

United States Department of the Interior
Bureau of Land Management
Redding Field Office

May 2003

***Proposed Plan Amendment to the Redding RMP
and Environmental Assessment for
the Horseshoe Ranch Wildlife Area***



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IN REPLY REFER TO:
1610(P)
CA-360

May 1, 2003

Dear Reader:

Plans for public lands in and near the Horseshoe Ranch Wildlife Area continue to draw wide public interest. We appreciate your participation through public meetings and by your written comments. This is the *Proposed Amendment to the Redding Resource Management Plan; Change to the Boundary of the Horseshoe Ranch Wildlife Area (HRWA)*. An environmental assessment (EA) evaluates the predicted effects of the proposed action and of three alternatives. The approved Finding of No Significant Impact is included following the Executive Summary.

The draft amendment that was distributed for public comments in December, 2001 contained three management alternatives. In the draft, Preferred Alternative 2 was described an "interest area" for future land acquisitions surrounding the Horseshoe Ranch. In response to public comments on the draft amendment, the BLM has removed any reference to an "interest area."

This Proposed Amendment uses the same boundary as the previous Alternative 2 which did not include any private land. The amendment states that any future acquisition by BLM of private land offered for sale in the vicinity would be limited to land immediately contiguous to the Horseshoe Ranch boundary. No private land would be included within the boundary of the HRWA.

A 30-day public protest period will begin on the day a press release is published that the Proposed Amendment is available to the public. Details on this formal protest process, set by BLM's planning regulations, are found in the Protest Rights section of Chapter VII.

BLM has worked to make this proposal clear and consistent with our California Department of Fish and Game management partners and the interests of our neighbors in Siskiyou County. If you have further questions, please contact Glen Miller, Planning and Environmental Coordinator at 530-224-2100, or email to: gmler@ca.blm.gov.

Sincerely,

Charles M. Schultz
Field Manager

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Horseshoe Ranch Plan Area



Map 1 - Location Map

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EXECUTIVE SUMMARY OF THE PROPOSED RMP AMENDMENT

The Horseshoe Ranch Wildlife Area (HRWA) is a 9,000 acre public deer habitat preserve and recreation property. It lies just south of the California-Oregon state line, east of Interstate Highway 5 and north of the Klamath River. The California Department of Fish and Game (CDF&G) manages the HRWA in cooperation with the Redding office of the Bureau of Land Management (BLM).

In 1977, the CDF&G bought the B.B. Miller cattle ranch to protect the principal wintering grounds of the Jenny Creek blacktail deer herd that summers in Oregon. Miller's private property was intermixed with one-mile square sections of public (BLM) lands, all being managed together. Map 3 shows the boundary fencing of the Horseshoe Ranch at the time of purchase. The HRWA is managed primarily to enhance and protect deer winter range habitat and provide public access for hunting and other recreational pursuits. The BLM management goals for the HRWA, from the 1993 *Redding Resource Management Plan* (RMP) are explained in this proposed amendment and environmental assessment (EA).

Some of the private unfenced lands contiguous with the Horseshoe Ranch had been legally grazed by neighboring ranchers under county open grazing rules. However, open range rules do not apply to public lands. Livestock grazing on public lands must be specifically authorized. While a historic grazing lease had been issued for Township 48N, Range 6W, Section 22, the lessees saw further BLM acquisition of private lands as a threat if the HRWA no-livestock-grazing rules caused them to lose their traditional uses.

Two contiguous public land sections, 22 and 34, on the west side of the HRWA, were outside the ranch fence. When the Horseshoe Ranch was purchased, both BLM and the CDF&G considered those sections to be part of the wildlife area. The HRWA is now a combination of state and federal public land with a single entry and exit point. A letter from the CDF&G explaining entry controls is included as Appendix B.

In 1983, CDF&G and the BLM completed a Habitat Management Plan (HMP) for the HRWA. Maps in the HMP show the public (BLM) land of sections 22 and 34, outside the old Horseshoe Ranch fence line, were included as part of the HRWA plan. A 1989 Memorandum of Understanding (MOU) between the CDF&G and the BLM stated the intention of controlling livestock grazing inside the HRWA and affirmed that CDF&G would be the primary management agency. The CDF&G has always administered the HRWA considering sections 22 and 34 to be part of the wildlife area. In 1992 the eastern half of section 21, T. 48N., R. 6W., contiguous with section 22, was acquired by a land exchange consistent with the existing Management Framework Plan, with the intention of including it in the HRWA. A previous lease had been issued to authorize grazing on section 22 for the period April 15 to June 15. Section 34, being unfenced, had been grazed in common with a private land inholding.

The Redding BLM office completed the current RMP in 1993. A main purpose of the Plan was to resolve the issue of where BLM would provide long term federal stewardship versus disposing of some parcels of public land. Resolving that issue meant that some widely scattered, hard-to-manage BLM lands would be disposed of and management concentrated on

a few consolidated areas with unique resource values. One of the future management areas identified in the RMP was the so-called Shasta wetlands, an area between Weed and Yreka in Siskiyou County. Another area identified in the RMP is the HRWA, shown on Map 5, upon which to concentrate long term management. About 7,000 acres of private lands are included within that HRWA boundary. By 1993, over 16,000 acres of scattered parcels of public land in Siskiyou County had been sold or exchanged to private parties. The RMP stated that if private lands within the boundary line were offered for sale, the BLM would seek to acquire those lands for inclusion to the HRWA.

In 1995, two sections of land to the west of the HRWA were offered for sale to the BLM. During public participation in the decision, private land owners in that vicinity became aware of the proposed sale and objected to the sale to the BLM. Some owners of private lands within the potential acquisition boundary line of the HRWA do not want their property included within that boundary. At about the same time, groups were organized for the proposed establishment of a national monument just north of the state border in Oregon. About 60% of lands within the now-designated monument boundary are private. The owners neighboring the HRWA stated that their traditional livestock operations and way of life on private lands were threatened with being prohibited by the BLM acquisitions for the HRWA. Neighbors also expressed fears that the BLM also might attempt to regulate or prohibit livestock operations on private lands within the HRWA boundary line. As a result of public concerns over both the proposed sale and loss of county tax revenues, BLM withdrew from the sale and the two sections were subsequently sold to a private buyer.

Request to amend the RMP. At the request of the landowners and the Siskiyou County Board of Supervisors, the Redding BLM office agreed to consider amending the RMP HRWA boundary. Landowners wanted the BLM to redefine the HRWA boundary as the established fence line of the original Horseshoe Ranch in 1977. In addition, BLM was requested to not acquire any more private lands in Siskiyou County and to manage sections 22 and 34 for multiple uses.

The RMP amendment process. The RMP is being amended in several steps.

First: In February 2000, the project proposal and a 30-day scoping review was announced to gather public comments. Redding BLM staff also conducted several public meetings in Siskiyou County to explain the project. Over 700 public comments and results of the meetings were evaluated to determine the range of issues and public concerns to be covered in the amendment and EA. Comments ranged from calls to minimize the size of the HRWA and maintain traditional life styles, to requests for BLM to balance the previous disposal of public lands in Siskiyou County with acquisitions to enlarge the HRWA. Some respondents asked that the HRWA be merged with the planned Cascade-Siskiyou National Monument.

Second: Based upon the public scoping process, BLM prepared a draft RMP amendment and distributed over 300 copies to the public for a 60-day comment period. The intention of the draft amendment was to address all of the appropriate concerns about BLM management of the HRWA in the following three management alternatives.

1. Alternative 1 responded to the private landowners and the County Board of Supervisors, redrawing the boundary to the 1977 fenced boundary of the original Horseshoe Ranch. The BLM lands outside that boundary would be managed to allow multiple uses including livestock grazing. With this alternative, no further acquisitions of private land would be made in Siskiyou County. Sections 22 and 34 on the west side of the HRWA would be managed for multiple uses, with a primary emphasis on deer habitat.

2. Alternative 2 included redrawing the HRWA boundary around the lands that are administered by the CDF&G and BLM. These lands included the two BLM sections on the west side of the original ranch, T48N, R6W, sections 22, and 34. Alternative 2 would formally add to the HRWA the east half of section 21 that had been acquired through a land exchange in 1992. With agreement of CDF&G, BLM lands on sections 21, 22 and 34 would be managed for multiple uses including livestock use. The last grazing lease for section 22 contained a season-of-use from April 15 to June 15. This alternative also mentioned an “interest area,” for possible future BLM acquisitions for the HRWA.

“ The area considered in this management alternative lies between Interstate 5 to the west, the Klamath River to the south, Camp Creek and Iron Gate Reservoir to the east, and the State Line to the north. Developed lands (those lands that contain improvements which represent more than 20 percent of the total value of the land) would not be accepted for acquisition.”

Public comments on Alternative 2 showed that identification of an “interest area” for future BLM acquisitions was confusing. Although the mapped HRWA boundary area was reduced, the “interest area” was seen as vastly expanding the properties BLM might seek to acquire. Former Alternative 2 was revised to remove the reference to a “interest area” for acquisition. The revised alternative is now the Proposed Amendment. The three management alternatives of the previous draft amendment are analyzed along with the Proposed Amendment alternative.

3. Alternative 3 would continue implementation of the 1993 RMP management direction for the HRWA and maintain the boundary of the RMP. BLM would seek to acquire private lands willingly offered for sale within the boundary. A former grazing lease existed for section 22. Sections 22, 34, and the eastern half of section 21 would be considered part of the HRWA but continue to be managed as a separate unit.

The Redding BLM office received comments on the draft amendment in over 2,200 letters, postcards, emails and faxes. BLM staff categorized the individual comments and prepared responses that are included in this document. Some issues, such as social and economic effects and preservation of local custom and culture that were not analyzed individually in each alternative, are now discussed in more detail.

The four management alternatives analyzed in this Proposed Amendment are:

1. The Proposed Amendment states that the HRWA boundary would coincide with the CDF&G administrative boundary with the addition of the eastern half of section 21, T.48N, R.6W., Map 2. Only property immediately contiguous to that HRWA boundary that meets criteria for deer winter range habitat quality and manageability would be considered by BLM for acquisition from willing sellers. No “interest area” for acquisitions is established now implied. Any land acquired would be added to the HRWA through a plan maintenance action with public participation in an EA, without further RMP amendment. Any subsequent proposed acquisition of land not presently contiguous to the HRWA boundary would require a new plan amendment. Existing fences on the HRWA would be maintained. The exterior boundary would be fenced by the BLM and CDF&G. The public lands on sections 21, 22 and 34 would be managed as a separate management unit pasture for multiple uses including authorized livestock grazing, with emphasis on deer habitat condition. Legal access for the owners of the private inholding on section 34 would be maintained through granting of a BLM crossing right-of-way. It is not BLM’s intent to limit landowner access to that parcel.

2. Alternative 1 to the Proposed Amendment is identical to Alternative 1 of the draft amendment described above.

3. Alternative 2 to the Proposed Amendment is identical to Alternative 2, the draft amendment preferred alternative described above.

4. Alternative 3 to the Proposed Amendment is identical to Alternative 3 of the draft amendment described above.

The EA also clarifies rules from the RMP about the use of vehicle on the HRWA. Authority for administrative access by motorized vehicles is clarified and defined. In summary, vehicle use by the general public is not allowed. Vehicle use for administration, law enforcement and winter range vegetation treatments is authorized both on and off road. No management objectives would be changed. These include protection of deer winter range and other wildlife habitats, protecting cultural-resource values, providing opportunities for public semi-primitive recreation, and preserving or managing the existing scenic quality of public lands.

Third: The last step of the amendment process is to provide a 30-day public protest period for the proposed amendment and the signed Finding of No Significant Impact (FONSI). The protest period is not a public comment period, but it provides the public that has been involved in the planning process an opportunity to protest specific provisions of the plan to BLM’s Director in Washington, D.C.

Protests to the proposed amendment must be filed formally with the Director of the BLM as explained in the section on protest rights. The final action, after any protests are resolved, will be preparation of a final decision record signed by the California BLM State Director.

FINDING OF NO SIGNIFICANT IMPACT

Environmental Assessment CA-360-EA-2001-24

**Proposed Plan Amendment to the
Redding Resource Management Plan
and Environmental Assessment
for the Horseshoe Ranch Wildlife Area**

Environmental effects associated with the proposed amendment and the alternatives have been assessed. Based upon the analysis provided in the attached environmental assessment, CA-360-2001-24, I conclude the approved action is not a major federal action and will result in no significant impacts to the environment under the criteria in Title 40 Code of Federal Regulations 1508.18 and 1508.27. Preparation of an Environmental Impact Statement to further analyze possible impacts is not required pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969.

Approved By: _____

 5/1/03
Charles M. Schultz, Manager Date
BLM Redding Field Office

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Chapter I BACKGROUND

The BLM approved the Redding Resource Management Plan (RMP) in 1993. The RMP guides management of the public lands scattered throughout Butte, Tehama, Shasta, Siskiyou and Trinity counties. A major goal of the RMP is to guide a process of improving management of public lands for the national interest by disposing of scattered parcels in exchange for accumulating assemblages of land of high natural resource value that could be better managed or protected. Those public lands that would be retained in federal ownership and those lands that would be available for disposal are identified on pages 11-13 of the RMP. When fully implemented, the pattern of BLM public land ownership would change from more than 1,000 scattered parcels to only a few more-manageable blocks of land.

The Horseshoe Ranch Management Area (HRWA) is on the Oregon-California border north of Iron Gate Reservoir on the Klamath River. The ranch is part of the BLM Klamath Management Unit in northern Siskiyou County (see Location Map 1). The HRWA is one of the areas identified for potential consolidation of public lands in the Klamath Management Unit. The California Department of Fish & Game (CDF&G) created the HRWA when it bought the former B.B. Miller ranch. The Miller ranch lands were intermixed with public lands, sustaining a cattle grazing enterprise. In 1983, the CDF&G and the BLM prepared a Habitat Management Plan listing goals and actions that improve habitat and general resource conditions. The CDF&G management goals are to protect the local blacktail deer herd and provide hunting and recreation access for “unattached” hunters. “Unattached” hunters are members of the public who have no hunting access privileges to private land.

The following BLM management objectives for the HRWA are found on page 37 of the present 1993 RMP.

“BLM and the California Department of Fish and Game have a successful cooperative management relationship at Horseshoe Ranch which protects the natural values while minimizing taxpayer costs. This relationship is mirrored by BLM and the Oregon Department of Fish and Wildlife north of the state boundary. Expansion of public land administration westward to Interstate 5 would complement public management (Pacific Crest Trail, Soda Mountain Wilderness Study Area, existing public land ownership, etc.) in Oregon, enhance public accessibility, and provide more effective long term protection of the interstate deer herd.”

Specific Objectives (p. 33)

- *“Improve the existing public-administered deer winter range habitat and afford long-term protection for additional privately owned deer winter range habitat in cooperation with California Department of Fish and Game, Oregon Department of Fish and Wildlife and the BLM Ashland Resource Area.*
- *Allow long-term natural restoration of riparian zones to Class 2 or better.*
- *Offer semi-primitive, non-motorized recreation opportunities.”*

Land use allocations, or use restrictions, for the HRWA as stated in the RMP (p. 34)

- *“Area is closed to motorized vehicles.*
- *Manage as Semi-Primitive, Motorized.*
- *All Animal Unit Months (AUMs) are available for wildlife unless BLM determines that domestic livestock grazing management would be beneficial to enhance wildlife habitat.*
- *Acquire available, unimproved privately owned land between Interstate 5 and the existing public lands. Acquire the eastern one-half of Section 20, T. 48 N., R. 5 W.*
- *Seek administrative transfer of three parcels totaling 720 acres from the Klamath National Forest.*
- *Area is closed to mineral leasing.*
- *The available commercial forest land would be managed for the enhancement of other resources.”*

A. Land Exchanges Associated with the HRWA

In 1995 a land exchange of properties in Siskiyou and Shasta Counties was proposed to the BLM. The exchange conformed with the RMP and included two parcels totaling approximately 1,200 acres within the 1993 RMP HRWA boundary. Opposition to the exchange arose in December 1998. Additional concerns included possible changes to traditional uses and to the custom and culture of the area, water rights, access to a private inholding, decrease in the county tax base should BLM acquire title to the offered private land parcels.

The BLM met with the Siskiyou County Land Exchange Review Committee attempting to address those concerns. In the meantime, the owners of the two offered parcels within the HRWA boundary withdrew the parcels from the exchange and sold them to a private party (a neighboring landowner).

Withdrawal of these parcels from the land exchange did not ease the concerns of some people regarding the federal government potential to acquire private land. Some citizens, along with Congressman Wally Herger and the Siskiyou County Board of Supervisors, requested that the western boundary of the HRWA be moved eastward from Interstate 5 to conform with the fenced 1977 Miller ranch boundary. As a result of that request, BLM’s Redding Field Manager, Charles M. Schultz, agreed to consider amending the RMP to reduce the size of the HRWA.

In the same period of these discussions, the Medford District Office of BLM was analyzing future management for an area called the Cascade-Siskiyou Ecological Emphasis Area, an extensive region including significant public land in Oregon immediately north and contiguous to the HRWA. The emphasis area was eventually designated the Cascade-Siskiyou National Monument in June, 2000. The Medford District Office of BLM subsequently prepared a management plan for the new monument. Because the monument adjoins the HRWA, the two BLM offices and the California Department of Fish and Game (CDF&G) signed a

Memorandum of Understanding (MOU) to coordinate future management on both sides of the California-Oregon border.

This plan amendment analysis and environmental assessment has been conducted in accordance with BLM planning regulations in 43 CFR 1610.4-9, and regulations in 40 CFR 1500, et. seq., and complies with the National Environmental Policy Act (NEPA) of 1970.

Chapter II PURPOSE OF THIS PROPOSED AMENDMENT

This document analyzes a proposed change to the HRWA boundary along with three alternatives. Also addressed are the BLM land acquisition policy related to the HRWA and management of livestock grazing. The National Environmental Policy Act (NEPA) requires managers to consider of a full range of management choices when the human environment could be affected by a federal action.

Four choices of action being analyzed:

- 1) The Proposed Amendment to redraw the HRWA boundary, to coincide with the CDF&G administrative boundary; and consider for acquisition only lands, if offered for sale, that are immediately contiguous to the HRWA,
- 2) Alternative 1. Redraw the boundary to the 1977 ranch boundary when the Horseshoe Ranch was purchased and consider no future land acquisition,
- 3) Alternative 2. Redraw the HRWA boundary to the administrative boundary of 1983 and define an “interest area” for consideration of potential future acquisitions,
- 4) Alternative 3. Maintain the 1993 RMP boundary and acquisition goals - the “No Action” alternative.

Of the four choices for action, Alternative 3, the No Action alternative, would continue the present management actions of the 1993 RMP. The administrative boundary of the HRWA, even after 1993, had remained as it was considered to be in the 1983 Habitat Management Plan (HMP). The HMP had always included the two public land sections contiguous to the HRWA on the west, T 48N, R 6W, sections 22 and 34 had always been intended to be part of the HRWA. All of the alternatives are combinations of actions that could each be implemented, and contain different positive and negative elements.

The initial BLM announcement on February 24, 2000, to consider amending the RMP boundary for the HRWA produced more than 1,600 comments. More than 700 pieces of written correspondence came from agencies, organizations and individuals. The broad scope of concerns included land exchanges, perceived loss of tax base, a lack of adequate environmental protection, threats to local ranching practices and a general distrust of government. On one hand are those who want less “government” presence in Siskiyou

County. On the other hand are those who want to see BLM implement the land use management decisions of the RMP, including the acquisition of private parcels, willingly offered, within the present boundary of the HRWA.

Following the distribution of the draft amendment on December 17, 2001 more than 2,200 comments were received in the forms of letters, emails, facsimiles, and postcards.

Some commentators suggested that BLM increase the size of the HRWA to include special areas (Jenny Creek) adjoining the management area (as designated in the 1993 RMP). Some parties state that it is necessary for the BLM to balance the number of public acres sold to private parties in Siskiyou County with the purchase of private acreage in the county. BLM has disposed of 16,928 acres of public land in Siskiyou County and acquired only 1,657 acres of private land in the county since the approval of the RMP (see Appendix A).

A. Issues Considered, Then Dismissed from Full Analysis

BLM staff reviewed all input received from agencies, organizations and individuals relating to the proposal to amend the HRWA boundaries. This review included staff analysis, oral comments from citizens and, especially, the 700-plus pieces of written correspondence from the draft amendment public comment period. Comments were categorized as (1) beyond the scope of the proposed undertaking, (2) dismissed from full analysis with rationale, and (3) issues central to the proposed undertaking that are analyzed in this document.

For a variety of reasons many of the comments received from the public were beyond the scope of the analysis. Some offered personal opinions that did not assist the BLM to decide on a different placement of the management boundary of the HRWA. Some examples of these comments include: agencies provide poor land management; lands should be privately owned; private parties care for land better; too much government control; BLM needs to maximize public ownership to protect resources; stop runaway government; BLM, the Forest Service, and the CDF&G have enough (or too much) land to manage; enough land is set aside for wildlife; the public needs more public land to protect wildlife from private land uses; residents have suffered enough from government; BLM is responding to the demands of an anti-government fringe; the RMP was completed without public input; the RMP did not provide analysis to justify management decisions; proper cutting of timber should prevail; BLM will shut down the area; and the government wastes timber and/or grazing forage.

Other comments went beyond the authority of BLM to address: public lands should be returned to private ownership; don't force owners to sell (BLM has no authority to condemn by power of eminent domain for the purchase of private lands, it only acquires from willing sellers); grazing fees on public land should be reduced; change the Endangered Species Act; and discontinue special deer hunts.

Some comments focused on specific management practices. Where appropriate, these practices are considered in the development of more location-specific plans, meaning they are not part of RMP-level decision making. Examples of this kind of comment include: keep

roads open for fire protection; keep boundary fences straight; lessen fire hazards; burn more brush; and improve more springs.

Other comments went beyond the geographic scope of the undertaking, i.e. the HRWA and the immediate environs: Example statements include: the HRWA should be included in the Cascade-Siskiyou National Monument; expand the study area to the Klamath River at its crossing of the Oregon border; expand the study area west of Interstate 5 (this would not conform with adjoining public land management units).

Some management issues are discussed within the description of the Affected Environment. In each discussion is the reason that it is not fully analyzed for each amendment alternative.

These comments include:

- Cultural Resources and Native American Traditional Cultural Properties (TCPs)
- Feral Horses
- Riparian Habitat Condition
- Special Status Species

Protection of Interstate Corridor for Future Development. The RMP considered existing land uses to ensure compatibility to the degree possible. The lands along the eastern side of Interstate 5 were and still are zoned for non-intensive land uses. Moreover, substantial tracts of lands more suitable for development remain along Interstate 5 immediately south of the HRWA.

B. Issues Analyzed for Each Management Alternative

The major planning issues brought forward for more thorough analysis are described below. The four management alternatives address these issues. Background information is contained in the “Affected Environment” section of this document. The effects or impacts to these planning issues are evaluated by alternative in the “Environmental Consequences” section.

1. Deer winter range habitat. The primary management objective for the Horseshoe Ranch in the RMP is to improve blacktail deer winter range habitat. What would be the results to the habitat under the management alternatives considered?

2. Livestock grazing. Livestock grazing was originally thought to be an issue of great concern to the responding public before the scoping process took place. It now appears to be of a lesser concern than thought. Of the 1,628 individual comments, only 8%, about 127 comments, addressed grazing. Approximately two-thirds of the 127 comments expressed that any expansion occurring to HRWA by the Federal government threatens the existence of local ranches and grazing leases, as well as their “custom and culture.” Approximately one-third of the 127 comments expressed the opinion that the environment was being negatively impacted and jeopardized by livestock grazing in this area. No specific facts were included with the opinions.

Livestock grazing would be consistent with the RMP on public lands and on the HRWA in coordination with the CDF&G managers. If livestock use were determined to have no effect or to improve deer habitat there would be no conflict with the higher priority management objective.

3. Public Recreation. The third objective of the RMP is to improve semi-primitive non-motorized recreation opportunities within the HRWA. How would implementation of the management alternatives affect access for these opportunities?

4. Economic Effects on Landowners and Siskiyou County. What would be the monetary effects to private landowners near the HRWA? Would there be a large difference to County revenues in conversion from private ownership to public ownership?

5. Preservation of “Custom and Culture” in Siskiyou County. This refers to the ability to maintain traditional land use practices such as grazing under open-range rules, lack of necessity to fence, and payment of fees for grazing rights.

Chapter III ALTERNATIVES CONSIDERED

Natural Resource Management Common to All Alternatives. Free-ranging horses would be removed from the HRWA by their private owners and/or public agencies to enhance and protect riparian areas against undue disturbance.

Prior or existing land uses and applications for new uses such as private administrative access authorizations, would be considered for approval by BLM on a case-by-case legal basis. Access to a privately-owned inholding (section 34) could be permitted through BLM's right-of-way process.

The wording for authorized use of motor vehicles on the HRWA would be amended under each alternative. The 1993 RMP states that the Horseshoe Ranch is closed to motor vehicle use. The wording and definitions in federal regulations explaining the authorized use of vehicles on public lands are confusing and inconsistent. On the HRWA, public use is restricted to walking and horseback riding. A letter from the CDF&G included as Appendix B explains the one-entry-point policy.

Management agency representatives may use vehicles for purposes of habitat maintenance and improvement. The present RMP land use allocation, found in the RMP on page 34, will be replaced by the following allocation: The HRWA public lands are designated to be limited-use and public access is normally closed to vehicles. Access is authorized both on and off-road for official vehicles performing administrative or resource improvement activities on BLM lands of the HRWA.

BLM analysis of this RMP amendment has created some concerns from neighboring property owners. South and east of the HRWA are lands have been subdivided into tracts for low-density land development. Most of the land near the Horseshoe Ranch area is zoned Rural Residential and Non-Prime Agricultural 2, 40-acre minimum, according to the Siskiyou County Planning Department. Level lands are zoned Agricultural 1, 40-acre minimum lot size. The subdivisions of Iron Gate Lake Estates and Klamath River County Estates (that adjoin the planning area) are zoned to a minimum of 2-1/2 acres. Lands west of Copco are zoned 80-acre minimum. The BLM has no plans or desire to consider acquisition of any subdivided residential land. This is also stated in the discussion of land tenure decisions.

A. Proposed Amendment: The Resource Management Plan boundary of the Horseshoe Ranch Wildlife Area will coincide with boundary in the 1983 Horseshoe Ranch Habitat Management Plan and the 1989 Memorandum of Understanding with the California Department of Fish and Game. [Map 2]

Management objectives would remain as protection of resource values and enhancement of critical deer winter range habitat. The HRWA boundary would enclose 3,835 acres [this is a

correction to the draft amendment of December, 2001] of federal land and 5,067 acres of state land administered by CDF&G. The outer boundary of the HRWA would be fenced to better manage the resources. Should private lands contiguous to the HRWA boundary become available for acquisition through willing sellers, the BLM would consider the offered property for the extent to which it would meet a set of evaluation criteria.

Any potential acquisition should enhance the purposes and management of the HRWA. The following criteria would be included in an evaluation in consultation with the CDF&G and the public during deliberation for acquisition of private land contiguous with the HRWA:

- Is the land contiguous with the present HRWA boundary?
- What is the quality and continuity of winter deer-habitat?
- Does the property provide additional public access to land for recreation?
- How vulnerable is the property to development?
- What is the potential of improvement of existing winter deer habitat on the property (within the migration corridor, for instance)?
- Is this consistent with the RMP and with the amount of BLM public land holdings in Siskiyou county (disposal vs acquisition)?
- Are there other management concerns to be considered in the acquisition process?

The HRWA boundary will include the original Horseshoe Ranch plus the public lands of sections 21, 22, and 34, T. 48N., R. 6W., MDM. This would add an additional 1,440 acres of public land. Public lands of those three sections will be managed as a separate unit for multiple-use, with primary emphasis on preservation and enhancement of deer winter range habitat. Livestock grazing may be authorized in consideration of traditional use of the lands.

The BLM would consider acquisition only of land contiguous with the HRWA boundary if it were offered for sale. Any such acquired land would be added to the HRWA without the additional action of a plan amendment. Proposed federal land acquisitions would be made public and open to public comment through an environmental assessment process. Collaboration between the BLM and CDF&G, the public, private landowners and local government agencies would be welcomed and encouraged. Acquired land would be actively managed to maintain or improve deer winter range values, while increasing the amount of public land available for outdoor recreational activities.

B. Alternative 1: The HRWA boundary would be redrawn to be the original 1977 Horseshoe Ranch fence line. The BLM would acquire No More Private Land in Siskiyou County. [Map 3]

Implementation of this alternative would establish the HRWA boundary along the lines that existed when the Miller ranch property was purchased in 1977. That boundary is mostly fenced and encloses only the public lands included within the HRWA when it was originally established. Management objectives would stay as they are; to enhance conditions of deer winter range habitat and provide a semi-primitive recreation experience to the public as stated

in the Redding RMP. The HRWA would be reduced in area by approximately 43 percent compared to the No Action (current 1993 RMP) Alternative. The redrawn HRWA boundary would include a total of 7,462 acres: 2,395 acres of BLM- administered federal land and 5,067 acres of state land, all administered by CDF&G. No private lands would be included within this boundary. BLM would acquire no additional private lands to add to the HRWA.

The public lands outside the revised boundary, on T. 48N., R. 6E., sections 21, 22 and 34; and the one parcel of about 40 acres in T. 48N., R. 5E., section 24, would be managed for multiple uses. Traditional uses such as livestock grazing could be continued and authorized after analysis under current BLM grazing rules.

Recreation access: Because of the administrative requirements of the CDF&G to provide only one legal entry and exit point for the HRWA, there would be no legal public access available to public lands on sections 21, 22 and 34 under Alternative 1. Public access control for the HRWA is discussed in Chapter 3, The Affected Environment.

The BLM-managed lands outside the revised HRWA would be treated the same as other parcels in the Klamath Management Unit if an exchange were considered. Lands in the Redding Resource Area could be made available for disposal via exchange to the private sector. Those same public lands could be segregated from mineral location to facilitate their eventual disposal.

C. Alternative 2: Modify a core area HRWA Boundary. The boundary line would be redrawn to a “core area,” including the eastern half of section 21, all of section 22, and the public land of section 34 of Township 48N., Range 6E. Those three parcels would be managed under multiple-use principles. The BLM would maintain the option to acquire private land within an “interest area” defined below. [Map 4]

The HRWA boundary would enclose a core area for collaborative management by CDF&G and BLM. The public lands of M.D.M., T48N, R6W, Sections 21, 22 and Section 34 would be included in the HRWA core boundary. This would add an additional 1,440 acres of public land. Management objectives would be protection of resource values and enhancement of critical deer winter range habitat. The HRWA boundary would enclose 3,835 acres [this is a correction to the draft amendment of December, 2001] of public land and 5,067 acres of land administered by CDF&G. The outer boundary of the HRWA would be fenced to better manage the resources. Should private lands outside the HRWA become available for acquisition through voluntary offers, the BLM would consider acquisition to further the protection of deer winter range habitat and public access to land. The BLM would evaluate the suitability of any private lands offered for sale to the federal government according to the extent and quality of existing or potentially suitable deer winter range habitat. Existing public lands in the area would be evaluated for retention or disposal in the future.

Proposed federal land acquisitions would be disclosed to the public and open to planning

process participation. Collaboration between the BLM and CDF&G, the public, private landowners and local government agencies would be welcomed and encouraged. Acquired land would be actively managed to maintain or improve deer winter range values, while increasing public access for outdoor recreational activities.

The “interest area” considered in this management alternative lies between Interstate 5 to the west, the Klamath River to the south, Camp Creek and Iron Gate Reservoir to the east, and the State Line to the north. Developed lands (those lands that contain improvements which represent more than 20 percent of the total value of the land) would not be accepted for acquisition. The BLM may allow continued livestock grazing on acquired lands if compatible with the management objectives of the HRWA.

The boundary of Alternative 2, Map 4, is the same as the boundary of the HRWA shown in the 1989 Memorandum of Understanding (MOU) between the BLM and the CDF&G. The 1983 HRWA Habitat Management Plan assumed the same boundary. Sections 22 and Section 34 were contiguous to the original 1977 ranch boundary when the Miller ranch was bought. One added parcel, the eastern half of section 21 was acquired by exchange in 1992. A little over two square miles, 1,440 acres, would be added to the original 2,395 acres of public lands in the HRWA as shown on Map 2b. The HRWA boundary would enclose 3,835 acres of public land administered by BLM, and 5,067 acres administered by CDF&G, a total of 8,902 acres. Thus, about 14 square miles of public lands would be managed as the core area through collaboration between CDF&G and BLM. Management objectives in the RMP would not be changed. The outer boundary of the HRWA would be fenced. The north-south fence line on the west sides of sections 35, 26 and 23 would be rebuilt. Traditional grazing practices could be continued Sections 34, 22, and the eastern half of section 21. These parcels would be managed for multiple uses. Recreation access to all of the present HRWA would be identical with the present RMP.

D. Alternative 3: The No Action Alternative. The BLM would continue to implement the 1993 RMP goals within the boundary line shown in Map 5.

Implementation of the 1993 Redding Resource Management Plan would continue under this action alternative. The HRWA boundary established as the 1993 RMP states, “Expansion of public land administration westward to Interstate 5 would complement public management in Oregon, enhance public accessibility, and provide more effective long-term protection of the interstate deer herd.” With respect to deer winter range, the boundaries established in the 1993 RMP included the majority of “critical deer winter range” identified by CDF&G at that time. The 1993 boundary would include 3,843 acres of BLM-administered public land, 5,067 acres of public land administered by CDF&G, and 732 acres of public land administered by the USFS. Within this boundary are located 7,766 acres of private lands. Any of these private properties voluntarily offered for sale would be considered for acquisition. If private lands offered by willing sellers were acquired the lands would be incorporated into the HRWA. Decisions on the appropriateness of future livestock grazing would be made in collaboration with the CDF&G.

The Land Parcel Density Map (Map 7) shows the degree of development of the lands in the area of Horseshoe Ranch. The lands within the four management alternatives listed above are in areas of low density, as shown on the map, and are confined to areas that have not been developed.

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Table 1.

Comparison of the Proposed RMP Amendment and Alternatives

Alternatives	Proposed Amendment	Alternative 1	Alternative 2	Alternative 3
Boundary	Redraw to 1983 administrative	Redraw to 1977 ranch boundary	Redraw to 1983 administrative	Keep the 1993 RMP boundary
Acquisition Policy	Maintain option to acquire contiguous lands if offered for sale and meets identified criteria	Acquire no more land in Siskiyou County	Maintain option to acquire lands within an "interest area" surrounding the Horseshoe Ranch	Acquire lands within the RMP Horseshoe Ranch boundary if offered for sale.
Livestock Management	Sections 21, 22, 34 available for livestock grazing	All public land outside original boundary available for multiple use management	Sections 21, 22, 34 available for livestock grazing	Section 22 has been available for grazing, section 34 grazed in-common
Public Access	Contiguous land acquired added without further amendment	No further acquisitions for public use	Any land acquired would be available for public use if legal access were available	Acquired land available for public use if legal access is available

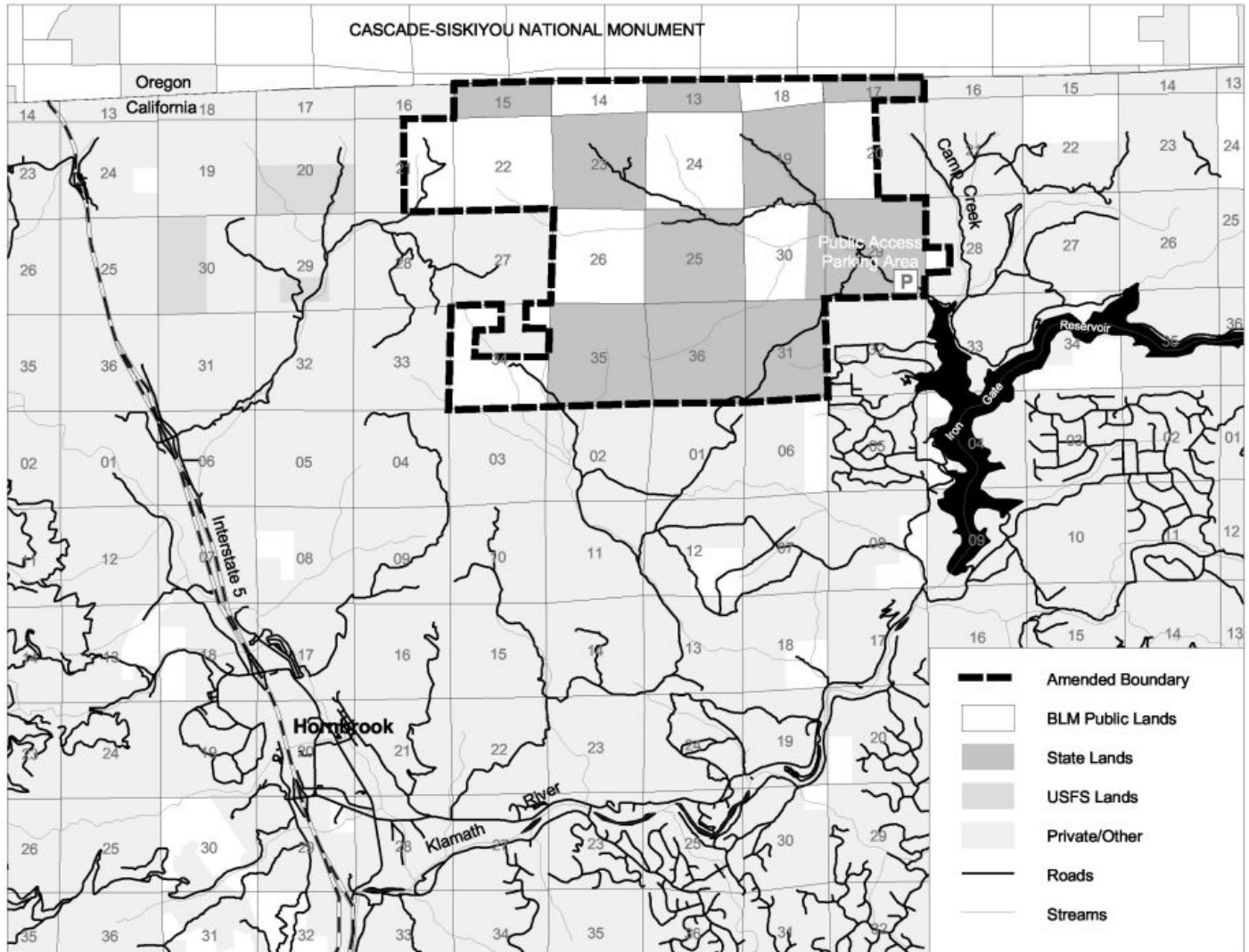
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Table 2.

Summary Table of HRWA Area by Management Alternative
Refer to Maps 2, 3, 4 and 5.

Proposed Plan Amendment: administrative boundary HRWA. Consider acquisition only of contiguous private land if offered.				Alternative 1: Original Horseshoe Ranch boundary. No acquisitions of private lands.				Alternative 2: Core HRWA. Consider acquisition of private land within an “interest area” if offered.				Alternative 3: HRWA boundary to I-5 and seek to acquire the private lands to I-5.			
State	USFS	BLM	Private	State	USFS	BLM	Private	State	USFS	BLM	Private	State	USFS	BLM	Private
5,067 acres	0 acres	3,835 acres	0 acres	5,067 acres	0 acres	2,395 acres	0 acres	5,067 acres	0 acres	3,835 acres	0 acres	5,067 acres	732 acres	3,843 acres	7,766 acres
Total: 8,902 acres 13.9 sq. mi.				Total: 7,462 acres 11.7 sq. mi.				Total: 8,902 acres 13.9 sq. mi.				Total: 17,408 acres 27.2 sq. mi.			

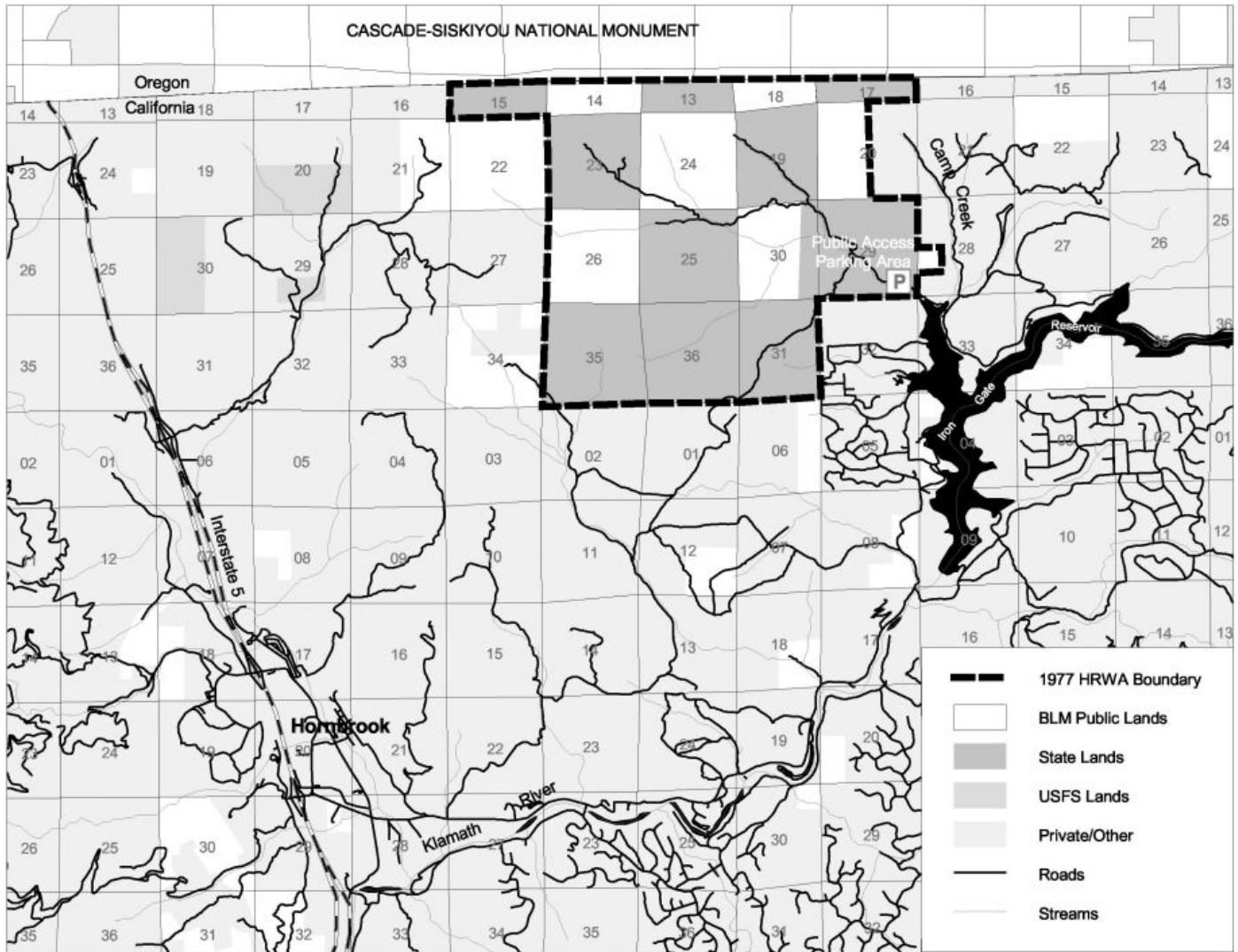
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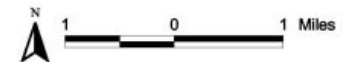
Map 2 - Proposed Amended Boundary



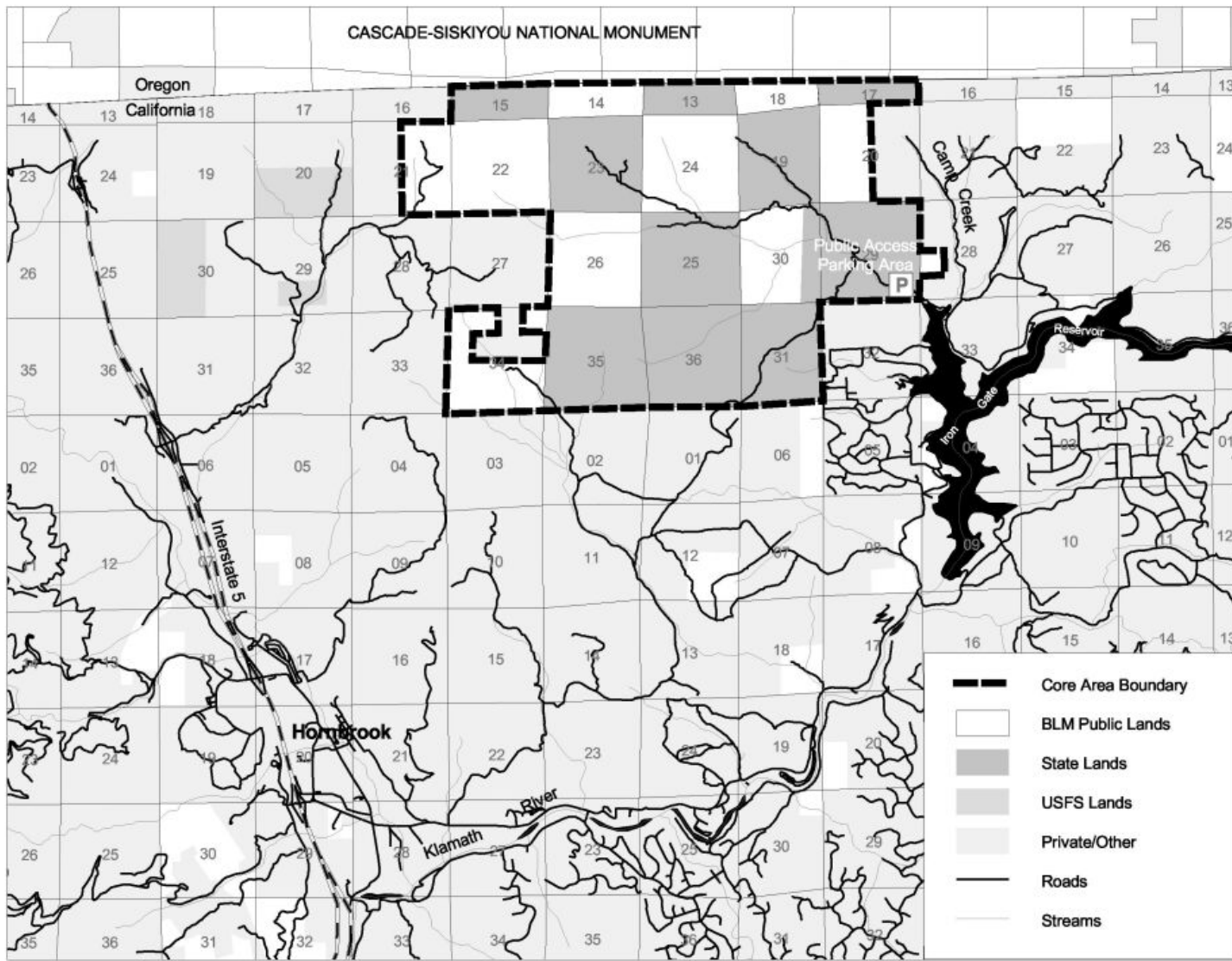
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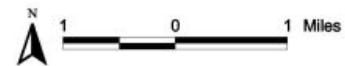
Map 3- Alternative 1.
Limit the HRWA to Original 1977 Boundary



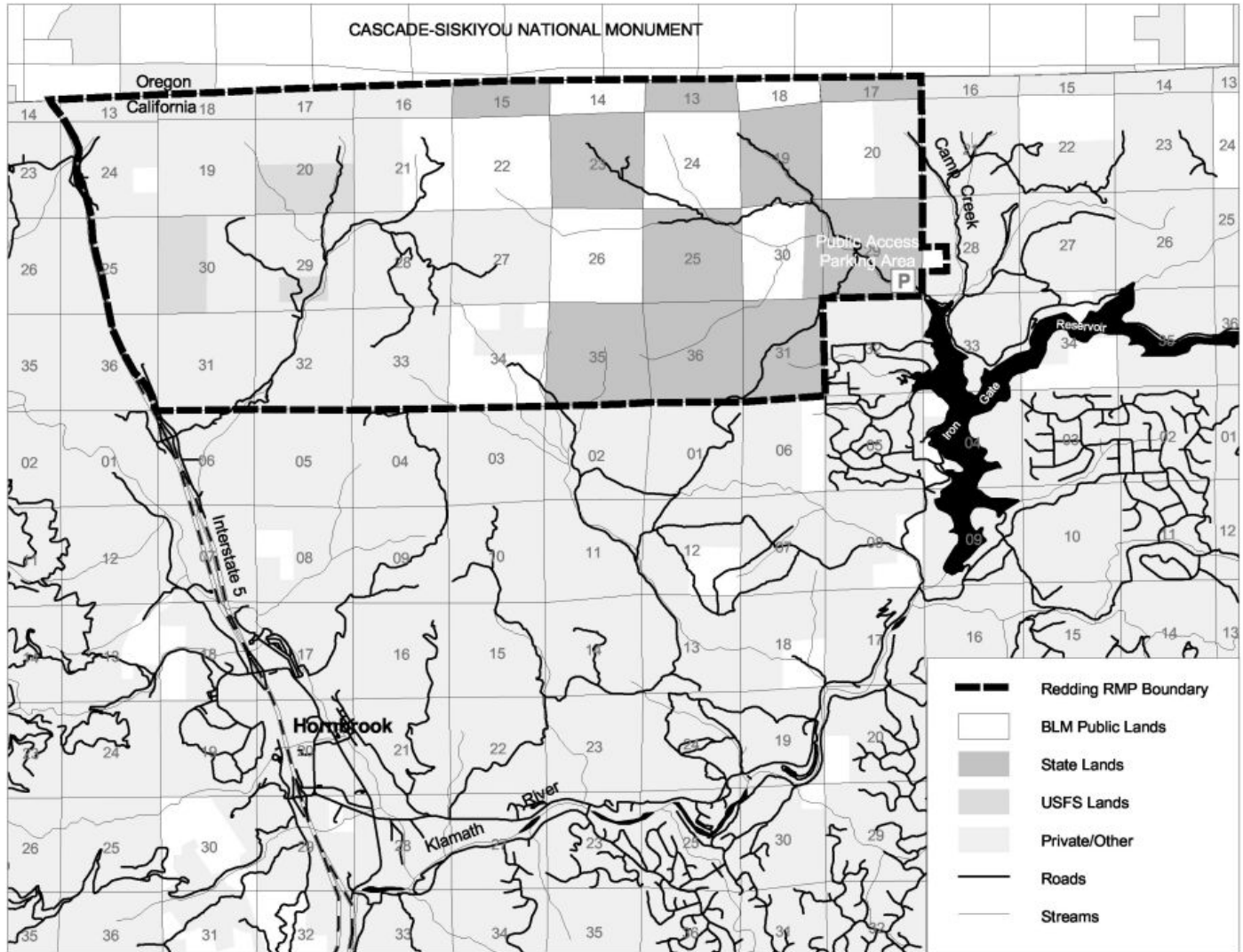
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**Map 4 - Alternative 2.
Modified Core Area HRWA Boundary**

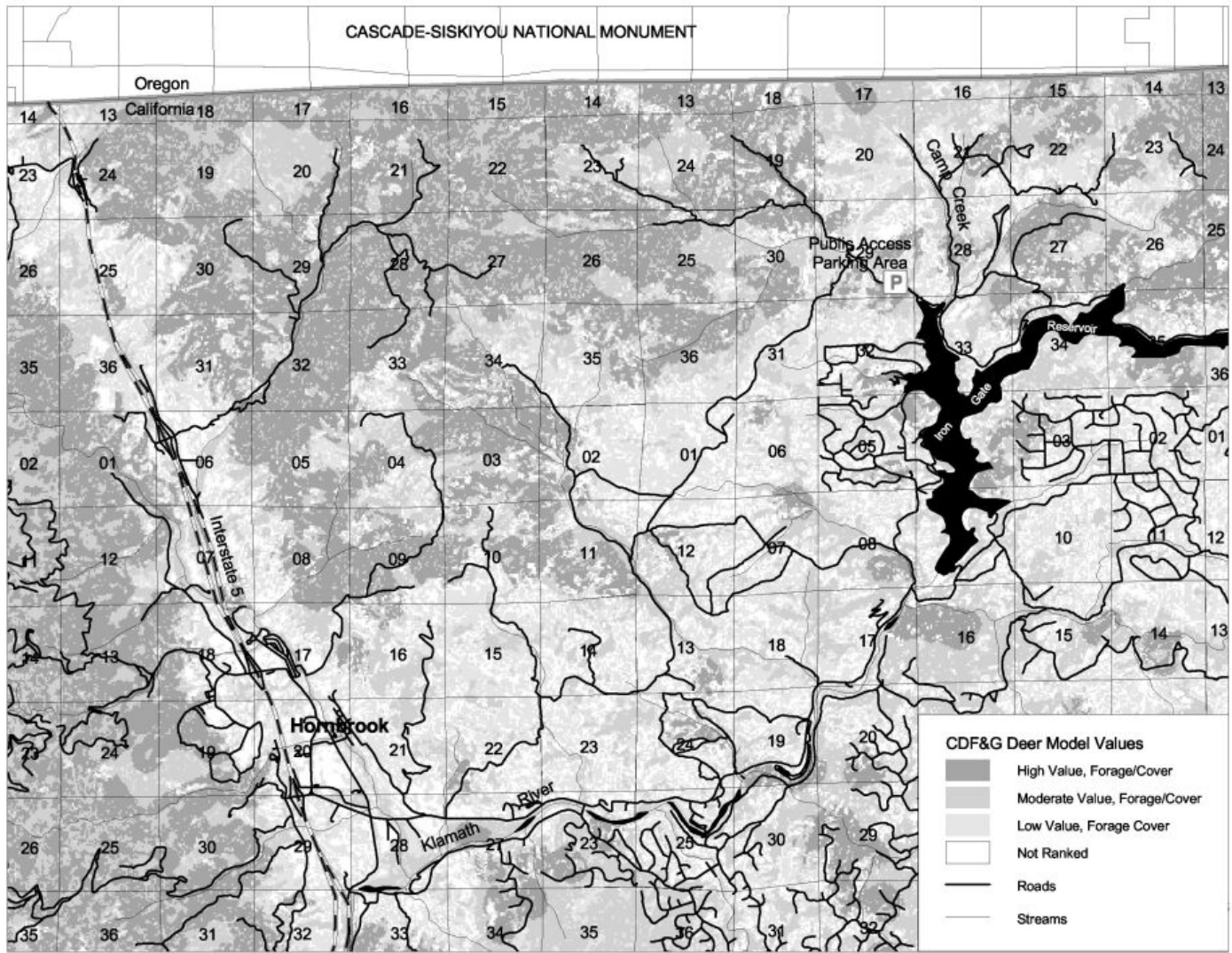


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**Map 5 - Alternative 3. The No Action Alternative.
Implement the Redding RMP**

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Data Source: California Department of Fish and Game.
1998 Deer Model of Habitat Forage and Cover

Map 6 - Deer Habitat - Forage and Cover Values

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Chapter IV AFFECTED ENVIRONMENT

This section provides information related to the major planning issues, i.e. deer winter range habitat, grazing and recreation, economic, and cultural effects. It also gives background information on elements of the environment that have been dismissed from fuller analysis as a planning issue, i.e. cultural resources, minerals, riparian habitat, special status species plants and animals, and horses.

A. The Cascade-Siskiyou Ecological Section. The HRWA is on the lower foothills of an area of northern California and southern Oregon known as the Southern Cascades ecological section. The section comprises about 88% of the total area of the HRWA, with the exception of a thin strip along the western boundary. The Southern Cascades ecological section is underlain by Tertiary volcanic materials that are mostly Eocene and Miocene andesite flows. Quaternary alluvial and lacustrine basin-fill has accumulated in some areas. Moderately steep foothill slopes predominate in this section. The elevation ranges from 2,200 feet along the Klamath River, to about 4,300 feet. Soils are Lassen-Kuck-Mary, moderately deep, gently sloping to steep, well-drained clays, clay loams, and stony loams. Vegetation is predominantly native plant communities consisting of big sagebrush series, Oregon white oak series (the most extensive), ponderosa pine series, mixed conifer series occurring on north-facing slopes at higher elevations, plus wedgeleaf ceanothus series. Grassland communities are common on south-facing slopes at lower elevations.

The remaining ecological section is associated with the Klamath Mountains and makes up about 12 percent of the total area. It is situated along the extreme western boundary, lying east of Interstate Highway 5 in a thin corridor about a mile wide. The Klamath Mountain ecological section is composed of Upper Cretaceous marine sedimentary materials of the Hornbrook Formation. Soils are Marpa-Kinkel-Boomer, which are moderately deep to very deep, gently sloping to very steep, well-drained gravelly loams, and very gravelly loams. Since this narrow corridor is more of a transition zone between these two sections, it is more geomorphologically and vegetatively similar to the above adjoining ecological section.

Though some invasive, exotic plants such as medusa-head and yellow star-thistle are found in some of the lower elevation communities that have historically received heavy livestock use, much of the higher elevation and lightly-grazed communities remain unaffected by livestock use.

The area of the HRWA is fairly uniform throughout; geomorphologically, vegetatively, climatically, and topographically. Even though it has some unique ecological qualities, it does not compare to scenic areas with greater differences and more diverse ecological sections, such as the neighboring Oregon lands to the north, that incorporate the Cascade-Siskiyou National Monument.

B. Cultural Resources. Cultural resources are generally divided into (1) those historic sites dating between contact between Euroamericans and Native American Indians (ca. 1820s) and 50 years ago, (2) prehistoric Native American Indian sites, and (3) Native American Indian sites related to traditional uses, including sacred locations and food and other products' gathering locales. All three resource categories are found in the greater Horseshoe Ranch vicinity (see Appendix C for details).

Historic Resources. During the ranching period (1850s-1930s), limited irrigation work began to move water about the more gentle landscape. Hunters depleted game, and brought local extinction to animal species such as wolves, antelope, mountain sheep and grizzly bears.

The cattle and sheep industry during this ranching period was spread throughout the area, both on an official and unofficial basis. The memoirs of range rider George Wright, on file with BLM, Medford and Redding, provide a vignette of conditions historically within at least portions of the study area:

“During the spring of 1889 and 1890 . . . hundreds of cattle had just been loosed on the rangeland to graze the southward slopes of hillsides between Hornbrook and the Pilot Rock area . . .”

Sheep and cattle grazed unregulated from shortly after the Gold Rush, and before most homesteading activities (the Homestead Act was established in 1862). By the early 20th century many of the pastures, rangelands and riparian communities had been heavily affected by overgrazing and indiscriminate range burning although quantitative data are hard to determine. Recovery is continuing to this day.

Recreation uses on public lands in the area such as hunting and fishing increased quickly following World War II.

Prehistoric Resources. The prehistoric sites (found during prior inventories) appear to be mainly late prehistoric judging from the projectile points recovered. Major villages are known to occur along the Klamath River and within the lower stretches of perennial secondary streams. As one moves further away from the Klamath and lower stream stretches, occupation seems more ephemeral, probably special use sites related to seasonal hunting and foraging, as in bulb, tuber and root collecting in meadows. Additionally, there are scattered concentrations of quartz-related cryptocrystalline silicate materials including chalcedony and chert/jasper. These materials appear to have weathered out in places from the basic igneous rocks. They occur primarily in colluvial deposits and stream beds and their occurrence is difficult to predict. Such materials facilitated expedient flaked stone tool production. Minor prehistoric prospecting and quarrying appears to be present in the area and such siliceous materials were locally used for various cutting/scraping tools. Better materials in biface and core/tool form

may have been exported to other areas which, along with materials testing, has left behind flaked stone by-products.

Traditional Use Site Resources. Written inquiries to the various tribes within the greater region regarding Traditional Cultural Properties of concern within the greater study region elicited no response. An examination of an earlier sacred lands' study completed for BLM by Theodoratus Cultural Research in 1985 was examined (*Mapping Project Ethnographic Inventory Shasta-Trinity National Forest, Mendocino National Forest [Corning and Stonyford RD], Redding Resource Area, Bureau of Land Management*). This report and maps are on file with BLM in Redding. The record shows two Shasta villages located adjoining the study area, *Ekwik'*, along Camp Creek, and *Id-doo-kwi*, along the Klamath River near the mouth of Camp Creek.

Archaeological sites, historical sites and TCPs are not considered at risk, considering the probable continuation of low-intensity land uses expected during the next seven years of the RMP life span under any management alternative. The levels of future disturbance due to grazing are not expected to further exacerbate the existing amount of disturbance in the upper levels of the soil, which may contain artifacts or other cultural material. A discussion of cultural resources and TCPs is found in the "Affected Environment" section of this document.

C. Feral Horses. Horses, either wild or feral, have historically been documented using the HRWA; they continue to use it now. The study area was never designated as a Herd Management Area (HMA), so the Redding RMP didn't assign any AUMs for horses. Their presence conflicts with current management objectives for the HRWA, and removal will be necessary in the future. Since horses were not identified through public scoping as a concern, are not a management unit objective of any existing land use plan, and their removal is appropriate under all management alternatives, the management of horses is dismissed from full analysis.

Historical accounts document horses using the HRWA and they continue to be present today. Recently, approximately 20 horses were observed within the HRWA. These animals were in two distinct bands located in lower Scotch Creek and at the juncture of Slide and Brushy Creeks. Previous visits have documented horses at the head of Dry Creek and at other locations. Many of these animals exhibit no visible signs or marks of domestication, even though in the past such evidence of domestication was present on a number of horses. It is BLM's belief that these animals are not "wild, free-roaming horses." Over recent decades these animals have been claimed by adjoining private landowners; however, the horses continue to roam. Even though numbers and geographic range have fluctuated over the years in relation to gathering and other factors, it is anticipated that the number of horses will increase without some type of intervention, as affirmed by the numbers of foals seen attached to recently observed bands.

Recent riparian surveys have indicated some negative effects to vegetation and stream side soils on lower Scotch Creek as a result of trampling or grazing by horses. As band size increases, riparian degradation and negative impacts are expected to the creek bed. CDF&G has stated that the presence of the horses is not compatible with the management goals for the HRWA and they desire that all horses be removed.

D. Minerals (Withdrawal from Location). BLM received many comments (all on identical form-type postcards) from members of the public recommending the withdrawal of the public lands within the HRWA from mineral location. The rationale was to “protect” the public lands from the impacts of mineral development and to conform with a similar mineral withdrawal initiated by BLM on the adjoining Cascade-Siskiyou National Monument in Oregon.

Lands within the HRWA study area are not considered mineral in character. As an example, no mining claims exist on the public lands. Although portions of the Cascade-Siskiyou National Monument in Oregon may be considered mineral in character, necessitating a withdrawal of those public lands from mineral location, a withdrawal of the public lands within the HRWA from mineral location is unnecessary. The wildlife area is located in the Cascade Range geologic province. The geology consists of Cenozoic-age volcanic rock types identified as lava flows and pyroclastic deposits, primarily of andesite and basalt composition. Cretaceous in age, or younger, sediments are likely to be present at depth beneath some of these lands. Sediments and soils derived from volcanic flows are abundant on the surface on some of the parcels, while others contain bare rock from recent lava flows.

There are presently no Federal mineral leases, mining claims, or authorized mineral material disposals on any of the parcels. The subject land is historically and currently lacking in any mineral development activity, with the exception of a reported very small gold (?) prospect located in the west half of Section 24. All of the subject lands have a mineral potential rating of low, with the lowest level of certainty (LA), for gold, silver, and mercury in hot spring-type deposits. No other locatable mineralization is known to occur in the geologic environments present on or beneath these lands.

The potential for the occurrence of oil and gas beneath all of these parcels is low (LB), based on the probable existence of Cretaceous strata beneath the surface. The potential for the occurrence of geothermal resources beneath all of these parcels is low (LB), based on the existence of volcanic rock types on the surface. The land has a low (LB) potential for common mineral materials, the type which could be used in local construction projects for purposes such as building or road fill material. No mineral development is foreseen in this area.

E. Federally Protected Species Few special status species are located within the HRWA boundaries under any of the management alternatives. The species that are present are not considered under risk based on the continued low-intensity land uses expected during the next seven years of the RMP life span. A discussion of special status species is found in the “Affected Environment” section of this document.

F. Deer Winter Range Habitat California's mule and black-tailed deer are one of the state's most widespread and visible species. They range across many habitats and their value as a wildlife resource in the state is high. Deer are enjoyed by the public for viewing and other forms of recreation including hunting. They are an integral part of the food chain as grazers/browsers of wildlands and as prey species (Loft, et al. 1988). Deer are the most popular game mammal in California, attracting between 165,000 and 200,000 hunters annually. Most of this hunting opportunity occurs on public lands and contributes substantially to the economies of the state and local communities. It has been estimated that each year the public spends \$180 million in personal and business income in California to hunt and to view deer. (Loomis, et al. 1989).

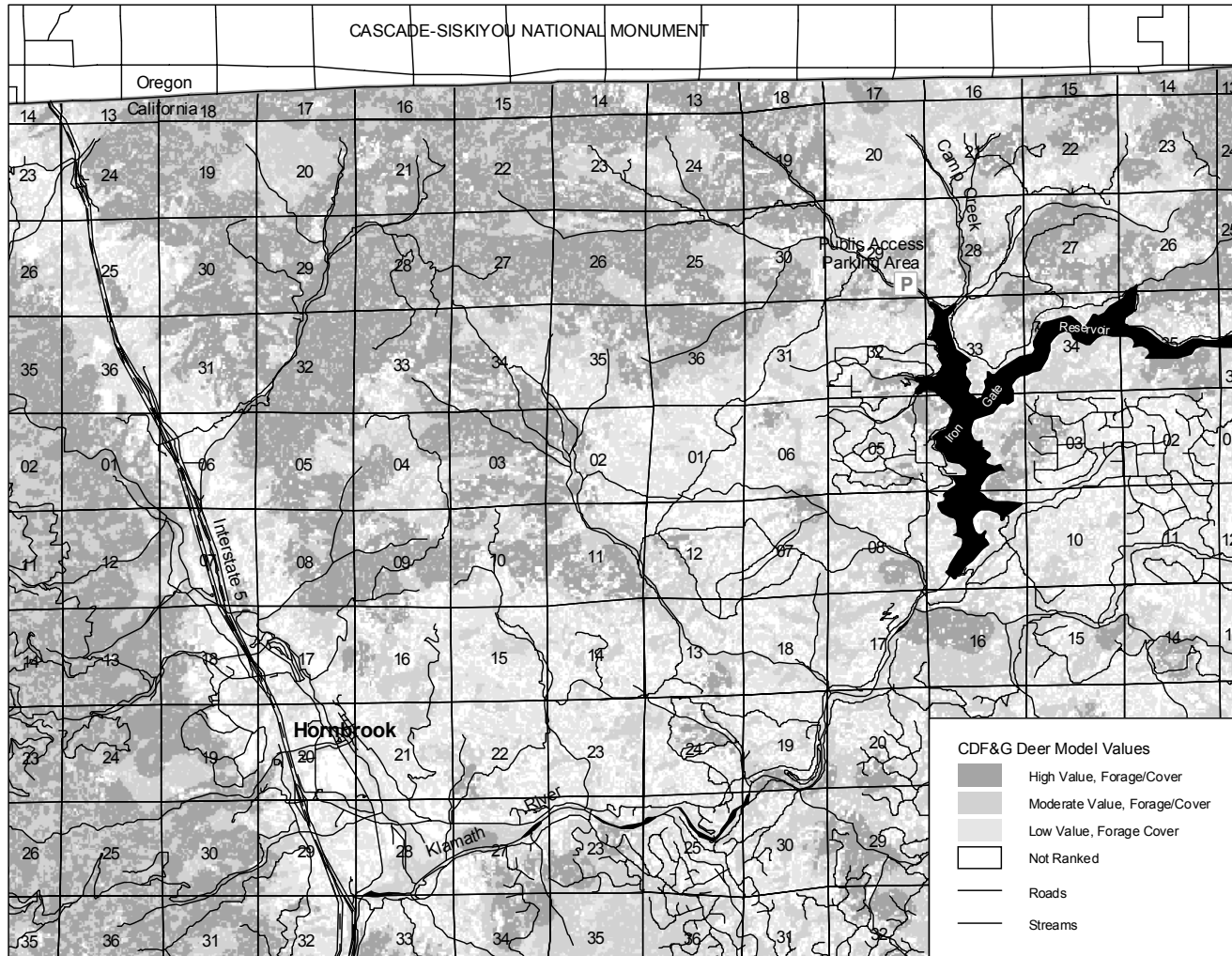
Deer populations in California likely peaked in the late 1950's and 1960's and have declined substantially since that time. Factors contributing to these population declines are complex and are likely interrelated. The primary factor appears to be long-term declines in habitat quality. Much of the early-seral vegetation (low to the ground, succulent and palatable to the deer) that was comparatively abundant in the 1950's has been replaced by decadent (taller, coarser, less succulent and palatable) shrub fields, and exotic annual plants. Late seral-stage vegetation provides forage of lower nutritional value.

The HRWA and surrounding lands provide winter habitat for several deer herds. Although some deer reside on the HRWA year round, most of the animals that use the area migrate from summer foraging in Oregon. The quality and extent of deer winter range habitat on the HRWA and surrounding lands is thought to be critical to the perpetuation and health of deer herds in this region. Considerable opportunities exist on the HRWA and surrounding lands to increase both the quantity and quality of forage available to deer through the management of vegetation on these lands.

CDF&G has mapped the distribution and relative quality of deer habitat within portions of northern California using, in part, a habitat classification developed from Landsat Thematic imagery by the Spatial Analysis Laboratory at Humboldt State University. This deer habitat map (habitat model) was based primarily on an assessment of the value of habitats characterized by Landsat imagery as cover and forage as well as their juxtaposition. For example, early seral shrublands were rated highly for deer forage and were assigned the highest rating if they occurred near high quality cover.

The HRWA and surrounding lands contain a relatively high percentage of high quality forage (approximately 30%) based on CDF&G's habitat model. Almost half of this area was rated as either low or moderate quality forage. Many sites on the HRWA and surrounding lands can be improved for deer by management to establish early seral shrubs, reduce the prevalence of exotic annual plants, reduce juniper encroachment on rangelands, and enhance the distribution and health of oak woodlands. Examples of these practices are brush burning, machine clearing and piling of brush, and the replanting of desirable browse species.

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Data Source: California Department of Fish and Game.
1998 Deer Model of Habitat Forage and Cover

Map 7 - Deer Habitat - Forage and Cover Values

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Future habitat and wildlife management activities do not depend on the four alternative actions of this amendment. Wildlife managers used predictive models of the watershed to assess deer habitat quality and potential for acquisition. Various ecological modification techniques would be employed to benefit species such as deer that depend upon early seral succession processes. Early seral processes means sprouting of brush species, high numbers of species that thrive in full sunlight (little shading) on bare soil (minimal plant litter) surfaces. This approach would be applied to achieve a landscape mosaic of thermal and escape cover and winter forage. The result would be expected to result in a larger and healthier deer herd that has increased survival and recruitment of fawns. Please refer to Map 7. Deer Habitat - Forage and Cover Values, page 45.

G. Livestock Grazing. Currently, no authorized grazing occurs within the fenced portion of the HRWA, i.e., within the 1977 HRWA boundary fence. Additional lands assigned to the HRWA in 1983 through the Horseshoe Ranch Habitat Management Plan could also be fenced, with a similar management prescription as discussed in the 1989 Agreement for Administration of Livestock Grazing Within the Horseshoe Ranch Habitat Management Area. The 1989 Agreement states that “Livestock grazing within the boundaries. . .will not be allowed, unless both parties identified in this agreement (i.e., BLM and CDF&G) agree to allow grazing to benefit wildlife resources.” Both agencies are willing to consider grazing as one method for deer habitat improvement.

The Horseshoe Ranch, as outlined in the RMP, is used for grazing predominately by one operator. This operator has two small federal grazing leases along with his own 2,900 acres located on the west side of the existing HRWA, and within the Hutton Creek drainage. These two federal leases are:

- (1) Hutton Creek (Forest Service lease) encompasses 720 acres for seven cattle. The period of use extends from April 15 to June 30, and
- (2) Upper Brushy Gulch (BLM lease) encompasses 640 acres for 25 cattle. The period of use runs from April 16 to June 16. This lease was put into a “non-use” status between 1991 and 1998, and again in 2000.

One 480-acre parcel of federal public land at the head of Dry Creek is receiving some unauthorized use in-common by an adjacent landowner, who has applied for a 125-head grazing permit.

The complex land ownership pattern west and south of the 1977 HRWA boundary and the lack of adequate fencing, have resulted in an increase in grazing-related issues in recent years. Historically, this area has seen unauthorized livestock grazing. Over the years, major range improvements in the form of fencing have been built to alleviate these problems, e.g., the state-line fence and the 1977 HRWA boundary fence. In more recent years, some major landowners have changed their land uses, finding livestock grazing not compatible with their desired use for their property. The change has come in direct conflict with those who historically have

used these lands under the “open range laws” for grazing [open range rules require neighbors who do not want grazing on their property to fence out unwanted livestock]. In the last year, the east side of T. 48N, R. 6W, section 33, and the south boundary of section 27, both bordering section 34, have been fenced, preventing livestock movement off of section 34.

H. Land tenure (ownership). Land acquisitions or disposals through exchange or sale:

Under the proposed RMP amendment, acquisitions would be considered only for lands contiguous to the HRWA. BLM does not want to perpetuate checker board ownership patterns. BLM has sought to consolidate the scattered parcels through the current management plan. Consolidated ownership can provide more public access to public lands, and enables more effective resource management. If undeveloped private lands contiguous to the present HRWA boundary were voluntarily offered for sale or exchange by private land owners, BLM would evaluate the suitability of those land against a set of criteria based upon location contiguous to the HRWA boundary, deer habitat quality, and opportunity to increase access to public lands.

Proposed federal land acquisitions would be publicized and open to public participation through an environmental assessment process. Collaboration between the BLM, CDF&G, the public, private landowners and local government agencies would be welcomed and encouraged. Acquired land would be actively managed to maintain or improve deer winter range values, while increasing public access to the HRWA for outdoor recreational activities. Any lands that contain improvements representing more than 20 percent of the total value of the land, would not be considered for acquisition.

I. Public Recreation. The RMP resource condition objectives are for the Horseshoe Ranch area to be managed for semi-primitive, non-motorized recreation opportunities. The land-use allocations call for the area to be managed for a semi-primitive, motorized recreational experience under the Recreation Opportunity Spectrum (ROS) classification system. In addition, the off-highway vehicle designation for the same area is “closed to motorized vehicles” (see below for definitions). The resource condition objectives and land-use allocations seem to conflict with each other.

The RMP allocation for the HRWA as semi-primitive motorized recreation referred to the proximity of traffic on both Interstate Highway 5 and Klamath River highway that could affect a recreationist’s experience on the HRWA. Whether or not that is true does not influence the BLM designation of the HRWA as closed to vehicle access by the public. This clarification is consistent with the CDF&G management policy for vehicle access. No amendment to the RMP is necessary

Vehicle Access. CDF&G rules for vehicle regulations on HRWA state lands are similar to those for federal lands. Currently, they do not allow motorized vehicles on state lands within the HRWA.

1. BLM Recreation Opportunity Spectrum (ROS) Classification Definitions

ROS - A continuum used to characterize recreation opportunities in terms of setting, activity, and experience opportunities. Two types of semi-primitive recreation are:

Semi-Primitive Motorized - An area that is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted.

Semi-Primitive Non-Motorized - An area is characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted.

A Recreation Experience Opportunity is a chance for a person to realize predictable psychological and physiological outcomes from engaging in a specific recreation activity within a specific setting.

Off-Highway Vehicle (OHV) - Any motorized track- or wheeled vehicle designed for cross-county travel over all types of natural terrain.

Off-Highway Vehicle Use Designations (BLM specific):

Open - An area where all types of vehicle use is permitted at all times including cross-county travel.

Limited - An area restricted at certain times, in certain areas, and/or to certain vehicular use. Restrictions may be of any type, but can generally be accommodated within the following type of categories: number of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions.

Closed - An area where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the Authorized Officer.

2. Recreational Visitor Use. Currently, the HRWA and adjacent public lands receive relatively low use by recreationists partly due to its location and limited public access. Off-highway vehicles and/or motorized vehicles are prohibited from entering the area, but visitors may walk in from the Horseshoe Ranch administrative entry point at the southeast corner (See Map 2). No other public access points are available because of the lack of public roads adjacent to the HRWA.

CDF&G estimates put visitor use at approximately 2000 visitor days for the year 2000.

<u>Number of Visits</u>	<u>Type of Visit</u>
1,050	Nature study
450	Upland game hunting
300	Deer hunting
200	Equestrian

J. Riparian Habitat Condition. The general trend throughout the region is an improvement of riparian vegetation. At one time over grazed, these areas, such as Scotch Creek, now appear to be recovering or recovered. Comparative data on public/private lands have not been developed since the HRWA was established that would show if recovery rates have accelerated in comparison to nearby private lands. A discussion of riparian areas is found in the “Affected Environment” section of this document.

Background: (Adapted from: *A User Guide to Assessing Proper Functioning Condition and Supporting Science for Lotic Areas* TR 1737-15 1998; *Process for Assessing Proper Functioning Condition* TR 1737-9 1993). BLM depicts natural riparian areas as resources whose capability and potential is defined by the interaction of three components: (1) vegetation, (2) landform/soils, and (3) hydrology. Standard BLM riparian assessment protocol places streams into three categories: proper functioning condition (PFC), functional-at risk (FR), and nonfunctional (NF).

Proper Functioning Condition: Riparian areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high flows, thereby performing the following functions: erosion reduction, water quality improvement, sediment filtration, bedload capture, floodplain development, flood water retention, ground water recharge, and development of diverse water depths and water temperature regimes. Succinctly, PFC is a state of resiliency that will allow a riparian area to maintain ecological integrity (hold together) during high-flow storm events with a high degree of reliability. This resiliency allows an area to then produce desired values, such as fish habitat, neotropical bird habitat, or forage, over time. Riparian areas that are not functioning properly cannot sustain these values.

Functional-At Risk: FR riparian areas are in functional condition but a soil, water or vegetation attribute makes them susceptible to degradation during high flow events.

Nonfunctional: NF riparian areas are those that clearly are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows. The absence of certain physical attributes, such as a floodplain where one should be, are indicators of NF conditions.

Condition assessments were conducted between April 30 and May 3, 2001 by Dan Dammann, Hydrologist, and Doug Morical, Stream Survey Assistant, from Medford District BLM. Riparian functional assessments were made for Scotch Creek, Slide Creek, Brushy Gulch, and Wildcat Gulch in the HRWA. Overall, these streams are PFC. Only the lower portion of Scotch Creek was determined to be FR with an upward trend, because of a concentration of disturbances at the main ranch site (spring house) location. All other stream reaches were determined to be PFC. Comments explaining the condition assessment ratings for each stream are contained in Attachment B.

L. Wildlife Other Than Deer. The HRWA supports seven types of wildlife habitat. The CWHR System stores life history, habitat relationships, and management information for 675 species of amphibians, reptiles, birds, and mammals that are considered to be regularly occurring in California. The computerized database of predictive models can produce several types of reports listing wildlife species that are projected to occur in a given location and set of habitat conditions. The model predicts that 132 species could occur in the HRWA: 16 amphibians, 72 birds, and 44 mammals.

Chapter V. ENVIRONMENTAL CONSEQUENCES OF THE ACTION

A. Critical Elements of the Human Environment

The following table summarizes potential impacts to various elements of the human environment in the HRWA area, including the "critical elements" listed in BLM Manual H-1790-1, Appendix 5, as amended.

Environmental Element	Proposed Action		Alternative 1		Alternative 2		(No Action) Alternative 3		Specialist Initial
	Affected	No Affect	Affected	No Affect	Affected	No Affect	Affected	No Affect	
Air Quality		x		x		x		x	GRM
ACECs		x		x		x		x	GRM
Cultural Resources		x		x		x		x	ECR
Native American Concerns		x		x		x		x	ER
Farmlands		x		x		x		x	GRM
Floodplains		x		x		x		x	GRM
Minerals		x		x		x		x	RR
T&E Animal species		x		x		x		x	IF
T&E Plant species		x		x		x		x	JM
Wastes (hazardous/solid)		x		x		x		x	GRM
Water Quality		x		x		x		x	GRM
Wetlands/Riparian Zones		x		x		x		x	JM
Wild and Scenic Rivers		x		x		x		x	WK
Wilderness		x		x		x		x	WK
Visual Resource Management		x		x		x		x	WK
Environmental Justice		x		x		x		x	ER
NWFP		x		x		x		x	IF

B. Discussion of Environmental Effects

This section analyzes the environmental effects that would be expected if each alternative were implemented of each alternative key impact topics analyzed. It identifies what will be measured to provide an assessment of the impacts to those key impact topics. Also it provides assumptions to help shape the assessment of impacts. Finally, an assessment of those impacts is provided for each of the three management alternatives considered in this analysis.

1. Key Effects Defined.

Deer Winter Range Habitat - What are the likely effects to the deer winter range if livestock grazing is eliminated on private lands upon transfer to public ownership within the HRWA?

Livestock Grazing - What are the anticipated impacts to individuals dependent on livestock grazing on lands within the HRWA, if lands are acquired by BLM (from willing sellers) and grazing is discontinued?

Public Recreation - What are the likely impacts to non-motorized recreation opportunities if private lands are transferred (or not) to public ownership within the present HRWA?

Traditional land uses, customs and culture - What effect would each alternative have on long-established ranching practices and land uses?

2. Measures of Management Performance.

Deer Winter Range Habitat (acres and quality)

Livestock Grazing (AUMs and/or acres)

Public Recreation (access sites)

C. Assumptions for Analysis.

The following assumptions are provided for consistency in the development of the assessment of the key impact topics,:

1. The time span for analysis is ten years, i.e. just beyond the time limits of the RMP.
2. Any contiguous private lands, willingly offered, would be considered for acquisition by the BLM or a cooperator.
3. RMP decisions, such as land use allocations, would remain consistent among all alternatives.

4. Rural residential development near Iron Gate Reservoir would continue at the present rates of development.
5. Land uses on other near by private lands would remain non-intensive: no residential or commercial developments.
6. CDF&G would continue to manage deer winter range and deer populations.

D. Proposed Amendment: Redraw the HRWA RMP boundary to coincide with the 1983 Habitat Management Plan boundary. Only land offered for sale that is immediately contiguous to the boundary and meets habitat acquisition criteria would be considered for future acquisition. Map 2

1. Deer Winter Range Habitat: Approximately 8,914 acres of deer winter range would be managed as the HRWA, primarily to enhance the deer population. This alternative would provide more public land acreage for habitat management than Alternative 1. Additional opportunity would be implemented to improve deer populations by managing winter forage conditions. The primary management goal is preservation or enhancement of deer winter range habitat condition. More public regulation of uses is provided for critical habitat on public lands than on private lands.

2. Livestock Grazing: The possibility of continued open-range grazing has been greatly changed or eliminated by recent changes in fencing near the HRWA. Public lands on sections 21, 22, and 34 are outside the present fenced outside perimeter, and would be considered a separate management unit under multiple-use principles, Livestock operations could be authorized under permit. This management responds to requests to respect the customs and culture of the surrounding ranching operations.

3. Public Recreation: The acquisition of land, voluntarily offered, contiguous to the HRWA would enhance the area available for public access. If public ownership included right of way access to the properties, additional developed trail heads and facilities could be considered in cooperation with the CDF&G. Public lands would remain closed to vehicle access by the public.

4. Economic Effects and Loss of Tax Base. This issue was analyzed specifically for Siskiyou County in the development of the 1993 RMP and found to be insignificant. Moreover, BLM has disposed of public lands exceeding 10 times the amount of acquired private lands in Siskiyou County since approval of the RMP. Therefore, there was a significant increase of tax base (see RMP Appendix H, RMP “Siskiyou County Economic Impact Assessment). There should be no direct economic effects to land owners neighboring the HRWA. Should lands be acquired to expand the preserve, the interest of the BLM would be to consolidate property, not create additional checkerboard ownership.

Only property that presently adjoins the HRWA boundary would be considered for acquisition. Any potential acquisition should enhance the purposes and management of the HRWA. The following criteria would be evaluated during consideration of acquisition of private land near HRWA:

- How close is it to the HRWA core area?
- What is the quality and continuity of winter deer-habitat?
- How vulnerable is the property to development?
- What is the potential of improvement of existing winter deer habitat on the property (within the migration corridor, for instance)?
- Is this consistent with the RMP and in balance with BLM public land holdings in Siskiyou County (disposal vs acquisition)?
- Are there other management concerns to be considered in the acquisition process?

5. Effects on Preservation of Custom and Culture. The proposed amendment would maintain the need to properly administer both state and federal public lands and enable multiple uses on the public lands on sections 21, 22 and 34. Restrictions to continued open-range grazing are also discussed for the environmental effects of Alternative 1. With the management flexibility of this alternative, deer winter range preservation interests are maintained while enabling economic activities that conform with federal grazing regulations.

E. Alternative 1: Redraw the HRWA boundary to the original 1977 Horseshoe Ranch. Acquire no more private land in Siskiyou County. Map 3

The parties requesting the amendment to the 1993 RMP boundary maintain that the original HRWA western boundary was the north-south fenced line bordering sections 14, 23, 26 and 35 of the HRWA boundary. Traditional uses for all of these lands have been timber production, livestock grazing and hunting.

1. Deer Winter Range Habitat. Under this alternative, the RMP would be amended to recognize only the 7,458 acres of original CDF&G Horseshoe Ranch Management Area as the HRWA. Management of the public lands would continue to emphasize deer winter forage enhancement. Because the HRWA would include a limited acreage of the local available winter range, enhancing winter deer forage and improving migratory corridors would be less effective over the smaller area. This alternative could eventually result in fewer winter deer, reduced vigor, and less fawn survival and recruitment. However, cooperative management plans could be made with neighboring landowners. Some habitat improvement work on neighboring private land is already completed or in progress.

2. Livestock Grazing. Under this alternative, current livestock grazing practices would not be affected. Grazing within the fenced portion of the Horseshoe Ranch Habitat Management Area is currently not allowed, unless BLM and CDF&G agree to allow grazing to benefit wildlife resources (see *Agreement for Administration of Livestock Grazing Within the*

Horseshoe Ranch Habitat Management Area, 1989). A positive impact for some would be the removal of the 1993 RMP boundary line that some individuals have perceived to be a threat to their present and future grazing operations. The public lands of sections 20, 21 and 34 would be managed for multiple uses, including authorized livestock operations.

3. Public Recreation. Public access to federal public lands of the present HRWA would be decreased if the boundary were changed back to the 1977 lines. Public lands in sections 21, 22 and 34 would be legally inaccessible to the unattached public hunter. The only legal entry access for the public presently is through the single HRWA gate. CDF&G manages access to the HRWA under California Title 14 regulations. Hunters crossing the western boundary fence to the public lands on sections 21, 22 and 34 cannot legally cross back into the HRWA to return to the parking lot. Refer to Appendix B. Changing the current off-highway vehicle designation of “closed” (closed to motorized vehicles) to “limited” (motorized use limited to designated roads and trails) would not change public access to the HRWA. No additional roads would be designated by this or the other alternatives.

4. Economic Affects to landowners and Siskiyou County: Some landowners perceive the 1993 HRWA boundary as placing restrictions on their property rights or land value. The RMP expressed BLM interest in acquisition of property within the HRWA boundary line. Under Amendment Alternative 1, no more private property would be acquired by the BLM in Siskiyou County. This would include rejection of offers by willing sellers. Two relevant factors are property rights issues of who can tell a private property owner to whom they can sell, and the fact that 1993 HRWA boundary has no legislative designation or restrictions on “inholdings” as would a wilderness or a national monument that might limit either access to the property or future land uses. Throughout most of the western U.S. property adjacent to public lands is currently being marketed at premium prices. The BLM has no control over development of private property adjacent to public lands.

5. Preservation of “Custom and Culture” in Siskiyou County. Federal regulations require the fencing of grazing allotments for proper control of livestock use. Livestock use of forage on federal lands must be authorized under a grazing permit, must be regulated, and have fees paid for the number of allowable AUMs. Effects of the BLM HRWA boundary for private property owners as a concern was identified by several area residents. BLM’s interpretation of this concern is “an erosion of the traditional lifeways of residents within Siskiyou County in general and the HRWA specifically.” BLM considers analysis of the economic impacts to agricultural (livestock) operations within the HRWA as an appropriate means to address this more generalized concern.

As discussed in *Livestock Grazing in the Affected Environment*, Chapter IV, this issue applies primarily to one livestock operator. Preserving custom and culture by minimizing the external costs of operation is influenced by the need to observe federal regulations, not by the simple presence of federal lands or the HRWA boundary. At present, because of land ownership changes and new fence construction, there is no open access to the existing grazing lease on section 22 except by special trailing permit through the HRWA. Trailing by open range use

would be possible with permission of adjacent landowners. Open-range grazing effectively is no longer possible in the area.

F. Alternative 2: **Redraw the HRWA boundary to a “core area” that includes the eastern half of section 21, section 22, and the public land of section 34 of Township 48N., Range 6E. Manage those three western parcels for multiple uses. Maintain BLM option to acquire private land in an “interest area” to balance disposal of public lands in Siskiyou County. Map 4**

1. Deer Winter Range Habitat: Approximately 8,914 acres of “core” deer winter range would be managed as the HRWA primarily to enhance the deer population. This alternative would provide more public land acreage for habitat management than Alternative 1. Additional opportunity would be implemented to improve deer populations by managing winter forage conditions.

2. Livestock Grazing: Under this alternative, there could be negative impacts to individuals dependent on open-range ranching operations. Traditional livestock operations could be continued on the multiple use parcels under authorized grazing management. Because of recent fence construction, open-range grazing opportunities have been almost eliminated in the planning area. The public lands of sections 21, 22 and 34 would be managed as a separate pasture from the main body of the HRWA. Fence maintenance and horse removal on the original Miller ranch would be continued as part of the habitat management plan.

Under this alternative, assume that all parcels of land with four owners or fewer (see Map 3) have willing sellers, and assume that all of the parcels also meet the criteria, that BLM has set for acquisition other than being contiguous to the HRWA. There could be 35 landowners with voluntary offers of land (approximately 22,000 acres). Even though we know this to be highly unlikely, the projected impacts based on this alternative would still have limited effects on people dependent on grazing operations. This is because half of these landowners own 160 acres or less, which usually is not a viable economic grazing unit size since this area requires at least ten acres to produce one AUM. It is the larger blocks of land (2000 or more acres) that are more economically desirable for cattle production, and are the ones currently receiving much of the use. Of these larger private land parcels, sixty percent of the private land acres are owned by only four landowners. Of these, it is known that one owner is not using his lands for grazing and several of the others have not fully used their lands for grazing on a yearly basis.

The severity of these impacts would be less when weighed in relation to current local and national conditions and trends. Those trends would include the lack of willing sellers due to the local anti-federalism sentiment; the fact that the type of determinations that BLM would be making with respect to domestic livestock grazing would not always be negative; and the

fragmentation of pasture lands as a result of traditional land uses changing to exclude grazing, and the increased land sales and development occurring due to the influx of new residents to Siskiyou County. Current national conditions and trends would include: recent changes to federal procedural requirements for exchanges and acquisitions that are more complicated and have remarkably slowed down these processes; and an already declining livestock industry resulting from economic factors due to increased production costs and declines in beef consumption.

3. Public Recreation: The acquisition of land, voluntarily offered, in and around the HRWA could enhance public access primarily due to increased roaded access points. If public ownership included lands along the west side Interstate 5, the Oregon border, and the Hornbrook-Copco Road area, numerous points of access could be possible. Developed trail heads and facilities would be possible if additional lands were acquired, which would enhance public access. The process required for the BLM to acquire land is complex and it would be difficult to forecast which willingly-offered lands would be available for inclusion in the HRWA. Activity-level planning would be necessary to finalize any additional access points and determine the impacts that they would have on the existing resources.

4. Economic Effects and Loss of Tax Base. This issue was analyzed specifically for Siskiyou County in the development of the 1993 RMP and found to be insignificant. Moreover, BLM has disposed of public lands exceeding 10 times the amount of acquired private lands in Siskiyou County since approval of the RMP. Hence, there was a significant increase of tax base (see RMP Appendix H, RMP “Siskiyou County Economic Impact Assessment”). There should be no direct economic effects to land owners neighboring the HRWA. Should lands be acquired to expand the preserve, the interest of the BLM would be to consolidate property, not create additional checkerboard ownership.

5. Effects on Preservation of Custom and Culture. Alternative 2 could maintain the need to properly administer both state and federal public lands while enabling multiple purpose uses on the public lands on sections 21, 22 and 34. Restrictions to continued open-range grazing were discussed for the environmental effects of Alternative 1. With the management flexibility of this alternative, deer winter range preservation interests are maintained while enabling economic activities that conform with federal grazing regulations.

G. Alternative 3: Maintain the 1993 HRWA Boundary. Continue to Implement the Redding RMP. The No Action Alternative. Map 5

1. Deer Winter Range Habitat: Implementation of this alternative would include a larger area of habitat on public lands than on the area of the Proposed Amendment or of Alternatives 1 or 2. It includes additional drainages that are beneficial for deer migration, forage and cover. The larger block of land also offers opportunity to provide early seral successional habitat management on public lands. Private lands within the boundary have recently been treated for deer habitat improvement, a positive benefit for deer winter range. Deer winter range on and near the HRWA is benefitting on both private and public lands.

2. Livestock Grazing: Effects discussed for Alternatives 1 and 2 apply also to Alternative 3. Independent from the BLM RMP, open-range grazing has become greatly restricted or prevented completely because of the recent fencing of neighboring property and private land ownership changes within the 1993 boundary to the HRWA. If private lands are acquired by BLM through willing sellers and determinations are made to eliminate domestic livestock grazing. Those impacts, considered in relation to the actual monetary loss of grazing opportunities along with current economic conditions and trends, would become cumulatively less significant to this County as a whole.

Less than half of the total area under the RMP, or 45% (7,766 acres), is in private ownership. Of these acres, only one or two landowners currently use their property for livestock grazing, or have done so in the last couple of years. It is these lands that could be affected, equaling 39% (3,040 acres) of the private acres, or only 17% of the total acres in this alternative.

The severity of these impacts can be lessened further when considered in relation to current local and national trends. Offers of private land in Siskiyou County are limited because of a lack of willing sellers caused by the local anti-federal sentiment. Also, the type of determinations on grazing rights that BLM would make would not always be against livestock grazing. Also, the livestock industry is declining as a result of economic factors due to increased production costs and declines in beef consumption.

Changes from traditional land uses, to uses of land that exclude grazing, cause the break up of pasture lands. This transformation is caused by increased land sales and developments to serve the influx of new residents to Siskiyou County. Recent changes in the procedural requirements for federal land exchanges and acquisitions are more complicated and have slowed down the processes. Private buyers and sellers often are unwilling or financially unable to wait out the federal process.

3. Public Recreation: The acquisition of land, voluntarily offered, contiguous to the HRWA would enhance public access primarily due to the potential for more roaded access points. If public ownership included lands along Interstate 5, the Oregon border, and the Hornbrook-Copco Road area, numerous points of access may be possible. Developed trail heads and facilities would be possible if additional lands were acquired, which would enhance

public access. This alternative would be dependent on changing the off-highway vehicle designation from “closed” (closed to motorized vehicles) to “limited” (limited to designated roads and trails).

Because of the complexity of the land acquisition process, involved, it would be difficult to forecast which willingly offered lands would be available for inclusion in the HRWA. Activity plans would be necessary before specific access points were identified and the effects additional public entry points would have on management of the HRWA is the existing resources.

4. Economic Effects and Loss of Tax Base. This issue was analyzed specifically for Siskiyou County in the development of the 1993 RMP and found to be insignificant. BLM has disposed of public lands exceeding 10 times the amount of acquired private lands in Siskiyou County since approval of the RMP. Hence, there was a significant increase of tax base (see RMP Appendix H, RMP “Siskiyou County Economic Impact Assessment”). There should be no direct economic effects to land owners neighboring the HRWA. Should lands be acquired to expand the preserve, the interest of the BLM would be to consolidate property, not create additional checkerboard ownership.

5. Effects on Preservation of Custom and Culture. Economic conditions and changes in private land ownership independent of the BLM RMP have had more to do with changing local custom and culture than have any federal actions. Neighboring lands have been fenced, limiting or eliminating open-range grazing. Grazing rules have been administered so that BLM is not be prejudiced against continued livestock operation. The BLM has worked with the permittee to offer access to private inholdings. Continued implementation of the RMP under current grazing rules should not have a direct effect on the customs or culture of land uses neighboring the HRWA.

Chapter VI CUMULATIVE EFFECTS AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the proposed RMP amendment would require no irreversible or irretrievable commitment of resources. The land is managed as a semi-primitive area, with minimal management tools applied. Reducing the area within the formal boundary might affect the eventual size of the HRWA, but that depends more on real estate market conditions, not management practices.

Implementation of Alternative 1 could limit benefits to the total acreage of deer winter habitat managed by public agencies, compared to current management because of the smaller area potentially under intensive deer management. Any direct costs to neighbors would be minimized, although controls of livestock grazing on public land would still be enforced..

The Proposed Amendment and Alternative 2 would focus management on the smaller area than Alternative 3. Cooperative management with surrounding landowners would be welcomed, and the HRWA would receive a commitment from the BLM California State Office to support additional active projects including the use of prescribed fire and other vegetation management tools. Land acquisitions that would serve the public purposes of improving deer and other wildlife habitat and improving access to public lands would be considered case-by-case, but would not be actively solicited. There would be no irreversible or irretrievable effects to the environment. Vegetation management would be designed to enhance natural processes.

Any conversion of ownership from private to public under the Proposed Amendment, Alternative 2 or Alternative 3, could have the cumulative effect of reducing present county tax revenue. As previously discussed in the Loss of Tax Base discussion on page 10, the effect should have a small effect on the economy of the county. On the positive side, the increased acreage of Siskiyou lands legally accessible to the public result in increased purchases of goods and services from HRWA visitors. Other than acquisition or disposal of lands, no commitments of resources would be made that are irreversible or irretrievable.

Continued implementation of the Redding 1993 RMP, Alternative 3, would maintain the largest mapped boundary area for the management unit of the HRWA. This alternative could be used as the benchmark comparison of management choices. Some property owners perceive that having the boundary line around their property on a BLM map makes their property “worthless.” The belief remains that if the BLM intends to eventually buy the land, even from “willing sellers,” no one would be willing to pay for land that could not be worked or developed. That belief comes from an assumption that the BLM has some control over development of private lands within the HRWA boundary shown in the RMP. BLM has no control over development or management of private lands within the present HRWA boundary. Should additional private lands be acquired for the HRWA that had been previously grazed under open range rules, a cumulative effect of reducing access to those lands would occur. As previously discussed, recent changes in land ownership and construction of new fences has effectively eliminated open range in the area of the HRWA.

Controls over livestock grazing on newly-acquired public lands could add to costs of livestock operations but would not have cumulative environmental effects.

Chapter VII PUBLIC PARTICIPATION AND RESPONSE TO COMMENTS ON THE PROPOSED AMENDMENT AND ENVIRONMENTAL ASSESSMENT

Public Participation: As part of the initial scoping for this assessment, in March, 2000, BLM received more than 700 pieces of written correspondence. Additional scoping was not considered to be necessary.

The comment process on NEPA documents enables participation by the public to make facts and feelings known to the decision makers. It is not a voting process, and is used to assist the formation of better decisions by helping to ensure that all important factors are being considered. A draft plan amendment and environmental assessment was prepared and posted on the Redding Field Office web site. Over 300 Draft Plan documents were distributed through a mailing list and personal requests. The 60-day public comment period extended from December 7, 2001 to February 14, 2002. The required 60-day Governor's Consistency Review that ensures the federal action is consistent with state regulations and policies was completed concurrently. BLM held a public meeting in Yreka on January 23, 2002 to collect public comments and explain the draft RMP amendment and EA. The proposed amendment was materially improved through the assistance of Jim Depree, Siskiyou County planning specialist.

Three large sets of comments were submitted through the efforts of organized groups. Two sets stated support for Alternative 2 and in general urged for more restrictions on use of the public lands. These letters asked for inclusion in the HRWA of all lands eastward to Jenny Creek and the prohibition of vehicle use on the public lands. The third large set of comment letters supported Alternative 1. Although the presence of the original HRWA and its purposes was supported, the letters called for no more federal acquisition of private land in Siskiyou County. Active management of the original HRWA deer habitat was supported in place of any emphasis on acquiring private lands to be included in the HRWA. Over 700 letters were mailed by individuals. Almost all commentators favored retaining at least the original HRWA for hunting and multiple use purposes

The California Department of Fish and Game supported Alternative 2 as representing the greatest opportunity to retain and enhance deer winter range near the HRWA. CDF&G said it would also best meet the increasing public demand for recreational opportunities in the area. The Department wants to continue the present cooperative management and to be involved in development of criteria BLM would use to evaluate potential land acquisitions in the area.

The proposed amendment has been presented to Congressman Wally Herger and his staff, the Siskiyou County Board of Supervisors, and the BLM NORCAL Resource Advisory Committee.

Below are summarized all substantive comments directly related to the issues of this amendment that would benefit from additional discussion.

Representative Comments and Responses

Comment 1: “The Board of Supervisors... remains adamantly opposed to any expansion of the land area under federal control to the extent that such control undermines the tax base or impedes the lifestyles of those land owners whose livelihoods remain dependent upon the County’s natural resource base.”

Response: Comment noted. Federal land ownership effects on local tax bases are offset by payment in lieu of taxes. Other federal programs, such as Jobs In The Woods are intended to supplement county revenues where other federal actions reduce county tax income. These annual payments are intended to fully, or in large part, offset any loss of taxes due to federal ownership. BLM has recognized traditional authorized and unauthorized livestock operations adjacent to the HRWA. BLM proposes to continue recognizing traditional use through the Proposed Amendment until such time that the public lands outside the original boundary are fenced through administration of a grazing permit on section 22. This should accommodate traditional lifestyles to the extent practicable, considering changes in land ownership and regional economic conditions.

Comment 2: Adopt Alternative No. 1, do not acquire any more private lands for the HRWA.

Response: Comment noted. The difference in acreage between Alternative 1 and Alternative 2 is the inclusion of the eastern half of section 21, section 22 and the public lands of section 34. All of these lands are existing public lands. The public land of the eastern half of section 21 was acquired after 1977. The section 22 and section 34 lands were outside the existing fence of the Miller ranch that formed the HRWA.

Comment 3: Impose no conditions on types of land that can be acquired from willing sellers.

Response: The HRWA has been established to enhance deer winter habitat and provide for other uses do not conflict with the basic management purpose. BLM acquisition of property for other reasons would not conform to the RMP.

Comment 4: The Siskiyou County Board of Supervisors is on record opposing expansion of the HRWA and of extension of the Cascade-Siskiyou National Monument into Siskiyou county.

Response: Comments noted. See preceding comment and response. Neither the BLM nor the present administration is considering an expansion of the National Monument.

Comment 5 Keep all present and acquired public lands designated “nonmotorized.”

Response: The 1993 Redding RMP designates the HRWA as “closed to motor vehicles.” This wording has caused public confusion over the land use authorizations that apply to the federal lands of the HRWA. The EA states the desire to clarify and correct an inconsistency in the 1993 RMP. The guiding regulation for motor vehicle use on public lands is 43 CFR part 8340.0-51 [page 901-902] Off-road vehicles. The change in route designation from closed to limited acknowledges the continued need for agency personnel to use the designated routes and, on occasion, travel off road for administrative purposes. The change in designation is a description of the status quo.

The HRWA area will continue to be managed to provide semi-primitive non-motorized recreation for the public. Management priorities are to “Improve existing public administered deer winter range habitat and afford long-term protection for additional privately owned deer winter range habitat...” Within the HRWA existing routes of travel (tracks, trails, two-track roads) cross both public lands (managed by the BLM), and State of California lands managed by the California Department of Fish and Game. Public (BLM) lands in the “area of interest in Alternative 2, including the HRWA are changed from the present RMP designation of a “closed area” to a designation of a “limited use area.” In a limited-use area, land uses are authorized at the discretion of the authorizing officer. All vehicular travel is restricted to designated routes of travel. Authorization for motorized access on the HRWA may be allowed for resource management or other activities with approval of the Redding BLM authorizing officer in consultation with the CDF&G.. Existing routes on federal lands shown on EA Map 2b and potential existing routes not mapped on those lands are routes designated for motorized administrative use by both agencies. Applications for rights-of-way for access to private lands will be considered on a case by case basis. No other changes are implied.

Comment 6a. California Department of Fish and Game recognizes that BLM has disposed of 16,298 acres of public lands to private ownership in Siskiyou County while acquiring 1,657 acres of private lands. None of the acquired lands were in the vicinity of the HRWA.

6b. CDF&G is concerned with BLM intentions of providing additional points of public access to HRWA.

Response: 6a. The BLM would be willing to evaluate offers of land for sale that is contiguous to the boundary of the HRWA as shown on Map 3. Any potential acquisition should enhance the purposes and management of the HRWA. The following criteria would be evaluated during consideration of acquisition of private land.

Is the land contiguous to the HRWA boundary?

What is the quality and continuity of winter deer-habitat?

How vulnerable is the property to development?

What is the potential of improvement of existing winter deer habitat on the property (within the migration corridor, for instance)?

Is this consistent with the RMP and in balance with BLM public land holdings in Siskiyou county (disposal vs acquisition)?

Are there other management concerns to be considered in the acquisition process?

6b. BLM acknowledges the management issues that result in only one legal entry point to the HRWA. Control of potential damage from unauthorized off highway vehicle use (often motorcycles or all-terrain-vehicles) is a continuing issue. Public hunters must use the public access parking area at the eastern end of the HRWA. BLM has received claims that some neighboring landowners and others enter the HRWA from the western side, in effect having a private hunting preserve. Should additional land be acquired that also could provide vehicle access to other boundary entry of the HRWA, the BLM and CDF&G would consult and agree by consensus on the appropriateness of providing additional access points to the area. The 1999 letter mailed by the CDF&G explaining the HRWA entry policy is included as Appendix B for further explanation.

Comment 7: The Oregon Department of Fish and Wildlife recognizes livestock grazing as an appropriate land use when properly administered. Fire is needed to replace mature wedgeleaf ceanothus stands with younger growth. Private land owners should be assisted to improve habitat on their own lands. Winter range in and around the HRWA is essential to the health and maintenance of migratory black-tailed deer in the region. Habitat improvement and long-term protection can best be accomplished through public administration. Because this is one of the last large undeveloped tracts of deer winter range in the region, and because of the critical need to provide long-term protection, ODFW supports the adoption of Alternative 3, the No Action Alternative.

Response: BLM is responsible for land use and vegetation management, while state fish and game management agencies concentrate on direct management of game and non-game wildlife. BLM has concluded that regional protection of deer winter range and deer habitat improvement can be accomplished by promoting closer working relations with surrounding landowners while focusing active management on the existing public lands. The two are most likely to limit future development in the area. The first is to keep ranching viable; the second is for public ownership of the regional lands. The Proposed Amendment maintains the potential for BLM to acquire land contiguous to the HRWA boundary should owners offer to sell. The Proposed Amendment also accommodates neighboring land owners who see unrestricted expansion of the HRWA as a coercive threat to their land values.

Comment 8: Alternatives 2 and 3 represent a hostile non-local agenda being forced upon the area. They conflict with long range plans for development along the I-5 corridor.

Response: Many variables influence future development of the I-5 corridor. Most influences on local development will originate outside the region. BLM attempts to be as complementary as possible to local wishes. In the Horseshoe Ranch area, local interests came between a willing seller and the BLM, effectively preventing a private owner from completing a sale of his own choosing. The HRWA provides public hunting and recreation access serving a regional population. Public land ownership does not foreclose all discretionary authorizations for specific uses. The Proposed Amendment specifically responds to recommendations to limit takeover of private property while protecting important wildlife habitat and public recreation opportunities.

Public Distribution of the Proposed Amendment:

The document will be mailed to BLM and other public offices or libraries, that will be named in the news release at the start of the 30-day protest period.

A. PROTEST PROCEDURES

The BLM planning process offers an opportunity for administrative review. Any participant in the planning process who has an interest that is or may be adversely affected by the proposed decisions may file a protest in writing with the BLM Director.

This resource management plan amendment is subject to BLM regulations under 43 CFR Part 1610.5-2. The BLM draft amendment was available for a 60-day public comment period beginning December 7, 2001. As describe in the Public Participation section, above, written comments were received from individuals, agencies and organizations. All comments were considered in the preparation of this Proposed Amendment to the RMP.

DATES: The proposed boundary change amendment described in this environmental assessment will be available for review and a 30-day protest period. The protest period will begin on the date the of news release on the availability of the proposed amendment. News releases will be distributed to news media in Yreka, Redding and Medford and will be posted on BLM internet web pages.

Only those persons or organizations that participated in the planning and analysis process may protest the decisions in the Proposed Amendment. Protests may raise only the issues that were previously submitted for the record during the planning and environmental analysis process by the protestor or another participant in the process. To be considered complete, a protest must include at a minimum the following information:

1. The name, mailing address, telephone number, and interest of the person filing the protest.
2. A statement of the part or parts of the plan and the issues being protested. To the extent possible, this should be done by reference to specific pages, paragraphs, sections, tables, or maps included within the Proposed Amendment and EA.
3. A copy of all documents addressing the issue(s) that the protesting party submitted during the planning process or a statement of the date they were discussed for the record.
4. A concise statement explaining why the BLM State Director's decision is believed to be incorrect (a critical part of the protest).
5. Take care to document all relevant facts and to reference or cite the planning documents, environmental analysis documents, and available planning records (meeting minutes, summaries, correspondence). A protest without data will not provide us with the benefit of your information and insight, and the Director's review will be based on the existing analysis and supporting data.,

At the end of the 30-day protest period, the BLM may issue a Record of Decision approving implementation of any portion of the proposed plan not under protest. Approval will be withheld on any portion of the Proposed Amendment that is under protest, until the protest is resolved.

ADDRESSES: All protests must be filed only with the Director of the BLM and submitted by mail or overnight mail as follows:

The preferred mailing address is: Director, Bureau of Land Management, Att: Ms. Brenda Williams, Protest Coordinator (WO 210/LS-1075); PO Box 66538; Washington, DC 20035.

The address for overnight mail is: Director, Bureau of Land Management, Att: Ms. Brenda Williams, Protest Coordinator (WO 210); 1620 L Street, NW., Room 1075, Washington, DC 20036. Phone: (202) 452-5110.

To ensure that any protest is properly tracked, **please also send a copy to:** BLM Redding Field Office; Attn: Glen Miller; 355 Hemsted Dr.; Redding, CA 96002

FOR FURTHER INFORMATION CONTACT: Glen R. Miller, Environmental Coordinator, BLM Redding Field Office (530) 224-2153; or by email at gmliller@ca.blm.gov.

Chapter VIII CONSULTATION AND COORDINATION

Consultation Assistance:

Jim Depreé, Siskiyou County Planning Department.

Interdisciplinary Team

A team of interdisciplinary specialists completed this analysis and document. Their respective responsibilities included:

TEAM MEMBER	PLAN AMENDMENT RESPONSIBILITY
Francis Berg BLM	Team Leader
Richard Callas CDF&G	Deer winter range habitat
David Cook BLM	GIS data development/analysis, map production
Patricia Cook BLM	Writer/Editor
Ilene Emry BLM	Realty, land ownership, administrative assistant
Jeff Fontana BLM	Public information
Keith Hughes BLM	Wildlife, riparian habitat, special status fauna
Daniel Weinberg BLM	Deer winter range
Bill Kuntz BLM	Recreation
Joe Molter BLM	Botany, range management, special status flora
Eric Ritter BLM	Cultural resources, Native American coordinator
Ron Rogers BLM	Geologist
Glen R. Miller BLM	Planning and Environmental Coordinator

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APPENDIX A
BLM Land Tenure Statistics by County

County	Acquired Fee		Acquired Easements		Total Acquired		Patented	
	Acres	Value	Acres	Value	Acres	Value	Acres	Value
Butte	141.060	\$785,000	0.00	\$0	141.060	\$785,000	1,924.180	\$4,027,540
Shasta	14,598.645	\$20,984,203	250.58	\$1,449,978	14,849.225	\$22,434,181	6,061.780	\$12,991,121
Siskiyou	1,657.000	\$321,550	0.00	\$0	1,657.000	\$321,550	16,928.270	\$6,631,673
Tehama	9,459.990	\$13,792,051	723.20	\$1,758,270	10,183.190	\$15,550,321	10,507.390	\$3,099,050
Trinity	15,969.350	\$9,592,295	0.00	\$0	15,969.350	\$9,592,295	4,420.070	\$10,331,800
Total:	41,826.045	\$45,475,099	973.78	\$3,208,248	42,799.825	\$48,683,347	39,841.690	\$37,081,184

County	In an Exchange	Percent of Remaining - Total	Not in an Exchange	Percent of Remaining Total	Remaining to be Patented	Percent of RMP Total
	Acres		Acres		Acres	
Butte	0.00	0.0%	12,346.38	100.0%	12,346.380	86.5%
Shasta	545.71	1.7%	31,964.85	98.3%	32,510.565	84.3%
Siskiyou	18.00	0.1%	27,040.67	99.9%	27,058.670	61.5%
Tehama	0.00	0.0%	24,304.45	100.0%	24,304.450	69.8%
Trinity	3,482.81	26.5%	9,672.44	73.5%	13,155.250	74.9%
Total:	4,046.52	3.7%	105,328.79	96.3%	109,375.32	73.3%

County	Patented Timber Vol 1,000bf	Acquired Timber Vol 1,000bf
Butte	8,245	1,852
Shasta	23,551	21,07
Siskiyou	15,919	0
Tehama	5,466	0
Trinity	20,312	32,013
Total:	73,493	54,936

	Fee	Easement
Acreage acquired by Purchase	17,788.26	485.95
Acreage acquired by Exchange	23,516.10	0.00
Acreage acquired by Donation	521.69	487.83
Average Value per Acquired Fee Acre	\$1,087.24	
Average Value per Patented Acre	\$930.71	

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Appendix B

STATE OF CALIFORNIA – THE RESOURCES AGENCY

GRAY DAVIS, Governor

DEPARTMENT OF FISH AND GAME
SHASTA VALLEY WILDLIFE AREA
xxix BALL MOUNTAIN -LITTLE SHASTA ROAD
MONTAGUE, CA 96064
(916) 459-3926

September 12, 1999

Neighbors and Interested Individuals:

re: Horseshoe Ranch Wildlife Area access regulations

The purpose of this letter is to inform you of a regulation change made by the Department of Fish and Game which covers public access to Horseshoe Ranch Wildlife Area. California Code of Regulations, Title 14, Section 550 (b) (2) states:

"On wildlife area where entry and exit sites are designated by the Department, no person shall enter or leave except at designated sites".

Section 55 (q) describes entry onto Horseshoe Ranch Wildlife Area:

The designated entry point for public access is through the main gate located in the southeast corner of Section 29 Township 48 Range 5 West, and is approximately 0.25 mile north of the junction of Horseshoe Ranch Road and Copco Road".

This regulation means that hunters, hikers and other users of Horseshoe Ranch can only access the area through the main entrance described in the previous paragraph. Access to and from neighboring private lands and Oregon is no longer legal and violators will be subject to citation. Wildlife protection staff will be patrolling the wildlife area to enforce this regulation.

The regulation change was made in order to be consistent with other wildlife areas throughout the state. We also hope to discourage illegal vehicle access and boundary fence damage. Additionally, a common complaint from public hunters using Horseshoe Ranch is that after hiking several miles, it is not uncommon to run into hunters that had used private land to access remote sites. This regulation should "even the playing field" for the many hunters that legally access the wildlife area.

We have enjoyed a long standing relationship with neighboring livestock operators. We understand the need to enter the wildlife area at points other than the designated access point to round up livestock or repair common boundary fences. Arrangements to do this can be made by calling the wildlife area office at (530) 459-3926. Thank you for your cooperation.

(signed)

R. Robert Smith
Wildlife Habitat Supervisor II

cc: Joan Smith, Tim Burton, Capt. Charles Konvalin,
Anthony Ries, Redding and Medford BLM

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APPENDIX C

RIPARIAN HABITAT ASSESSMENT AND RIPARIAN FUNCTIONALITY ON HRWA

Scotch Creek: Because of its length, Scotch Creek was divided into three reach segments: upper, middle, and lower.

The upper reach (ID # 103) went from the Oregon/California border down to the confluence with an unnamed tributary in M.D.M., T. 48N., R. 6W., Section 24 NE1/4NE1/4. This reach is rated **PFC**.

The middle reach (ID #105) went from the same confluence with the unnamed tributary down to the confluence with Slide Creek. This reach is rated **PFC**.

The lower reach (ID #107) went from the confluence with Slide Creek down to the lower Horseshoe Ranch Management Area boundary. This reach is rated **FR** with an upward trend.

Overall, there are many similarities in all three reaches. In many places, a well-defined floodplain is visible. The floodplain appears to be well maintained and piles of flood debris provide evidence of recent flooding. Sinuosity, width/depth ratio, and gradient appear to be in balance with the landscape setting. Scotch Creek has good sinuosity which helps to dissipate stream energy. Point bars appear to be well established and maintained. In most places riparian vegetation is either at its potential or in the process of widening. There is, in most cases, a dramatic shift from riparian species (willow, alder, choke cherry, snowberry) to upland species (buck brush, Oregon grape, oak, juniper). Riparian vegetation appears to be thicker where the valley bottom is more confined. When the valley bottom widens out, conditions become much drier and there is less riparian vegetation. In these cases willow is the only riparian species that persists.

There is a diverse age class and composition of riparian vegetation. Multiple species of willow are found throughout the riparian areas. Alder and choke cherry are also found less abundantly. All size classes are present from less than 1 inch to greater than 8 inches in diameter for some *Salix sp.* and *Alnus sp.*. The species present indicate the maintenance of riparian soil moisture. The dense willow component stabilizes streambanks with root masses capable of withstanding high streamflow events. Bank cutting is occurring on the outside bend of meanders as expected in a dynamic stream system. In most cases, it appears bank cutting occurred at a faster rate in the past. Over time, cut banks appear to have stabilized, with vertical banks slumping back to a more stable angle and becoming established with vegetation (small plants and grasses). Where active bank cutting is occurring, it appears to be within normal limits.

Although there is an old road that parallels much of Scotch Creek, impacts related to the road are not apparent. This natural surface road has mostly grown over with grasses and no obvious erosion problems are visible. There is a well defined game trail on the road surface which is causing some minor erosion at stream crossings. The main access road appears to be limiting the widening of riparian vegetation below the ranch site. However, since the road is placed at about the transition zone between riparian and upland species, this effect is minimized and is only occurring where the road is very close to the stream.

The major area affected by ranching on Scotch Creek is located at the ranch site (spring house) area. This area historically has been the most disturbed area. Scotch Creek appears to be lacking sinuosity in this location which may be due to past management activity along the stream. Currently this site has become a popular loafing area for horses and trespass cattle, which continue to affect the area by hoof action and riparian grazing pressure. Understory riparian species are lacking and have low vigor due to grazing and browsing. However, a nice overstory component of alders is present. Downstream migration of impacts are shielded by the bedrock canyon below the ranch. Below the canyon, the gradient levels out creating a natural area of deposition. Aggradation of this channel reach was likely

accelerated due to historic and current disturbance upstream. In this location Scotch Creek has become a braided stream with numerous stream channels weaving across a wide valley bottom. Riparian vegetation is well established along and between these multiple channels. Just below the Horseshoe Ranch fence line, these stream channels become captured by the access road which routes the stream about 150 feet down the road before returning to the stream channel. The road in this location is well rocked which helps to minimize any potential impacts.

The ranch site area of Scotch Creek would greatly improve if access for horses and cattle was restricted, such as by the use of an enclosure or some other method. Riparian vegetation would improve very rapidly and impacts along the stream banks and springs in the area would be reduced.

Slide Creek: Because of its length, Slide Creek was divided into three reach segments: upper, middle, and lower.

The upper reach (ID# 115) went from the Oregon/California border down to the confluence with Brushy Gulch. This reach is rated **PFC**.

The middle reach (ID #113) went from the confluence with Brushy Gulch down to the confluence with Wildcat Gulch. This reach is rated **PFC**.

The lower reach (ID #109) went from the confluence with Wildcat Gulch down to the confluence with Scotch Creek. This reach is rated **PFC**.

Overall, all three stream reaches were very similar, except the lower reach has more bedrock than the upper reaches.

Riparian vegetation, especially willow is well established in most places. Young alder colonization is occurring at several places along the stream, but only where the stream valley is more confined. Lots of other riparian species are present (current, choke cherry, cottonwood, and snowberry). All age classes were observed for these species. Vigor appeared high. Riparian vegetation is much more lush wherever the stream valley became more confined, and old, tall alders were noticeably present. We observed this trend in every stream reach we surveyed on the Horseshoe Ranch Area. This indicates that a cooler microclimate is being maintained by the confined valley. Conditions dry up very quickly as the valley width increases.

Bank cutting is occurring on the outside bend of meanders. Current rates of cutting appear to be normal. Many older cut banks are stabilizing and revegetating. Point bars are usually present on the inside bend and are vegetated by riparian species. There is evidence of recent flood flow that has accessed the well-defined floodplain in many places along Slide Creek. In several areas there is historic evidence of channel shifting across the valley. All lateral stream movement appeared to be associated with normal stream dynamics.

A natural surface road is close to Slide Creek near its confluence with Brushy Gulch. Very few impacts related to this road were observed. Some minor road related erosion and rutting was observed at stream crossings. The only major road-related impact is the excessive scouring of one tributary below a road crossing. This scouring appears to be the result of concentrated runoff flowing down the road and routed into the tributary by a dip in the road crossing. Conditions at this site appear to have stabilized; however, a high flow event could trigger an increase in erosion which could damage the road and increase sediment production. This site is located at the first tributary below the road crossing with Slide Creek.

The lower section of Slide Creek has many bedrock areas that act as good energy dissipaters. Where bedrock was not present, willow is well established and protecting the banks. Throughout Slide Creek, the stream appears to be in balance with its landscape setting and does not show any signs of excessive erosion or deposition.

Brushy Gulch: Brushy Gulch was surveyed from its confluence with Slide Creek, up to a spring in M.D.M., T. 48N., R. 6W. Section 26 NE1/4NW1/4.. This reach is rated **PFC**.

Where a floodplain is present, it appears to be maintained and accessed relatively frequently. Floodplain action is more evident higher in the stream system where more water is present.

The stream is in balance with the landscape setting, no excessive erosion or deposition was observed. Conditions appear to be dryer than in the past, which is affecting riparian vigor to some degree. Riparian vegetation is thick and lush where the stream valley is more confined. This is similar to what was observed in Slide and Scotch Creeks; however, it is much more dramatic here. Riparian vegetation is more limited lower in the reach where very little water is present. Throughout the reach, there is sufficient channel structure and adequate substrate material to dissipate stream energy.

Wildcat Gulch: Wildcat Gulch was surveyed from its confluence with Slide Creek, up to the confluence with an unnamed tributary in M.D.M., T. 48N., R. 6W., Section 36 NE1/4NE1/4. This reach is rated **PFC**.

Floodplain inundation is occurring; however, the stream is less dependent on the floodplain for energy dissipation. The steep channel has a high amount of bedrock and other large substrates to help dissipate energy. No excessive erosion or bank cutting was observed.

Conditions appear to be drier now than they were in the recent past. Willows are mostly old and stressed (moisture), little regeneration is occurring or it appears to be slower than normal. Vigor appears to be lower; this is especially evident on the outer riparian margins. This may indicate that the riparian area is shrinking in some areas. A diverse composition of riparian vegetation is present, especially higher up in the reach where more water is present.

Currently this reach is still functioning properly. However, it appears that conditions within this basin have become drier. This reach is heavily spring influenced. Recent periods of low precipitation may have diminished moisture availability. If dry conditions continue, riparian vegetation may suffer and the rating would shift to FR with a downward trend.

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APPENDIX D

ADDITIONAL CULTURAL INFORMATION

Ethnography

At the time of contact the study area was principally inhabited by the Shasta Indians. These were Hokan-speaking hunters and foragers occupying numerous villages along the Klamath River with smaller settlements situated at springs and along secondary streams. Special use locations (gathering sites, quarries for stone, hunting locations, etc.) were more widely scattered across the landscape. Because of seasonal availability of various resources, the Shasta practiced a pattern of seasonal migration, periodic movement, and group splitting and joining up while following the resources. The Klamath River corridor was an active interaction sphere and trading pathway dating back into prehistoric times. The Klamath Indians appear to have been involved in trading (e.g., basketry, obsidian, marine shell beads and ornaments, salt, etc.) and other activities within this corridor and in the study area, at least on its eastern margins. Both the Shasta and the Klamath had a rich religious institution closely intertwined with the natural world and with neighboring groups, manifested in myth and ritual and sacred or special locations throughout the landscape.

There were numerous food resources used by the Shasta and their neighbors including roots and bulbs such as camas (*Camassia* sp.) and various varieties of *Perideridia* sp. (e.g., ipos, yampa). Acorns in a good year were an important food source along with salmon, eel, suckers, freshwater mussel, deer, bear, elk, and smaller animals. Other plant foods included various seeds (e.g., *Madia* sp.). Nuts and berries helped round out the diet. A diversity of plants and animals provided materials for clothing, tools, houses, medicines, etc., resources found in the study area.

Throughout Shasta territory cylindrical pestles, hopper mortars, manos and metates were the principal grinding implements for foods and other materials. Sinew backed bows of yew or juniper were made with arrows, often tipped with obsidian points, painted to match the bows. Some basketry was produced in the twining method. Bone and antler were used for scrapers, awls, wedges, arrow shafts and salmon gigs. Various flaked stone tools were also employed.

An important technique utilized by Native American Indians was controlled burning to help manipulate the growth of desired plants and provide beneficial habitats for animals, much like the practice used in the study location today. Of course, long term changes in plant communities and animal population distributions have occurred over the centuries and millennia in the location, both as a result of changing natural environmental conditions (precipitation, temperature, etc.) as well as human uses.

While written inquiries to the various tribes within the greater region regarding Traditional Cultural Properties of concern within the greater study region elicited no response, an examination of an earlier sacred lands' study completed for BLM by Theodoratus Cultural Research in 1985 was examined (*Mapping Project Ethnographic Inventory Shasta-Trinity National Forest, Mendocino National Forest [Corning and Stonyford RD], Redding Resource Area, Bureau of Land Management*). This report and maps are on file with BLM in Redding. The record shows two Shasta villages located adjoining the study area, *Ekwik'*, along Camp Creek, and *Id-doo-kwi*, along the Klamath River near the mouth of Camp Creek.

Historic Resources

Peter Skene Ogden's exploration of 1827 initiated the dramatic and disastrous disruption of Native American lifeways in the region. Ogden's trip along the Klamath River and over the Siskiyou for the Hudson's Bay Company was followed by numerous other trapping and exploration parties between about 1830 and 1850, with the main Siskiyou Trail along the western and southern border of the greater study area. The natural and cultural world was severely disrupted. Subsequently, the Gold Rush brought in many more miners, entrepreneurs and settlers with Yreka the principal community, with nearby smaller communities such as Cottonwood/Henley. During the 1850s and 1860s, Native American Indian people were largely removed from the area. A few Shasta families managed to persist

in the locality or returned from reservations. Their descendants live locally in the region to this day.

Farmers and ranchers began the transformation of the area in the 1850s, although more to the south in Shasta Valley than in the Horseshoe Ranch area. Roads were built to the ranches, including one from Cottonwood to Wadsworth Flat and possibly on up the Klamath on its north side or to points to the north. This is perhaps the wagon road mentioned by early range rider George Wright (see below) running between Hornbrook and Little Good Water, passing through the study area and Horseshoe Ranch itself. U.S. Government surveyors laid out both the township and ranges and defined the California-Oregon border through accurate survey methods. C.C. Tracy initiated surveys in the region in 1856. D.G. Major officially delineated the state line in 1867-1869 followed later by Fred Rudolf in 1916. State land delineations were initiated through the State Indemnity School Selection Grant in 1853. The next official land transfer in the greater locality did not occur until a homestead entry in 1869 and a mineral patent in 1874. Various homestead and stock raising entries were filed beginning in earnest in 1891 into the 1930s, although many were relinquished or cancelled, probably in cases due to the relatively marginal living conditions, isolation, and absence of water. Most applications were filed in the first 15 years of the 20th century. A number of individuals undoubtedly lived in the area without filing an application, for a time before filing an application, or after an application was relinquished or revoked judging from the oral history notes of George Wright, discussed below, on file with the BLM office in Medford.

A Central Pacific Railroad grant was obtained in 1896 and some land was placed into the Forest Service jurisdiction in 1910-1911. The 240-acre Horseshoe Ranch itself was obtained by Carlton Miller et al. in 1936 from the Southern Pacific Land Company. It eventually passed into the State of California's hands in 1977. Earlier ranching occupants also lived here.

The Government Land Office plats for the study area were examined. Away from the Klamath River the most prominent area of historical activity was along the California and Oregon Stage Line, the earlier emigrant trail. A dirt road shown on the 1875 GLO plat runs up Hudon (Hutton) Creek. An agriculture field is also shown along this creek close to present day Interstate 5. Up a fork of Cottonwood Creek on the State line is listed Rushton's House, evident on the 1916 map. A ranching complex is present at Horseshoe Ranch itself. Local lore has it that a stage station was present at Wadsworth Flat (perhaps known earlier as the location of Little Good Water), along a historic road previously mentioned. While this location on private land was not visited, from afar large poplar trees and a historic development are evident. Other historic sites in the area include various ranches or homesteads, most on private or State land, including those of Crovele, Quigley, McHenry, Pappas, Pedro Smith, Terrill, Beers-Liskey, Scholenburger, Madero, McNew-Bull Hide Camp-and Miller, as well as others near the California-Oregon Trail, some still occupied to this day. There is an abandoned ranch at Anderson's Spring, Spaulding's Camp near the mouth of Wildcat Gulch (on BLM land), old fence lines, a few old roads, and the Southern Pacific Railway, built in 1887, present in the study area.

The comparative remoteness of much of the area, the scarcity of fresh water sources, its relative ruggedness and absence of development are seemingly reflected in the minimal historical geographical nomenclature for the area, as found on the topographic maps and the presence of BLM administered land remaining unpatented. There are obvious landmarks including Little Pilot, Bailey Hill, Shelton Rock, Fog Rock and Slide Ridge; the various springs named Maple, Anderson, and Collins; Wildcat, Miller and Wildcat gulches. There is also Camp, Dry, Hudon (Hutton), Scotch, and Slide creeks. Oral history notes from the 1950s were obtained by Anne Fowley and the Medford BLM office as discussed above. These have been compiled into a monograph on file with that office. These notes are derived from work with an early settler, later range rider for BLM, George Wright. The documentation bespeaks a relatively rich local geography and history. Oak Spring, Choke Cherry Spring, Brady's Lick, Horseshoe Bend, Hears Flat, and Elie's Flat, for instance, are no longer listed on the modern day topographic map.

A highlight of Wright's applicable narratives follows. Scotch Creek was apparently once called Lone Pine Creek. Camp Creek received its name in the mid 1850s when a detachment of soldiers camped near its mouth during hostilities with the local Indians. Wildcat Gulch and nearby Spaulding Camp were the scenes of a major encounter with the notorious Grizzly, Reelfoot. He was eventually shot in 1890 along Wildcat Gulch after a furious battle. Many horses used to roam the area along with cattle and a few goats. Sheep seemed to have been concentrated to the north (into Oregon) and south in the Shasta

Valley. Bobcat, coyote and mountain lion were formerly hunted in numbers in the area and the deer were reduced through over-hunting by the 1950s, in Wright's estimation. Former wood cutting for rails and pickets occurred in the early days in the study area, with wagon roads scattered about interspersed with a homestead here and there along the creeks and by springs. Gold mining was briefly attempted by Lone Pine ridge at Fred's Mine (apparently also known as the Chipmunk Tunnel). The Lowood School was at the mouth of Scotch Creek. More than one mention is made by Wright of local moonshine stills, log corrals, hunting camps, fur trapping, steelhead runs in the creeks, and trout populations.

During the ranching period (1850s-1930s), limited irrigation work began to move water about the more gentle landscape. Hunters depleted game, and brought local extinction to various animal species such as wolves, antelope, mountain sheep and grizzlies. Other types of recreation uses began following World War II.

The cattle and sheep industry during this ranching period was spread throughout the study area, both on an official and unofficial basis. The memoirs of George Wright provide a vignette of conditions historically within at least portions of the study area:

During the spring of 1889 and 1890 . . . hundreds of cattle had just been loosed on the rangeland to graze the southward slopes of hillsides between Hornbrook and the Pilot Rock area . . .

Unregulated grazing by sheep and cattle was initiated shortly after the Gold Rush and prior to most homesteading activities (the Homestead Act was established in 1862). By the early 20th century many of the pastures, rangelands and riparian communities had been badly damaged by overgrazing and indiscriminate burning. Recovery is continuing to this day.

Prehistoric Resources

An examination was conducted of both the Bureau's cultural resource records as well as those on file with The Northeast Center of the California Historical Resources Information System at California State University, Chico. There have been 10 previous archaeological inventory projects within the greater study area, four of which were BLM-initiated reconnaissance surveys, three were CDF-Fish and Game related inventories directed at habitat improvement, and single examples are related to logging, communication site development and a fiber-optics cable alignment. These inventories, totaling 543 acres, are not random, composing two percent of the greater study area. They range between one and 160 acres in size. They are somewhat dispersed in the greater study area, however, providing an inkling of prehistoric site distribution and composition. Historic site distribution is better known based on historic information as presented above.

During the inventories there were four prehistoric residential artifact scatters (flaked and ground stone present), one of which was a housepit village; four lithic scatters (chert/jasper materials with occasional obsidian flakes); and five isolates (projectile points, flakes and a pestle). One historic ranching complex was recorded (Horseshoe Ranch). Other historic features not documented include cedar stumps (rail manufacturing?), a historic road, and old barbed wire fences. If one were to consider those prehistoric and historic sites recorded during the various surveys, there is a rough approximation of one site per 50-100 acres plus numerous isolates. This suggests that there are about 250 to 500 prehistoric and historic sites in the greater study area, with historic sites more common on current private land. Within the existing RMP boundary, between 175 and 350 sites could be present. A small percentage of the historic and prehistoric sites would likely be eligible for listing on the National Register of Historic Places, sites such as the Horseshoe Ranch prehistoric village, the Southern Pacific Railroad, and others. At this juncture there is not enough information to suggest any National Register districts.

The prehistoric sites appear to be mainly late prehistoric judging from the projectile points recovered. Major villages are known to occur along the Klamath River and within the lower stretches of perennial secondary streams. As one moves further away from the Klamath and lower stream stretches, occupation seems more ephemeral, probably special use sites related to seasonal hunting and foraging, as in bulb, tuber and root collecting in meadows. Additionally, there are scattered concentrations of quartz-related cryptocrystalline silicate materials including chalcedony and chert/jasper. These materials

appear to have weathered out in places from the basic igneous rocks, primarily occurring in colluvial deposits and stream beds difficult to predict in terms of occurrence. Such materials facilitated expedient flaked stone tool production. Minor prehistoric quarrying/prospecting appears to be present in the area and such siliceous materials were locally used for various cutting/scraping tools. Better materials in biface and core/tool form may have been exported to other areas which, along with materials testing, has left behind flaked stone by-products.

APPENDIX E

1. Special Status Flora. There is one Special Status Plant (SSP) species known to occur within the HRWA. This is Greene's mariposa lily (*Calochortus greenei*), which is a California Native Plant Society List 1B plant (plants that are rare, threatened, or endangered in California and elsewhere). It is an attractive lily with erect bell-shaped lilac flowers on foot-long stems, which grows only in southern Jackson County, Oregon, and northern Siskiyou County, California. Its habitat is associated with open thickets of Oregon white oak and western juniper, within grasslands and dry meadows. Soils ranging from clay to light loam, which are generally cobbly or stony, and often associated with rock outcrops, support *Calochortus greenei*. This species is at risk from horticultural collection and grazing pressure from deer, rabbits and livestock. Cattle grazing, when properly managed, does not appear to be a threat; however, uncontrolled grazing can severely impact the species (Brock, 1988). Currently, only five occurrences of this species is known within the planning area, but the potential for more occurrences is high.

Two SSP species are suspected to occur with the HRWA. One is Gentner's fritillary (*Fritillaria gentneri*), which has been Federally listed as endangered. This species is currently known only in southwestern Oregon, being found in scattered localities in the Rogue and Illinois drainages, and recently in the Klamath River drainage in Josephine and Jackson Counties. Plants have bright scarlet, nodding, bell-shaped flowers that are spotted with yellow, on nearly two-foot tall, stout stems with whorls of leaves about its middle. It typically grows in or on the edge of open woodlands of oak, mixed oak, and coniferous forests as well as chaparral/grassland habitat. Since the HRWA could have habitats that are suitable, and since this species has been recently found approximately three miles to the north, it has a fair possibility of occurring within the planning area. This plant often grows in places that experienced human disturbance and eventually became revegetated. Surveys so far have not established this species within this area.

The other species that is suspected to occur within the HRWA is Bellinger's meadowfoam (*Limnanthes floccosa ssp. bellingeriana*), a California Native Plant Society List 1B species. It is known from a few occurrences in southwestern Oregon and a few occurrences in Shasta County, California. This plant is a low-growing annual with several stems three to six inches long, with small, white, urn-shaped flowers borne on slender stalks. It is associated with standing water and highly saturated soils such as vernal pools, drainages, and moist meadows in open pine/oak woodlands. There is a low potential for this habitat within the planning area.

2. Survey and Manage Flora. The study area lies within the Northwest Forest Plan (NFP) area. This group of plants includes the vascular plants, bryophytes, lichens, and fungi. While lichens and fungi are no longer considered members of the plant kingdom, they have traditionally been classified as plants and are therefore addressed here. To date, the HRWA does not contain known sites of any of these plant species. Three species are suspected to occur there because the area is within their range, and possibly there are isolated patches of suitable habitat. Two species are vascular plants that are both of the orchid family: *Cypripedium fasciculatum* and *Cypripedium montanum*. These plants require canopy closures of over 60% in conifer forest and mixed evergreen/oak woodland plant communities. It is suspected that mid- to late-successional communities may be necessary for these species. The other species is a fungi called *Sarcosoma mexicanum*, which also requires conifer forest habitat. Since suitable habitats for these above-listed species make up a small portion of HRWA, the potential of occurrence would also be low, based on current surveys.

3. Survey and Manage Fauna. The NFP indicates that the FS and BLM will survey and manage for a host of faunal species, including several terrestrial and aquatic mollusk species. Surveys are required prior to ground-disturbing actions within suitable mollusk habitat. Suitable habitat typically includes talus slopes, mixed conifer habitat with multi-storied and closed canopies, dense riparian areas, and springs and streams. The following species could occur in the study area. The potential for their occurrence is low in most instances due to limited suitable habitat. These species include Oregon shoulderband, Klamath shoulderband, Siskiyou sideband, Church's sideband, Klamath sideband, Tehama chaparral, Klamath pebblesnail, and Klamath Rim pebblesnail.

Although occurrence of any of these species is unlikely, if suitable habitat exists within the boundaries of a ground-disturbing project area, surveys would be required. If survey and manage species are found, a proposed ground-disturbing action would be modified so there would be no significant damage to the species and its critical habitat.

4. Special Status Fauna. The California Natural Diversity Data Base (CNDDDB) is a database depository for sightings and records of special status animal and plant species, including federal endangered and threatened species. Records for the U.S. Geological Survey (USGS) topographical maps that encompass the HRWA were retrieved from CNDDDB.

This data base search indicated past sightings or collections of the following **special status faunal species in the vicinity of the HRWA:**

SPECIES	STATUS	HABITAT ASSOCIATION	OCCURRENCE IN THE HRWA
bald eagle <i>Haliaeetus leucocephalus</i>	FE, SE	Lake margins and river courses for nesting and wintering. Most nests are within 1 mile of water. Nests in large, old-growth or dominant live trees with open branches, especially ponderosa pine. Nests communally in winter.	Not known from HRWA. Limited suitable habitat. Known to nest in stream corridor east of the study area
northern goshawk <i>Accipiter gentilis</i>	CFGSC	Summers within and in vicinity of coniferous forest. Uses old nests and maintains alternate nest sites. Usually nests on North slopes near water. Conifers are typical nest trees.	Not known from HRWA, Large tracts of continuous coniferous forest lacking. Known from forested area southwest (and outside) of the study area. Also known from Oregon just northeast of HRWA.
prairie falcon <i>Falco mexicanus</i>	CFGSC	Inhabits dry, open terrain, either hilly or level. Breeding sites located on cliffs. Forages far afield	Known from area encompassed by RMP HRWA boundaries and from cliff sites east of the study area.
Klamath largescale sucker <i>Catostomus snyderi</i>	CFGSC	Native to the Klamath River and Lost River-Clear Lake systems of OR and CA. Inhabits both lentic and lotic habitats, but primarily riverine. Migrates upstream to spawn in the spring	Collected from Iron Gate Reservoir
shortnose sucker <i>Chasmistes brevirostris</i>	FE, SE	Native to the Klamath River and Lost River-Clear Lake systems of OR and CA. Spends most of year in open waters of large lakes. Feeds on plankton. Spawns in tributary streams.	Collected from Klamath River upstream of Copco, and from Copco Reservoir.
Lost River sucker <i>Deltistes luxatus</i>	FE, SE	Native to the Lost River system of OR and CA. Primarily a deep water species. Adults spawn in tributaries in the spring	Collected from Copco Reservoir and upstream portions of Klamath River (not native to the Klamath). Also from Irongate Reservoir.
FE= federal endangered, SE= state of CA endangered, CFGSC=CA Dept. of Fish & Game Species of Concern			