buckeye			Close allotment.
Torre Canyon			Close allotment.

*SBB terms and conditions are listed under Resource Protection Measures Common to all action alternatives in Chapter 3.

Table 2. Summary of acres, Animal Unit Months (AUMs) available for grazing at the moderate level, and AUMs proposed.

Allotment Area/Unit	Gross Acres	Suitable Acres	AUMs Available	AUMs Proposed
Gorda				
Mill Creek	4132	1265	877	230 (26%)
Prewitt	5152	2904	2819	450 (16%)
Plaskett	5955	2173	2021	316 (16%)
Pacific Valley	305	254	789	343 (43%)
Total Gorda	15,544	6,596	6,506	1,339
Alder Creek	2525	553	313	115 (37%)
Salmon Creek	124 FS 116 pvt	66 FS 67 pvt	40 FS 40 pvt	
Total	240	143	80	65 (81%)
Kozy Kove	398	284	170	160 (94%)
San Carpoforo	3525	1891	1778	
Sur Sur	1915	1295	751	
Sea Vista	211	146	52	
Total	5651	3132	2581	975 (38%)

Torre Canyon	1690	723	834	0
Twitchell	4200	875	910	0
Buckeye	2681	1107	663	0

Alternative 2 – No Change

Resource Protection Measures Common to All Action Alternatives (Chapter 3) will be applied.

Updated allotment management plans would reflect no changes to current seasons of use, grazing rotation systems, livestock numbers, kind, or class. Changes to grazing management would be administrative only. Proactive management of the range resource, to adapt to changing resource or environmental conditions would not occur.

Current Permits are as follows:

Gorda Allotment- Mill Creek Unit

Management Area: 48, 64

Permitted Numbers: 25 cow/calf pairs

Animal Unit Months: 181.5

Season of Use: 4/1 – 8/15

Management: Two-pastures used concurrently season long. The herd is split approximately 18 pair below the Nacimiento-Ferguson Road and 7 pair above.

Gorda Allotment-Prewitt Unit

Management Area: 48

Permitted Numbers: 20 cow/calf pairs

Animal Unit Months: 171.6

Season of Use: 4/1 – 10/15

Management: Season long

Gorda Allotment – Plaskett Unit

Management Area: 48, 64

Permitted Numbers: 30 cow/calf pairs

Animal Unit Months: 257.4

Season of Use: 4/1 – 10/15

Management: Season long

Gorda Allotment – Pacific Valley Unit

Management Area: 42

Permitted Numbers: 50 cow/calf pairs

Animal Unit Months: 429

Season of Use: 4/1 – 10/15

Management: Season long

South Pasture

To prevent livestock access to Plaskett Creek, construct new drift fence, approximately 100 feet long, on the north side of Plaskett Creek riparian zone (Map D-5).

Middle Pasture

To prevent cattle access to a sensitive area, construct a 250-foot long (approximate) drift fence, with pedestrian passage (Map D-5).

To improve protection of south-central steelhead, livestock movement through the Prewitt Creek enclosure will be prohibited between January 1 and April 30. Outside of this time period, cattle can be herded across Prewitt Creek at the designated cattle crossing/breezeway between the north and central pastures 3 or 4 times per year. At such time, the cattle will be herded directly through the creek and riparian enclosure in an expedited fashion (approximately 15 minutes) so as to not linger in the stream. The Authorized Officer will approve prior to movement.

North Pasture

To avoid concentrated cattle use within high-risk heritage resource sites, the existing stock corral will not be used by livestock; posted for non-use by public livestock; removed and relocated 300 feet to the north when funding allows (Map D-5).

Existing Gorda Allotment Range Improvements: 9 ½ miles of barbwire fence; 10 water developments; 2 stock ponds; 2 riparian exclosures; 1 gathering corral; 1 sorting corral.

Alder Creek Allotment

Management Area: 42
Permitted Numbers: 5 horses or mules
Animal Unit Months: 72
Season of Use: Yearlong
Management: Season long

Existing Range Improvements: 1- ¼ mile of barbwire fence; 3 water developments.

Salmon Creek Allotment

Management Area: 42
Permitted Numbers: 4 mature cows and/or horses
Animal Unit Months: 65
Season of Use: Yearlong
Management: Deferred rotation. Highway 1 divides the allotment into two pastures with a livestock tunnel under the highway. The west pasture is typically used during the Winter through Fall months, deferring use of the east pasture based on utilization and available forage.

Existing Range Improvements on National Forest System lands: 2 miles of barbwire fence.

San Carpoforo Allotment

Management Area: 48, 64

Permitted Numbers: 118 yearling cattle

Animal Unit Months: 708

Season of Use: 11/1 – 4/30

Management: Herding system utilizing drift fencing and natural landscape features to move and hold small herds (typically 20-30 head) throughout the allotment based on utilization, available forage and water. A new two-mile barbed-wire fence will be built to replace the dilapidated fence along the old Forest boundary between the San Carpoforo allotment and the acquired Sur Sur and Sea Vista ranches to prevent cattle trespass. This will be a cost-share project between the Forest Service and Permittee.

Existing Range Improvements: 7- ¼ miles of barbwire fence; 2 water developments; 1 gathering paddock.

Twitchell Allotment

Management Area: 64, 66

Permitted Numbers: This allotment has been in non-use since 1999.

Current Term Grazing Permit provides for 20 cow/calf pairs.

Animal Unit Months: 106

Season of Use: 2/1 – 5/30

Management: Season long

Existing Range Improvements: 2 miles of barbwire fence; 1 water development.

Buckeye Allotment

Management Area: 42, 64

Permitted Numbers: This allotment has been vacant since 1991 with no applications for its use. Under this alternative a Permit will provide for 20 cow/calf pairs.

Animal Unit Months: 132

Season of Use: 2/1 – 6/30

Management: Season long

Existing Range Improvements: 2- ½ miles of barbwire fence and enclosure fence around Buckeye Flats.

Torre Canyon Allotment

Management Area: 48

Permitted Numbers: This allotment has been vacant since 1987 with no applications for its use. Under this alternative a Permit will provide for 25 cattle.

Animal Unit Months: 125

Season of Use: 2/15 – 7/15

Management: Season long

To protect red-legged frog habitat, construct approximate 100-foot enclosure fence in Lafler Canyon.

To keep livestock within the designated allotment boundary, construct approximately 3 miles of barbwire fence (Map D-11).

To protect domestic water supply, construct approximate 100-foot enclosure fence around source (Map D-11).

Existing Range Improvements: ¼ mile barbwire fence; 1 stock pond; 1 sorting corral; 2 water developments; 1 loading chute.

Sur Sur Ranch

Permitted Numbers: None

Existing Range Improvements: 4 miles of barbwire fence; 5 water developments; 1 gathering paddock.

Sea Vista Ranch

Permitted Numbers: None

Existing Range Improvements: 1- ½ miles of barbwire fence; 3 water developments; 1 set of holding corrals.

Kozy Kove Ranch

Permitted Numbers: None

Existing Range Improvements: 1 mile of barbwire fence; 2 water developments.

Table 3. Summary of current management for coastal rangelands

Allotment/Unit	Permitted #s	AUMs	Season	Management
San Carpoforo	118 yearling cattle	708	11/1 – 4/30	Season long herding system
Salmon Creek	4 mature cows and/or horses	65	yearlong	Deferred rotation
Alder Creek	5 horses/mules	72	yearlong	Season long
Gorda Mill Creek Unit	25 cow/calf pairs	181.5	4/1 – 8/15	Two pasture season long
Gorda Prewitt Unit	20 cow/calf pairs	171.6	4/1 – 10/15	Season long
Gorda Plaskett Unit	30 cow/calf pairs	257.4	4/1 – 10/15	Season long
Gorda Pacific Valley Unit	50 cow/calf pairs	429	4/1 – 10/15	Season long
Twitchell	20 cow/calf pairs	106	2/1 – 5/30	Season long
Buckeye	Vacant			
Torre Canyon	Vacant			

Alternative 3 – No Grazing

Under this alternative, permitted livestock grazing will be phased out as per 36 CFR 221.4 (a) (1) on the five active allotments (Twitchell, Gorda, Alder Creek, Salmon Creek, San Carpofo). The two vacant allotments (Torre Canyon, Buckeye) and the three newly acquired ranches (Kozy Kove, Sea Vista, Sur Sur) would not be authorized for grazing. Existing improvements determined no longer necessary would be removed as funding allows. Resource protection measures common to all action alternatives will apply while the active allotments are phased out.

Comparison of Alternatives

The differences between how alternatives address the issues are displayed in Table 4.

Table 4. Issues addressed by alternatives

Allotment	Issue	Alternative 1 Proposed Action (Adaptive Mgt)	Alternative 2 No Change	Alternative 3 No Grazing
Gorda- Mill Unit	<u>Rangeland Health</u> Noxious weeds.	*Bareground would remain mostly static or decrease somewhat. *Foliage density maintained. *RDM > 1200 lbs/ac. *French broom cover 1-5%.	*Bareground is expected to increase somewhat. *Foliage density decrease. *RDM > 1000 lbs/ac: *French broom cover 5-25%.	*Bareground would remain mostly static or decrease somewhat. *Foliage density maintained. RDM > 1200 lbs/ac; *French broom cover 1-5%.
	Distribution/ utilization.	*Season corresponds with maximum available water and green forage. *Key forage species will recover vigor.	*Season corresponds with limited available water and green forage. *Key forage species will decline somewhat.	*No season of use. *Key forage species will recover vigor then taper off.
Gorda-Prewitt Unit	<u>Rangeland Health</u> Distribution/ utilization.	*Proper distribution. *Key forage species will	*Improper distribution. *Key forage species will decline	*Key forage species will recover vigor then taper off.

Gorda – Plaskett Unit	<u>Rangeland Health</u>	maintain vigor.	somewhat.	
	Distribution/ utilization.	*Season corresponds with maximum available water and green forage. *Key forage species will maintain vigor.	*Season corresponds with limited available water and green forage. *Key forage species will decline somewhat.	*No season of use. *Key forage species will recover vigor then taper off.
Gorda- Pacific Valley Unit	<u>Rangeland Health</u>			
	Noxious weeds.	*Propagation of weeds reduced. *RDM > 1200 lbs/ac. *Bareground would remain mostly static or decrease somewhat.	*Propagation of weeds will remain constant. *RDM > 1000 lbs/ac. *Bareground would remain mostly static.	*Propagation of weeds and other invasive plants will increase. *RDM > 1200 lbs/ac. *Bareground would remain mostly static or decrease somewhat.
	<u>Heritage Resources</u>			
		*Compliance with National Historic Preservation Act.	*Compliance with National Historic Preservation Act.	*Compliance with National Historic Preservation Act.
San Carpoforo	<u>Biological Resources</u>			
	South-Central steelhead	*Habitat managed for protection.	*Habitat managed for protection.	*Habitat managed for protection.
San Carpoforo	<u>Recreation</u>			
	Dutra Camp	*Enlarged campsite utilizing vegetation.	*Exclosure fence remains same.	*Exclosure fence removed.
All allotments	<u>Biological Resources</u>			
	Smith’s blue butterfly	*Potential for livestock impacts	*Potential for livestock	*Potential for livestock

<p>Twitchell</p>	<p><u>Cone Peak RNA</u></p>	<p>on less than ½ % of known habitat.</p> <p>*RNA guidelines met. *Serve as reference area.</p>	<p>impacts on less than ½ % of known habitat.</p> <p>*RNA guidelines met. *No new improvements to aid mgt.</p>	<p>impacts on less than ½ % of known habitat eliminated.</p>
<p>Torre</p>	<p><u>Vacant allotment</u></p>	<p>*Eliminate allotment.</p>	<p>*Maintain allotment status.</p>	
<p>Buckeye</p>	<p><u>Vacant allotment</u></p>	<p>*Eliminate allotment.</p>	<p>*Maintain allotment status.</p>	
<p>Kozy Kove Sea Vista Sur Sur</p>	<p><u>Management Area Direction</u></p>	<p>*Forage available to livestock operators. *All lands within these ranches will have management direction consistent with adjacent lands.</p>		<p>*Forage will not be available to livestock operators. *Portions of these ranches will not have management direction.</p>

Chapter 4 - Environmental Consequences

This chapter describes the effects relative to the issues identified in Chapter 2 and desired conditions developed in the purpose and need. The information presented displays only the consequences that would provide a basis for decision. An assessment of direct, indirect and cumulative effects of the proposed action and other alternatives in view of past, present and potential actions of the future is provided.

Rangeland Health

Desired Condition - Annual grasslands provide sufficient cover to defend against noxious weed spread, maintain health and vigor of desirable plant species, provide for conditions supporting plant species diversity, provide favorable microenvironments for early seedling growth, soil protection from erosion, adequate soil organic matter, and a source of low moisture fall forage for livestock feed.

Gorda Allotment-Mill Creek Unit

The primary range on this 4,132-acre Unit is the 754 acres of grassland associated with Diggs Homestead and ‘finger’ ridges west of Cone Peak Road.

Issue: The Mill Creek watershed has areas of moderate (5-25% cover) infestation of French broom. Noxious weeds present a risk due to their aggressive nature in both pristine and disturbed landscapes. This noxious weed is threatening to invade available bare ground within the grasslands. Too much grazing can reduce foliage density and increase bare ground thereby making sites available to invasion of noxious weeds if they are present on or nearby the allotment.

Issue: Some water sources are dry, or at minimum flows, by the end of the grazing season resulting in congregated livestock use at or near the remaining water sources.

Alternative 1 – Propose Action (graze with adaptation)

Direct and Indirect Effects –The adjusted grazing season will correspond with the maximum available water and green forage improving distribution and utilization throughout the unit. Potential for bare ground spots will decrease as foliage density is maintained. Raising the minimum RDM standard to 1200 lbs. and the adjusted grazing season will further protect the soil from erosion, increases water infiltration and soil water holding capacity. These measures will help defend the grasslands from expansion of existing infestations of French broom on the Mill Creek Unit.

Cumulative Effects – In addition to bare ground, there are other vectors which are responsible for the movement of noxious weeds within the watershed: recreational use, road networks, wildlife, and natural disturbance. Each of these vectors will continue to operate within the watershed.

In 1999 the Monterey Ranger District completed an invasive weed control environmental assessment (USDA Forest Service). Weed control efforts, as prescribed in the environmental assessment, were carried out in 2000 and 2001 on the Mill Creek Unit. As a result, infestations of French broom were reduced approximately 60%. Treatments are

scheduled to resume in 2005. It is expected that the combined efforts of treatment and higher foliage density will reduce the cover of infestation to light (1-5% cover).

Under this alternative, the timing and distribution of grazing were developed to meet Rangeland Health desired conditions. Properly managed grazing practices have been endorsed as a tool for promoting biodiversity (Menke 1982, Edwards 1995, 1996, Reeves 2001). Key forage species will recover vigor, produce seed and establish new reproduction.

Alternative 2 – No Change

Direct and Indirect Effects - During years with less than average rainfall or only early-season rains, most water sources will dry up prior to the end of the grazing season. Towards the latter part of the grazing season, cattle will congregate at or near the few remaining season-long water sources. Lack of proper distribution will result in congregation areas with low RDM at the end of the grazing season, lowering foliage density and increasing the likelihood of bare ground spots. As a result, there will be a moderate risk that the existing infestations of French broom will expand into these areas within the Mill Creek Unit.

Cumulative Effects – French broom will likely take advantage of bare ground or low foliage density to spread. Combined with other vectors for spread, this alternative will not defend the grasslands from invasion by French broom or other noxious weeds within the Mill Creek Unit.

In 1999 the Monterey Ranger District completed an invasive weed control environmental assessment (USDA Forest Service). Weed control efforts, as prescribed in the environmental assessment, were carried out in 2000 and 2001 on the Diggs Unit. As a result, infestations of French broom were reduced approximately 60%. Treatments are scheduled to resume in 2005. Without proper distribution and utilization, and probable bare ground, treatments are unlikely to be effective in cumulatively preventing French broom from invading the grasslands. It is expected that cumulatively the infestations of French broom will continue at the moderate level (5-25% cover).

Areas of concentrated use will result in primary forage species eventually depleting their food reserves (carbohydrates stored). The effect will be fewer seeds produced and dispersed, fewer seedling and variety of age classes, and eventually primary forage species declining and replaced by less desirable plants.

Alternative 3 – No Grazing

Direct and Indirect Effects - Under this alternative, one contributing vector (livestock grazing) to the on-going invasion of noxious weeds would be eliminated from the Mill Creek watershed. Weed infestations are expected to continue to increase due to other causes, including recreational use, road networks, wildlife, and natural disturbance. The change in amounts of French broom as a result of this alternative is anticipated to be negligible.

Cumulative Effects – Under this alternative natural propagation and the combined effects of other activities and vectors, i.e. recreational use, road networks, wildlife, and natural disturbance will continue to operate within the watershed. This alternative will help

defend the grasslands from invasion by French broom or other noxious weeds within the Mill Creek Unit.

In 1999 the Monterey Ranger District completed an invasive weed control environmental assessment (USDA Forest Service). Weed control efforts, as prescribed in the environmental assessment, were carried out in 2000 and 2001 on the Diggs Unit. As a result, infestations of French broom were reduced approximately 60%. Treatments are scheduled to resume in 2005. It is expected that cumulatively the infestations of French broom will be reduced to light (1-5% cover).

Because grazing has been present for so long, careful consideration must be given before livestock are removed from coastal grasslands. Stromberg et al. (2002), observed that on Santa Cruz Island, grasslands formerly grazed by cattle and sheep now support near monocultures of *Foeniculum vulgare*, an exotic plant formerly held in check by grazing. Edwards (1995) discovered many species of pest plants accumulate after exclusion of livestock. *Foeniculum* is a good example. It is common in Central California to find it nearly entirely in excluded areas.

Excluding grazing animals from ecosystems that evolved with grazing may decrease biodiversity through competitive exclusion of certain plant species. Long-term studies on eastern and western grazing lands indicate that appropriate grazing management can support a relatively high level of plant diversity (Hart 2001; Milchunas, Lauenroth, and Burke 1998; Sanderson et al. 2001).

Native plant diversity would likely decrease. Non-grazed annual grasses will eventually shade out the small forbs, lowering native forb diversity in the open grasslands. No grazing presents a high risk of losing the low-growing native species (Hayes and Holl, 2003). Health, vigor and abundance of native perennial grasses will remain static or decrease. Elimination of livestock grazing would have the most significant improvement to rangeland health in the short term because those areas of the landscape where livestock tend to concentrate would receive an immediate reduction in use. Eventually, productivity would level off and then it would taper off. Upland sites would improve at a slower rate than mesic sites because these sites lack the natural productivity and resiliency as sites with greater soil moisture. The result is a reduction in essential features of vegetation cover, including the replacement of soil organic matter and surface residues (Anderson, 1993).

Gorda Allotment-Plaskett Unit

The primary range on this 5,955-acre Unit is the 1,224 acres of grassland on Plaskett Ridge.

Issue: Some water sources are dry, or at minimum flows, by the end of the current grazing season resulting in improper distribution of livestock at or near the remaining water sources.

Alternative 1 – Propose Action (graze with adaptation)

Direct and Indirect effects – The adjusted grazing season will correspond with the maximum available water and green forage allowing for improved distribution and utilization throughout the unit.

Cumulative Effects - Key forage species will recover vigor, produce seed and establish new reproduction. The adjusted grazing season will further protect the soil from erosion; maximize water infiltration and soil water holding capacity.

Under this alternative, the timing and distribution of grazing were developed to enhance native plant diversity. Properly managed grazing practices have been endorsed as a tool for promoting biodiversity (Menke 1982, Edwards 1995, 1996, Reeves 2001).

Alternative 2 – No Change

Direct and Indirect Effects - There would be no changes to season of use under this alternative. Distribution and utilization across the units will not be as uniformly as natural features and facilities will allow. During years with less than average rainfall or only early-season rains, most water sources will dry up prior to the end of the grazing season. Towards the latter part of the grazing season, cattle will congregate at or near the few remaining season-long water sources. Lack of proper distribution will result in continued low RDM at the end of the grazing season within congregation areas.

Cumulative effects - Areas of concentrated use will result in primary forage species eventually depleting their food reserves (carbohydrates stored). The effect will be fewer seeds produced and dispersed, fewer seedling and variety of age classes, and eventually primary forage species declining and replaced by less desirable plants.

Alternative 3 – No Grazing

Direct and Indirect Effects - Range vegetation would initially respond very well. The direct effect on range plants is a decrease in utilization of grasses, sedges and forbs. Short-term general improvements to rangeland health are anticipated to be more rapid with no grazing than with the proposed action. The long-term effects of no grazing on the range resource may be insignificant when compared to grazing at proper use.

Cumulative Effects – Plant diversity would likely decrease. Non-grazed annual grasses will eventually shade out the small forbs, lowering native forb diversity in the open grasslands. No grazing presents a high risk of losing the low-growing native species (Hayes and Holl, 2003). Elimination of livestock grazing would have the most significant improvement to rangeland health in the short term because those areas of the landscape where livestock tend to concentrate would receive an immediate reduction in use. Eventually, productivity would level off and then it would taper off. Upland sites would improve at a slower rate than mesic sites because these sites lack the natural productivity and resiliency as sites with greater soil moisture. The result is a reduction in essential features of vegetation cover, including the replacement of soil organic matter and surface residues (Anderson, 1993).

Gorda Allotment – Pacific Valley Unit

The primary range on this 305-acre Unit is the 216 acres of mixed annual and perennial grasses and forbs on Pacific Valley terrace. As a result of cultivation during the 1940s followed by extended grazing seasons, Italian thistle (*Carduus pycnocephalus*), State listed noxious weed, has become established. Following the 1940s, seeding of range forage has resulted in a significant component of two introduced perennial grasses: Harding grass (*Phalaris aquatica*) and reed fescue (*Festuca arundinacea*). In addition, kikuyu grass (*Pennisetum clandestinum*), Federal listed noxious weed, is encroaching from the Highway 1 corridor.

The Pacific Valley coastal terrace still contains significant amounts of California oatgrass (*Danthonia California*) and may have once supported abundant other coastal prairie grass species such as red fescue (*Festuca rubra*), both considered native perennial grasses. The Pacific Valley Unit may never revert to significant stands of desirable or native grass and forb species without intensive management. Stromberg (1996) found sites on the Hastings Natural History Reservation in Carmel Valley with a long history of cultivation where perennial grasses were eliminated and have not recovered despite elimination of grazing. It appears that current plant species composition and diversity of relic stands of native grasses are not as affected by grazing as they were by historical cultivation.

Issue: This Unit contains abundant Italian thistle and kikuyu grass.

Alternative 1 – Propose Action (graze with adaptation)

Direct and Indirect Effects - The adjusted grazing season will correspond to a high palatability period for Italian thistle enticing livestock to consume them, reversing the current trend of selective avoidance. Kikuyu grass is generally palatable yearlong.

The deferred rotation system will reduce the time period desirable plants are exposed to grazing, allowing them to recover vigor, produce seed and establish new reproduction.

Raising the minimum RDM standard to 1200 lbs. and the shorter grazing season will greatly reduce the likelihood of occasional bare ground and expansion of existing infestations of Italian thistle.

Cumulative effects – The combined effects of this alternative on the Unit are similar to the direct and indirect effects. The proposed action is designed to have a positive affect on the amount and frequency of desirable plants that occur on the terrace. Similarly, this alternative is designed to consume the noxious weeds, suppress the introduced perennial grasses, maintain sufficient ground cover, and improve distribution.

In theory, because plant species differ in phenology, the timing of grazing should differentially suppress or promote species by mitigating competitive interactions and/or reducing fecundity (Augunstine and McNaughton 1998).

This season-of-use coincides with the flowering of Italian thistle. The flowering buds (prior to maturation) are palatable to cattle at this stage of phenology. The noxious weeds will now be faced with the same type of competition the desirable plants have had to deal with for the last 40 years (i.e., continued selective grazing). The long-term effect would be a reduction in propagation of Italian thistle. Kikuyu grass is highly palatable to cattle during this period and will be suppressed. Rotating livestock will allow desirable plants and key forage species to recover vigor, produce seed and establish new reproduction before being regrazed, enabling them to compete with noxious weeds. Maintaining competitive desirable plants will reduce the risk of further introduction and spread of noxious weeds on the Unit

The Monterey Ranger District Weed Management Program has been suppressing Italian thistle for the last five years by mowing the plant prior to seed maturation. It is expected that continued mowing combined with this alternative will reduce the amount of thistle to an acceptable level.

Located adjacent to Highway 1, a major weed transporting corridor, will continue to create a high risk of introducing noxious weeds into the Unit.

Elliott and Wehausen (1974) showed that of three pastures on the Pt. Reyes Peninsula in Marin County, the moderately grazed one was richest in native grasses, sedges, and rushes, and that all three, including the heavily grazed one, contributed uniquely to native-plant diversity.

Alternative 2 – No Change

Direct and Indirect Effects - The grazing season will continue to correspond with the bolting period for the desirable species enticing livestock to consume them, while selectively avoiding the noxious weeds creating a competitive advantage. This will be compounded by season-long grazing throughout the Unit, reducing the time period desirable plants have to recover vigor, produce seed and establish new reproduction.

Frequency of bare ground is not expected to change. There will be a moderate risk that the existing infestations of Italian thistle will increase in size.

Cumulative Effects – Noxious weeds and introduced non-native perennials will continue to take advantage of the reduced competition from desirable plants and continue to reproduce and spread. Potential for bare ground, thus creating sites for invasive weeds will vary depending on variations in forage production influenced by precipitation and temperature. The Monterey Ranger District Weed Management Program will continue to treat Italian thistle throughout the Unit, but their efforts will be somewhat off-set by the continued selective grazing of desirable plants.

Alternative 3 – No Grazing

Direct and Indirect Effects – The harding grass, reed fescue and kikuyu grass will respond very well to no grazing; so well that they will likely out-compete the Italian thistle for space and biologically suppress it along with most other plant species.

Cumulative Effects - In 2002 this unit was not grazed. As a result the introduced perennial grasses and kikuyu grass are dominating the middle pasture and expanding throughout the entire unit. No grazing presents a high risk of losing the low-growing native species (Hayes and Holl, 2003). Abandoned pastures once seeded with harding grass on the University of California Rancho Marino Reserve in Cambria, California, have become monocultures of harding grass, supporting little diversity (Kwasny, personal communication, 2004). D'Antonio (2002) refers to an observational study performed in coastal grassland (Sea Ranch, Mendocino County) that suggests that certain perennial exotic species may achieve dominance on sites protected from grazing.

Stromberg et al. (2002), observed that on Santa Cruz Island, grasslands formerly grazed by cattle and sheep now support near monocultures of *Foeniculum vulgare*, an exotic plant formerly held in check by grazing. Edwards (1995), discovered many species of pest plants accumulate after exclusion of livestock. Without grazing to control their invasive nature, noxious weeds and introduced perennial grasses will spread throughout the Unit eventually creating a heavy thatch shading out small forbs, native constituent species, and cumulatively lowering diversity in the open grasslands (as evidenced when this Unit was not grazed in 2002). As litter and current years grass cures, fuel loads for potential wildfires will correspondingly increase.

Located adjacent to Highway 1, a major weed transport corridor, creates a high risk of introducing noxious weeds into the Unit. The ongoing MRD Weed Management

program will continue to eliminate existing infestations of Italian thistle, reducing the amount to acceptable levels. Because kikuyu grass is highly palatable to cattle, removing grazing eliminates one method of control. Grazing has been absent on the Sand Dollar Pasture the last two years allowing the kikuyu grass to flourish. Cumulatively there will be a high risk of kikuyu grass infestations increasing throughout the Pacific Valley Unit.

Gorda Allotment-Prewitt Unit

The primary range on this 5,152-acre Unit is 1,963 acres of grassland on Alms and Prewitt Ridges. These grasslands are dominated by annual grasses supported by a mix of perennial grasses (predominately *Nassella pulchra*) and both annual and perennial forbs.

Issue: Field observations indicate there is improper livestock distribution. Livestock spend much of the grazing season on lower Prewitt Ridge, while Alms Ridge receives little to no use. As a result, primary range on Lower Prewitt Ridge receives continuous grazing pressure throughout the season while Alms Ridge is often ungrazed.

Alternative 1 – Propose Action (graze with adaptation)

Direct and Indirect Effects - The adjusted grazing season will correspond with the maximum available water and green forage allowing for distribution and utilization throughout the unit. The deferred rotation system will rest the range at suitable intervals promoting uniform distribution and plant use. Season-long concentrated and selective grazing on lower Prewitt Ridge will be eliminated.

Under this alternative, the timing and distribution of grazing were developed to enhance native plant diversity. Properly managed grazing practices have been endorsed as a tool for promoting biodiversity (Menke 1982, Edwards 1995, 1996, Reeves 2001).

Cumulative Effects - Key forage species will recover vigor, produce seed and establish new reproduction.

Alternative 2 – No Change

Direct and Indirect Effects - Cattle will continue to spend an disproportionate amount of time concentrated on lower Prewitt Ridge, while Alms Ridge receives little to no use. There would be no changes to livestock number, class, season of use, rotation systems, or range improvements under this alternative. Distribution and utilization across the unit will not be as uniformly as natural features and facilities will allow.

Cumulative effects - Areas of concentrated use will result in primary forage species eventually depleting their food reserves (carbohydrates stored). The effect will be fewer seeds produced and dispersed, fewer seedling and variety of age classes, and eventually native forage species declining and replaced by less desirable plants.

Alternative 3 – No Grazing

Direct and Indirect Effects - Range vegetation would initially respond very well. The direct effect on range plants is a decrease in utilization of grasses, sedges and forbs. Short-term general improvements to rangeland health are anticipated to be more rapid with no grazing than with the proposed action. The long-term effects of no grazing on the range resource may be insignificant when compared to grazing at proper use.

Cumulative Effects - Native plant diversity would likely decrease. Non-grazed annual grasses will eventually shade out the small forbs, lowering native forb diversity in the open grasslands. No grazing presents a high risk of losing the low-growing native species (Hayes and Holl, 2003). Health, vigor and abundance of native perennial grasses will remain static or decrease. Elimination of livestock grazing would have the most significant improvement to rangeland health in the short term because those areas of the landscape where livestock tend to concentrate would receive an immediate reduction in use. Eventually, productivity would level off and then it would taper off. Upland sites would improve at a slower rate than mesic sites because these sites lack the natural productivity and resiliency as sites with greater soil moisture. The result is a reduction in essential features of vegetation cover, including the replacement of soil organic matter and surface residues (Anderson, 1993).

Table 5. Anticipated effect of alternatives on Rangeland Health DC

Alternative 1 Proposed Action	Alternative 2 No Change	Alternative 3 No Grazing
Anticipated to meet and maintain DC within implementation timeframe.	Anticipate DC would not be met.	Anticipated to meet DC more quickly than any other alternative then taper off for species diversity.

Heritage Resources

All rangeland management activities will be in compliance with the grazing strategy for the Los Padres National Forest as covered under the Programmatic Agreement between the California Historic Preservation Officer, Advisory Council on Historic Preservation, and the USDA Forest Service (2004). Obligations for consultation with local Native American Esselen and Salinan tribes have been met. Inventory, evaluation, and monitoring will emphasize areas of concentrated grazing use, but will also take into account (1) levels of site sensitivity to grazing impacts and (2) levels of archaeological sensitivity for a given area.

Desired Condition - Tradition Cultural Places are protected from livestock use. High-risk heritage resource sites are preserved.

Gorda Allotment – Pacific Valley Unit

Issue: This Unit contains resource sites where livestock use may contribute to cumulative damage or be in conflict with cultural values.

Alternatives 1, 2, 3

Direct and Indirect effects – Desired conditions will be met and compliance with Section 106 of the National Historic Preservation Act.

Cumulative effects – Impacts from livestock will be prevented.

Wilderness Values

Desired Condition – Conflicts between key wilderness recreational use areas and livestock use are mitigated.

San Carpoforo Allotment

Issue: The small permanent campsite enclosure at Dutra Camp creates a ‘fenced in’ atmosphere, negatively affecting wilderness values.

Alternative 1 – Propose Action (graze with adaptation)

Direct and Indirect effects –The small campsite enclosure at Dutra Camp and the “fenced in” atmosphere has been eliminated and replaced by a one-sided drift fence utilizing brush barriers on remaining sides. The enlarged campsite and use of existing natural barriers will mitigate conflicts with campers and livestock use in wilderness.

Cumulative effects – Cumulative effects are the same as direct and indirect effects. This action jointed with other actions would not result in an outcome different from that which has already been described.

Alternative 2 – No Change

Direct and Indirect effects – Campers at Dutra Camp will continue to feel “fenced in” by the small campsite enclosure fence negatively affecting their wilderness values.

Cumulative effects – Cumulative effects are the same as direct and indirect effects. This action jointed with other actions would not result in an outcome different from that which has already been described.

Alternative 3 – No Grazing

Direct and Indirect Effects – Under this alternative, the enclosure fence would be removed.

Cumulative effects – Structural improvements for livestock exclusion at Dutra Camp will no longer be necessary.

Table 6. Anticipated effect of alternatives on Wilderness DC

Alternative 1 Proposed Action	Alternative 2 No Change	Alternative 3 No Grazing
Conditions will meet DC.	DC would not be met.	Conditions will meet DC.

Biological Resources

Desired Condition - Habitats are managed for the protection of threatened and endangered species.

All Allotments – Smith’s blue butterfly

Issue: There are approximately 55,000 acres of Smith’s blue butterfly habitat along the Big Sur coast, of which 45 acres are located within or adjacent to primary range in the coastal allotments.

The federally listed endangered Smith’s blue butterfly [SBB] (*Euphilotes enoptes smithi*) is endemic to a portion of the central coast of California and is dependent upon its host plant, seacliff buckwheat (*Eriogonum parvifolium*) and coast buckwheat (*E. latifolium*), during all life stages. California buckwheat (*E. fasciculatum*), which is similar in life form and distribution to seacliff buckwheat, has a browse rating of good to fair for deer, fair to poor for cattle, and poor to useless for horses (Sampson and Jespersen 1963). The Forest Service biological assessment (Kwasny 2003) determined that the action alternatives may affect the SBB. After reviewing the current status of the SBB, the environmental baseline for the action area, the effects of the proposed action (including measures to avoid or minimize impacts), and cumulative effects, the Fish and Wildlife Service (FWS) issued an Biological Opinion (7/22/04) that the proposed action is not likely to jeopardize the continued existence of the SBB. No critical habitat has been designated for this species, therefore none will be affected.

Much of the coastal rangelands are above 2,200 feet and do not support plant communities containing the host plants. SBBs are not present in all suitable habitat, the distribution of host plants are far more extensive on the coast than is the distribution of the SBB. From Big Sur to San Carpoforo creek (including the coastal rangelands), it is estimated that the range of the SBB and its habitat extends over 55,000 acres (USFWS 2003). Within the coastal rangeland allotments there are a total of 45.4 acres of habitat in primary range and 156.7 acres in secondary range. Table 7 outlines acres of habitat per allotment.

Table 7. Acres of SBB habitat in coastal rangeland allotments

Allotment	Acres of buckwheat in primary range	Acres of buckwheat in secondary range
Alder Creek	2.5	15.2
Buckeye	2.9	8.8
Kozy Kove	0.1	2.9
Gorda-Mill Creek	11.6	38.3
Gorda-Plaskett	1.8	8
Gorda-Prewitt	0	0
Gorda-PV	14.6	0.7
Salmon Creek	1.3	16.6
San Carpoforo	0	0
Sea Vista/ Sur Sur	10.6	66.2
Torre	0	0
Twitchell	0	0
Totals	45.4	156.7

Primary range is defined as that part of the allotment which livestock naturally prefer to use. Typically it includes the forage-producing areas that are readily accessible and have available

water. Forage value and palatability is high in comparison to the rest of the allotment's vegetation. Ordinarily primary range will be grazed to allowable use levels before livestock graze other parts of the allotment to any great extent.

Secondary range is where forage value and palatability of vegetation is lower than primary areas and terrain is steeper making it a less desirable area to livestock. Ordinarily secondary range is used very little or not at all under existing management.

Alternative 1 and 2

Direct and Indirect effects – The relative amount and availability of palatable forage within the allotments has a direct influence on the degree of grazing within or adjacent to SBB habitat and potential utilization of buckwheat by livestock. By designating key areas for monitoring the utilization of palatable forage in primary and secondary range adjacent to seacliff buckwheat stands, range managers will be able to ensure that livestock are removed from the allotment well before forage becomes limiting and thus reduce the likelihood that cattle will browse within seacliff buckwheat stands.

Since secondary range is used very little or not at all under existing management, effects occurred within secondary range or beyond is expected to be negligible.

Where seacliff buckwheat does occur in areas used by livestock, browsing of seacliff buckwheat would occur to a small extent. Where there is an overlap between suitable/occupied SBB habitat and primary range, there is a risk that livestock use may affect the SBB by compacting the duff where pupae are located or browse flowers containing eggs or larvae. Livestock are expected to travel primarily on established trails, which should limit potential trampling to those trails. The amount of SBB habitat impacted by livestock trails is expected to be a relatively small proportion of the available habitat. Livestock may cause disturbance to adults, interfering with mating and feeding activities, in those areas where livestock are present during the flowering period of the host plants.

Studies conducted by Arnold (1978) found that adults leave buckwheat for evening roosts in grassy areas adjacent to the major patches of food plants. Generally, the roosting sites were somewhat sheltered from the prevailing winds by taller vegetation. The shorter vegetation used for roosting was near the ground, which radiated heat accumulated during the day. Heavy use of these roost sites by cattle could have an adverse impact on this microhabitat. Light to no use may result in accumulated residual dry matter, preventing access to on-ground roosting sites. Moderate use may benefit the SBB by providing a patchy diverse arrangement of vegetation to roost within.

Cumulative effects – Following all management requirements listed in Biological Opinions (USFWS 2003) and Biological Assessments (Kwasny 2003) prepared for this project will eliminate or minimize impacts to the Smiths blue butterfly. Viable populations will continue to be well distributed across the coastal rangelands and Big Sur Coast.

The amount of plants lost for SBBs and the amount of incidental take would be immeasurable relative to the entire species range. The majority of SBB habitat occurs on steep slopes outside primary and secondary range, over ¼ mile from developed water, the host plants are not a preferred forage species, and standards require that more palatable forage remain available to livestock.

The invasion of non-native invasive weeds, in particular jubata grass (*Cortaderia jubata*), will continue to displace habitat for the SBB. Deer will continue to utilize coastal scrub habitat and browse seacliff buckwheat. Seacliff buckwheat stands will continue to be impacted by recreational hiking along developed trails and near recreation facilities. Excessive recreational hiking/treading will continue to compact the soil, preventing expansion of buckwheat stands and normal root growth. Selection of alternative 1 or 2 would not result in a significant change in the percentage of seacliff buckwheat stands on the MRD nor reduce the likelihood of both the survival and recovery of the Smith blue butterfly in the wild by reducing the reproduction, numbers or distribution.

Alternative 3 – No Grazing

Direct and Indirect Effects – Under this alternative, the potential for livestock to physically or chemically impact the Smith’s blue butterfly (SBB) or its habitat will be eliminated.

Cumulative effects – Jubata grass invasion is the number one threat to the density and distribution of seacliff buckwheat (Kwasny, personal communication 2004). This invasion follows naturally occurring slope instability an important process in natural variability. Prior to the introduction of jubata grass, seacliff buckwheat filled this niche. Deer will continue to utilize coastal scrub habitat and browse seacliff buckwheat. Seacliff buckwheat stands will continue to be impacted by recreational hiking along developed trails and near recreation facilities. Excessive hiking/treading will continue to compact the soil, preventing expansion of buckwheat stands and normal root growth.

Table 8. Anticipated effect of alternatives on Biological Resources DC (SBB)

Alternative 1 Proposed Action	Alternative 2 No Change	Alternative 3 No Grazing
45 acres moving towards DC. Remaining 32,884 acres meet DC.	45 acres moving towards DC. Remaining 32,884 acres meet DC.	32,929 acres meet DC.

Gorda Allotment, Pacific Valley Unit – South-Central steelhead trout

Issue: The lower reaches of Prewitt and Plaskett creeks have been identified as accessible to the South-Central California Coast steelhead trout. Plaskett is accessible to livestock during a portion of the grazing season; Prewitt has a livestock enclosure preventing cattle access, but cattle are herded across when changing pastures 3 or 4 times per year.

The Santa Lucia Range along the southern Monterey coast is characterized by steep, scrub and chaparral covered slopes with narrow, high gradient, closed canopy canyons. This topography and vegetation distribution and structure generally restricts cattle access to riparian areas and stream corridors throughout the coastal rangelands.

Exception to this general area description is the Pacific Valley unit of the Gorda allotment, which contains the lower reaches of Prewitt and Plaskett Creeks.

The Forest Service biological assessment (Cooper, Peckham 2001); updated (Cooper 2003), determined that the action alternatives may affect the South-Central California steelhead trout. National Marine Fisheries Service (NOAA Fisheries) concurred.

Alternative 1 and

Direct and Indirect effects - For the most part, direct effects involve mechanical disturbance and trampling of eggs and fry. Both eggs and fry are noted as being most susceptible from February through April. By prohibiting cattle access to Plaskett Creek and allowing cattle to cross Prewitt Creek only during February 1 to April 30th, will prevent cattle from trampling or injuring incubating fish within redds, and injuring juveniles or adults.

By limiting the amount of time spent crossing Prewitt creek and eliminating livestock access to Plaskett creek, the indirect effects typically associated with over use of riparian habitats by livestock, e.g. increased siltation/sedimentation, changes in stream morphology and/or increases in water temperatures will be prevented.

Cumulative effects - No cumulative effects are expected. Dense riparian vegetation in Plaskett and Prewitt creeks will discourage recreational use except during fishing season.

Desired conditions will be met.

Alternative 3 – No Grazing

Direct and Indirect Effects – Under this alternative, the potential for livestock to physically disturb or trample steelhead eggs and fry in Plaskett and Prewitt creeks will be eliminated.

Cumulative effects - No cumulative effects are expected. Dense riparian vegetation in Plaskett and Prewitt creeks will discourage recreational use except during fishing season.

Desired conditions will be met.

Cone Peak Research Natural Area

Twitchell Allotment

The 4,200-acre allotment lies within the Limekiln watershed (Map D-12). The steep gradient and distance to water limit the capable acres to 620 of grassland and 255 acres of secondary range, predominately coastal scrub and mixed hardwood/conifer. The Cone Peak Research Natural Area (RNA) lies almost entirely within the allotment. The RNA Establishment Record (1987) advocates reducing grazing levels when appropriate and states that there will be no new range improvements.

Issue: The Establishment Record restricts progressive range management and prevents improvements for maximizing livestock distribution.

Alternative 1 – No Grazing (Proposed Action)

Direct and Indirect Effects – Under this alternative, forage on the Twitchell allotment will not be available to qualified livestock operators. Compliance with the RNA Establishment Record will be met.

Cumulative effects – The Cone Peak RNA will be available to serve as baseline or reference area for comparison with the grazed coastal rangelands.

Alternative 2- Re-authorize grazing

Direct and Indirect Effects – Under this alternative, forage on the Twitchell allotment will continue to be available to qualified livestock operators. Management will comply with restrictions set forth in the RNA Establishment Record. The landscape and no new improvements will deter proper distribution of livestock.

Cumulative effects – By executing the Resource Protection Measures common to all action alternatives, no cumulative effects are expected. The Cone Peak RNA will not be available to serve as baseline or reference areas to compare with the grazed coastal rangelands. Distribution of livestock will not comply with the type of moderate well distributed grazing we prescribe on National Forest System lands.

Management Area Direction

Kozy Kove Ranch

The Forest Service acquired the 256-acre ranch in 1997. The ranch is located adjacent to highway 1 on the western flank of Mount Mars (Map D-9). There are 240 acres of suitable acres: 110 acres of primary and 130 acres of secondary range.

Sea Vista Ranch

The Forest Service acquired the 211-acre ranch in 1999. The ranch is located adjacent to Highway 1 and the Sur Sur ranch, north of the San Luis Obispo County line (Map D10). There are 146 acres of suitable acres: 47 acres of primary and 99 acres of secondary range.

Sur Sur Ranch

The Forest Service acquired the 1,995-acre ranch in 1995. Located adjacent to Highway 1 and south of the San Luis Obispo County line (Map D10), the ranch provides the primary access into the San Carpoforo allotment. There are 1302 acres of suitable acres: 851 acres of primary and 451 acres of secondary range

Issue: Portions of these newly acquired ranches have not been incorporated into specific Management Areas with LRMP direction and management emphasis.

Alternative 1 – Propose Action

Direct and Indirect Effects – Under this alternative, all lands within these ranches will have management direction consistent with adjacent lands (Mgt. Areas 42 & 64). Kozy Kove Ranch will be a stand alone grazing allotment, providing available forage to qualified livestock operators. Suitable lands within the Sea Vista and Sur Sur Ranches will be incorporated into the San Carpoforo allotment.

Cumulative effects – By executing the Resource Protection Measures common to all action alternatives, no cumulative effects are expected. The additional carrying capacity of the Sea Vista and Sur Sur Ranches is expected to reduce grazing use on the San Carpoforo allotment.

Alternative 2 – No Grazing

Direct and Indirect Effects – Under this alternative, portions of these ranches will not have management direction. Forage on these historic ranches will not be available to qualified livestock operators.

Cumulative effects – Under this alternative, management will be handicapped in its ability to holistically manage the coastal rangelands from Salmon Creek south to San Carpoforo Creek with comprehensive strategies. The Forest will incur the cost of fence building (Table 9) to prevent cattle on the San Carpoforo allotment from entering these lands.

Vacant Allotments

Torre Canyon and Buckeye Allotments

Issue: There has been no use and demand for the Torre Canyon Allotment since 1989 and no use and demand for the Buckeye Allotment since 1991.

Alternative 1 – Propose Action

Direct and Indirect Effects – Under this alternative these two allotments will be closed, removing them from the Los Padres National Forest grazing program.

Cumulative effects – These allotments do not provide a viable livestock operation thus cumulative effects are the same as direct and indirect effects. This action jointed with other actions would not result in an outcome different from that which has already been described.

Alternative 2- Re-authorize grazing

Direct and Indirect Effects – Under this alternative these two allotments will remain in the Los Padres National Forest grazing program. Costly investments (Table 8) will precede authorization.

Cumulative effects – By executing the Resource Protection Measures common to all action alternatives, no cumulative resource effects are expected. This action jointed with other actions would not result in an outcome different from that which has already been described.

Other Physical, Biological, and Economic Components of the Environment

The Forest Service completed an Oceanfront Watershed Analysis (USDA, 1999) to set the stage for site-specific analysis on the coastal rangelands that share similar ecological conditions and resource issues. Fieldwork by the interdisciplinary team found no evidence of livestock grazing contributing to slope instability or other erosion potential.

Resource-specific analysis of environmental effects of livestock grazing on the coastal rangelands and resources are contained in the project file and will be considered in the effects of the decision. These include but are not limited to:

- ❑ Soils (Roath 2003)
- ❑ Hydrology (Andresen 2003)
- ❑ Rangeland Vegetation (Kwasny 2003)
- ❑ Recreation (Oosterhous 2003)
- ❑ Noxious Weed Risk Assessment (Kwasny 2003)

Threatened and Endangered Species (other than previously mentioned)

The Forest Service prepared a biological assessment for potentially affected threatened, endangered and sensitive wildlife species (Cooper 2000), updated (Cooper 2003). The BA determined that the action alternatives would have no adverse affects. FWS concurred.

Sensitive Species

For sensitive species, it is Forest Service policy (FSM 2670.32) to review programs and activities, through a biological evaluation (BE), to determine their potential effect on sensitive plant species. Utilizing the FS-R5 updated Sensitive Species list (January 2003) and California Natural Diversity Database, Special Plant List, June 2003, BEs were completed for all the allotments (Foster 2003, 2004). In summary, the proposed action is not likely to cause a trend to federal listing and is maintaining viable populations well distributed across the coastal rangelands.

Management Indicator Species

An assessment (Cooper 2003) was completed to evaluate landscape and project-level impacts to habitat conditions associated with the six Species Associations and related Management Indicator Species (MIS) identified in the LRMP EIS. In summary, no significant effects on habitat conditions were predicted. The effects analysis will be considered in the decision.

Migratory Bird Treaty Act

An analysis of ‘High Priority’ birds with regards to the Migratory Bird Treaty Act was completed (Cooper 2003). The proposed action will not have a measurable negative effect on populations of migratory bird species.

Clean Water Act

Compliance with the Clean Water Act is achieved through implementation and monitoring of Best Management Practices (BMP). BMPs are practices approved by the State and Environmental Protection Agency that are intended to result in compliance with State water quality standards. BMPs are a component of the Los Padres LRMP. The proposed action incorporates Range Management BMPs (Appendix B).

National Historic Preservation Act

The action alternatives will comply with the Grazing-Heritage Resource Strategy (USDA LPF 2003) as covered under the Programmatic Agreement between Forest Service and the Advisory Council on Historic Preservation Regarding Rangeland Management Activities on National Forest System Lands (PA) and the Memorandum of Understanding among the USDA Forest Service, Pacific Southwest Region, California State Historic Preservation Officer, and the Nevada State Historic Preservation Officer Regarding

Rangeland Management Activities (MOU). Obligations for consultation with local Salinan and Esselen tribes have been met through notification and request for comments, and responses to the comments, including site visits where appropriate.

The documents referenced above are available through John Bradford, Monterey District Ranger, 408 S. Mildred Ave, King City, California, 831-385-5434; or call Jeff Kwasny, Big Sur Ecosystem Manager at Big Sur Station #1, Big Sur, California, 831-667-1126.

A social and economic analysis was conducted during the planning process of the Final Environmental Impact Statement Land and Resource Management Plan (FEIS), Los Padres National Forest. For reference see: FEIS Sections 2.1, 2.2, 2.4, 3, 4, and FEIS Appendix B.

Cost Analysis

Table 9 provides a comparison of costs to the Forest range program for constructing or dismantling structural improvements between alternatives. Structures not listed for dismantling under the No Grazing alternative will be left in place for wildlife use or provide a benefit to the government (i.e. Forest Service/private boundary lines, assist in multiple use management). Under the No Grazing alternatives, dismantling costs include both labor and resources. Under the Grazing alternatives costs are for materials only, labor will be contributed by permittee.

Table 9. Structural improvement costs to construct or dismantle

Allotment	No Grazing	Grazing with adaptation	Grazing with no change
Torre	NSC	\$6,631.	
Twitchell	\$823.		NSC
Gorda			
Mill Creek	NSC	NSC	NSC
Prewitt	NSC	\$813.	NSC
Plaskett	\$813.	NSC	NSC
Pacific Valley	\$873.	\$1038.	\$1038.
Alder Creek	NSC	NSC	NSC
Buckeye	NSC		\$813.
Salmon Creek	NSC		NSC
Kozy Kove	NSC	NSC	
Sea Vista	NSC	NSC	
Sur Sur	NSC	NSC	
San Carpoforo	\$2536.	\$965.	NSC

NSC = no significant cost.

Chapter 5 - Federal, State, Local Agencies and Tribes Contacted

Monterey Bay National Marine Sanctuary
National Marine Fisheries Service
National Resource Conservation Service
United States Fish and Wildlife Service
California Department of Fish and Game
California Regional Water Quality Control Board
University of California Agriculture & Natural Resources Cooperative Extension
Esselen Tribal Members
Salinan Tribal Members

APPENDIX A

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APPENDIX B

RANGE MANAGEMENT BEST MANAGEMENT PRACTICES

The following are the BMPs for the control of nonpoint source pollution associated with livestock grazing activities on National Forest System lands. Each BMP is based on administrative directives that guide and direct Forest Service planning and permitting of livestock grazing activities on NFS lands.

BMP 8.1 - Range Analysis and Planning.

Objective - To safeguard water quality potentially effected by livestock grazing activities.

Explanation: An analysis of existing range condition and other resource values will be conducted by an Interdisciplinary Team to evaluate the potential grazing capability on an allotment. Based on this environmental assessment and the LRMP, the responsible Forest Officer in coordination with the permittee prepares a written Allotment Management Plan (AMP).

AMPs include measures to protect other resource values, such as water quality, and to coordinate livestock grazing with other resource uses. Structural and non-structural range improvements will be specified in the plan when needed to improve the range resources or protect other resource values, such as water quality. Monitoring practices and locations are outlined in the plan to determine the effectiveness of LRMP standards and guidelines and trend toward desired conditions.

Annual operating instructions are issued to the permittee each year to implement the AMP and to account for current allotment conditions and trends. The amount of livestock use is determined primarily by annual monitoring of compliance with LRMP standards and guidelines and other requirements developed through the environmental assessment. Allowable use is considered to be the use, which maintains range productivity, and soil and watershed stability.

Implementation: The District Ranger is responsible for the analysis of range allotments, determining the need for environmental evaluation and documentation and the preparation of AMPs.

Annual operating instructions will be prepared, or revised annually to allow for current allotment conditions and trends, and to incorporate direction in AMP. The permittee carries out the plans under the immediate direction and supervision of the District Ranger, or District Range Officer. Enforcement action will be taken where a permittee does not comply with grazing permit requirements and conditions, and has not received approval to deviate from permit provisions.

BMP 8.2 – Gazing Permit System.

Objective: Safeguard water quality potentially effected by livestock grazing activities.

Explanation: A grazing permit is used to authorize livestock grazing on NFS lands. The LRMP standards and guidelines, allotment management plans and annual operating instructions are part of the permit terms and conditions. Routine field checks include:

- 1) Range readiness evaluations to assure that the soil is not too wet and that sufficient forage growth has occurred.
- 2) Stock checks to assure that only permitted livestock enter the allotment, the allotment is occupied only within the permitted time period and use occurs only within the approved areas within the allotment.
- 3) Monitoring of standards and guideline attainment which includes measuring forage utilization, riparian vegetation impacts, and condition of streambanks.

If during the course of monitoring and periodic assessments a problem is found in meeting the standards and guidelines on a consistent basis, a range of actions are available to solve the problem. Actions might include adjusting livestock numbers and/or season of use, installing fences and water developments, etc.

When there is intentional noncompliance with terms and conditions of the permit, enforcement is necessary and will be applied as outlined in our Forest Service Handbooks. Enforcement actions will be commensurate with the severity of violation. Actions can vary from a letter of warning, permit suspension or permit cancellation.

Implementation: Allotments will be administered by the District Ranger assuring that permit provisions are carried out by the grazing permittee as required.

The Forest Supervisor or District Ranger will approve grazing permits and allotment management plans. Field checks and measurements will be made annually by the Forest Service. The permit will be modified, cancelled or suspended in whole or in part as needed to ensure proper use of the range resource and protection of other resources, such as water quality.

BMP 8.3 – Range Improvements.

Objective: Safeguard water quality potentially affected by livestock grazing activities.

Explanation: Rangeland improvements are generally designed to improve on the use of the range vegetation by livestock or provide protection to sensitive areas. They may consist of simply providing protection to sensitive areas. They may consist of simply providing rest through rotation grazing, or fencing, or lighter grazing use by changing the season of sue, or by adjusting the kind, class, or number or permitted livestock.

Other measures may include stream channel stabilization efforts such as riprapping, gully plugging, and planting, or mechanical treatments such as pitting, chiseling, or furrowing. Reseeding and/or fertilization will be done alone, or in conjunction with any of these measures.

Water developments are often included in rangeland improvement projects. Improvement efforts will be designed to induce range resources to produce at or near optimum potential for sustained forage production for livestock and to provide protection to the other resources.

Implementation: The District Ranger will assure that the permittee is involved as a cooperater in rangeland improvements and as appropriate, completes the work under Forest Service direction. This work includes both construction and maintenance of improvements. Implementation may also be done by Forest Service crews or contractors.

Range improvement needs will be recognized to the fullest extent possible in the range allotment planning process and will be scheduled for implementation in the allotment plan.

Results of watershed condition assessments developed by an IDT will be used in development of range improvement treatments and programs.

APPENDIX C

FOREST PLAN CONSISTENCY

The Monterey Ranger District (MRD) shares in implementing the Forest Plan and bases its actions upon the site-specific information gathered at the allotment level. Grazing activities and/or projects are planned and implemented by the MRD to carry out direction established in the Forest Plan.

Introduction – Chapter 1

1.4 Forest Plan Amendments, Revisions, and Appeal Rights (reproduced in part)

The Forest Supervisor may amend the Forest Plan. The Forest Supervisor will be responsible for determining the extent and need for changes based on budget, changed conditions, and mitigation measures. A minor amendment is considered to be a change that does not significantly change the overall direction or intent of the Plan as to be acceptable change without major public involvement and review.

If the change resulting from the amendment is determined not to be significant for the purposes of the planning process, the Forest Supervisor may implement the amendment following appropriate public notification and satisfactory completion of NEPA procedures.

Management Direction – Chapter 4 (reproduced in part)

4.2 Desired Future Condition

- The Forest Plan emphasizes services and commodities furnished in response to local and regional needs. The Plan will also slightly increase grazing opportunities.

4.2.6 Fish and Wildlife

- Competition for forage and the degree of riparian and aquatic impacts associated with grazing uses will become fully mitigated through application of Forest-wide standards and guidelines and the designation of areas where wildlife management or range management will predominate.

4.2.7 Range Management

- Existing range allotment plans will be reviewed and revised; new plans will be developed for any additional allotments. Range management will include maintenance and replacement of existing structural improvements and development of additional improvements as additional range is created, primarily within existing allotments.

4.3.2 Forest-Wide Standards and Guidelines

4.3.2.5 Watershed

- Best Management Practices will be implemented to meet water quality objectives and maintain and improve the quality of surface water on the Forest. Methods and techniques for applying the BMP will be identified during project level environmental analysis and incorporated into the associated implementation documents.

4.3.2.6 Vegetation

- Manage sensitive plant species to ensure their viability.
- Emphasize Sensitive and Special Emphasis plant species habitat protection and improvement in resource management.
- Prevent the destruction or adverse modification of habitat determined to be essential for Sensitive or Special Emphasis plant species.

4.3.2.7 Riparian/Wetland Areas

- Ensure habitat conditions necessary for maintenance of viable populations of riparian Management Indicator Species.
- Perennial and intermittent streams will be protected by limiting management activities within the Streamside Management Zone. Activities are to be limited to the extent that protective vegetation conditions in the zone can be returned to predisturbance conditions within one year.

4.3.2.10 Fish and Wildlife

- Existing water sources will be maintained in a usable state for wildlife needs. Minimize human/wildlife/livestock interactions which may be detrimental to wildlife populations.
- Perennial stream habitats will be managed to at least maintain fisheries habitat for viable populations of native fish species.
- Prevent the destruction or adverse modification of habitat determined to be critical for threatened or endangered species.

4.3.2.11 Range

- The standard for grass and forb utilization is the moderate level. This takes into account the combined forage and cover needs for wildlife populations and domestic grazing use.
- Range development projects will be limited to existing range allotments, unless forage improvement projects are of sufficient size to make a viable operating unit along with associated natural rangelands.

4.3.2.15 Cultural Resources

- Confidentiality of cultural resources sites locations will be maintained.
- All project impact areas will be inventoried prior to implementation to allow identification, protection, and mitigation of any significant cultural properties.

4.4 Management Area Prescriptions

- Management Area 42 allows the maintenance of existing grazing opportunities on natural rangelands and the retention of the balance between grazing lands and the natural/untreated lands within the area. Such practices as fencing, water developments, and riding are used to obtain more uniform distribution and plant use, and to maintain plant vigor.
- Management Area 48 allows grazing capacity to be maintained if it is not in conflict with other resources. Such practices as fencing, water developments, and riding are used to obtain more uniform distribution and plant use, and to maintain plant vigor.
- Management Area 64 consists of designated Wilderness Areas. The area is managed to preserve wilderness values and to provide for activities authorized in the Wilderness Act of 1964 and other enabling legislation; grazing opportunities will be maintained in areas where such use existed prior to establishment of the wilderness.

APPENDIX D

1. Analysis Area Map of the Monterey Ranger District Allotments
2. Gorda Allotment – Mill Creek Unit
3. Gorda Allotment – Prewitt Unit
4. Gorda Allotment – Plaskett Creek Unit
5. Gorda Allotment – Pacific Valley Unit – North, Mid & South Pastures
6. Alder Creek Allotment
7. Buckeye Allotment
8. Salmon Creek Allotment – East & West Units
9. Kozy Kove Ranch
10. San Carpofofo Allotment – Sea Vista & Sur Sur Ranch
11. Torre Canyon Allotment
12. Twitchell Allotment























