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Lower Piru Rangelands

Environmental Assessment

Ojai Ranger District
Los Padres National Forest
Ventura and Los Angeles Counties, California

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Table of Contents

List of Tables

List of Figures

List of Appendices

Summary

The Los Padres National Forest (LPNF) proposes to authorize livestock grazing on suitable National Forest System (NFS) lands within existing livestock grazing allotments in the vicinity of Piru Reservoir on the Ojai Ranger District. These are the Piru, Potholes (Lisk and Potholes Units), and Temescal (Reasoner and Rodeo Flat Units) Range Allotments. The allotments cover 10,085 acres, including 9,010 acres of National Forest System lands with the remainder private land. This action is needed because (a) the current grazing permit is set to expire in early 2010, (b) the allotment contains land that is suitable and capable of supporting livestock grazing, and (c) new provisions need to be added to protect soils, watershed function, roadless conditions, heritage sites, certain species of plants and animals, as well as to limit the spread of noxious weeds.

Implementation of the proposed action may affect (but is not likely to adversely affect) federally listed threatened species arroyo toad (ARTO), which is known to be present just outside the allotment boundaries. Designated critical habitat for ARTO and California red legged frog (CRLF) also exists within the allotment boundaries. The proposed action may also affect (but is not likely to adversely affect) a federally listed endangered species (southwestern willow flycatcher). This species is not known to be present on the allotments; however suitable habitat for the species is present. No other potentially significant effects to the human environment were identified in this Assessment. The proposed action is consistent with the provisions of the Los Padres National Forest Land Management Plan (2005).

In addition to the proposed action, the Forest Service also evaluated the alternative of not authorizing continued livestock grazing.

Based upon the effects of the alternatives, the responsible official will make a decision whether to permit grazing; and if so, whether protections are required for plants, animals, soils, roadless characteristics, watershed functioning, and heritage sites; and to control the spread of noxious weeds.

1.0 Introduction

1.1 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 four parts:

- **Introduction:** includes information on the history of the project proposal, the purpose of 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:** provides a more detailed description of the agency's proposed action as well as alternative methods for achieving the stated purpose. These alternatives were developed based on significant issues raised by the public and other agencies. This discussion also includes possible mitigation measures. Finally, this section provides a summary table of the environmental consequences associated with each alternative.
- **Environmental Consequences:** describes the environmental effects of implementing the proposed action and other alternatives. This analysis is organized by potential impacts to specific resource concerns. Within each section, the affected environment is described first, followed by the effects of the No Action Alternative that provides a baseline for evaluation and comparison of the other alternatives that follow.
- **Agencies and Persons Consulted:** provides a list of preparers and agencies consulted during the development of the environmental assessment.
- **Appendices:** provide more detailed information to support the analyses presented in the environmental assessment.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record located at the Ojai Ranger District Office in Ojai, California.

1.2 Background

Congress intends to allow grazing on suitable lands where it is consistent with other multiple use goals and objectives as provided through several Congressional Acts (Multiple Use Sustained Yield Act of 1960, Wilderness Act of 1964, Forest and Rangeland Renewable Resources Planning Act of 1974, Federal Land Policy and Management Act of 1976, National Forest Management Act of 1976). It is Forest Service policy to make forage available to qualified livestock operators from lands that are suitable for livestock grazing consistent with Forest Land and Resource Management Plans. Term grazing permits are

generally issued for ten-year periods (FSM 2203.1). The Los Padres National Forest Land Management Plan (Forest Plan, 2005) allows moderate utilization of livestock grazing areas (Forest Plan Goal 6.1).

Historic use within the project area included grazing, mining, hiking and hunting. This use has not changed much over time. Current uses include domestic livestock grazing, hiking and hunting. Though livestock have grazed on Lower Piru Rangelands since the 1920s, livestock numbers have declined across the Forest (Forest Plan FEIS, p. 289) and moderate decline of active grazing is expected to continue (Forest Plan FEIS, p. 292).

The project area contains three rangeland allotments, Piru, Potholes, and Temescal Allotments. The Potholes Allotment is divided into two units, the Potholes and Lisk Units. The Temescal Allotment is also divided into two units, the Reasoner and Rodeo Flat Units. Allotment and unit boundaries, and other features of the project area, are displayed on the Project Area Map (Figure 1.2-1).

Allotment and unit boundaries are a combination of fence lines, natural barriers, watershed boundaries, and other lines such as administrative boundaries and section lines. They represent the boundaries of where livestock grazing is permitted. Any livestock grazing outside of boundaries is a violation of the permit and must be rectified. All land within the allotment and unit boundaries is considered part of the allotment or unit regardless of ownership. Table 1.2-1 shows allotment and unit acres and the proportion of units on National Forest System (NFS) and other ownership lands.

Table 1.2-1 Lower Piru Rangeland Allotment Acres

Allotment (Unit)	NFS Acres	Other Ownership Acres	Total	Percent NFS Land
Piru	3,247	350	3,597	90
Potholes (Lisk)	2,150	0	2,150	100
Potholes (Potholes)	970	0	970	100
Temescal (Reasoner)	2,140	505	2,645	81
Temescal (Rodeo Flat)	540	195	735	73
TOTAL	**9,010**	**1,075**	**10,085**	**90**

In recent years, the majority of the project area has been grazed by one permittee. Only the Rodeo Flat Unit of the Temescal Allotment has been grazed by another permittee.

The primary road into the project area is Piru Canyon Road (4N13), the road that traverses the west side of Piru Reservoir and Piru Creek to the Blue Point area. Dominguez Canyon Road (4N14) and Lime Canyon Road (4N14A) are the other National Forest System Roads (NFSRs). Over the years, other roads have been constructed, maintained and used inside the allotment boundaries at least since 1925, when a permit clause was added to grazing permits that required the permit holder to repair damage to roads. Over the last 50 years, dozens of roads have returned to natural conditions as a result of lack of use and maintenance. Some roads that are not NFSRs are permitted within the allotments. These have been and still are used for allotment and livestock management purposes as well as for access to Piru Reservoir

management, mining claims, water rights, and privately owned parcels of land. They are minimally maintained and have not been improved since the allotments were established.

The Potholes Unit of the Potholes Allotment is within the Sespe Wilderness. The majority of the Lisk Unit of the Potholes Allotment and part of the Temescal Allotment are within the Sespe-Frazier Inventoried Roadless Area (IRA). The Piru Allotment does not contain any IRA lands within the allotment.

1.2.1 Suitable Lands

An interdisciplinary team (IDT) completed range analysis to verify capability and suitability of livestock grazing on these allotments, as outlined in the Forest Plan part 3, Appendix J. Capable rangelands are accessible to livestock and meet forage producing requirements. Suitable rangelands are a subset of capable rangelands where livestock use is compatible with other land uses considering ecological, social, and economic conditions, and would meet or move lands towards Forest Plan desired conditions. A rangeland allotment must have an adequate amount of suitable rangeland to support a viable grazing operation, and permitted livestock numbers are dependent on the acreage and feed production of suitable rangelands.

Table 1.2.1-1 shows approximate acres of suitable rangelands within Lower Piru Allotments verified by the IDT, and the proportion on NFS lands.

Table 1.2.1-1 Lower Piru Suitable Rangelands

Allotment (Unit)	Total NFS Acres	NFS Suitable Acres	% NFS Suitable
Piru	3,247	464	14
Potholes (Lisk)	2,150	525	24
Potholes (Potholes)	970	130	13
Temescal (Reasoner)	2,140	680	32
Temescal (Rodeo Flats)	540	230	43

Suitable rangelands are further divided into primary and secondary range. Primary range contains high forage value and palatability in comparison to the rest of the allotment's vegetation, and access is easiest. Secondary range contains lower forage value and palatability of vegetation than primary areas and terrain is steeper making it a less desirable to livestock.

1.3 Purpose and Need for Action

1.3.1 Purpose

The purpose for the proposed action is to meet Forest Plan goals to allow moderate utilization of livestock grazing areas and to evaluate the current grazing capacity of the area to determine what modifications are necessary to prevent grazing activities from causing adverse impacts

This project analyzes National Forest System (NFS) lands that are capable and suitable of providing livestock grazing on the Piru, Potholes (Lisk and Potholes Units), and Temescal (Reasoner and Rodeo Flat Units) Range Allotments in compliance with direction in the 1995 Rescission Act (P.L. 104-19) and Los Padres National Forest Land Management Plan (2005). This direction makes NFS lands available for commercial grazing subject to any mitigation measures necessary to protect plant, animal, watershed, roadless conditions and other resources that might be affected by this use.

1.3.2 Need

The current grazing permits will expire in early 2010.

There is a need to re-authorize grazing for the Piru, Potholes, and Temescal Allotments because small ranches permitted to use allotments rely on the summer forage provided by Forest Service rangelands for viable ranch operations.

The allotments contain lands that are suitable and capable of supporting livestock grazing.

There is a need to maintain sustainable grazing opportunities on healthy rangelands, with fully functional and productive watershed conditions (Forest Plan, Part 1, Page 43 and LG1). Field investigation contained in the Project File demonstrates that these grazed areas are meeting or progressing towards desired conditions.

New provisions need to be added to protect certain species of plants and animals, soils, watershed function, roadless conditions, and heritage sites, as well as to limit the spread of noxious weeds.

Specifically, there is a need to:

- Eliminate and/or mitigate conflicts with endangered species such as the arroyo toad and southwestern willow flycatcher.
- Reduce potential for impacts to water quality in Piru Reservoir and Piru Creek through fencing.
- Exclude cattle from entering lands managed by the United Water Conservation District (Lake Piru Recreation Area) through fencing.
- Exclude portions of wilderness that were determined to be not suitable of supporting grazing.

1.4 Proposed Action

The Los Padres National Forest (LPNF) proposes to authorize livestock grazing on suitable NFS lands within Piru, Potholes (Lisk and Potholes Units), and Temescal (Reasoner and Rodeo Flat Units) Range Allotments over the next 10 years. Details regarding number of livestock and season of use are in Table 1.4.2-1.

This proposed action is the result of extensive analysis and consultation with interested individuals and groups over the last nine years. The FS conducted surveys for Threatened, Endangered, and Sensitive wildlife and plant species (TES) and heritage sites.

Some adjustments have been made since the Public scoping letter. These changes are due to re-evaluations of grazing capacities after public comments and recalculations involving private land acres and updated GIS data (details contained in the Project File).

1.4.1 Improvements

Many range improvements are associated with grazing on the allotments, including drift and boundary fences, water troughs, cattle guards and access roads (see Project Area Map). Installation of new fencing is required in several of the allotments to protect resources. This is detailed in Table 1.4.2-1.

Maintenance of structural improvements is the responsibility of the permit holder and will comply with Forest Service standards as outlined in part 2 of the term grazing permit. Routine maintenance of range improvements should be completed as needed (such as fence mending; trough maintenance, cleaning, repair or replacement in kind; spring box repair or cleaning; water pipe repair or replacement; or other similar improvement maintenance work). More extensive projects must be separately authorized before any work is done, especially those that involve ground disturbance or use of heavy equipment. No change in historic use and maintenance of roads is proposed. Ongoing maintenance will be limited to keeping the roads passable by high clearance four wheel drive vehicles. The permit holder will be required to propose any maintenance projects on an annual basis. Annual proposals approved by the authorized officer will be described in the Annual Operating Instructions for the allotment. All roads will be closed to public entry by a locked gate. Road use by the permittee may be restricted seasonally or as necessary to limit or control the spread of noxious weeds.

1.4.2 Livestock Grazing

Table 1.4.2-1 Allotment Permit Restrictions and Requirements

Allotment (Unit)	Acres of NF Lands Suitable [4/]	Annual Season of Use	Number of Cow/Calf [1/]	HM/AUM	Required Improvements See Project Area Map
Piru	464	3/1-2/28	11	132/174 [2/]	a. A 200-foot drift fence would be reconstructed at the mouth of Canton Canyon to protect Piru Reservoir and riparian species. b. Use of vehicle and livestock crossings at Piru Creek would be supervised by a biologist to protect riparian species and habitats from vehicle and cattle use of this Piru Allotment access.
Potholes (Lisk)	525	3/1-11/30 [5/]	40	240/317	b. Construction of 4.5 miles of fencing along the east private property boundary to ensure protection of riparian species and habitats and prevent livestock access to United Water Conservation District lands and Piru Reservoir.
Potholes (Potholes)	130				c. Construction of 0.5 mile of fence in T15N, R18W, Section 7 may be required, to exclude cattle from wilderness not under allotment authority if herding and active management does not effectively control livestock.
Temescal (Reasoner)	680	1) 3/1-2/28 [3/] 2) 9/1-5/31 [5/]	1) 15 2) 26	1) 180/238 2) 156/206	d. Construction and reconstruction of fencing to protect riparian species at designated locations
Temescal (Rodeo Flats)	230	3/1-2/28	11	132/174	e. Re-construction of fencing to protect riparian species at designated locations

Notes

[1/] Numbers of animals allowed may change based on Adaptive Mgmt Principles See Section 1.4.4

[2/] This would reduce the permitted number from the currently authorized 30 cow/calf pairs and 4 bulls year-round and 30 yearlings for 6 months that are currently allowed on this allotment in combination with the Potholes Allotment.

[3/] Option for year-long grazing for 15 cow/calf rotation.

[4/] From Table 1.2.1-2

[5/] 6 months within this season.

HM = Head month: Number of head (cow/calf, bull, yearling, or combination) times months in season of use.

AUM = Animal Unit Month: the amount of feed required to support one Animal Unit for one month.

Animal Unit = one mature (1000 pound) cow or equivalent based on average daily forage consumption of 26 pounds dry matter per day. The following are animal unit conversion factors (FSH 2209.15, 10): cow with calf = 1.32; mature bull = 1.5; yearling (9-18 months) = 0.7

1.4.3 Resource Protection Measures

The Forest proposes that the new term authorization include provisions to protect against adverse effects to protected species of plants and animals, watershed function, wilderness condition, and heritage sites, as well as provisions to limit the spread of noxious weeds through compliance with a new term permit. Specific resource protection measures and design criteria to be implemented are listed in section 2.2 of the EA.

1.4.4 Adaptive Management

The permits and allotment management plans would be constructed around adaptive management and compliance with Best Management Practices (BMPs) for water quality protection. New ten year term grazing permits and revised allotment management plans would be prepared for the allotments incorporating the provisions outlined above, including a range of tools to respond to conditions of resources on the allotment as they vary from year to year or season to season.

An interdisciplinary team would determine adjustments in range management if:

- Monitoring indicates that range conditions are not at or trending toward desired conditions (Forest Plan, Part 2 LG-2, p 142; and Appendix A of this document).
- Validation monitoring indicates that any federally listed threatened or endangered or Regional Forester Sensitive species population appears to be in decline due to livestock grazing.

Adjustments may include changing season of use, number of livestock, types of livestock, additional fencing or other structural improvements, and/or a period of rest. Monitoring would be accomplished by the following:

- Range readiness evaluations to assure that the soil is not too wet and that sufficient forage is available.
- Stock checks to assure that only permitted livestock enter the allotment, the allotment is occupied only within the permitted time period, and that only approved areas in the allotment are used.
- Measurement of forage utilization, riparian vegetation impacts, and condition of streambanks to determine attainment of standards and guidelines.

1.5 Management Direction

National Forest management is guided by various laws, regulations, and policies that provide the framework for all levels of planning. This includes Regional Guides, Land Management Plans, and site-specific planning documents such as this EA. The Forest Plan provides guidance for managing NFS lands within the Forest. The following is a summary of Forest Plan direction and how proposed actions are designed to meet that direction. More detail can be found in Section 2.2, Project Design Features.

1.5.1 Land Use Zones

The Forest Plan identifies Land Use Zones to guide management activities across the National Forest. Table 1.5.1-1 lists approximate acres of land use zones within Lower Piru Rangelands along with management intent for these zones (Forest Plan, Part 2, pp 5-10). Livestock grazing is considered a suitable use of these land use zones (Forest Plan, Part 2, Table 2.3.3, p 4).

Table 1.5.1-1 Land Use Zones within Lower Piru Rangelands

Land Use Zone	Acres (%)	Management Intent	Authorized Motorized Use
Back Country	20 (<1)	Retain natural character and limit level and type of development.	Suitable
Back Country Motorized Use Restricted	200 (2)	Retain natural character and limit level and type of development.	Suitable
Back Country Non-Motorized	7830 (87)	Retain natural character and natural appearance and limit level and type of development.	By exception
Existing Wilderness	960 (10)	Administer for use and enjoyment by people while preserving wilderness character	By exception
TOTAL	9010		

Much of Piru Creek is eligible for wild and Scenic River (WSR) designation because of its outstanding scenic, recreation, fish, wildlife, and geological values. A 7-mile reach of Piru Creek below Pyramid Reservoir was recently designated as a WSR. Where the allotments fall within ¼ mile of Piru Creek, they are either already fenced or proposed for fencing to exclude cattle from the creek. No impacts are expected that would alter the character or potential for designation as a WSR. See section 3.1 for a description of soil and water resources in the allotments and the potential effects to these resources.

1.5.2 Place

These allotments are primarily within the **Ojai-Piru Front Country Place**, for which the desired condition is a naturally appearing landscape that serves as a high-quality recreation playground and scenic backdrop to nearby communities (Forest Plan, Part 2, p 70). The Potholes Unit is in the **Sespe Wilderness** (designated in 1992). The desired condition is a naturally evolving landscape providing primitive recreation opportunities (Forest Plan, Part 2, p 83). Livestock grazing is a recognized use in these two designations (Forest Plan, Part 2, pp 69 and 82). Furthermore, livestock grazing established before the date of legislation designating areas in the National Wilderness Preservation System is permitted to continue under general regulations for livestock grazing on the National Forests (36 CFR 293.7). Forest Plan direction is to manage wilderness to improve capability to sustain a desired range of benefits and values, and changes in ecosystems are primarily a consequence of natural forces (SD 1).

1.5.3 Forest Plan Consistency

Consideration of Forest Plan consistency includes Part 1, Goal 2.1 (control of invasive species); Part 1, Goal 3.1 (provide for public use and natural resource protection); Part 1, Goal 5.2 (improve riparian conditions); Part 1, Goal 6.1 (move toward improved rangeland conditions); and Part 1 Goal 6.2 (provide ecological conditions to sustain viable populations of native and desired nonnative species). The action is also consistent with Part 2 Commodity and Commercial Uses direction which emphasizes compliance with the Rescission Act of 1995 and review of grazing allotments. Part 2 strategy for livestock grazing: LG1-livestock grazing areas are maintained and remain sustainable and suitable over the long-term and LG2-rangelands are healthy and sustainable over the long-term. This action is subject to the Design Criteria identified in Part 3, p. 11-12, S50-S56. These design criteria specify rangeland capability and suitability requirements as specified in Appendix J, Livestock Capability and Suitability Guidelines. They also specify soil cover requirements, salt and mineral locations, distance of concentrated stock from sensitive habitats, and residual dry matter requirements. Consistency with this Forest Plan direction assures that rangelands are meeting or moving toward Forest Plan, ecosystem, and site-specific desired conditions.

1.6 Decision Framework

Given the purpose and need, the deciding official reviews the proposed action and the other alternative in order to decide whether to reauthorize grazing on the Piru, Potholes (Lisk and Potholes Units), and Temescal (Reasoner and Rodeo Flat Units) Range Allotments for a new ten year term as described in the proposed action.

1.7 Public Involvement

Various methods were used to solicit comments from members of the public, other public agencies, tribes, permittees, adjacent property owners, and organizations. The project was listed in the Los Padres National Forest Schedule of Proposed Actions (SOPA) prior to 2003 and has continued to be listed since then. A scoping letter was mailed to potentially interested members of the public, adjacent land owners, tribal representatives, organizations and other public agencies June 2, 2003.

A list of individuals and groups who submitted specific comments throughout the project planning process, their comments, and Forest Service consideration of comments is summarized in Appendix D.

1.8 Issues

Through a series of meetings and conference calls, an interdisciplinary team (IDT) reviewed comments received during scoping and public involvement efforts. Public comments were used to identify potential issues

The following is a description of issues identified by the IDT for Lower Piru Rangelands.

Issue 1- Water: Livestock grazing has potential to affect water quality and introduce fecal coliform and crytosporidim into Piru Reservoir. This issue is addressed in Section 3.1 of this EA.

Issue 2– Wildlife: Livestock grazing has potential to affect wildlife species federally listed as Threatened and Endangered and their critical habitats, including the California red-legged frog, arroyo toad, and southwestern willow flycatcher. This issue is addressed in Section 3.2 of this EA and in the Biological Effects (BE) analysis and Biological Assessment (BA) for this project (located in the Project File).

Issue 3-Heritage: Livestock trampling or wallowing can damage or displace heritage resources. Presence of livestock or manure may be in conflict with values for Traditional Cultural Places valued by Native Americans. This issue is addressed in section 3.3 of the EA.

Issue 4-Weeds: Localized heavy grazing can reduce foliage density and increase the amount of bare ground, thereby creating sites available to non-native invasive species. The amount of vegetation (forage) removed can affect plant species diversity. This issue is addressed in Section 3.4 of the EA.

Issue 5-Recreation, IRA and Wilderness: Grazing may impact values associated with local campgrounds, the Sespe Wilderness or the Inventoried Roadless Area. Specifically, a concern was raised that the location of proposed fence in section 16 could degrade the visual quality of Blue Point, a prominent landmark. This issue is addressed in Section 3.5 of the EA.

2.0 Alternatives, including the Proposed Action

This chapter describes and compares the alternatives considered for the Piru, Potholes (Lisk and Potholes Units), and Temescal (Reasoner and Rodeo Flat Units) Range Allotments project. It includes a description of each alternative considered. This section also presents the alternatives in comparative form, sharply defining the differences between each alternative and providing a clear basis for choice among options by the decision maker and the public. Some of the information used to compare the alternatives is based upon the design of the alternative and some of the information is based upon the environmental, social and economic effects of implementing each alternative.

2.1 Alternatives

2.1.1 Alternatives Considered in Detail

ALTERNATIVE 1 -NO ACTION

Grazing permits would not be re-issued after the current permits expire [36 CFR 222.4 (a) (1)]. The allotments would remain vacant pending further NEPA analysis. Existing fences and corrals, with the exception of privately owned National Forest boundary fences, would be removed when Forest Service funding is available. Existing developed springs would be retained for wildlife and recreation use.

ALTERNATIVE 2- THE PROPOSED ACTION

Alternative 2 includes moderate livestock grazing on the suitable NFS lands within Piru, Potholes (Lisk and Potholes Units) and Temescal (Reasoner and Rodeo Flat Units) Range Allotments described in the Proposed Action, Section 1.4. This alternative is very similar to the proposed action described in the scoping letter (June 2, 2003). Adjustments have been made, such as updating GIS data and land ownership acreages, to ensure the proposal is consistent with the Forest Plan that was finalized in 2005 after scoping was conducted. Management requirements described in Section 2.2 of this document are incorporated in the Proposed Action.

2.1.2 Alternatives Not Considered in Detail

ALTERNATIVE 3- CONTINUATION OF CURRENT PERMITTED ALLOTMENT MANAGEMENT PLAN

Continuation of the current permitted allotment management was considered. Under this alternative, livestock grazing on the allotments would continue to be authorized as specified under current permit(s). This alternative was not considered in detail because high impact grazing has occurred over 1,120 acres of NFS lands and adjacent private lands near Piru Reservoir. Without adjustment in allotment management to allow only moderate livestock utilization and fencing to keep cows away from Piru Reservoir, this alternative would not meet Forest Plan standards and therefore was not considered in detail.

ALTERNATIVE 4 LIVESTOCK GRAZING AT 1/3 STOCKING

As suggested by public comment, the IDT considered an alternative with about 1/3 stocking compared to the proposed action. A similar alternative is already being considered in detail with Alternative 2 (Proposed Action). Livestock numbers would be reduced as needed to meet Forest Plan standards and achieve or trend towards desired conditions as part of an adaptive management component included in Alternative 2. No rationale was provided for developing this alternative. The Proposed Action includes features to avoid high impact grazing. For these reasons this alternative was not analyzed in detail.

ALTERNATIVE 5 COMBINATION OF REST-ROTATION (GRAZE EVERY OTHER YEAR) WITH 40% - 50% REDUCTION IN LIVESTOCK NUMBERS

The IDT incorporated periods of rest and season of use adjustments into the Proposed Action as part of the Adaptive Management component of Alternative 2. The IDT promoted and developed rotational grazing systems wherever the landscape, wilderness status, and facilities would allow. Adjusted grazing seasons and rotational systems are incorporated into the Proposed Action and would correspond with the maximum available water and green forage periods allowing for proper distribution and utilization throughout the units. The Proposed Action includes features to avoid high impact grazing. For these reasons this alternative was not analyzed in detail.

2.2 Resource Protection Measures and Monitoring

a. Adhere to Best Management Practices (USDA 2000) described in **Appendix B**.

b. Apply the Five-Step Project Screening Process for Riparian Conservation Areas described in Forest Plan Appendix E (S47, Part 3, Page 11). Application of this Process to this project is shown in **Appendix C**.

c. Salt and/or other supplements would be located greater than ¼ mile from all water sources including developments; susceptible threatened, endangered, proposed, candidate, and sensitive species and habitats; concentrated and developed recreation areas; sensitive heritage resources and other sensitive areas, unless approved by the responsible Forest Service officer (S53, Part 3, Page 11).

d. Adaptive management guidelines would be used to protect heritage sites and springs wetlands and other riparian areas from excessive trampling by livestock. Location of water improvements, fencing, natural and constructed non-fence barriers and the like would be used as needed to preserve the natural functioning of these wetland features.

e. Pesticides (or other chemicals) would not be applied without prior authorization.

f. The permit holder would be required to monitor noxious and invasive weeds and report any found to the Forest Service. The permit holder would be required to make efforts to prevent introduction of new noxious and invasive weeds and to prevent or minimize the spread of existing noxious and invasive weeds (LMP, Part 3, Apx. M). Permit holder will be required to use weed-free hay as approved by FS personnel.

g. For improvements that may require ground-disturbing activity must be approved by the Forest officer in charge ensuring that laws, regulations, policies and guidelines are met.

h. Manage livestock grazing areas for long-term sustainability and suitability (Forest Plan Strategy LG1, Page 141).

i. Maintain effective soil cover of 60% (Forest Plan S52).

j. Meet Regional standards for soil quality (Forest Service Handbook Region 5 Supplement 2509.18-95-1).

k. Perform site-specific analysis prior to initiating grazing in burned areas to determine level and location of use (Forest Plan S54);

l. As shown in Table 2.2-1, retain average amounts of residual dry matter (RDM) until onset of the rainy season and do not exceed percent allowable use and streambank alteration.

Table 2.2-1 Forest Plan Livestock Grazing Utilization Standards*

Location**	Habitat Grouping	RDM (lbs/acre)	Percent Allowable Use		
			Woody Browse	Perennial Grass and Grass-like Plants	Streambank Alteration
LBV/SWWF Habitat	Nesting Season	No grazing during occupancy			
	Suitable Non-Nesting Season/ No Occupancy	N/A	35	35	10
Riparian Areas	N/A	N/A	40		20
Uplands	Annual Grasslands and oak woodlands with >10 inches annual precipitation	700	40 (20 – on advanced oak tree regeneration)	50	N/A
	Annual Grasslands and oak woodlands with <10 inches annual precipitation	400			
	Chaparral	200-400	N/A	N/A	

* Forest Plan, Table 3-2, Part 3, Page 12
** LBV – least Bell's vireo; SWWF – southwestern willow flycatcher

m. To avoid adverse affects to the arroyo toad (ARTO) and California red-legged frog (CRLF) regardless of life stage, the Lower Piru Rangelands Permittee would notify the Forest Service three days prior to use of the Piru Creek crossing to access Canton Canyon (Piru Allotment) so that it can be checked for animals by a qualified biologist. If animals (any life stage) are found in or near the crossing its use would be deferred until they disperse from or move out of the crossing on their own.

    - Near refers to animals not actually in the crossing but close enough to be considered at risk by the biologist. As an example, cattle being herded across Piru Creek into the Piru Allotment might stray out of the crossing and trample nearby eggstrings/masses or other life stages.

    - If requested, the biologist may work with the Permittee to try and locate a suitable alternate crossing not occupied by ARTO or CRLF. If animals not protected by ESA such as southern Pacific pond turtle or two-striped garter snake are found in the alternate crossing they can be moved by the biologist out of harms way to a safe location.

n. Prior to grazing permit issuance, construct, re-construct or maintain fencing described below, to prevent cattle permitted to graze in the Potholes and Piru Allotments from entering Piru Creek and corridor (see also Table 1.4.2-1 of this document).

    - Fencing would be constructed/re-constructed along the eastern boundary of the Lisk Unit (Potholes Allotment) to prevent permitted cattle from straying into the sensitive aquatic and riparian habitats associated with Piru Creek.

- Existing drift fences in the north Potholes Unit and Reasoner Unit (middle Reasoner Creek) would be inspected annually and if necessary repaired prior to cattle entry into the effected areas.

- Fencing would be used to prevent cattle from impacting a 20 acre patch of suitable flycatcher habitat on private property in the Reasoner Unit (lower Reasoner Creek).

- A drift fence would be reconstructed across Canton Creek where it narrows about ½ mile above its confluence with Piru Creek. This would prevent cattle permitted to use the Piru Allotment from entering Piru Creek and protect suitable arroyo toad habitat in lower Canton Creek.

2.2.1 Monitoring

Monitoring of allotment and resource conditions would be carried out as required by Forest Service Handbook 2209.13 and to comply with the provisions of the Forest LMP. Specifically, monitoring would be used as part of an overall adaptive management strategy as outlined above. Monitoring may be completed by the allotment holder or USDA Forest Service personnel to ensure all standards are met.

2.3 Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. Some information is presented in tables when comparing different levels of effects or outputs that can be distinguished quantitatively or qualitatively among alternatives.

2.3.1 Comparison of Issues and Purpose and Need by Alternative

Table 2.3.1-1 displays a summary of the features for each alternative and associated environmental consequence in relation to issues and responsiveness to the purpose and need for action.

Table 2.3.1-1 - Comparison of Alternatives

Issue or Purpose and Need	Threshold or objective	Alternative 1 (No Action)	Alternative 2 (Proposed Action)
Wildlife T&E species *California red-legged frog*	Maintain habitat	Yes	Yes
	Impact to species	None	None when mitigations are used
Arroyo toad	Maintain Habitat	Yes	Yes
	Impact to species	None	None when mitigations are used
Southwest willow flycatcher	Maintain Habitat	Yes	Yes
	Impact to species	None	None when mitigations are used
Provide for Livestock Grazing	Suitable acres within allotments	None	2,030 suitable acres
Fencing to Protect areas from damage	Protect riparian species	None	4.5 miles, plus as needed to protect species
	Protect water quality in Piru Reservoir and Piru Creek	None	4.5 miles, plus as needed to protect species
	Exclude cattle from UWCD lands and Piru Reservoir	None	4.5 miles

2.3.2 Comparison of Forest Plan Goals and Direction by Alternative

2.3.2-1 Comparison of Alternatives in Meeting Forest LMP Goals and Direction

Goal/ Direction	Desired condition	Alternative 1 (no action)	Alternative 2 (reauthorize grazing)
Goal 2.1: Invasive Species	The structure, function and composition of plant communities and wildlife habitats are not impaired by the presence of invasive nonnative plants and animals.	No authorized grazing activity would occur on NFS lands, so livestock would not be a vector for the spread of invasive plants. However, the lack of livestock grazing may allow some invasive plants to expand their range. This alternative would neither meet nor be inconsistent with this LMP Goal.	Livestock grazing would continue on the allotment, so livestock may act as a vector for the spread of some invasive plants. However, livestock grazing may also help to control other invasive species. This alternative would neither meet nor be inconsistent with this LMP Goal.
Goal 3.1 Provide for natural resource protection	Significant heritage resource sites are preserved and protected.	No authorized grazing activity would occur on NFS lands, so livestock would not impact heritage resource sites. This alternative would meet this LMP Goal.	Livestock grazing would continue on the allotments. Management actions are in place to exclude livestock from protected heritage sites. Adaptive management principles would be applied to react to potential future impacts on heritage sites by livestock. This alternative would meet this LMP Goal.
Goal 5.2: Improve riparian conditions	Watercourses are functioning properly and support healthy populations of native and desired nonnative riparian dependent species.	No authorized grazing activity would occur on NFS lands. Watercourse function would evolve over time consistent with natural processes and may improve or degenerate. This alternative would not meet this LMP Goal because no management actions would be taken to improve riparian conditions.	Grazing activity would be authorized and regulated based on Best Management Practices for Water Quality Management for Forest System Lands in California, as amended from time to time. Adaptive management principles would apply to determine the appropriate management response. This alternative would meet this LMP Goal
Goal 6.1: Move toward improved rangeland conditions as indicated by key range sites	Livestock grazing opportunities are maintained and are managed for sustainable, healthy rangelands that contribute to improving watershed conditions toward a fully functional and productive condition.	No authorized grazing activity would occur on NFS lands. No livestock grazing opportunities would be provided on the Lower Piru Rangelands. Monitoring of conditions at key range sites would not occur.	Grazing activity would be authorized and supported by range monitoring of conditions at key sites. This alternative would meet this LMP Goal.
Goal 6.2: Provide ecological conditions to sustain viable populations of native and desired nonnative species	Habitats for federally listed species are conserved and listed species are recovered or are moving toward recovery. Habitats for sensitive species and other species of concern are managed to prevent downward trends in population or habitat capability, and to prevent federal listing.	No authorized grazing activity would occur and no effects to federally lsited species are likely. This alternative would meet the LMP Goal.	Grazing activity would be authorized but is not expected to adversely affect federally listed species. See separate discussion of impacts on arroyo toad,, southwestern willow flycatcher and sensitive plant and animal species. This alternative would meet this LMP Goal.

3.0 Environmental Consequences

This section summarizes the physical, biological, social and economic environments of the affected project area and the potential changes to those environments due to implementation of the alternatives. It also presents the scientific and analytical basis for comparison of alternatives presented in the chart above. All assessments of environmental consequences of the alternatives are based on the best available science.

The actions described in the proposed action are ones that are implemented frequently by the USDA Forest Service on the Los Padres National Forest as well as on other National Forests in Region 5 and Nationwide. Grazing is a common and normal activity on National Forest System lands, and Forest specialists are familiar with the impacts of the activity on the human environment.

3.1 Water and Soils

3.1.0 Issue: Livestock grazing has potential to affect water quality and introduce fecal coliform and cryptosporidium into Piru Reservoir.

Response Summary: Forest Plan direction for moderate livestock utilization and allowable use standards would avoid high impact grazing with potential for erosion. Other Forest Plan standards and allowable use levels, particularly excluding livestock grazing along the lakeshore of Piru Reservoir, also reduce potential for effects to water quality associated with grazing. The Piru Rangelands Project Soils/Hydrology/ Cumulative Watershed Effects Analysis (available in the Project File) concludes that low to moderate impact grazing would cause little to no direct impacts to water quality. Indirect effects are expected to be minimal and cumulative effects on watershed condition would be below thresholds.

Fencing would be required along the National Forest/private land boundary prior to authorizing livestock grazing in the Lisk unit. This fence would keep cattle away from Piru Reservoir and associated recreation facilities. By following Forest Plan standards for riparian areas to protect water quality, fencing off cattle from Piru Reservoir, and maintaining moderate livestock utilization over limited acreage, the IDT determined effects from livestock grazing in this proposal to be minimal. Further discussion may be found under alternative sections 3.1.2 and 3.1.3.

3.1.1 Affected Environment

A Soils/Hydrology/Cumulative Watershed Effects Analysis Report was completed and is included in the Project File. Information included is excerpted from that report.

Watersheds

The analysis area consists of seven 7th field drainages tributary to Piru Creek. Three of these drainages together comprise the Agua Blanca 6th field subwatershed. The remaining four drain directly into Piru Creek or Piru Reservoir. These drainages in their entirety are

considered for watershed impacts even though the project area is much smaller than the combined drainages. A list of drainages and acreages can be found in Table 3.1.1-1.

Beneficial uses for Piru Creek and Piru Reservoir include agricultural supply, ground water recharge, warm and cold freshwater and spawning habitats, wildlife habitats including rare, threatened or endangered species, and recreational uses, including fishing (LATWQCB, 1994). Piru Creek and Piru Reservoir are also listed as potential sources of municipal and domestic water supply and fresh water replenishment. Piru Creek is listed as a 'water quality limited segment' under Section 303(d) of the Clean Water Act for pH. The Santa Clara River downstream of Piru Creek is also listed for ammonia, chloride, and total dissolved solids.

Geologic/Soils/Landform Setting

The analysis area consists primarily of steep slopes underlain by shallow soils derived from Monterey Shale or unnamed harder sandstone and conglomerate beds. About 18 to 52% of each watershed is over 55% slope. The more gentle slopes (generally less than 10% of each watershed is less than 15% slope) are typically landslide benches or alluvial fans or terraces derived from adjacent shale, sandstone, or conglomerate. Livestock grazing occurs mostly on landslide benches, fans and terraces less than 15% slope, although livestock will also venture onto steeper slopes.

Slopes in Monterey Shale are highly susceptible to earthflow landslides. Sandstone and conglomerate units are more likely to stand out as rock outcrops. Landslide benches contain deep soils with higher clay content than adjacent areas while alluvial fans and terraces contain large amounts of cobble and gravel. Soils in the analysis area are not particularly susceptible to erosion, although steep slopes in the area are susceptible to moderate to high erosion rates regardless of soil type. None of the soils are particularly susceptible to compaction although the deeper, high clay soils in the landslide benches can be compacted more readily than high gravel soils in fans and terraces.

Watershed Disturbances

The primary factors that affect water quality in the analysis area, the primary watershed disturbances, are roads and wildfire. These affect stream sedimentation which is the most common water quality concern in mountainous watersheds. The analysis area has relatively low road densities compared to neighboring areas, with several drainages in wilderness with no roads at all (see Table 3.1.1-1). The highest number of roads is in the Canton Canyon drainage where Interstate 5 crosses the headwaters of the drainage and road density is about 2.6 miles per square mile.

Nearly the entire analysis area has burned in a wildfire in recent years. Most notable are the Ranch Fire in 2007, the Day Fire in 2006, and the Piru Fire in 2003. The extent of wildfire in each drainage is listed in Table 3.1.1-1.

Table 3.1.1-1 Watershed Disturbance Summary

Drainage or Subwatershed*	Total Acres	Wildfires	Road Mileage w/in Sub-watershed
Canton Canyon	9,569	Ranch Fire 2007 (3,700 acres), Day Fire 2006 (200 acres), East and Paradise Fires 2004 (1,400 acres), Templin Fire 2003 (60 acres)	39.4
Devil Canyon	3,366	Ranch Fire 2007 (1,600 acres)	5.1
Reasoner Canyon	5,301	Ranch Fire 2007 (1,900 acres), Piru Fire 2003 (2,600 acres)	7.7
Sharps Canyon-Piru Creek	7,514	Ranch Fire 2007 (3,500 acres), Piru Fire 2003 (500 acres)	11.5
Lower Agua Blanca Creek	7,395	Ranch Fire 2007 (1,500 acres), Piru Fire 2003 (3,900 acres)	0.0
Middle Agua Blanca Creek	9,108	Day Fire 2006 (6,100 acres), Piru Fire 2003 (1,400 acres)	0.0
Upper Agua Blanca Creek	4,949	Day Fire 2006 (4,300 acres)	0.1
Agua Blanca Creek	**21,452**	**Day Fire 2006 (10,400 acres), Piru Fire 2003 (5,300 acres), Ranch Fire (1,500 acres)**	**0.1**
*Bold Denotes 6th Field Subwatershed) a combination of Lower, Middle, and Upper Agua Blanca Drainages			

Another watershed disturbance that has impacted water quality in the analysis area is livestock grazing. Typically livestock grazing has little impact on stream sedimentation compared to roads and wildfire but livestock can introduce pathogens such as fecal coliform and cryptosporidium into streams. Also, moderate to heavy livestock grazing can contribute to stream sedimentation, especially heavy grazing along riparian zones.

Grazing impact levels were estimated for the CWE analysis using the following criteria:

- Livestock are expected to concentrate in areas where feed and water are more readily available.
- Past records in the allotment files indicate areas of high impact grazing were observed at selected water sources.
- Recent field observations provided indications of where high impact grazing may have occurred in the past.
- Areas not identified as high or moderate impact were modeled as low impact areas.
- Although grazing impacts change from year to year, mapping for this analysis provides a representative approximation for past and predicted conditions.

Grazing Impact Levels Used in CWE Analysis

Low Impact: less than 30% forage utilization; seedstocks remain intact and young plants undamaged.

Moderate Impact: 30 to 50% forage utilization; 25-70% of seedstocks remain intact and most young plants undamaged.

High Impact: greater than 50% forage utilization for any given year; reduction or damage to seedstocks and young plants starts to appear at 50 percent utilization stubble still evident up to about 90% utilization.

The project area receives moderate to high impact grazing over a number of acres. Acreages of high or moderate impact grazing by drainage are listed in Table 3.1.1-2. Of greatest concern is high impact grazing along Piru Creek and Piru Reservoir in the Sharps Canyon-Piru Creek drainage. The risk of spreading fecal coliform and damaging riparian vegetation is greatest along these perennial waterbodies.

Table 3.1.1-2 Watershed Grazing Impact Summary

Subwatershed or Drainage*	High Impact Grazing Acres	Moderate Impact Grazing Acres
Canton Canyon	247	0
Devil Canyon	only low use (incidental) grazing	
Reasoner Canyon	368	0
Sharps Canyon-Piru Creek	617	424
Upper Agua Blanca Creek	not grazed	
Middle Agua Blanca Creek	not grazed	
Lower Agua Blanca Creek	0	233
Agua Blanca Creek	**0**	**233**
*Bold Denotes 6th Field Subwatershed) a combination of Lower, Middle, and Upper Agua Blanca drainages		

3.1.2 Alternative 1 (no action)

No grazing would be authorized, and no effects to the riparian and wetland areas would occur from grazing.

No livestock grazing would be authorized so there would be minimal impact on water quality, stream stability, temperature, soil compaction, and nutrient loading. Stream channels surveyed in primary and secondary grazing use areas meet desired conditions.

DIRECT AND INDIRECT EFFECTS

Pathogens such as fecal coliform and cryptosporidium may have been introduced into Piru Reservoir from past livestock grazing on the shores of the reservoir. With no grazing this potential problem would be eliminated.

Nutrient loading in streams is not significant under the current livestock practices on the allotment. If grazing were terminated, nutrients delivered to streams from the current grazing operation would decrease over time. Soil compaction from livestock at localized trough sites would no longer occur. Livestock trails could begin to re-vegetate further reducing any potential erosion.

Stream channel temperatures are expected to remain the same overall. It is possible certain areas could receive more shade from surrounding vegetation as a result of livestock grazing being removed. However, the amount of potential re-vegetation is unknown, as the no grazing alternative only accounts for use by livestock and not impacts from wildlife and/or natural events.

Soils: No livestock grazing, or the removal of livestock grazing, would have a minimal impact on soil productivity and buffering capacity. Based on the soil types, vegetation cover, current level of effects, and past livestock grazing activities, the soil conditions within primary and secondary use areas on NFS lands are in a stable desired condition. More vegetation would be available to add to the organic component of soil. Soil compaction from livestock at localized sites would no longer occur. Livestock trails could begin to re-vegetate at a faster rate, thus reducing any erosion resulting from runoff.

Cumulative effects for the No Action Alternative would decrease. Recovery of annual vegetation would take one to three seasons. Potential increased sediment from localized trampled banks and channels would decrease as vegetation is reestablished in affected areas. Livestock trails would be revegetated in one to three seasons. Chances of rilling and gullying along livestock trails would decrease as vegetation increases.

3.1.3 Alternative 2 (Proposed Action):

DIRECT EFFECTS

Table 3.1.3-1 lists the estimated extent of moderate impact grazing for the analysis area. Locations of high and moderate impact grazing for past and the Proposed Action are shown on maps in Appendix B of the Water and Soils report (Project File).

Table 3.1.3-1 Watershed Grazing Impact Summary

Subwatershed or Drainage*	Estimated Proposed Action Moderate Impact Grazing Acres
Canton Canyon	247
Devil Canyon	only low use (incidental) grazing
Reasoner Canyon	368
Sharps Canyon-Piru Creek	424
Upper Agua Blanca Creek	not grazed
Middle Agua Blanca Creek	not grazed
Lower Agua Blanca Creek	233
Agua Blanca Creek	**233**
*Bold Denotes 6th Field Subwatershed) a combination of Lower, Middle, and Upper Agua Blanca drainages	

Table 3.1.3-1 shows that with the Proposed Action, past high impact grazing would either be eliminated or reduced to moderate impact grazing to meet Forest Plan standards. Moderate impact grazing would occur on an estimated 1,272 acres or 3% of the analysis area for the Proposed Action.

Pathogen introduction into local waterbodies from livestock grazing would be minimal with the proposed action. Restricting livestock from accessing the shores of Piru Reservoir would minimize potential for pathogens to reach waterbodies. Review of related studies (Tate et al 2006, Atwill et al 2002) and discussions with Dr. Kenneth W. Tate (USDA 2007a) indicate that Forest Plan standards for riparian areas are effective at preventing water contamination from pathogens associated with livestock.

Nutrient loading in streams is not significant under the current livestock practices on the allotment. With reduced impacts with the proposed action, nutrients delivered to streams from the current grazing operation would decrease. Soil compaction from livestock at localized trough sites would lessen. Livestock trails could begin to re-vegetate further reducing any potential erosion.

Stream channel temperatures are expected to remain the same overall. It is possible certain areas could receive more shade from surrounding vegetation as a result of reduced livestock impacts.

Soils trampling by livestock when the soil is wet can cause a loss of soil porosity and an increase in soil density (compaction) especially when saturated. Any reduction in porosity due to trampling would be expected to occur in the top 1-4 inches of soil. A reduction in soil porosity can result in reduced water infiltration into the soil, more runoff, and a higher risk of erosion. The actual effect would be dependent upon both the degree of change in soil porosity as well as the percentage of the land in a given area that has been grazed.

INDIRECT EFFECTS

With moderate direct effect over 3% of the analysis area, potential for indirect effects, either off-site or separated in time, is expected to be minimal and accounted for in Cumulative Watershed Effects modeling.

CUMULATIVE WATERSHED EFFECTS (CWE)

The CWE analysis uses three geographic information system models to predict effects to watershed conditions due to livestock grazing. These models are described in the Water and Soils specialist report (Project File)**.**

Livestock use levels are added to current watershed conditions (primarily influenced by roads and past wildfire) to determine cumulative watershed effects of the Proposed Action and alternatives when added to past and other current actions. No foreseeable future actions were identified for this analysis. Results of CWE modeling are shown in Tables 3.1.3-2, 3.1.3-3, and 3.1.3-4.

Table 3.1.3-2 Universal Soil Loss Equation (USLE) Model Results

Subwatershed or Drainage*	Background Erosion (cy/ac/year)	% Over Background Wildfire & Roads (no grazing)	% Over Background with Past Grazing	% Over Background with Proposed Grazing
Canton Canyon	0.057	141%	144%	143%
Devil Canyon	0.066	128%	128%	128%
Reasoner Canyon	0.077	98%	128%	113%
Sharps Canyon-Piru Creek	0.060	125%	185%	140%
Upper Agua Blanca Creek	0.111	69%	69%	69%
Middle Agua Blanca Creek	0.140	47%	47%	47%
Lower Agua Blanca Creek	0.114	34%	36%	36%
Agua Blanca Creek	**0.124**	**47%**	**48%**	**48%**
*Bold Denotes 6th Field Subwatershed) a combination of Lower, Middle, and Upper Agua Blanca drainages				

As shown in Table 3.1.3-2, USLE modeled percent over background increases with grazing within 4 of the drainages. The largest increases in percent over background for proposed grazing is for Reasoner Canyon and Sharps Canyon-Piru Creek because these areas have the most acres of moderate impact grazing. The Proposed Action would decrease risk of sediment delivery compared to past grazing in three of the affected drainages.

Table 3.1.3-3 Geology (GEO) Model Results

Subwatershed or Drainage*	Background Landsliding (cy/ac/dec)	% Over Background Wildfire & Roads (no grazing)	% Over Background with Past Grazing	% Over Background with Proposed Grazing
Canton Canyon	3.15	218%	218%	218%
Devil Canyon	4.76	203%	203%	203%
Reasoner Canyon	5.88	264%	264%	264%
Sharps Canyon-Piru Creek	5.02	237%	237%	237%
Upper Agua Blanca Creek	3.49	179%	179%	179%
Middle Agua Blanca Creek	4.54	150%	150%	150%
Lower Agua Blanca Creek	3.90	193%	193%	193%
Agua Blanca Creek	**4.08**	**170%**	**170%**	**170%**
*Bold Denotes 6th Field Subwatershed) a combination of Lower, Middle, and Upper Agua Blanca drainages				

All values in Table 3.1.3-3 are elevated due to effects of the Ranch, Day, or Piru fires; and these values are the same regardless of grazing because grazing has no impact on landsliding in the model.

Table 3.1.3-4 Equivalent Roaded Area/Threshold of Concern (ERA/TOC) Model Results

Subwatershed or Drainage*	% Threshold of Concern	%ERA Wildfire & Roads (no grazing)	%ERA with Past Grazing	%ERA with Proposed Action Grazing
Canton Canyon	12	3.3%	3.3%	3.3%
Devil Canyon	12	3.5%	3.5%	3.5%
Reasoner Canyon	12	3.1%	3.6%	3.3%
Sharps Canyon-Piru Creek	12	3.5%	4.3%	3.7%
Upper Agua Blanca Creek	12	2.4%	2.4%	2.4%
Middle Agua Blanca Creek	12	1.6%	1.6%	1.6%
Lower Agua Blanca Creek	12	1.7%	1.8%	1.8%
Agua Blanca Creek	**12**	**1.8%**	**1.9%**	**1.9%**
*Bold Denotes 6th Field Subwatershed) a combination of Lower, Middle, and Upper Agua Blanca drainages				

Wildfires in all drainages have caused %ERA values to be elevated. The Proposed Action shows slightly increased %ERA for Canton Canyon, Reasoner Canyon, Sharps Canyon, and Lower Aqua Blanca Creek. There are drainages where moderate impact grazing is proposed. The Proposed Action has lower %ERA than past grazing for three drainages. All %ERA values are well below threshold.

SUMMARY OF FINDINGS

The following thresholds or inference point values for USLE and GEO were used for this analysis:

- **USLE** = 400% over background; and
- **GEO** = 200% over background.

With consideration of grazing activities, models (as shown Tables 3.1.2-2, 3.1.2-3, and 3.1.2-4) indicate the following interpretations:

- None of the 7 drainages have **USLE model** (surface erosion) values near the inference point.
- Four of the 7 drainages (all except those in Aqua Blanca Creek) have **GEO model** (mass-wasting) values above the inference point due to wildfire impacts.
- None of the 7 drainages have **ERA** values near the **TOC**.

Canton Canyon, Devil Canyon, Reasoner Canyon, Sharps Canyon-Piru Creek, and Lower Agua Blanca Creek were all highly impacted by the 2007-Ranch Fire. Upper and Middle Agua Blanca Creek drainages were both highly impacted by the 2006-Day fire. The 2003-Piru fire impacted mostly Lower Agua Blanca Creek and Reasoner Canyon drainages. Because unstable slopes are common and recovery time is relatively slow (compared to USLE or ERA models), the GEO model shows elevated impacts for these all drainages which is not reflected in the other models.

The GEO model considers livestock grazing "no impact" since increased landsliding occurs with the removal of woody vegetation (as can occur with wildfire), or changes on the hill slope that occur with road construction. The other two models factor in impacts from grazing, decreased soil cover in the USLE model and increased watershed disturbance in the ERA model. Even the most grazing impacted drainage, Sharps Canyon-Piru Creek (includes the areas next to Piru Reservoir that had been highly impacted by livestock); model results indicate values well below threshold. With improved range management inherent in the Proposed Action, impacts of grazing on watershed condition would be small.

Cumulative effects for livestock grazing would be minimal. On the assumption that every year receives a normal rain fall, annual vegetation would return within one to three years. The vegetation re-growth would assist in stabilizing the stream channels, thereby reducing impacts on the watershed. Wildland fires, recreational activities, and landslides are having a larger impact within the watershed than livestock grazing. Livestock grazing is expected to contribute some effects to the watershed, but only a fraction compared to other activities and natural events that have occurred or are occurring within the watershed. Overall erosion and impacts from livestock are minimal. The channels are within their range of natural variability and fall within the Forest Plan allowable percent for alternation by livestock (Forest Plan, Part 3, S56).

Adaptive management procedures would be followed to identify and implement measures to limit or mitigate impacts to riparian and wetland areas. Best management practices would be followed as outlined in Water Quality Management for Forest System Lands in California, Best Management Practices (USDA Forest Service, Pacific Southwest Region, September 2000).

Continued livestock grazing would have a minimal effect on water quality, stream stability, temperature, soil compaction, and nutrient loading. Stream channels that were surveyed within primary and secondary use areas are expected to remain in a stable condition and continue to be within or moving towards desired conditions.

Overall, erosion and other impacts to soil from livestock grazing on the Lower Piru Range Allotments are minimal. The potential effects of grazing under the proposed action are not likely to have long-term impacts on soils within the allotments. Soil productivity, soil

hydrologic function, and soil buffering capacity would all be adequately protected by implementation of the Standards from the Forest Plan, BMPs, and other design and monitoring criteria indicated in the Forest Plan (including those in section 2.2 of this document).

MITIGATION MEASURES:

When the following standards from the Forest Plan are followed, no detrimental soil disturbance would generally occur. These measures are incorporated into Section 2.2, Resource Protection Measures i-l.

- **Soil cover** -S52: Maintain an effective soil cover of 60% to provide for soil protection, water infiltration, and reduce the risk of accelerated erosion within grazing areas. Soil cover includes: living vegetation (grasses, forbs, and prostrate plants), plant litter, and surface rock fragments greater than ¾ inch.
- **Burned Areas** -S54: Burned Areas: After a wildland fire, prior to initiating grazing, a site-specific analysis would be performed for designated livestock areas to determine the level and location(s) of livestock use, if any.
- **Residual Dry Matter** -S56: Retain the average amounts of residual dry matter (RDM) until the onset of the rainy season; percent utilization; and percent streambank alteration on grazed rangelands. See Table 2-2.1. Precipitation is based on long-term averages. Streambank alteration is defined as alteration and displacement of rooted plants and physical soil structure by livestock per stream reach in wet montane meadows and Rosgen C3 channels. Percent woody browse is based on current year's growth of shrubs, unless required to meet other vegetation management objectives. Livestock would be moved from grazing units when thresholds are met at determined by established protocols.

3.2 Threatened, Endangered, Sensitive and Management Indicator Species

3.2.0 Issue: Livestock grazing has potential to affect wildlife species federally listed as Threatened and Endangered and their critical habitats, including the California red-legged frog, arroyo toad, and southwestern willow flycatcher.

Response Summary: The following determinations were made regarding the proposal to issue a term grazing permit for the allotments contingent upon inclusion of the mitigations in (section 2.2). U.S. Fish and Wildlife Service concurs with these determinations per their letter of concurrence dated May 4, 2009 (located in the Project File). Further discussion may be found under alternative sections 3.2.2 and 3.2.3.

a. "May Affect, But is Not Likely to Adversely Affect" California condor, least Bell's vireo, southwestern willow flycatcher, arroyo toad, or California red-legged frog.
b. "No Affect" on designated critical habitat for California condor, least Bell's vireo, arroyo toad, or California red-legged frog.

c. "May affect individuals, but is not likely to result in a trend toward federal listing or loss of viability" for arroyo chub, southwestern pond turtle, California legless lizard, San Diego horned lizard, and two-striped garter snake.

d. The project area is out of the range of southern California steelhead and would have "No Affect" to this species or critical habitat (Wildlife BA, Appendix A).

e. There are no known occurrences of listed vernal pool invertebrate species in the project area, nor is there any designated critical habitat. The project would have "No Affect" on listed vernal pool invertebrates or their critical habitat.

3.2.1 Affected Environment: is described under each species under Section 3.2.3

3.2.2 Alternative 1 (no action): No grazing would be authorized, and no effects to the threatened, endangered, management indicator or sensitive species would occur.

3.2.3 Alternative 2 (proposed action): A Biological Assessment, Biological Evaluation, Project Level Assessment of Wildlife Management Indicator Species and Analysis of "High Priority" Birds with Regard to the Migratory Bird Treaty Act, were conducted and included in the Project File. Following is a summarized discussion of effects to listed species and categories of species detailed in these reports.

Table 3.2.3-1 Comparison of effects of alternatives on TES, MIS and migratory bird species.

Species	Listing	Alternative 1 (no action)	Alternative 2 (reauthorize grazing)
California condor	**Endangered**	No grazing would occur. No effects are likely to this species.	Grazing livestock may have beneficial effects to this species. Effects are not likely to adversely affect the population in this area.
Least Bell's vireo	**Endangered**	No grazing would occur. No effects are likely to this species.	With proposed fence construction, livestock grazing may affect but is not likely to adversely affect the population in this area.
Southwestern willow flycatcher	**Endangered**	No grazing would occur. No effects are likely to this species.	With proposed fence construction, livestock grazing may affect but is not likely to adversely affect the population in this area.
Arroyo toad	**Endangered, Management Indicator Species**	No grazing would occur. No effects are likely to this species.	With measures to minimize disturbance to Piru Creek, livestock grazing may affect, but is not likely to adversely affect the population in this area. There would be no affect to arroyo toad critical habitat.
California red-legged frog	**Threatened**	No grazing would occur. No effects are likely to this species.	With measures to minimize disturbance to Piru Creek, livestock grazing may affect, but is not likely to adversely affect the population in this area. There would be no affect to frog critical habitat

Table 3.2.3-1 Comparison of effects of alternatives on TES, MIS and migratory bird species.

Species	Listing	Alternative 1 (no action)	Alternative 2 (reauthorize grazing)
Arroyo chub	**Sensitive**	No grazing would occur. No effects are likely to this species.	Use of the Piru Creek crossing to access Canton Canyon for livestock grazing activities may adversely impact reproductive potential and adult fish, but with measures to minimize disturbance to Piru Creek, proposed livestock grazing would not contribute toward a loss of viability of the local population or trend toward federal listing.
Southwestern pond turtle	**Sensitive**	No grazing would occur. No effects are likely to this species.	Grazing and allotment management activity (motor vehicles) may impact individuals not contribute toward a loss of viability of the local population or trend toward federal listing.
California legless lizard	**Sensitive**	No grazing would occur. No effects are likely to this species.	Grazing and allotment management activity may impact individuals not contribute toward a loss of viability of the local population or trend toward federal listing.
San Diego horned lizard	**Sensitive**	No grazing would occur. No effects are likely to this species.	Grazing and allotment management activity (motor vehicles) may impact individuals not contribute toward a loss of viability of the local population or trend toward federal listing.
Two-striped garter snake	**Sensitive**	No grazing would occur. No effects are likely to this species.	Grazing and allotment management activity (motor vehicles) may impact individuals not contribute toward a loss of viability of the local population or trend toward federal listing.
Mule deer	**Management Indicator Species**	No grazing would occur, which would result in beneficial effects to this species by reducing disturbance and competition for food.	Grazing and allotment management activity would cause a small amount of disturbance and competition for food, but no noticeable change to the population is likely.
Mountain lion	**Management Indicator Species**	No grazing would occur which would benefit this species by potentially increasing prey due to benefits to mule deer.	Presence of livestock may slightly reduce prey species that compete with livestock. No noticeable change to the population is likely.

Table 3.2.3-1 Comparison of effects of alternatives on TES, MIS and migratory bird species.

Species	Listing	Alternative 1 (no action)	Alternative 2 (reauthorize grazing)
Song sparrow	**Management Indicator Species**	No grazing would occur. No effects are likely to this species.	Proposed fence construction may benefit this species by protecting habitat. No noticeable change to the population is likely.
Migratory birds	**Migratory Bird Treaty Act**	No grazing would occur. No effects are likely to this species.	Four species of high priority migratory birds are known to nest on the allotments and may occasionally be impacted by livestock. No noticeable change to the population is likely.

3.2.3.1 FEDERALLY LISTED THREATENED AND ENDANGERED WILDLIFE SPECIES

California condor

Affected Environment – Condors do on occasion forage over the project area. A majority of these birds probably wander into the project area from the adjacent Hopper Mountain NWR where the FWS maintains a feeding program. There are several cliff complexes near the northern boundary of the Potholes Allotment and the southwest boundary of the Piru Allotment that probably do harbor potential nest sites. In fact, during the winter and early spring of 2004/5 a pair did attempt to nest just south of the Piru Allotment on a steep cliff face that overlooked Piru Reservoir. For unknown reasons after about two months the pair abandoned the attempt.

Direct Effects from the Proposal – None**.**

Indirect Effects from the Proposal – Cattle grazing in the three allotments may have an indirect benefit to foraging condors in that areas that would otherwise be overgrown with vegetation might be kept open enough so that dead animals would be more easily detected from above by condors. This attribute should be especially evident in and around loafing grounds, watering locations (troughs and springs) and salt licks. Another possible indirect benefit would be the potential sources of carrion provided by cattle mortalities as well as the afterbirths that result from the calving process.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to California condors.

Critical Habitat – The extreme western edge of the Temescal Allotment and the northern one third of the Potholes Allotment excluded but are adjacent to "protected zones" of 3 historic California condor nest sites.

Determination for the California Condor – Because of the above information and rationale I determine that the proposal to issue a term grazing permit for the Potholes, Temescal and Piru Allotments **"May Affect, But Not Likely To Adversely Affect"** the California condor and would have **"No Affect" on its federally designated critical habitat**.

Least Bell's vireo

Affected Environment – There are no known occurrences of least Bell's vireo within the project boundaries. However, there is a small nesting population located along the Santa Clara River about 5 miles south of the project area.

Direct Effects from the Proposal – None.

Indirect Effects from the Proposal – There would be no deleterious indirect affects from the proposal to the vireo or its habitat. However, with cattle excluded by fencing suitable nesting habitat for the vireo could eventually become available.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to Least Bell's vireo.

Critical Habitat - The only critical habitat for least Bell's vireo on the LPNF is located in the upper Santa Ynez watershed on the Santa Barbara Ranger District.

Determination for the Least Bell's Vireo – Because of the above information and rationale I determine that the proposal to issue a term grazing permit for the Potholes, Temescal and Piru Allotments as modified by the minimization measures **"May Affect, But Not Likely To Adversely Affect"** the least Bell's vireo and its habitat. There would be **"No Affect"** to designated critical habitat.

Southwestern willow flycatcher

Affected Environment– There are no records of flycatchers in the three allotments, but there are eleven along Piru Creek between upper Piru Reservoir and the Agua Blanca Creek area, which is located about three miles north of the project area. There is a twelfth record from Piru Creek, just above Agua Blanca Creek. All records are from the late spring of 1999 and only represent the presence of a bird and not occupancy on a nesting territory. However, the 12th record above Agua Blanca Creek is notable because on June 7, 1992 occupancy and nesting was presumed at the site when two birds were observed interacting (singing and calling) and a bird was seen carrying food.

Direct Effects from the Proposal – Since cattle would be excluded from the suitable and potentially suitable habitat within the project area via fencing there is little likelihood the proposal would have a meaningful direct effect (i.e., trampling, hedging) upon flycatcher habitat.

Indirect Effects from the Proposal – Nest predation by brown-headed cowbirds is thought to be one of the reasons for the population declines that inspired listing under ESA. It was also generally thought that cattle grazing near nesting flycatchers, as well as other species (i.e., least Bell's vireo), increased probability of predation because cowbirds attracted to cattle would have a greater probability of finding the nest. However, in the spring of 2002 avian point counts in the riparian habitat along lower Piru Creek found a very low abundance of cowbirds compared to other areas and a low correlation to the presence and/or distance of cowbirds to grazing cattle in the study area (Wildlife BA, Appendix D). The study concluded that livestock are unlikely to have an impact on flycatchers due to cowbird

parasitism in this area, especially when coupled with the low cattle numbers that would be permitted to graze.

Cumulative Effects – Except for 2 acres in upper Reasoner Creek, suitable and/or occupied habitat for southwestern willow flycatcher within the analysis area is on private land. Direct, indirect and cumulative effects analysis included consideration of 20 acres of suitable habitat in lower Reasoner Creek that is also located on private property. Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to southwestern willow flycatcher.

Critical Habitat - There is no federally designated critical habitat for the flycatcher on LPNF.

Determination for the Southwestern Willow Flycatcher – Because of the above information and rationale the determination of the proposal to issue a term grazing permit for the Potholes, Temescal and Piru Allotments is **"May Affect, But Not Likely to Adversely Affect"** the southwestern willow flycatcher.

Arroyo toad

Affected Environment –Based on inventory maps, the corridor along Piru Creek is suitable and occupied by arroyo toad and the lower section of Canton Creek is suitable but not known to be occupied by the toad. Although toads have bred in the corridor in the past, they have not done so in a number of years. Recent inspections suggest that habitat in the corridor is improving (active deposition of sediments creating the necessary shallow breeding pools) and that breeding is likely to occur again in the future. To date there are no records of arroyo toad in Canton Creek.

Direct Effects from the Proposal – The presence of approved biological monitors as stated in resource protection measure m of Section 2.2 (use of Piru Creek crossing for Piru Allotment access) and construction of a drift fence across Canton Creek to protect suitable habitat in lower Canton Creek, would minimize impacts to the toad, its tadpoles and egg-strings. With the implementation of these protection measures the magnitude of any potential affect should not represent a threat to the viability of the population. Finally, reconstruction of fencing to exclude cattle from Piru Creek would prevent possible trampling mortality or harm to toads, tadpoles and/or egg-strings**.**

Indirect Effects from the Proposal – Fence construction that would exclude cattle from the Piru Creek corridor would benefit toads by allowing metamorph/sub-adult hiding cover (bank vegetation near breeding ponds) to become better established.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to arroyo toads.

Critical Habitat - the original designation of critical habitat that included the Piru Creek "corridor" was rescinded by court order. The FWS again submitted a modified proposal to designate critical habitat for the toad. The new designations were finalized in 2005 and

include the "corridor" section of Piru Creek as well as some adjacent uplands in lower Canton Creek.

Determination for the Arroyo Toad – Because of the above information and rationale, issuance of a term grazing permit for the Potholes, Temescal and Piru Allotments with fence construction and implementation of specified resource protection measure m. **"May Affect, But Not Likely to Adversely Affect"** the arroyo toad, and **"No Affect"** on arroyo toad critical habitat.

California red-legged frog

Affected Environment – There are no recent records for California red-legged frog in Piru Creek Watershed. However there are four older records from near Agua Blanca Creek and Piru Reservoir. Because of these occurrences the FWS considers Piru Creek as occupied habitat and has designated Piru Creek as critical habitat for the frog. Under the proposed action, cattle would not be able to access California red-legged frog habitat except when using the Piru Creek crossing to access Canton Canyon. Per resource protection measure m in Section 2.2, use of the crossing would be monitored and managed by a qualified biologist.

Direct Effects from the Proposal – The presence of approved biological monitors during the use or maintenance of the access to Canton Canyon at the Piru Creek crossing per resource protection measure m in Section 2.2 would minimize or eliminate impacts to the frog or its tadpoles and egg masses, if in the future they become established in the Piru Creek corridor. Excluding cattle from the Piru Creek corridor with fence construction would minimize or eliminate possible trampling mortalities or harm to frogs, tadpoles and/or egg-strings**.**

Indirect Effects from the Proposal – Fence construction to exclude cattle from the Piru Creek corridor would benefit frogs by allowing required habitat features such as deep steep sided pools, emergent vegetation and vegetative bank cover to improve and provide more optimal habitat if and when frogs re-occupy the corridor.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to California red-legged frogs.

Critical Habitat - Much of Piru Creek including the "corridor" adjacent to the Piru Allotment had formally been designated as critical habitat for the frog. However, court action rescinded that designation. Subsequently the FWS submitted a modified proposal to designate critical habitat for the frog. This proposal was finalized in April 2006 and does include the riparian corridor along Piru Creek as well as some of the adjacent uplands.

Determination for the California Red-Legged Frog – Because of the above information and rationale, issuance of a term grazing permit for the Potholes, Temescal and Piru Allotments with implementation of fence construction and specified resource protection measure m **"May Affect, But Not Likely to Adversely Affect"** the California red-legged frog in all its live stages and have **"No Affect"** to critical habitat in the Piru Creek corridor. Fencing to exclude cattle from the Piru Creek corridor may improve the suitability of the habitat in the future.

3.2.3.2 SENSITIVE WILDLIFE SPECIES

Arroyo chub

Affected Environment – It is native to most of the large coastal watersheds of Los Angles, Orange and San Diego Counties, California and has been introduced into many other systems in southern California. The population in Piru Creek is introduced. Where they exist, the introduced populations are the largest and considered the most secure for the species as a whole. Food and space competition with other introduced fish is thought to be adversely impacting some populations. They inhabit the slower sections and backwater areas of streams with small gravel to sand bottoms.

Direct and Indirect Effects from the Proposal – Prior to elimination of cattle grazing in the Piru Creek corridor, bank trampling and forage use of streamside vegetation by cattle was adversely impacting chubs by direct damage to eggs via trampling (deposited on submerged vegetation or wood debris) and increased exposure to predators due to the reduction of hiding cover (submerged vegetation). Use of the Canton Canyon access at the Piru Creek crossing by vehicles probably has similar adverse impacts on the chub. Fence construction to exclude cattle from the Piru Creek corridor and resource protection measure m in Section 2.2 to reduce and biologically regulate the use of the Piru Creek crossing to access Canton Canyon would either eliminate or greatly reduce these adverse impacts.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to arroyo chub.

Determination for the Arroyo Chub – Because of the above information and rationale, the determination is that the proposal to issue a term grazing permit for the Lower Piru Range Allotments may adversely impact (continued but reduced use of the crossing) reproductive potential and adult arroyo chub, but not to the extent as to contribute toward a loss of viability of the local population and a trend toward federal listing.

Southwestern pond turtle

Affected Environment – Southwestern pond turtles are known to inhabit Piru Creek as well as the very lowest section of Reasoner and Dominguez Canyons.

Direct and Indirect Effects from the Proposal – Cattle grazing in the project area has only a minor potential to adversely impact this reptile. Cattle avoid the deeper sections of occupied aquatic sites, which are preferred by adults and young. The greatest threat is damage or destruction of nests, which are usually located on the upper stream terrace adjacent to occupied habitat. An adult female could be displaced while constructing a nest by cattle if in the same area, or the nest itself could be trampled. Also young could be trampled as they make their way to aquatic habitat after emerging from the nest. Adult turtles could be injured or killed by vehicles conducting permit administration activities while traveling overland to nest sites or other suitable habitat.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to southwestern pond turtle.

Determination for the Southwestern Pond Turtle – Because of the above information and rationale the determination for issuing a term grazing permit for the Lower Piru Range Allotments may impact individuals, but not to the extent as to contribute to a loss of viability of the local population or a trend toward federal listing.

California legless lizard

Affected Environment – In California, they are found west of the Central Valley and deserts from Monterey south to northwestern Mexico to include all of Los Padres National Forest. These lizards have recently been documented from the Chuchupate area on LPNF at an elevation approaching 6000 feet. Although usually associated with moist (not wet) soil conditions, they are sometimes found in rather dry situations such as leaf litter under shrubs and trees in the uplands. However, these upland sites need to be near some form of permanent moisture. They no doubt occur throughout the allotments, probably most abundant along the floodplains of the major drainage channels and in the leaf litter habitat associated with oaks.

Direct and Indirect Effects from the Proposal – Since these lizards spend almost all their time buried or under surface cover (i.e., fallen logs and rocks) they are not likely to be impacted by grazing cattle. Maintenance of range improvements that require movement of earth (i.e., fence post replacement, spring box repair) could adversely impact lizards if they are buried in the work site.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to California legless lizards.

Determination for the California Legless Lizard – Because of the above information and rationale the determination for issuing a term grazing permit for the Lower Piru Range Allotments may impact individuals, but not to the extent as to contribute to a loss of viability of the local population or a trend toward federal listing.

San Diego horned lizard

Affected Environment – This lizard occurs throughout the allotments wherever there is open relatively level ground with some loose sandy soil for burrowing. The dry stream channels of the lower sections of the main canyon and dry upper terrace of Piru Creek probably harbor more lizards than other parts of the project area.

Direct and Indirect Effects from the Proposal – Cattle grazing may have an indirect beneficial affect on lizards by opening up habitat that may otherwise be unsuitable due to dense vegetative cover. This would be especially evident in areas of concentrated use by cattle such as loafing grounds, salt licks and watering locations. Cattle may on occasion directly impact lizards via trampling. However, this is probably a rare occurrence because this lizard is quite mobile and able to avoid this outcome if sufficiently warm. Lizards would

be most susceptible to trampling in the early morning when they seek sunny locations to bask but are still torpid and unable to move quickly. Finally, lizards may on occasion be harmed or killed by vehicles that are in the allotments for permit administrative purposes, especially in the early morning when the animals may still be somewhat torpid and unable to move quickly out of harms way as would be the case in the late afternoon.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to San Diego horned lizard.

Determination for the San Diego Horned Lizard – Because of the above information and rationale the determination for issuing a term grazing permit for the Lower Piru Range Allotments may have an indirect beneficial impact by improving habitat but may have a direct adverse impact to individuals via trampling. However, the number of individuals adversely affected would be too small to cause a trend to federal listing or loss of viability of the local population.

Two-striped garter snake

Affected Environment – Two-striped garter snakes are known to inhabit Piru Creek as well as the lower sections of Reasoner, Dominguez and Potholes Canyons. They have been observed moving through dry upland habitat to reach other suitable habitats.

Direct and Indirect Effects from the Proposal – Cattle grazing has little or no potential for direct impacts upon this snake. They are very alert and mobile. If confronted by cattle while foraging they are able to move quickly out of harms way. Since garter snakes are ovoviviparous (young are born fully developed) there is no potential for trampling impacts to buried egg clutches, as is the case with most other reptiles. The above also applies to most of not all human activities involved in management of the grazing permit such as fence repair and herding. The only possible adverse impact might be to a torpid snake basking in or near a road that is unable to move upon the approach of a fast moving vehicle.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to two-striped garter snakes.

Determination for the Two-Striped Garter Snake – Because of the above information and rationale the determination for issuing a term grazing permit for the Lower Piru Range Allotments may impact individuals, but not to the extent as to contribute to a loss of viability of the local population or a trend toward federal listing.

3.2.3.3 WILDLIFE MANAGEMENT INDICATOR SPECIES

Mule deer

Affected Environment – The project area constitutes good mule deer habitat, especially around the periphery of the larger grassland areas, near the brush boundaries and riparian areas, where there is cover, water, and forage available. Large areas of the allotments (most of Dominguez Canyon, upper Reasoner Canyon and Canton Canyon) have recently been

burned by wildfires. These areas are in the early stages of succession (early to mid-seral) and by their vary nature are providing abundant forage (grasses, forbs, browse) for early-seral oriented wildlife such as mule deer. For these reasons these areas are supporting higher than normal deer numbers and would continue to do so until they reach the later and climax stages in 10-20 years depending on climate and terrain. For the same reason cattle would be attracted to these areas, but since the proposal calls for active management, this use would not represent a limiting factor to mule deer numbers.

Direct and Indirect Effects from the Proposal – Grazing may lead to competition between livestock and mule deer for forage. Bowyer and Bleich (1984) found southern mule deer to be significantly more abundant in un-grazed meadows than in grazed meadows. This was attributed to the absence or reduction of important forage plants on the grazed range as well as the absence of dense stands of deer grass, known to provide valuable cover for does with fawns. The retention of 700 lbs/acre residual dry matter on this allotment (see Table 2.2-1) is designed to retain forage to protect the soil and retain forage for wildlife. Deer are also able to maneuver through or over fences and into brushy areas where cattle cannot move. Deer are primarily browsers and are capable of utilizing a wide variety of browse species while cattle feed almost exclusively upon herbaceous forage (graminoids and forbs). This dietary difference greatly reduces competition between deer and cattle when they occur in the same area. Unlike cattle, which tend to remain in an area until forage conditions inspire them to move, deer move often, usually as singles or in small groups, feeding on various items as they wander over the landscape. Because of these difference and because the cattle would be actively managed, the proposal to issue a term grazing permit would not have an adverse effect on the mule deer population or their habitat in the three allotments.

Cumulative Effects – The greatest impact to deer in the lower Piru watershed is recurrent wildfires which in the last 5 to 10 years have effected over half the area in question. The immediate effect in the aftermath of a fire is adverse due to general displacement of the deer themselves and elimination of forage and cover. However, within a few years the habitat recovers into early seral stages that favor deer. Other cumulative impacts to deer could include road collisions, poaching and disease. There are no other planned or anticipated new human activities in the effected area that if they occurred would cause direct and indirect effects of the proposal to have an adverse effect on the mule deer population in the three allotments.

Forest Level Effects to Mule Deer – Based on the above information and rationale, the size of this project is too small relative to the size of the Los Padres National Forest (2 million acres) to lead to a noticeable change in deer populations.

Mountain lion

Affected Environment – The Los Padres National Forest has vast tracts of unfragmented wilderness habitat ideal for supporting mountain lion populations. During a drought cycle in the mid-1970s, the Los Padres National Forest was documented to have one of the highest densities of mountain lions reported within the state (Reading Room 2005). Mountain lions are most abundant in areas that support large deer populations. Currently there is no information that would lead to a cause for concern for mountain lion populations on the Los Padres National Forest. The Forest Plan desired condition to maintain or improve habitat

conditions to sustain healthy lion populations can be supported by activities that support healthy deer populations and provide travel routes for lions to disperse to other suitable habitats.

The grazing allotments contain good mule deer habitat especially along the edges (see Mule Deer analysis above) and therefore supports mountain lions which prey on these deer.

Direct and Indirect Effects from the Proposal – The effect on mountain lions from this project is parallel to the effect on mule deer (above). Competition with cattle for forage may reduce deer numbers in and around the allotments thus reducing the number of mountain lions that could potentially supported in the area. However, the level of competition would be minimal considering the low stocking numbers (number of permitted cattle) and active management being proposed. Therefore, any reduction in deer numbers as they relate to the lion population is not expected to be meaningful. The other possible impact to mountain lion from the ranching operation is an increase in prey items (live or dead cattle), which introduces the possibility that a depredation permit to kill a lion that is eating livestock may be issued by California Dept. of Fish and Game.

Cumulative Effects – Depredation permits for mountain lions could be issued in the future to eliminate lions preying on livestock. Other cumulative impacts to mountain lions could include road collisions, poaching, disease, competition with hunters for deer, and competition with other lions moving into the watershed from nearby areas. Factors that affect mule deer population size or livestock herd size would probably have the greatest effect on mountain lion numbers (see mule deer analysis above). Direct and indirect effects of the proposal, when added to past, present or foreseeable future activities, would not contribute to adverse cumulative effects to the mountain lion population in the three allotments.

Forest Level effects to Mountain Lion – Since mountain lion populations in California and on the Los Padres N.F. are considered high at this time, the small changes in lion population from any decisions based on this project are probably inconsequential at the Forest level and Regional level.

Song sparrow

Affected Environment – The song sparrow is a permanent resident of coastal scrub and riparian brush over most of the Forest. The Forest Plan desired condition to maintain or improve habitat conditions to sustain healthy song sparrow populations can be supported by activities that maintain and improve riparian habitats. Most of the riparian areas in the project area are in good to excellent condition and show little or no sign of grazing except near trailing areas. This is probably because of the low stocking rates in the past and more or less active management to prevent over-utilization, especially to riparian habitat.

Direct and Indirect Effects from the Proposal – Song sparrows as well as other riparian dependant species would benefit from the proposal due partially to continued active management with reduced cattle numbers but especially because several key riparian habitat areas in and adjacent to the allotments would now be protected from cattle entry via the construction of drift and enclosure fencing.

Cumulative Effects – There are no other planned or anticipated new human activities in the effected area that if they occurred would cause direct and indirect effects of the proposal to have an adverse effect on the song sparrow population in the three allotments.

Forest Level effects to Song Sparrow – Although significant negative trends were determined for the song sparrow during the 1988-1996 Forest riparian bird count surveys, song sparrows are still well represented on all four Southern California National Forests (http://fsweb.cleveland.r5.fs.fed.us/sccs/animals/).

Since implementation of the project is not expected to have significant direct effects upon song sparrows at the watershed level, it should not have an effect at the Forest level either.

3.2.3.4 MIGRATORY BIRDS

Affected Environment – Sixty-seven high priority migratory bird species (USFWS, 2001) were reviewed for adverse effects if a term grazing permit was issued for the Lower Piru Range Allotments on the Ojai Ranger District, Los Padres National Forest. Some of these species have been observed within the allotments (*Analysis of "High Priority" Birds With Regards to the Migratory Bird Treaty Act (MBTA)* in the Project File).

Direct and Indirect Effects from the Proposal – With proposed fence construction, reconstruction and maintenance, suitable habitat for some riparian dependant species on the list would be protected and improve over time. Most species on the list are well distributed beyond the allotments or have habits that would protect them from potential adverse grazing effects (i.e., nest in trees or cliffs). There is a small possibility that grazing cattle could trample the nests of some of the ground nesting species (California thrasher, rufous-crowned sparrow, black-chinned sparrow, and sage sparrow) but considering the small number of cattle that would be in any given area at the same time (25 cow-calf pairs maximum evenly distributed and cycled through three grazing allotments) the number would be small and not represent a threat to the viability of the species on the Forest.

Determination – Based on this information and rationale, it was determined that issuance of a term grazing permit for the Lower Piru Range Allotments, as proposed, would not have a measurable negative effect on populations of migratory bird species, and therefore would not lead to extraordinary circumstances under NEPA.

3.2.3.5 THREATENED, ENDANGERED PLANTS

There are no threatened, endangered, or proposed plant species in the project area. Within the project area there is no critical habitat or areas proposed as critical habitat for listed plant species.

3.2.3.6 SENSITIVE PLANTS

A Biological Evaluation of TES plants was conducted and included in the Project File. Following is a summarized discussion of effects to listed species and categories of species detailed in these reports.

Affected Environment - Vegetation within the allotments can be characterized as arid coastal sage scrub, interspersed with annual grassland, and pockets of riparian woodland consisting mainly of California sycamore (Platanus racemosa), coast live oak (Quercus

agrifolia), and occasional big-leaf maples (Acer macrophyllum). Slopes with thin soils support dense chaparral, dominated by chamise (Adenostoma fasciculatum). The elevation of the project area varies from about 1200 feet in the bottom of Canton, Reasoner, and Dominguez Canyons to nearly 3,000 feet at the upper end of the Potholes Trail (Project File, Plant BE, p.1).

Late-flowered mariposa lily and Ojai fritillary

The allotments contain marginal habitat for two **sensitive** plant species which were analyzed in the Plant BE document: **late-flowered mariposa lily** (*Calochortus weedii var. vestus*) and **Ojai fritillary** (Fritillaria ojaiensis).

Late-flowered mariposa lily (*Calochortus weedii var. vestus*) grows in chaparral, and open, dry sites in cismontane and riparian woodland at elevations of 880–6,250 feet (270–1,910 meters), often on serpentinite substrates (Fiedler & Ness 1993, California Native Plant Society 2001). It is also been found on sandstone, siltstone, and shale substrates (Stephenson and Calcarone 1999). Some occurrences of Late-flowered Mariposa Lily are on rocky sites, disturbed areas, road banks, and fuel breaks, suggesting either a tolerance of disturbance, or a lack of tolerance of competition from other plants (Stephenson and Calcarone 1999). The key habitat element for late-flowered mariposa lily may be open, rocky substrates with reduced competition from other vegetation. There are estimated to be 753 acres (305 hectares) of occupied habitat on the Los Padres National Forest (Stephenson and Calcarone 1999).

Ojai fritillary (***Fritillaria ojaiensis)*-** is distributed in several highly restricted occurrences and is considered to be in danger of extirpation in a portion of its range (California Native Plant Society 2001). Population status and trends are unknown, but it is considered to have low vulnerability on National Forest System lands (Stephenson and Calcarone 1999). Ojai fritillary has been reported from about 29 locations.

Ojai fritillary grows on moist slopes in chaparral, in mesic broad-leaved upland woodlands (often near drainages), and in lower montane conifer forests at elevations of 980-2,200 feet (300-670 meters) (California Native Plant Society 2001). Big leaf maple and Umbellularia californica are common associates. Plants found near the South Coast Ridge Road are in openings in brush and woodland on or near serpentine. Plants found in the Topatopa Mountains are usually found on poorly consolidated soils associated with landslides (Burgess 2000).

Direct and Indirect Effects from the Proposal - There are no known occurrences of Threatened, Endangered, Proposed, and Sensitive plant species within the project area. Marginal potential habitat for Late-flowered mariposa lily or Ojai fritillary exists, though no plants were found when selected areas with suitable habitat were surveyed.

For the most part, the cattle grazing in the Piru, Temescal, and Potholes Allotments spend the majority of their time in the grasslands with gentler slopes and in the adjoining plant communities where shade, water, and dust can be found. This reduces the potential risk to species such as Ojai fritillary which is found on moist, rocky slopes, and Late-flowered mariposa lily found on dry, rocky fuel breaks and cut banks in chaparral. If the livestock do

access potential habitat, and if plants are present, there is a risk that cattle grazing would impact individual plants by consuming or trampling the flowers, buds, or shoots. Affected plants may be impacted by lost plant parts such as leaves, stems, flowers, fruits, or seeds.

Cumulative Effects – Direct and indirect effects of the proposed action, when combined with past, current and foreseeable future activities in the project area, would not contribute to negative cumulative effects to Late-flowered mariposa lily or Ojai fritillary.

Determination for Late-flowered Mariposa Lily and Ojai Fritillary- Because of the above information and rationale, I determine that the proposal to issue a term grazing permit for the Potholes, Temescal and Piru Allotments **may affect individuals, but is not likely to result in a trend toward federal listing or loss of viability for** Late-flowered mariposa lily or Ojai fritillary (Project File, Plant BE, p.18).

3.3 Heritage and Cultural Sites

3.3.0 Issue: Livestock trampling or wallowing can damage or displace heritage resources. Presence of livestock or manure may be in conflict with values for Traditional Cultural Places valued by Native Americans.

Response Summary: Heritage resources would be protected as directed in the Forest Plan (Forest Plan, Part 2, p 126). With moderate livestock utilization, effects to heritage resources would be avoided. Provisions of the National Historic Preservation Act for identifying and protecting historic properties would be met. This project also meets the Regional Programmatic Agreement approved by the State Historic Preservation Office to protect heritage resources. Further discussion may be found under alternative sections 3.3.2 and 3.3.3.

3.3.1 Affected Environment: Although livestock currently have access to all of the documented sites within the allotment, not all of the heritage concerns are exposed to the same degree of impact. Some sites are situated in areas of the allotment that livestock do not frequently visit; these sites are typically (1) located on fairly steep slopes, (2) not situated near streams, (3) have rock outcrops, and/or (4) are covered with a dense stand of chaparral. Most of the sites that fall into this rubric are lithic procurement areas. Conversely, sites that are situated near springs and drainages are located on relatively flat terrain. These are covered with a thick carpet of introduced grasses and more likely to be visited by livestock throughout the year and classified as short-duration occupation sites.

Cultural resources consist of archaeological sites, architectural sites (buildings and structures), and locations or resources of importance to Native Americans and other ethnic groups. The project area contains a variety of non-renewable historic and prehistoric archaeological sites that reflect past land uses. The Lower Piru Rangelands lies within the ethnographic territory of the Chumash, and possibly the Ilikliks, and Tataviam tribes. Three archaeological survey reports within the Piru, Potholes, and Temescal Allotments have been conducted in support of this Environmental Assessment. These surveys have yielded 15 archaeological sites on National Forest System lands, five of which are historic homestead locations. These homesteads include land utilized by the Dominguez, King, Morales, and Reasoner families. The remaining ten sites are prehistoric site types that include lithic scatters, procurement areas, and temporary camps.

3.3.2 Alternative 1 (no action): No grazing would be authorized, and no effects to heritage and cultural sites would occur.

3.3.3 Alternative 2 (proposed action):

DIRECT AND INDIRECT EFFECTS

No significant impacts from past livestock grazing have been observed at any of the sites within the allotments. Noted impacts to cultural resources within the allotments from livestock grazing are minimal, consisting primarily of fresh hoof prints and cow trails. At present, none of the sites within the allotments have been evaluated for the National Register of Historic Places (NRHP). All sites would be treated as eligible under the NRHP for the purpose of this analysis, pursuant to 36CFR800.

In order to comply with Section 106 of the National Historic Preservation Act, the Forest Plan, and the Programmatic Agreement between the USDA Forest Service, Pacific Southwest Region, California State Historic Preservation Officer, and Advisory Council on Historic Preservation; no improvements, developments, or high impact areas associated with grazing would be allowed within documented cultural resources. These activities include but are not limited to the maintenance and use of springs and water diversions, the placement of water troughs and salt blocks, and the corralling and staging of livestock. Specific locations to be avoided would be identified to Forest Service Planners.

CUMULATIVE EFFECTS

With moderate livestock utilization, effects to heritage resources would be avoided. Since no effects are anticipated under direct and indirect effects, no cumulative impacts would occur.

3.4 Weeds

3.4.0 Issue: Localized heavy grazing can reduce foliage density and increase the amount of bare ground, thereby creating sites available to non-native invasive species. The amount of vegetation removed by foraging can affect plant species diversity.

Response Summary: While noxious weeds are known to occur along travel corridors in the project area, the risk of spread due to continued cattle grazing was determined to be low due to: moderate livestock utilization, adherence to allowable use standards, and rangeland management towards desired conditions identified by the Forest Plan to minimize soil disturbance and prevent exposure of bare mineral soil. Retention of residual dry matter would help maintain plant diversity, retain soil in place, and reduce potential for invasion by non-native plant species (See Table 2.2-1). Localized heavy grazing would be avoided and livestock numbers would be adjusted as needed to meet desired conditions. The potential for the introduction of non-native invasive plant species would be low and effects to plant species diversity would be negligible.

Controlling the impact of cattle on the landscape by avoiding localized heavy grazing would reduce the risk of introducing and spreading noxious weeds. Cattle have the potential to spread weeds as they walk through infested areas into un-infested areas. Weed seed can also be introduced in mud on their feet or in their stomachs when they are brought up to the grazing allotments. If grazing did not occur in these allotments, one vector of weed spread

would be removed. However, weeds would continue to spread in the allotments via other mechanisms such as wind, water, wildlife, vehicles, and human foot travel. Weed infestations along roads are too well established to be set back by the removal of cattle (Weed Risk Assessment, Project File). Further discussion may be found under alternative sections 3.4.2 and 3.4.3.

3.4.1 Affected Environment

A Noxious Weed Risk Assessment was completed and is included in the project record. As a whole, the Lower Piru Range Allotments have few high risk factors. Risk is highest within disturbed areas along access roads outside and inside the allotments. Most of the existing weed species were established through past road maintenance activities and vehicular travel. Species found include Tree tobacco (Nicotiana glauca), Spanish broom (Spartium junceum), tocalote (Centaurea melitensis), and yellow star thistle (Centaurea solstitialis). These species are found primarily along roads in or adjacent to the grazing allotments.

3.4.2 Alternative 1 (no action)

No grazing would be authorized, and no efforts to control the spread of noxious weeds would occur. Some existing weed infestations may expand their territory, and livestock grazing would not serve to limit other weed species. With ongoing uses along infested roads and trails, spread of noxious weed populations along travel routes is expected whether or not the project is implemented.

3.4.3 Alternative 2 (proposed action)

DIRECT AND INDIRECT EFFECTS

Grazing at proposed levels would cause light to moderate disturbance which has the potential to spread weeds or promote certain invaders. However, there is a low risk noxious weeds would be introduced or spread in the project area.

Overall, the Lower Piru Range Allotments have few high risk factors although there is a moderate to low potential for noxious weed spread, especially within disturbed areas along access roads outside and inside the allotment. Most of the existing weed species were established through past road maintenance activities and vehicular travel. Grazing at proposed levels would cause light to moderate disturbance, which has the potential to spread weeds and/or to promote certain invaders. Implementation of Los Padres Land Management Plan (Forest Plan) standards S53 and S56 would insure that adequate cover would remain to reduce the chance of increased weed infestations (see Section 2.2). Grazing can be used to selectively control or suppress weeds. The direct effects of the project are likely to be the potential for spread of current weed populations along roads and trails where activities and existing infestations of weeds are concentrated. Indirect effects of project implementation would be the spread of weeds into other areas of the allotments from adjacent roads and trails.

CUMULATIVE EFFECTS

The cumulative effects of the proposed actions when added with ongoing public uses are likely to be similar to direct and indirect effects. Areas on the allotments where shade is

removed and bare soil is exposed provide favorable conditions for weed colonization and are likely to be populated by weeds. Weeds are not expected to spread into adjacent areas where dense canopy cover is maintained and no soil disturbance occurs. Road use is a vector for the spread of noxious weeds. Road use and maintenance activities may be restricted as needed to limit or control the spread of weeds.

3.5 Recreation, Roadless Area and Wilderness

3.5.0 Issue: Grazing may impact values associated with local campgrounds, the Sespe Wilderness or the Inventoried Roadless Area. Specifically, the location of proposed fence in section 16 could degrade the visual quality of Blue Point, a prominent landmark.

Response Summary: The allotments include a portion of the Sespe Wilderness and the Sespe-Frazier Inventoried Roadless Area, and are in close proximity to recreation sites and trails such as the Lake Piru Recreation Area, the Blue Point Campground (closed since 2003), and hiking trails along Piru and Agua Blanca Creeks. The Blue Point landmark is along the northern boundary of the Potholes Allotment and is a good vantage point into the Lisk Unit. Parts of the fence necessary to keep livestock on the Lisk Unit and off of United Water Conservation District (UWCD) lands is visible from Blue Point; however the fence should not be conspicuous from the vantage point. And since the primary recreation sites and trails are outside of the allotment boundaries, recreation facilities (except for the Potholes Trail) would not be impacted by livestock grazing.

Livestock grazing is a recognized use in designated Wilderness (Forest Plan, Part 2, pp 69 and 82), and does not impact roadless values in IRAs. Existing trails and fuel breaks within the IRA boundary would be used and maintained as access for motorized vehicles (most likely OHVs) as needed for allotment management and other administrative needs, consistent with Forest Service direction for IRAs. The Canton Canyon road, which crosses the IRA boundary, will be maintained as a permitted road for access to private land and the east shore of Piru Reservoir as well as access to the Piru Allotment. Another road, the road up Reasoner Canyon, will be maintained as a permitted road for about ¼ mile onto National Forest System (NFS) land to access a private water right. After that point the old road bed will be managed as a trail.

3.5.1 Affected Environment

Sespe Wilderness

Sespe Wilderness is 219,700 acres which was established 1992 by the Los Padres Condor Range and River Protection Act. The Wilderness is mainly a chaparral covered environment with rock cliffs in various sites. The desired condition for the wilderness is a naturally evolving landscape providing primitive recreation opportunities (Forest Plan, Part 2, p 83). The Potholes Unit is entirely within the Sespe Wilderness.

Campgrounds and Viewpoints

Blue Point Campground is located north of the reservoir along Piru Creek. The campground was closed to public use in 2003 under the Southern California Conservation Settlement to protect arroyo toad and its critical habitat. The Blue Point landmark is a prominent hilltop on the Potholes Allotment boundary south and west of Blue Point Campground. It is 1/3 mile

north of the northernmost boundary of UWCD lands. The boundary between UWCD and NFS lands north of the Potholes Trail is on a north-facing slope visible from the hilltop.

Lake Piru Recreation Area is located on the west shore of Piru Reservoir on United Water Conservation District lands south of the project area. This facility provides a developed campground experience with numerous campsites, a marina, boat launch, boat slips and picnic area.

Trails

A hiking trail extends north from Blue Point Campground up Piru Creek, connecting with the Agua Blanca Trail (19W10) along Agua Blanca Creek north of the project area. The Potholes Trail (18W04) runs west from National Forest System Road (NFSR) 4N13 through the Lisk Unit, across the wilderness boundary to the Potholes area and Potholes Unit, and north to join the Agua Blanca Trail. Other trails in the project area are old road beds that receive very little non-motorized traffic and are not open to motorized vehicles except for permitted uses.

Inventoried Roadless Areas

The majority of the Lisk Unit-Potholes Allotment and part of the Temescal Allotment are within the Sespe-Frazier Inventoried Roadless Area (IRA, see the Piru Range Inventoried Roadless Areas map, Figure 3.5.1-1). Access to these grazing units is primarily through NFSR 4N13 although additional roaded access is available through the Dominguez Canyon road (NFSR 4N14, south of the IRA through the Temescal Allotment), the Reasoner Canyon road (runs north of the Dominguez Canyon Road mostly on private land, the permittee's base property), and the Reichenbach road (runs west from NFSR 4N13 through United Water Conservation District and other private lands to the Potholes Allotment). An extension of the Reasoner Canyon road continues into the IRA but is not suitable for most highway legal vehicles. It is managed as a permitted road for about ¼ mile into the IRA to a water rights location. Above that location it is managed as a motorized trail. An extension of the Reichenbach road continues into the IRA but is managed as a fuel break rather than a road.

The Piru Allotment does not contain any IRA lands within the allotment. However, the road that has been used historically to access this allotment (the Canton Canyon road) skirts the Sespe-Frazier IRA boundary for several hundred yards as it crosses between private and NFS land. It has been in existence since the 1920s as verified by old maps and photos. The road is used to access private property, gold mining claims, and the east shore of Piru Reservoir, as well as the Piru Allotment. The road is not open to the public but is used by permit and for administration. The use of this historic road is considered necessary for the efficient monitoring of environmental and range conditions on the allotment and to support allotment and livestock management.

3.5.2 Alternative 1 (No Action)

No grazing permits would be reissued, therefore no fencing would be needed and effects on visuals from Blue Point would not occur. Livestock grazing would no longer be apparent in the Wilderness or the IRA and grazing impacts on recreation facilities would not longer occur. No motorized use in the area would be authorized for grazing. However, the Canton

Canyon road would continue to be used administratively and by the water district and private land owner. The extension of the Reasoner Canyon road into IRA would continue to be used to access the water right. The fuel break extension of the Reichenbach road would likely receive occasional maintenance as a fuel break.

3.5.3 Alternative 2 (Proposed Action)

DIRECT AND INDIRECT EFFECTS

Campgrounds and Viewpoints

Blue Point

The closest fencing to Blue Point would be approximately ¼ mile away along the boundary of United Water Conservation District (UWCD) lands south of Blue Point landmark. Parts of the fence necessary to keep livestock on the Lisk Unit and off of UWCD lands is visible from Blue Point; however the fence should not be conspicuous from the vantage point. The Blue Point Campground (closed to public use) is outside of the allotment boundaries and would not be impacted by livestock grazing.

Piru Lake Recreation Area (LPRA) - Fencing proposed for the Lisk Unit would exclude cattle from all UWCD lands and the reservoir. Existing and proposed fencing may be visible from portions of the recreation area along Piru Canyon Road and from the reservoir. A permanent gate allows administrative vehicle access north of the Juan Fernandez Launch Ramp and Picnic Area (2.3 mi. north of LPRA entrance) along Piru Canyon Road. Therefore the fencing north of the Juan Fernandez Launch Ramp is not accessible to public vehicular traffic. The majority of use occurs near the Temescal Allotment at Lake Piru Recreation Area boat ramp and store. UWCD and private lands exist along Piru Canyon Road near the eastern boundary of the Temescal and Lisk Units.

Sespe Wilderness

The Potholes Unit is in the Sespe Wilderness. Livestock grazing is a recognized use in the wilderness designations (Forest Plan, Part 2, pp 69 and 82). Livestock grazing established before the date of legislation designating area in the National Wilderness Preservation System, is permitted to continue under general regulations for livestock grazing on the National Forests (36 CFR 293.7). Forest Plan direction is to manage wilderness to improve capability to sustain a desired range of benefits and values, and changes in ecosystems are primarily a consequence of natural forces (SD 1). Construction of 0.5 mile of fence in T15N, R18W, Section 7 may be required, to exclude cattle from wilderness not under allotment authority if herding and active management does not effectively control livestock.

Inventoried Roadless Areas

To preserve the roadless condition of the area, the allotment holder will be limited to the use of two existing, permitted roads within the IRA (see Figure 3.5.1-1). Access to the Potholes Allotment will be by OHV or horseback on identified trails which is consistent with IRA regulations.

A permitted road accesses a portion of the Reasoner Unit of the Temescal Allotment in middle Reasoner Canyon. The road extends ¼ mile from the permittee's base property into

NFS lands and the Sespe-Frazier IRA. Beyond the ¼ mile, a trail continues to access the allotment, which is consistent with IRA regulations. The road existed prior to the RARE II effort which identified IRAs and under the direction at that time non-system roads were disregarded in drawing IRA boundaries. The road has always been associated with management of the allotment and to access a private water right. Private land restricts public access and the maintenance level is primitive. Historically, the road has received little maintenance and is generally passable only by high clearance vehicles.

A permitted road accesses the Piru Allotment from Piru Canyon Road via a Piru Creek crossing at the northern end of Piru Reservoir. The road lies just within inventoried roadless for a very short distance, less than one mile, before it enters the Piru Allotment and is no longer in inventoried roadless after it enters the allotment. However, this proposal gives consideration to the portion of the road that is in inventoried roadless even though it is not in the allotment because it is a connected action. The road existed prior to the RARE II effort which identified IRAs and under the direction at that time non-system roads were disregarded in drawing IRA boundaries. The road has always been associated with management of the allotment as well as providing access to a private inholding and areas under United Water Conservation District's FERC license. Public access is restricted by a gate and the maintenance level is primitive. Historically, the road has received little maintenance and is generally passable only by high clearance vehicles.

Under this proposal the roads will be part of the allotment permit with terms and conditions that the road will be maintained only after review and approval by the Forest Service. It is noteworthy that because the Canton Canyon road also accesses a private inholding, the landholder has rights to access under the Alaska National Interest Lands Conservation Act. From that viewpoint, closing the road is not a feasible consideration.

This proposal to retain the use of an existing road within inventoried roadless has been reviewed by the State Resources Agency and found to be acceptable to the State of California. The road is found to be consistent with the 2001 roadless area regulations as being associated with an existing permit and consistent with maintaining the character of the surrounding roadless area. The CWE analysis described under Section 3.1 included the use of this road under analysis. See Section 3.1 for additional information on the effects of roads on soil and water resources in the allotments.

4.0 Consultation and Coordination

The Forest Service consulted the following individuals, Federal, State, and local agencies, tribes and non-Forest Service persons during the development of this environmental assessment:

ID TEAM MEMBERS:

Irvin Fox Fernanedez	Assistant Resource Officer
Mark Reichert	Hydrologist
Gary Montgomery	Range Program Manager
Steve Galbraith	Zone Archaeologist
Lloyd Simpson	Forest Botanist
John Brack	Assistant Forest Wildlife Biologist

FEDERAL, STATE, AND LOCAL AGENCIES:

United States Fish and Wildlife Service
California State Resources Agency
National Marine Fisheries Service

TRIBES:

Santa Ynez Band of Chumash Indians

APPENDICES

A – Forest Plan Desired Conditions

B – Range Management Best Management Practices

C – Five Step Screening Process for Riparian Conservation Areas

D – Public Involvement Summary

E – Literature Cited and Documents Incorporated by Reference

APPENDIX A

Forest Plan Desired Condition

All management direction in the 2005 revised Los Padres Land Management Plan would be incorporated into permits issued for the Lower Piru Rangelands. The most relevant is presented in the Management Direction of Chapter 1 of this EA. The following are additional parts of the Forest Plan relevant to authorization of livestock grazing.

Goal 2.1 – Invasive Weeds - Reverse the trend of increasing loss of natural resource values due to invasive species.

Desired Condition: The structure, function, and composition of plant communities and wildlife habitats are not impaired by the presence of invasive nonnative plants and animals.

Goal 3.2 – Wilderness - Retain a Natural Evolving Character within Wilderness.

Desired Condition: Ecological processes occur untrammeled. Human resources do not free play of natural forces in the ecosystem.

Goal 5.1 – Watershed Function - Improve watershed conditions through cooperative management.

Desired Condition: The desired condition is that national forest watersheds are healthy, dynamic and resilient, and are capable of responding to natural and human caused disturbances while maintaining the integrity of their biological and physical processes.

Goal 5.2 – Riparian Condition – Improve riparian conditions

Desired Condition: The desired condition is that watercourses are functioning properly and support healthy populations of native and desired nonnative riparian dependent species. Riparian vegetation consists mainly of native species, with minimal or no presences of invasive nonnative plants. Nuisance nonnative aquatic animals are absent or rare in streams and lakes. Riparian and aquatic ecosystems (including vegetation, channel stability, water quality and habitat for aquatic and riparian dependent species) are resilient and able to recover after natural events, such as floods and wildland fires.

Goal 6.1 – Rangeland Condition – Move toward improved rangeland conditions as indicated by key range sites.

Desired Condition: The desired condition is that livestock grazing opportunities are maintained and are managed for sustainable, healthy rangelands that contribute to improving watershed conditions towards a fully functional and productive condition.

Goal 6.2 – Biological Resource Condition – Provide ecological conditions to sustain viable populations of native and desired nonnative species

Desired Condition: The desired condition is that habitats for federally listed species are conserved, and listed species are recovered or are moving toward recovery. Habitats for sensitive species and other species of concern are managed to prevent downward trends in populations or habitat capability, and to prevent federal listing. Flow regimes in streams that provide habitat for threatened, endangered, proposed, candidate, and/or sensitive aquatic and riparian-dependent species are sufficient to allow species to persist and complete all phases of their life cycles.

Program Emphasis and Objectives: The livestock program emphasizes compliance with the Rescissions Act of 1995. Priority is given to reviewing allotments where there are known impacts on natural resources or recreation use (Part 2, Page 31).

SD 1 – Wilderness: Protect and manage wilderness to improve the capability to sustain a desired range of benefits and values, and so that changes in ecosystems are primarily a consequence of natural forces.

Part 3 - Standards and Guidance Applicable to Livestock Grazing

S11: When occupied or suitable habitat for a threatened, endangered, proposed, candidate or sensitive (TEPCS) species is present on an ongoing or proposed project site, consider species guidance documents (see Appendix H) to develop project-specific or activity-specific design criteria. This guidance is intended to provide a range of possible conservation measures that may be selectively applied during site-specific planning to avoid, minimize or mitigate negative long-term effects on threatened, endangered, proposed, candidate or sensitive species and habitat. Involve appropriate resource specialists in the identification of relevant design criteria. Include review of species guidance documents in fire suppression or other emergency actions when and to the extent practicable.

S22: Except where it may adversely affect threatened and endangered species, linear structures such as fences, major highways, utility corridors, bridge upgrades or replacements, and canals would be designed and built to allow for fish and wildlife movement.

S25: Conduct road and trail maintenance activities during the season of year that would have the least impact on threatened, endangered, and proposed wildlife species in occupied habitats, except as provided by site-specific consultation. Road access and maintenance would be approved and monitored by the Forest Service

S46: Surface water diversions and groundwater extractions, including wells and spring developments would only be authorized when it is demonstrated by the user, and/or agreed to by the Forest Service, that the water extracted is excess to the current and reasonably foreseeable future needs of forest resources.

APPENDIX B

Range Management Best Management Practices

Best Management Practices (BMPs) (USDA 2000) are measures certified by the State Water Quality Board and approved by the Environmental Protection Agency as the most effective way of protecting water quality from non-point sources of pollution. These practices have been applied to projects across National Forest System lands throughout the Pacific Southwest Region of the Forest Service and have been found to be effective in protecting water quality.

Forest Service BMPs allow for flexibility in how they are implemented in diverse combinations of physical and biological environmental circumstances. BMPs incorporate 75 years of erosion control and watershed protection experience and are based on sound scientific principles. Land treatment measures incorporated into BMPs evolved through research and development, and have been monitored and modified over several decades with the expressed purpose of improving the measures and making them more effective. On-site evaluations of control measures by State regulatory agencies have found BMPs to be effective in protecting water quality and beneficial uses.

The following is a list of the BMPs applicable to Lower Piru Rangeland management and a description of how they would be implemented.

BMP 8.1 - Range Analysis and Planning, BMP 8.2 – Grazing Permit System, and BMP 8.3 – Range Improvements

The objective is to safeguard water quality potentially affected by livestock grazing activities. Analysis of existing range condition and other resource values has been conducted by an IDT. Grazing capability has been adjusted to meet state water quality standards and protect beneficial uses as prescribed by the Forest Plan.

A grazing permit is used to authorize livestock grazing on NFS lands. Allotment management plan (AMP) and annual operating instructions (AOI) are part of the permit terms and conditions. Based on Forest Plan and project specific standards, the responsible Forest Officer in coordination with the Permittee prepares a written AMP. The AMP includes measures to protect water quality and coordinate livestock grazing with other resource uses. Proposed fencing and changes in livestock distribution would be specified in the plan to maintain and protect water quality. Monitoring practices and locations are outlined in the plan to determine the effectiveness of Forest Plan standards and guidelines and ensure trend toward desired conditions:

Annual operating instructions (AOI) are issued to the Permittee each year to implement the AMP and to make adjustments to range management in response to current allotment conditions and trends. The amount of livestock use is determined primarily by annual monitoring of compliance with Forest Plan standards and guidelines and other requirements. Allowable use levels are designed to maintain range productivity, and soil and watershed stability. If terms of AMP and/or AOI are not met, adjustments in range management and/or livestock numbers and/or season of use are made.

Rangeland improvements are designed to improve on the use of the range vegetation by livestock to avoid high impact grazing and provide protection to sensitive areas. Water development and livestock distribution keep livestock away from natural water sources. Range improvements include rest/rotation grazing; fencing, water development, adjusting grazing use by changing season of use, kind, class, or number or permitted livestock.

Appendix C

Five-Step Project Screening Process for Riparian Conservation Areas (Forest Plan Appendix E applied to Lower Piru Rangelands:

Step 1: Riparian conservation area (RCA) width is 328 feet (100 meters) along each side of perennial streams which includes: Reasoner Creek and Canton Canyon, and Dominguez Canyon.

Step 2: The Proposed Action would occur in areas that drain into Piru Reservoir, and therefore upstream of the Santa Felicia Dam, a barrier to upstream migration of Southern California Steelhead. Therefore, there would be no effects to federally listed fish species.

Although no listed riparian associates have been found within allotment boundaries; arroyo toad, California red-legged frog, and southwestern willow flycatcher are known to occur adjacent to the project. The project contains critical habitat for arroyo toad and California red-legged frog. Potential habitats would be maintained by maintaining fencing in strategic locations and by meeting Forest Plan standards.

Step 3: This project was screened against the desired conditions of Goal 5.2 (improve riparian conditions) and 6.2 (provide ecological conditions to sustain populations of native and desired non-native species). Features of the Proposed Action are designed protect the riparian vegetation and maintain healthy stream processes and thus should have a neutral effect on the desired conditions for riparian habitat and listed species. With implementation of BMPs and project design standards, the project would have minimal effect on riparian and water resources. Eliminating high use in RCAs would help progress areas towards desired conditions.

Step 4: This project was screened against the Forest Management Plan riparian management objectives and incorporates listed strategies in WAT-1 and WAT-2 by incorporating BMPs, grazing to moderate utilization, and maintaining 60% soil cover.

Step 5: FSH Los Padres National Forest Supplement 2509.22, 2005 was reviewed for guidance to management tactics for conducting activities within the RCAs. The following are site-specific management techniques for livestock and grazing (3.34) and how they would be applied to the Lower Piru Range Allotments.

1. *Rangeland and allotment management practices to achieve desired conditions are:* regulating/adjusting livestock numbers, distribution, and fencing.

2. *Locate all livestock handling facilities outside of RCAs.* Fencing is included in proposed action to protect Piru Creek.

3. *Where RCAs are not meeting or moving towards desired conditions, plan and implement rangeland management practices that minimize the impacts.* Proposed actions are designed to move RCAs towards desired conditions.

4. A *proper functioning condition (PFC) assessment (Bureau of Land Management 1998 and 1999) should be done during the NEPA analysis or whenever there are indicators that an RCA is not meeting or moving towards desired conditions.* PFC assessment has not been done because RCA is moving towards desired conditions.

5. *Incorporate standards found in part 3 of the Forest Plans into the term grazing permit, part 3, terms and conditions section.* Proposed Action includes incorporation of Forest Plan standards into term grazing permit.

6. *Develop a livestock management program with the Permittee that emphasizes RCA short and long term goals and strategies, and an adaptive management approach should be considered in the planning process.* Adaptive management is incorporated into the Proposed Action. Permittee would be required to manage livestock to meet desired conditions.

7. *Monitor RCAs with the Permittee and an interdisciplinary team, when possible.* Periodic RCA monitoring is ongoing.

8. *Salt or mineral supplements should not be located within ¼ mile of riparian areas or water sources except as authorized by the forest officer (Forest Plan standard S53).* Placement of Salt or mineral supplements would be approved by the forest officer.

Appendix D

LOWER PIRU RANGELANDS
PUBLIC INVOLVEMENT SUMMARY

The following is a list of individuals/groups who submitted specific comments throughout the project planning process. Commenter numbers have been assigned to recognize the source of each comment received:

Commenter Number	Name/Organization
1	Rodney McInnis - National Marine Fisheries Service
2	Todd Shuman – Interested Public
3	Gerald L. Mathews - Rancher
4	Alan Coles – Sierra Club
5	Martin Taylor – Center for Biological Diversity

The following comments were received throughout the planning process. With each comment is an explanation of the issue disposition for that comment.

No.	Comment	Disposition
1	Proposed action would occur within areas that drain into Piru Lake, and therefore upstream of Santa Felica Dam, a long-standing barrier to upstream migration of the Southern California Evolutionarily Significant Unit of Federally endangered steelhead…For this reason, adverse effect to steelhead downstream of the dam are not expected, and no further coordination with NOAA Fisheries is required. *Commenter 1*	Comment noted.
2	I request the Los Padres NF provide time frames for the accomplishment of desired condition on these…allotments. The Los Padres NF must specify acceptable and non-acceptable rates of change toward desired condition and target values to be achieved. *Commenter 2*	Desired conditions are established by the Forest Plan. Acceptable rates of change are not relevant at this point. All units except Reasoner have rested since 2004. All units are currently meeting or on a trend towards desired conditions which would be maintained through range management practices.
3	The R-5 Range planning process requires that the Los Padres NF identify the species composition that should exist upon accomplishment of late seral-stage desired condition. *Commenter 2*	Grazing primarily occurs in the annual grassland community as described in the Forest Plan (Part 2, Page 42). The Lower Piru Rangelands project does not propose changes to species composition in allotments. Proposed rangeland management would be consistent with Forest Plan direction for livestock to be managed for sustainability by allowing moderate livestock utilization levels that maintain forage, cover, wildlife habitats, soils productivity, water quality, and ecosystem health (Goal 6.1).

No.	Comment	Disposition
4	It is illegal to use "proper functioning condition" as a proxy for "desired condition". Desired condition for willow stands should be late seral stage along 100% of stream courses capable of supporting willow. *Commenter 2*	Desired condition is established in the Forest Plan through place-based allocations and utilization standards (Table 3-2, Part 3, Page 12)
5	The proposal constitutes a major federal action. I request a full-blown environmental impact statement …before a decision is made. *Commenter 2*	The Forest Service has the responsibility to determine the appropriate level of NEPA documentation based on potential for environmental impacts. The Forest Service would disclose environmental effects of this project in an EA.
6	I request that alternative of "no grazing" for a minimum of 10 years be considered and analyzed. I also request other alternative which entail fewer numbers than the proposed cow/calf pairs be considered and analyzed. I request an alternative that combines mandatory rest-rotation with a major cattle stocking rate reduction (40-50%). Another alternative that should be analyzed would be one with these features: a 3 year rest period; 1/3 stocking rate reduction, a 3 year rest-rotation cycle, maximum utilization rates of 30%, four-inch post-grazing residual stubble height for all wet and moist meadow areas during drier years, rigorous enforcement of a restrictive streambank disturbance standard. *Commenter 2* The no grazing alternative should include restoration measures, such as reintroduction of native fire regimes to undo the legacies of livestock damage. *Commenter 5*	No grazing alternative would be considered and analyzed. Numbers of cow/calf pairs have been reduced in some units for the Proposed Action. Cow/calf pairs would be adjusted as needed to meet Forest Plan standards. Many of the other alternative features are already incorporated into the proposed action. All units except Reasoner have rested for 3 years. There is also a rotation option for Reasoner unit. Forest Plan has specific allowable use standards for riparian areas that would include wet meadows and 10-20% allowable streambank alteration (Table 3-2, Part 3, Page 12). Range managers on southern California Forests have found residual dry matter (RDM) a better indicator of range condition than stubble height. Leaving adequate amounts of RDM provides favorable microenvironments for early seedling growth, soil protection, and adequate soil organic matter (Forest Plan, Part 1, Page 42). Commenter does not provide any issues to support need for these alternative. Overgrazing has not been identified as an issue during analysis or from public comment. Reintroduction of fire into the ecosystem is not responsive to purpose and need to respond to Forest Plan direction to allow moderate level grazing.

No.	Comment	Disposition
7	I request detailed analysis for costs and benefits to the taxpayer for different alternatives… Consider socio-economic benefits not only to permittees and local communities, but also to the entire public now and in the future. In analyzing the no-grazing alternative estimate benefits of enhanced ecological services provided by livestock-free and fence-free wildlife habitat, enhanced income to local economies from greater visitation by hunters and recreational users (Souder 1997). Include full administrative costs of conducting NEPA, implementing, monitoring, and constructing range improvements over life of permit. *Commenter 2, Commenter 5*	While financial integrity and accountability of resource management programs in the Forest Service is priority, the Forest Service is constrained in its ability to positively affect financial efficiency of agency grazing projects. Primary factors include: Constraints from Congress on the Forest Service grazing fee; inability of the agency to control Permittee ranching operations and profit margins; and impact of climatic influences on grazing seasons and stocking rates directly affecting annual grazing receipts. In addition, realization of estimated economic returns from construction of range improvements tied to allotment grazing programs are speculative, subjective to measure, and subject to climatic fluctuations in grazing seasons. Grazing fees for permitted livestock use on National Forest Systems lands are designated by Congress in accordance direction incorporated in FLPMA, Sect. 401, and 36 CFR 222.10(a). Under this regulation Currently 100 percent of Forest Service fees are returned to regions and Forests from which they are generated to be use for range betterment on the agency allotments from which they were generated. With the passage of the 1995 Rescission Act, Congress directed the Forest Service to issue grazing permits on active allotments pending updated AMP development in accordance with NEPA. No Forest Service direction or other federal law constrains grazing authorization based on financial or economic efficiency. Socio-economic impacts of Forest Grazing Programs are analyzed at the Forest Plan level through an FEIS. Based on the constraints of federal law and regulation toward affecting the financial efficiency of the Forest Service grazing program, together with Congressional direction to authorize grazing in accordance with NEPA, financial efficiency as a condition for grazing authorization is considered outside the scope of Forest Service grazing projects.
8	The Permittee should be responsible for monitoring their own compliance…The Forest Service must conduct annual, thorough utilization/streamside disturbance/permit compliance monitoring. *Commenter 2*	Key areas are established as a portion of the range that provide indication of range condition, trend, or degree of use seasonally (Forest Plan, Part 1, Page 42). Long-term trend is monitored by installing and reading condition and trend frequency transects about every 5 years. Monitoring to determine if goals for maintaining or improving progress towards sustainable rangelands and ecosystem health by increasing number of key areas in good and fair condition would occur on an annual basis (Forest Plan Appendix C).
9	Fecal coliform and cryptosporidim bacterial agents usually present in cow feces in riparian area of these allotments constitute a serious public health menace.	Water quality addressed in Section 3.1 of the EA...

No.	Comment	Disposition
10	Document and disclose how much grazing acreage exists on each meadow and disclose how many cow/calf pairs/month/per meadow would be allowed each year. Such information would allow the public to determine if proposed stocking rates for allotment areas accord with the best available science concerning cattle stocking rates and impacts upon mule deer and willow flycatcher habitat. *Commenter 2*	Grazable acreage is expressed in EA as suitable rangelands. Cow/calf pairs are also disclosed in EA. Grazing to Forest Plan standards and desired condition provide habitat condition information to adequately assess effects to mule deer and willow flycatcher based on best available science.
11	It is important that mechanisms are in place that allow for adjustment of livestock numbers and season of use to ensure proper levels of grazing are maintained. *Commenter 2*	The adaptive management approach as proposed includes flexibility to make adjustments to meet standards.
12	Fencing, water developments, roads and trails, ATV use for ranching, competition for forage, removal of protective grass cover, altered watershed hydrology, soil erosion, encroachment by weeds and woody species, degradation of native habitats, water pollution, diseases and pathogens carried by livestock, direct persecution of native predators and competitors are all negative impacts on listed or proposed species or their critical habitats among other not listed here, that are documented to result from range livestock production and must be considered in this analysis….[Evaluate losses of game and migratory birds… (Czech and Krausman 1997, Flather et al 1994, flather et al 1998, Johnson 1989, Langner and Flather 1994, Rees 1993, US Fish and Wildlife Service 1997) *Commenter 2 and Commenter 5*	These issues would be addressed in BA, Soils/Geo/Hydro Report, and EA. Potential effects to T&E species, specifically arroyo toad and southwestern willow flycatcher are discussed in Section 3.2 of the EA. Soil and Water is discussed in Section 3.1 of the EA. Weeds are discussed in Section 3.4 of the EA.
13	Negative impacts from livestock grazing to all resource values apart from livestock production are well established by abundant scientific evidence, including studies by the Forest Service such as that of Flather et al. 1994 who found grazing to be the most widespread cause of species endangerment in the southwest. *Commenter 2, Commenter 5*	Effects to TES species are addressed in the Biological Assessment and Biological Evaluation for this project, located in the Project File. Address in BA and EA. Excerpts from these documents are included in Section 3.2 of the EA.
14	[Evaluate]…impacts of grazing...[on] trampling and erosive loss of fossil and archaeological remains (Osborn et al. 1987). …Complete surveys must be done before grazing can be reauthorized. *Commenter 2, Commenter 5*	This will be covered through heritage report, located in the Project File. Excerpts from this report are included in Section 3.3 of the EA.
15	[Evaluate],,,impacts of grazing on range vegetation, weed invasions, woody plant encroachment, fire suppression and disrupted fire cycle, degradation of soils and cryptobiotic soil crusts (Ambos et al. 2000, Belnap 1990, Belnap 1993, Belsky and Blumenthal 1995a; Belsky and Blumthal 1995b, Belsky and Gelbard 2000, Brotherson et al. 1983; Cole 1990, Dunne 1989, Jones 2000, Kleiner 1977. *Commenter 2, Commenter 5*	Weed invasions would be covered by weed risk analysis, included in the Project File. Excerpts from this report are discussed in Section 3.4 of the EA. Woody plant encroachment is not an issue in southern California. Fire suppression and disrupted fire cycle is outside the scope of this project. Degradation of soils and crytobiotic soil crusts would be avoided by meeting Forest Plan standards for moderate level grazing and allowable use.

No.	Comment	Disposition
16	[Evaluate]…degradation of watersheds through soil compaction and abrasion resulting in reduced rainfall infiltration, increased runoff, accelerated erosion, degradation and dewatering, of streams and riparian ecosystems, lower water quality and water-borne microbial diseases (Armour et al 1991, Belsky et al 1999, Chaney 1990, Krueper 1993, Ohmart 1996, Platts 1981, Platts 1984, US GAO 1988, Atwill 1998). *Commenter 2, Commenter 5*	Degradation of watersheds is avoided by meeting Forest Plan standards for moderate level grazing and allowable use. Water quality will be tracked through the EA as an issue.
17	[Evaluate]…degradation of scenic quality, wild and scenic river, roadless area and wilderness quality, hunting, research and non-motorized recreation quality (USBLM 1975, USFS 1995, US GAO 1991, US GAO 1992). *Commenter 2, Commenter 5*	Degradation of watersheds is avoided by meeting Forest Plan standards for moderate level grazing and allowable use.
18	The Forest Service must analyze impacts of livestock activities on non Forest Service lands in the entire ranching operation on listed/proposed species…and interdependent effects of a connected action that would not otherwise occur in the absence of the federal grazing permit. *Commenter 2, Commenter 5*	Cumulative effects on listed/proposed species are covered in the BA. A summary of these findings is located in Section 3.2 of the EA.
19	Global warming is an established reality that must also be considered. *Commenter 2, Commenter 5*	The Proposed Action is to graze about 103 c/c over a total of 9,850 acres. Vegetation would be maintained over grazed areas. Sustainable rangeland management as proposed is not expected to contribute towards global warming.
20	The Forest Service must commit to selecting the optimal alternative…and state clearly how all resource values have been weighed relatively to one another in arriving at a decision. *Commenter 2, Commenter 5*	Comparison of Alternatives will be displayed in Chapter 2 of the EA.
21	Supports continued range management in Lower Piru Range Allotments. *Commenter 3*	Comment noted
22	We feel the location of the proposed fence in section 16 is impractical due to rough terrain. I would also degrade the visual quality of Blue Point, a prominent landmark. It would be more practical to run the fence along the ridge adjacent to Potholes Trail to a height of about 2500 feet which is 200 feet higher than the highest location that cattle have been observed along the ridge. A gate would be needed to allow hikers and equestrians to access the trail. *Commenter 4*	The commenter's fencing recommendations along Potholes Trail was reviewed. Because of the capable rangelands north of the Potholes Trail, they were not incorporated. The northern allotment boundary described in comment is located near Blue Point and runs along the ridgeline from the tributary south of Blue Point to the wilderness boundary intersection near Potholes Unit. Steep slopes and a sufficient natural barrier along the northern allotment boundary of the Lisk Unit would prohibit livestock, therefore no fencing is proposed at that location. Proposed fencing within the Lisk Unit and inside Section 16 would be required to ensure protection of aquatic TES species and habitat and prevent livestock access to United Water Conservation District (UWCD) lands. Visually, the closest fencing would be approximately ¼ mile from Blue Point along the boundary of UWCD lands and across Piru Creek tributary south of Blue Point. No fencing is proposed within a ¼ mile of Blue Point.

No.	Comment	Disposition
23	We are concerned that the LPNF may intend to increase the level of stocking on the Piru and Potholes combined allotments to 365 AUMs (20 c/c yearlong on Piru + 25 c/c for 5 mo on Potholes) from 312 AUMs (30 c/c, 4 bulls, 30 yearlings for 6 months). *Commenter 5*	Proposed stocking on Piru at 132 head months (11c/c) [written PA refers to 20 c/c which is listed for total area] is a substantial decrease in permitted numbers from 488 head months (30 c/c, 4 bulls, 30 yearlings for 6 months). Some inconsistencies in the tables could have caused confusion between grazing on NFS lands and total allotment area including other ownership. The EA will focus on authorization of livestock grazing on NFS lands. Grazing on private lands will be considered for cumulative effects analysis.
24	In the scoping letter you indicate that new suitability and capacity analyses have been done. Please provide us with copies of these documents. *Commenter 5*	These are included in the Project File. The determination for suitability from this analysis is included in Table 1.2.1-2.

Appendix E - Literature Cited and Documents Incorporated by Reference

Atwill, Edward R.; Lingling Hou, Betsy M. Karle, Thomas Harter, Kenneth W. Tate, and Randy A. Dahlgren. 2002. Transport of Cryptosporidium parvum Oocysts through Vegetated Buffer Strips and Estimated Filtration Efficiency. Applied and Environmental Microbiology, November 2002, p 5517-5527.

Bowyer, R.T.; Bleich, V.C. 1984. Effects of cattle grazing on selected habitats of southern mule deer. California Fish and Game 70: 240-247.

Burgess, Rick. 2000. Rare plant report, Ojai fritillary (Fritillaria ojaiensis). Matilija Copy, Vol. 13(3). Channel Islands Chapter California Native Plant Society, Ventura, CA.

California Native Plant Society. 2001. Inventory of rare and endangered plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society, Sacramento, CA.

Fiedler, P. And Ness, B. 1993. Calochortus. In Hickman, James C. (ed.). The Jepson manual: higher plants of California. Berkeley, CA: University of California Press.

LARWQCB. 1994. LA Regional Water Quality Control Board, Water Quality Control Plan, Ch. 2.http://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.shtml

Reading Room. 2005. Southern California National Forests electronic reference library. http://www.fs.fed.us/r5/scfpr/projects/lmp/docs/species-animals.pdf

Stephenson, John R. and Gena M. Calcarone. 1999. Southern California mountains and foothill assessment: habitat and species conservation issues. General Technical Report GTR-PSW-172. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. 402 pp.

Tate, Kenneth W.; Edward R. Atwill, James W. Bartolome, and Glenn Nader. 2006. Significant Escherichia coli Attenuation by Vegetative Buffers on Annual Grasslands. Published online April 3, 2006.

USDA Forest Service 2000a. Water Quality Management for Forest System Lands in California-Best Management Practices. Pacific Southwest Region, Vallejo, California.

USDA 2007a. Notes from Meeting with Ken Tate (Department of Plant Sciences; University of California, Davis) January 25, 2007 by Crispin Holland and Anne Yost. Pacific Southwest Region. Vallejo, CA.

USDA Forest Service. 2005. Los Padres National Forest Land Management Plan. (The plan can be viewed on-line at http://www.fs.fed.us/r5/scfpr/.).

US Fish and Wildlife Service. 2001. Memorandum of Understanding between USDA Forest Service and USDI Fish and Wildlife Service, 01/17/01.