Decision Notice

& Finding of No Significant Impact

Peola Allotment Environmental Assessment

USDA Forest Service
Pomeroy Ranger District, Umatilla National Forest
Garfield County, Washington

Legal Land Description: T8N, R42E in portions of sections 1-5; T8N, R43E in portions of sections 3 and 4; T9N, R42E in portions of section 1, 11, 12, 14, 22, 25, 27, 28, 33, 36 and all of sections 13, 23, 24, 26, 34 and 35; T9N, R43E, in portions of sections 7, 11-14, 18, 19, 23-26, 31, 32, 34 and all of sections 9, 10, 15-17, 20-22, 27-30, and 33 Willamette Base and Meridian

Decision and Reasons for the Decision

Background

The Peola Cattle and Horse Allotment has had a history of use dating to 1870 when it was used by sheep, horses, and cattle. In 1929 horses were excluded and by the mid 1930s, sheep. Use of the of the allotment by cattle has not changed since 1949 however the number of cattle using the allotment has varied from 520 to the current 222 cow/calf pairs depending on the amount of private lands included in the allotment management plan. The existing Allotment Management Plan was completed in 1969 and has been adjusted using the Annual Operating Instructions to protect ESA listed species. Three pastures have been placed in resource protection (an administrative procedure to defer grazing on an area for protection of a resource of interest or concern for impacts) and a forth dropped because of the lack of water (EA Chapter I – 2 and 3). Currently five pastures are actively used. Monitoring of the three condition and trend transects indicate an upward trend in the condition of vegetation and soil resources (EA Chapter III – 2).

The purpose of this action is to implement direction in both the Forest Plan and in Acts of Congress to provide grazing on National Forest System lands. See EA Chapter 1 pages 3 and 4.
There is also a need to revise the current allotment management plan for new information and changed conditions.

- The Rescission Act of 1995 (Public Law 104-19, Section 504) requires the Forest Service to identify all allotments requiring NEPA analysis, and to prepare and adhere to a schedule for conducting such analysis.
- The Granger-Thye Act of 1950 (Public Law 81-478) created direction for National Forest System allotment management. The purpose of the Act was to establish controls and stewardship of the public land grazing resource. The Act included such measures as authorization to issue grazing permits for terms up to 10 years; authorization to use grazing fee receipts for rangeland improvement; and the establishment of grazing advisory boards. The core of stewardship linked the use of public land to an established, local private landowner who would bring economic stability to local communities and create a sustainable level of production for both forage and wildlife habitat.
- Where consistent with other multiple use goals and objectives there is Congressional intent to allow grazing on suitable lands. (*Multiple Use Sustained Yield Act of 1960, Wilderness Act of 1964, Forest and Rangeland Renewable Resources Planning Act of 1974, Federal Land Policy and Management Act of 1976, National Forest Management Act of 1976.*

- The allotment management plan in place is quite old (1969) and does not incorporate changes associated with the signing the current Forest Plan, PACFISH amendment and listing of new species under the Endangered Species Act (ESA). Also, it does not allow flexibility in making adjustments to accommodate changes in weather, forage conditions, or other circumstances. Instead these changes have been made through adjustments in the Annual Operating Plan.
- Grazing would occur in areas that provide habitat for Canada lynx. There is a need to provide management direction for the conservation of Canada lynx habitat for project and fulfill our obligations under the ESA.

The environmental assessment (EA) documents the analysis and comparison of 2 alternatives, a no grazing alternative and the proposed action which continues grazing as it currently exists.

Decision

I have decided to implement a modified Alternative 1 – Proposed Action placing the Upper Sourdough Pasture in resource protection along with the other 3 pastures already identified to continue in resource protection. This decision would continue the authorization of domestic livestock grazing for 222 cow/calf pairs in the Peola Allotment between June 1 and no later then September 30th for a maximum of 1,175 Animal Unit Months (AUM). The allotment would consist of 8 pastures; however Lower Sourdough, North Fork, Dick, and Upper Sourdough pastures would be placed in resource protection and not used for grazing. Grazing of these pastures could be allowed in the future if management activities can be designed to be compatible with the resource being protected but would require additional analysis and a new decision.

SUMMARY OF THE SELECTED ALTERNATIVE

Pasture	Acres	Time of Use	Numbers, Cow/Calf Pairs	Reason of Protection
Cottonwood	1,097	Early season	100/100	
Dick Trail	1,110	Early season	50/122	
Lick	8,346	mid and late	222	
Charley	7,460	mid and late	222	
Upper Sourdough	1,403	No grazing		Contains populations of the ESA listed *Silene spaldingii*, and the sensitive species *Lomatium rollinsii*
Lower Sourdough	644	No grazing		Contains populations of the ESA listed *Silene spaldingii*
North Fork	3,068	No grazing		Main water source is also anadromous fish habitat.
Dick	753	No grazing		Main water source is also anadromous fish habitat.

Utilization and range condition trends observed through monitoring various resource conditions would be used to change grazing instructions. Based on yearly monitoring, the number of cattle permitted and the time of use can change. Other factors that can reduce the number of animals or days of use include when the range is ready for turnout, a new listing of a species for protection either as a R6 sensitive species or under ESA, or the permittee having fewer cattle.

My decision includes a non-significant Forest Plan amendment.

Rationale for Decision

Adding the Upper Sourdough Pasture to the three pastures already in resource protection offers the greatest protection for endangered species habitat and the one Region 6 sensitive species that could trend towards ESA listing should grazing continue. It has not been determined if the years of cattle grazing in the sourdough pastures has kept these listed plant species from utilizing or spreading into potential habitat in these pastures. Once cattle are removed from the pastures, monitoring will be used to determine if the species spread to new areas or expand the boundaries of currently occupied sites. This information would be used in the future to determine if grazing could be returned to the pasture.

I believe this adjustment to the Peola Allotment best meets the purpose and need by providing grazing opportunity while allowing the management of endangered species habitat necessary to meet Endangered Species Act requirements. The decision represents a compromise that I have discussed with the permittee. Grazing can be carried out in the other four pastures until more is learned about the interaction between cattle and the listed species. The number of cattle permitted would not change unless trend monitoring indicates a need to reduce numbers or add more acres. I could have added fences and relocated portions of fences to continue use of the pastures however, the expense associated with relocating fences and modifying pasture boundaries to avoid the known plant populations or fence out riparian areas along North Fork Asotin Creek would be quite high for the amount of pasture that could be made available. I did not develop this as an alternative.

Fisheries and riparian habitat is being protected from potential impacts from grazing. There would be continued monitoring to determine when cattle need to be either moved from the pasture or encouraged to disperse. Past monitoring indicates that forage utilization by cattle is meeting Forest Plan standards and guidelines and there is an improving range condition trend (EA pages Chap IV – 1 and 2). Natural barriers keep cattle away from the North Fork Asotin Creek in the Lick and Charley pastures EA pages Chap III-17 and Chap IV-19). Improving of the water gap on Lick Creek has reduced sediment delivery into the stream. The continuation of grazing as proposed in this decision would: (1) protect water quality, (2) improve or maintain riparian conditions by not impacting stream shade or temperatures and (3) protect anadromous fish habitat by continuing to keep the Dick and North Fork Pastures under resource protection (EA pages Chap II – 12 to 15, Chap IV – 4 to 6 and 15 to 19).

The risk to spread of invasive plants to new areas by cattle would be reduced but not eliminated. The threat to *Silene spaldingii* would be reduced by adding the Upper Sourdough pasture to resource protection (Biological Assessment of Spalding's Catchfly, BA). The invasive plants prevention plan (EA Chap II – 14) has measures for reducing the incident of new species or infestations coming from off forest. Measures will be taken to avoid concentrating cattle in dry meadows or other locations that would increase soil disturbance from hoof action. Early detection and reporting by the permittee would identify new sites for early treatments. These measures would reduce the rates of spread and the risk for invasive plants moving into other pastures. (EA Chap IV page 10) The only risk of damaging this Silene species would be from individual cattle getting out of a pasture (BA for Spalding's Catchfly). Past monitoring indicates that this has been very few to none and the impacts from these individuals would be immeasurable. By including Upper Sourdough in resource protection, Spalding's Catchfly would be protected.

Continuing grazing in the four pastures would not impact big game cover and since big game utilization of forage is incorporated into Forest Plan utilization standards, competition from cattle for forage would

not degrade winter range or overall forage productivity. Forage productivity is protected by Forest Plan Standards and Guidelines. (EA Chap IV pages 1 and 2, 11 and 12)

As part of my decision, the selected alternative amends the Forest Plan. The Forest Plan will be amended to incorporate management direction (standards and guidelines) for Canada lynx. The amendment applies only for the duration of the project and to those actions proposed in lynx habitat. The management direction is consistent with conservation recommendations located in Chapter 7 of the lynx Conservation Assessment Strategy (LCAS) as amended, 2000.

This decision is consistent with the Forest Plan (EA Chap IV – 22) and applicable laws, regulations and policies such as the Clean Water Act (EA Chap IV – 21 and 22).

Other Alternatives Considered

In addition to the selected alternative, I considered 4 other alternatives; three were considered but not fully developed because they would not meet current Forest Plan Standards or the concern could be addressed by monitoring and adjusting the permit with the annual operating instructions. A no grazing alternative was fully developed; a comparison of the two alternatives can be found in the EA on pages Chap II 16 to 20.

Alternative 2 – No Domestic Livestock Grazing (No Grazing)

This alternative responds to Forest Service policy by providing a no grazing alternative. Under this alternative, domestic livestock grazing on the Peola C&H Allotment would not be authorized. Twenty-one water troughs on the allotment and one corral, in Lick and Charley pastures, would be removed. Existing ponds will remain in place for wildlife.

Public Involvement

The public was first informed about our proposal to continue grazing in the Peola Cattle and Horse Allotment in the Fall of 2003 Schedule of Proposed Actions. The proposal was provided to the public and other agencies for comment during scoping. Contact was made with the Nez Perce Tribe through a scoping letter and at three meetings; they voiced no concern. Throughout the analysis process our permittee has been kept informed about resource impacts that could restrict allotment use. Several meetings occurred in 2005 and again in early 2006 prior to the EA being released for the comment period. They were informed that the Upper Sourdough Pasture would likely be placed in resource protection to protect *Silene Spaldingii* and *Lomatium rollinsii* from possible effects by grazing cattle. In March of 2006 the EA was released for public comment. The permittee responded and voiced concern about placing the four pastures in resource protection. Rationale for removing grazing for resource protection is provided above. Concerns about impacts to anadromous fish were also voiced by the Center for Tribal Water Advocacy. Responses to their concerns can be found in Appendix E of the EA.

Using comments from the public, permittee, and environmental interest organizations the interdisciplinary team identified several issues regarding effects of the proposed action. Issues were:

- concern about impacts to water quality and fish habitat by hoof action and heavy or intensive grazing of riparian vegetation that may move sediment into streams as cows travel along riparian areas.
- concern that cattle movement would increase the risk of noxious weeds spreading to new areas.
- concern that continued grazing may have a negative effect on *Silene spaldingii* and *Lomatium rollinsii* habitat by allowing invasive plants to gain a foothold through trampling and displacement of soils.

None of these issues generated an alternative; however they provided a focus for the analysis. How these issues influenced my decision is included in the rationale for the decision above.

Finding of No Significant Impact

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. This determination is based on the site-specific environmental analysis documented in the Environmental Assessment and supporting documents which describe direct, indirect, and cumulative impacts of this decision. I have found that the context of the environmental impacts of this decision is limited to the local area and is not significant. I have also determined the severity of these impacts is not significant.

Context

The actions included in the selected alterative are described in Chapter 2 of the EA. The detection of effects may differ by the resource and by the scale of analysis. Therefore, multiple scales and levels of analysis were used to determine the significance of the actions effects on the human environment. The analysis area covers the 23,880 acres of the Peola Allotment. The selected alternative includes grazing on four of eight pastures. Water qualities and flows would not be measurably impacted. Wildlife and its habitat, fisheries habitat, soil productivity and the regional economy would be affected. The impacts of the Selected Alternative on each of these are disclosed in the EA (Chapter 4). Therefore in context, this project is local in scope.

Intensity

The environmental effects from the proposed grazing are documented in Chapter 4 of the Environmental Assessment. The beneficial and adverse direct, indirect, and cumulative impacts discussed in the EA have been disclosed within the appropriate context, and effects are expected to be low in intensity because of project design including management requirements developed to protect or reduce impacts to resources. Significant effects to the human environment are not expected. The rationale for the determination of significance is based on the environmental assessment. I base my findings on the following:

1. My finding of no significant environmental effects is not biased by the beneficial effects of the action. The interdisciplinary team analyzed and disclosed the direct, indirect and cumulative effects of the action on range (pg. IV 1-2), Soils (pg. IV 3-4), water quality (pg. IV 4-6), fire and fuels (pg. IV 6-7), TE&S plant species (pg. IV 7-10), noxious weeds (pg. IV 10-11), wildlife and wildlife habitat (pg. IV 11-15) and TE&S aquatic species and habitat (pg. IV 15-20. While the EA discloses short-term and minor deviations from the existing conditions, in my experience on similar projects, none of these effects have been found to be significant. All of these effects would result in conditions that are consistent with the Forest Plan.

2. There will be no significant effects on public health and safety, because there would be no measurable impacts to water quality, fisheries, or public health (see EA Chap IV – 4 and 5, 15 to 20 and 22). The selected alternative is consistent with the Clean Water Act and Forest Plan.

3. There will be no significant effects on unique characteristics of the area, because there are no park lands, prime farmlands, wetlands, wild and scenic rivers affected. (see EA Chap IV – 22 and 23).

4. The effects on the quality of the human environment are not likely to be highly controversial because there is no known scientific controversy over the impacts of the project. There are differing opinions about the role and impacts of grazing on the landscape. The EA reviewed these differences (EA Chap II – 3 and 4 and Chap IV – 23). There was a concern suggesting the analysis disclosing effects of the proposal to fisheries habitat was incomplete. This concern was addressed in the Aquatic Biological Evaluation and does not represent a significant disagreement. The Biological Evaluation considered the fact that the pasture with the greatest threat to anadromous fish habitat will be placed in resource protection, and thus no grazing will occur in that area. The impacts to aquatic organisms from the other pastures would not be measurable. (EA Chap III – 17 to 19; Chap IV 1 to 6; 15 to 20)

5. We have considerable experience with the type of activity to be implemented. The analysis shows the effects are not uncertain, and do not involve unique or unknown risk. Grazing is one of the most heavily monitored activities on the Umatilla National Forest and effects from grazing are well documented. Specific monitoring on the Peola allotment has show a continually increasing trend in range condition. Based on the past monitoring results and the effects disclosed in the EA, the project presents no highly uncertain or unknown risks.

6. The action is not likely to establish a precedent for future actions with significant effects. Grazing has occurred on the Umatilla National Forest for over 100 years and through continuing monitoring, the effects have been well documented. Grazing in this area is permitted in the Forest Plan. The EA effectively addressed and analyzed all major issues associated with the project. The decision also authorizes the use and maintenance of exiting improvement in support of the grazing. Any new improvements would be considered after further analysis. Before any of the pastures now in resource protection are authorized for use, additional analysis (which would include public comment) and a new decision would be completed. (see EA Chap II – 7 to 15).

7. Cumulative impacts are not significant. EA Appendix D lists existing permits, contracts, and uses both within and adjacent to the planning area, along with reasonably foreseeable future projects. These actions were considered when cumulative effects for various resources were discussed in Chapter IV. Private lands below the Forest boundary were also considered in determining cumulative effects. Our analysis did not indicate significant cumulative effects. Forest standards and guidelines would be met and the activity would not cause measurable impacts to water quality or fisheries habitat below the Forest boundary.

8. The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. A review of the Umatilla National Forest heritage files indicate that the Peola Allotment project area has been surveyed for cultural resources recording 36 historic or prehistoric sites within the project area. Section 106 responsibilities for this undertaking, permit re-issuance for the Peola C&H Allotment, has been completed and forwarded to the Washington SHPO. Any grazing maintenance activities, including establishment of salting locations, will be looked at as separate undertakings and will require the appropriate tribe and SHPO consultation. A no effect

determination for permit re-issuance has been forwarded to the Washington SHPO. (EA Chap IV – 20)

9. Including the Upper Sourdough Pasture with the other 3 pastures in resource protection will result in an action that will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species act of 1973. (EA Chap IV – 12 to 14, 15 to 20; Terrestrial and Aquatic BEs, the BA for Spalding's catchfly). Proposed grazing has been determined to have no effect on ESA listed fish and may effect but not likely adversely affect Canada lynx and Spalding's catchfly. The modified grazing system has been consulted and the USDI Fish and Wildlife Service concur with our finding of may affect but not likely adversely affect.

10. The modified Alternative 1will not violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA (Chap IV 20 to 23). It is also consistent with the Umatilla National Forest Land and Resource Management Plan (EA Chap IV - 22).

Findings Required by Other Laws and Regulations

This decision to continue grazing in the Peola Allotment is consistent with the intent of the forest plan's long term goals and objectives found in Chapter 4 of the Forest Plan. The project was designed in conformance with land and resource management plan standards and incorporates appropriate land and resource management plan guidelines for forage utilization and management (Land and Resource Management Plan, pages 4-63 to 65 and PACFISH amendment).

Finding of Non-Significant Forest Plan Amendment

Forest Service Land and Resource Management Planning Handbook (Forest Service Handbook 1909.12) lists four factors to be used when determining whether a proposed change to a Forest Plan is significant or not significant: timing; location and size; goals, objectives and outputs; and management prescriptions.

Timing: Timing looks at what point over the course of a Forest Plan period the Plan is amended. Both age of the underlying document and duration of the amendment are relevant considerations. The handbook indicates that the later in the time period (fifteen year planning period), the less significant change is likely to be. The Record of Decision for the Umatilla Forest Plan was signed June 11, 1990, so we are in year seventeen. As noted in the EA (Chapter 1, 2, and 4) the action is limited in time in that it would only apply for the duration of grazing in the Peola Allotment where it occurs in lynx habitat.

Location and Size: This factor looks at "the relationship of the affected area to the overall planning area. [T]he smaller the area affected, the less likely the change is to be a significant change in the forest plan." The planning area for the Umatilla National Forest is about 1.4 million acres (Forest Plan, page 1-4). Management direction in the amendment applies only to lynx habitat and only for the duration of grazing in the Peola Allotment. The Peola Allotment is within the Asotin lynx analysis unit (LAU). There are about 50,630 acres of lynx habitat with in the Asotin LAU. Of that about 3,000 acres of lynx habitat fall within pastures of the Peola Allotment; which is about 6 percent of the total lynx habitat within the LAU. This amount is approximately 0.2 percent of the forest planning area (1.4 million acres). Thus, the size of area affected by the project and amendment is small when compared to the overall planning area.

Goals, Objectives, and Outputs: This factor involves the determination of "whether the change alters the long-term relationship between the level of goods and services in the overall planning area" (Forest Service Handbook 1909.12, section 5.32(c)). This criterion concerns analysis of the overall Forest Plan and various multiple-use resources that may be affected. In this criterion, time remaining in the 15-year planning period to move toward goals and achieve objectives and outputs are relevant considerations.

The objectives, standards, and guidelines of the amendment are specific to Canada lynx for the duration of the Peola Allotment Management Plan. The amendment does not change the goals and objectives for other resources in the forest plan nor does place limitations on the utilization of forage. Effects of these limitations are disclosed by alternative in Chapter 4 of the EA. This amendment is not expected to preclude or require other actions across the forest in lynx habitat and incorporation of this management direction will not change the amount of range habitat available for use outside of this project area; it does not change management direction for timber management; plans of operation for mining; or access and travel management (Chapter 4). Therefore, anticipated changes brought about by this amendment in the levels of resource activities and outputs (Forest Plan, page 4-16) projected for this planning period are not expected to be measurable.

Management Prescriptions: This factor involves the determination of (1), "whether the change in a management prescription is only for a specific situation or whether it would apply to future decisions throughout the planning area" and (2), "whether or not the change alters the desired future condition of the land and resources or the anticipated goods and services to be produced" (Forest Service Handbook 1909.12, section 5.32(d)). In this criterion, time remaining in the 15-year planning period and changes in desired future conditions or anticipated goods and services to be produced are relevant considerations. The amendment is specific to, and for the duration of, grazing in the Peola Allotment and will not apply to future decisions throughout the planning area (EA, Chapter 1, 2, and 4). The desired future condition and land allocations are not changed by this decision (EA, Chapter 1, 2, and 4). As discussed above in "goals, objectives, and outputs", the long-term levels of goods and services projected in current plan for the 15 year planning period are not measurably changed by the Forest Plan amendment.

Finding

On the basis of information and analysis contained in the EA and all other information available as summarized above, it is my determination that adoption of the management direction reflected in my decision results in a non-significant amendment to the Forest Plan.

Implementation Date

If no appeals are filed within the 45-day time period, implementation of my decision may occur on, but not before, 5 business days from the close of the appeal filing period. When appeals are filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Administrative Review or Appeal Opportunities

This decision is subject to administrative review (appeal) pursuant to 36 CFR Part 215. The appeal must meet content requirements of 36 CFR 215.14. Only individuals or organizations who expressed an interest in the project may appeal.

The appeal must be filed (regular mail, fax, email, hand-delivery, or express delivery) with the Appeal Deciding Officer. Any written appeal must be postmarked or received by the Appeal Deciding Officer, Linda Goodman, Regional Forester, ATTN 1570 Appeals, P.O. Box 3623 Portland, OR 97208-3623 within 45 days of the legal notice announcing this decision in the East Oregonian Newspaper.

Electronic appeals must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), or Word (.doc) to the following e-mail address: appeals-pacificnorthwest-regional-office@fs.fed.us. In cases where no identifiable name is attached to an electronic message, a verification of identity will be required. A scanned signature is one way to provide verification.

The street location for hand delivery: 333 SW 1st Ave, Portland, OR (office hours: 8-4:30 M-F). Send faxes to 503-808-2255. Office business hours for those submitting hand-delivered appeals are: 8:00 am to 4:30 pm Monday through Friday, excluding holidays.

Contact

For further information regarding these appeal procedures, contact the Forest Environmental Coordinator Dave Herr at 541-278-3869

_/s/ *Kevin Martin*_____ 8/18/2006

KEVIN D MARTIN Date
Forest Supervisor
Umatilla National Forest

Publication # F14-POM-13-05

Environmental Assessment

USDA Forest Service
Pacific Northwest Region

Peola C&H Allotment

Umatilla National Forest
Pomeroy Ranger District
Garfield and Asotin Counties, Washington

August 2006

Lead Agency: **USDA Forest Service**

Responsible Official:

Kevin Martin
Umatilla National Forest
2517 S.W. Hailey Avenue
Pendleton, OR 97801-3989
(541) 278-3716

For Further Information Contact:

Angela Whittaker
Range Technician
Pomeroy Ranger District
(509) 843-4672

Table of Contents

Table of Contents (continued) **Page**

Chapter IV-Environmental Consequences

Chapter V-Agencies and Persons Consulted

Chapter I
Purpose and Need

Introduction

This Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This Environmental Assessment discloses the direct, indirect, and cumulative environmental impacts that would result from allowing grazing to continue as described in the Proposed Action. The document is organized into five Chapters:

• ***Chapter I – Purpose and Need:*** The section includes the history of the project proposal, the purpose of and need for the project, and the agency's proposal for achieving the purpose and need. It also details what decisions will be needed.

• ***Chapter II - Issues and Alternatives:*** This section begins by detailing how the Forest Service informed the public about this proposal, how the public responded, and how that information (along with internal, other agency, and Tribal input) resulted in significant issues to be analyzed. This section also provides a more detailed description of the agency's Proposed Action as well as alternatives to the Proposed Action including Alternatives considered but eliminated from detailed study. A monitoring plan is described followed by a summary table comparing the environmental consequences of each alternative.

• ***Chapter III - Affected Environment:*** This section describes the current condition of various resources of interest to provide a background to understand environmental impacts disclosed in Chapter IV.

• ***Chapter IV - Environmental Consequences:*** This section describes the environmental effects of implementing the Proposed Action and No Grazing alternative. This analysis is organized by significant issues. Consistency with the Forest Plan and other laws is also disclosed

• ***Chapter V – Agencies and Persons Consulted:*** This section describes the contributors to this Environmental Assessment.

• ***Appendices:*** The appendices provide more detailed information to support the analyses presented in the environmental assessment.

Location and Physical Characteristics

The Peola Cattle & Horse (C&H) Allotment is located in Garfield County, Washington (T8N, R42E in portions of sections 1-5; T8N, R43E in portions of sections 3 and 4; T9N, R42E in portions of section 1, 11, 12, 14, 22, 25, 27, 28, 33, 36 and all of sections 13, 23, 24, 26, 34 and 35; T9N, R43E, in portions of sections 7, 11-14, 18, 19, 23-26, 31, 32, 34 and all of sections 9, 10, 15-17, 20-22, 27-30, and 33) Willamette Base and Meridian. The allotment, also referred to as the project area, includes approximately 23,374 acres of National Forest System (NFS) lands

and 640 acres of state land. The allotment is administered by the Pomeroy Ranger District of the Umatilla National Forest (see Appendix A for Map).

The Peola allotment is within the Asotin watershed and is made up of long ridges with heavily timbered draws and steep, narrow stream channels. Many of the steep slopes are inaccessible to cattle, and the higher elevations have dense timber with little or no forage in the understory. Elevation varies from 3000 feet in Sourdough Gulch to 5400 feet near Devils Eyebrow.

Allotment History and Overview

Peola C&H allotment was part of one of the original C&H allotments on the district. Portions of the allotment have been grazed since 1870 by sheep, horses and cattle. Horses were excluded in 1929 and sheep in the mid 1930's. Although allotment and pasture names and acres have changed over the years, cattle have been consistent in the area since 1949 when the Peola C&H allotment was formed. Numbers of cow/calf pairs varied from 520 to the current number of 222. The Grazing season since 1949 to the present has ranged from 4 to 6.5 months.

The Peola allotment originally consisted of nine pastures (listed below). Over the past 30+ years management of the allotment has had many changes in response to resource protection needs and Forest Plan direction. Snake River spring/summer and fall chinook salmon, Snake River steelhead, Columbia River bull trout, Canada lynx, and Spalding's Silene (Silene spaldingii) were listed as Threatened under the Endanger Species Act (ESA). Nez Perce Mariposa Lily (Calochortus macrocarpus maculosus), and Arthur's Milkvetch (astragalus arthuri) were placed on the Region 6 sensitive plant listing. These are found in the project area. Noxious weeds such as yellow star thistle, diffuse knapweed and scotch thistle are also found within the allotment. Modifications have been made using the annual operating instructions to protect restoration investments for Threatened Endangered and Sensitive (TES) aquatic and plant species and to contain the spread of noxious weeds by placing three of the original nine pastures in resource protection.

The following is a list of all pastures as they have evolved over time and their current status.

Cottonwood II – early pasture – removed in the late 1980's because water was unavailable and drift fences were not maintained.
Cottonwood – early pasture and still in use today.
Upper Sourdough – early pasture and still in use today. Populations of Silene Spaldingii, an ESA threatened plant, exist in this pasture.
Dick Trail – early pasture and still in use today.
Lower Sourdough – early pasture and in resource protection so grazing cattle could not spread yellow star thistle seed across open areas and has some populations of Silene Spaldingii.
North Fork – has been is resource protection since 1993 because the main water source for cattle was North Fork of Asotin Creek which has anadromous fish. Non-use for resource protection eliminated any potential sediment delivery on salmon redds or trampling of spawning beds.
Dick – is currently in resource protection because the main water source is Charley Creek, an anadromous stream.
Charley – rotated between mid and late season and still in use today.

Lick – rotated between mid and late season and still in use today.

The existing Allotment Management Plan (AMP) was completed in 1969, and includes 23,881 acres which are divided into the current eight grazing units (pastures); Cottonwood II pasture was dropped in the late 1980's. Since 1992, there have been only five pastures in use: Charley, Lick, Upper Sourdough, Dick Trail and Cottonwood. The allotment uses a rest rotation system of grazing on the three lower elevation pastures, Upper Sourdough, Dick Trail and Cottonwood, where one pasture is in non-use (rested) each year. Charley and Lick pastures are on a deferred rotation grazing system, alternating mid and late season use. Lower Sourdough, North Fork, and Dick pastures are not being grazed.

Both the Dick and North Fork pastures are riparian pastures and have been placed administratively into resource protection. When these pastures were in use the numbers of permitted cow/calf pairs varied each year. For example the Dick pasture permitted from 72 to 265 cow/calf pair late in the season (between 10/1-11/30) and North Fork permitted 87 cow/calf pair as an early pasture (6/1-6/30). In order to reduce or eliminate any sedimentation effect to salmon redds, these pastures have not been grazed since 1992.

Lower Sourdough pasture is in resource protection due to Yellow star thistle populations and related concerns for the presence of Silene spaldingii (Spalding's catchfly), listed as threatened under ESA.

The allotment presently provides summer pasture annually for a total of 222 cow/calf pairs. The grazing period is from June 1st thru September 30th.

In 1992, 317 cow/calf pairs were authorized based on forage available using National Forest System lands, private lands, and a permit for the use of State of Washington Department of Natural Resources lands. However, these numbers have declined to the current 222 cow/calf pairs over the past 12 years because of pastures removed for resource protection, the private lands are no longer used, and the lease with the Department of Natural Resources expired.

Other management changes relating to the implementation of the Forest Plan in 1990 and the Forest Plan amendment dealing for PACFISH has resulted in changes in implementation requirements being added to the Allotment Management Plan using Annual Operating Instructions. Grazing on the Peola Allotment has been monitored and is fully consistent with the Allotment Management Plan and Forest Plan.

Purpose of and Need for Action

The purpose of this action is to implement direction in both the Forest Plan and in Acts of Congress to provide grazing on National Forest System lands. This analysis is being prepared to determine if the Forest Service should continue livestock grazing in the Peola Allotment. The needs associated with this purpose are:

- The Rescission Act of 1995 (Public Law 104-19, Section 504) requires the Forest Service to identify all allotments requiring NEPA analysis, and to prepare and adhere to a schedule for conducting such analysis.

- The Granger-Thye Act of 1950 (Public Law 81-478) created direction for National Forest System allotment management. The purpose of the Act was to establish controls and stewardship of the public land grazing resource. The Act included such measures as authorization to issue grazing permits for terms up to 10 years; authorization to use grazing fee receipts for rangeland improvement; and the establishment of grazing advisory boards. The core of stewardship linked the use of public land to an established, local private landowner who would bring economic stability to local communities and create a sustainable level of production for both forage and wildlife habitat.

- Where consistent with other multiple use goals and objectives there is Congressional intent to allow grazing on suitable lands. (*Multiple Use Sustained Yield Act of 1960, Wilderness Act of 1964, Forest and Rangeland Renewable Resources Planning Act of 1974, Federal Land Policy and Management Act of 1976, National Forest Management Act of 1976*)

There is a need to revise the current allotment management plan for new information and changed conditions.

- The allotment management plan in place was completed in (1969) and does not incorporate changes associated with the signing of the forest plans, PACFISH amendment, listing of new species under the Endangered Species Act. It also does not allow flexibility in making adjustments to accommodate changes in weather, forage condition, or other circumstances. Instead these changes (such as avoiding grazing within 300 feet of fish-bearing streams) have been made through adjustments in the Annual Operating Instructions.
- Grazing would occur in areas that provide habitat for Canada lynx. There is a need to provide management direction for the conservation of Canada lynx habitat for project and fulfill our obligations under the Endangered Species Act.

Proposed Action

The Pomeroy District Ranger, Umatilla National Forest, proposes to continue authorization of domestic livestock grazing on the Peola C&H allotment, grazing adjustments will be made when monitoring of resource use indicates a need for changing. The number of cattle permitted could be reduced or increased based on the range condition and trends. Additional protective measures to control potential impacts would be included in the Annual Operating Instructions when the past years monitoring indicates a need. Improvement actions would be identified to remedy impacts and any additional NEPA completed.

The proposed action would continue the authorization of permitted livestock for a total of 222 cow/calf pairs. The annual grazing season is from June 1 to September 30 (actual on-off dates may vary depending on range readiness, weather, and forage conditions) for a total of 1,192 Animal Unit Months (AUM). See Table 1-1 below.

Table I-1 - Peola C&H Allotment/Proposed Action

Allotment	Type Permit	Numbers	Kind	Season	Animal Unit Months
Peola	Term	222	Cow/calf	6/1 – 9/30	1,192

The proposed permitted actions are designed to comply with the standards and guidelines set in this document, the Forest Plan, conditions set in Biological Assessments, Biological Opinions and Letters of Concurrence, and other related documents associated with the management of this allotment and the actions designed in this proposal will not exceed these standards.

A detailed description of the Allotment Management Plan can be found in Chapter II including management requirements for consistency with Forest Plan Standards and Guidelines, PACFISH riparian protection, and Interagency Implementation Team standards (FSH 2209.13 Sec. 94.1). This proposal would be implemented in 2006.

As part of the continued use of the allotment the Forest Service proposes to amend the Forest Plan to incorporate management direction (standards and guidelines) for Canada lynx (see Appendix C details). The amendment applies only for the duration of the project and to those actions proposed in lynx habitat. The management direction is consistent with conservation recommendations located in Chapter 7 of the Lynx Conservation Assessment Strategy (LCAS) as amended, 2000. The LCAS states in Chapter 7-1 "These measures are provided to assist federal agencies in seeking opportunities to benefit lynx and help to avoid negative impacts through the thoughtful planning of activities. Plans that incorporate them are generally not expected to have adverse effects on lynx, and implementation of these measures across the range of the lynx is expected to lead to conservation of the species."

Applicable Laws and Documents

Analysis and documentation has been done according to direction contained in the National Forest Management Act (NFMA), the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations (CEQ), the Endangered Species Act (ESA), Magnuson-Stevens Fishery Conservation and Management Act of 2000 (NSA), the National Historic Preservation Act (NHPA), the Clean Air Act (CLA), Clean Water Act (CWA), and the 1995 Rescissions Act, Public Law 104-19 Section 504. Project consistency with these laws is discussed in Chapter IV.

Tiering and Incorporation by Reference

In order to eliminate repetition and focus on the site-specific analysis, this EA is tiered to the following documents as permitted by 40 CFR 1502.20:

- The ***Umatilla National Forest Land and Resource Management Plan FEIS*** and ***Record of Decision*** dated June 11, 1990, and the accompanying ***Land and Resource Management Plan*** (Forest Plan). The Forest Plan provides programmatic direction for the Forest, including the Peola C&H Allotment. The Forest Plan does this by allocating parts of the Forest to different resource emphasis or "management areas", and prescribing the type and intensity of management that may occur within each allocation. Relevant

portions of the Forest Plan are summarized below and compliance with applicable Standards and Guidelines will be discussed in Chapter IV.

- ***Forest Plan amendment 10 The Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California*** (PACFISH), dated February 24, 1995. PACFISH includes objectives and direction to project ocean-migrating fish and habitat that occurs on the Umatilla National Forest. This amendment contains specific guidelines for grazing.

- The **Pacific Northwest Regional Invasive Plant Program EIS** (ROD) Signed October 11, 2005, amended the Forest Plan and gives direction for use of prevention measures that reduce the rates of spread of invasive plants through providing goals and objectives along with standards and guidelines.

This EA also incorporates by reference the following documents:

- The ***Biological Opinion for the Implementation of Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California*** (PACFISH) from National Marine Fisheries Service dated January 23, 1995. PACFISH itself does not propose any ground-disturbing actions, but sets in place certain riparian management goals and management direction with the intent of arresting the degradation and beginning the restoration of riparian and stream habitats.

- The ***Biological Opinion on the Land and Resource Management Plans for the Boise, Challis, Nez Perce, Payette, Sawtooth, Umatilla and Wallowa-Whitman National Forests*** from National Marine Fisheries Service, dated March 1, 1995.

- The ***Biological Opinion for the Effects to Bull Trout from Continued Implementation of Land and Resource Management Plans and Resource Management Plans as Amended by the Interim Strategy for Managing Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, Western Montana, and Portions of Nevada (INFISH), and the Interim Strategy for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California (PACFISH)*** from National Marine Fisheries Service, dated August 14, 1998. This BO addresses the effects of continued implementation of LRMPs as amended by PACFISH standards and guidelines where listed distinct population segments of bull trout occur in Idaho, Montana, Oregon, and Washington.

- The ***Biological Opinion - Land and Resource Management Plans for National Forests and Bureau of Land and Management Resource Areas in the Upper Columbia River Basin and Snake River Basin Evolutionarily Significant Units*** by National Marine Fisheries Service dated June 22, 1998. This BO addresses the effects of continued implementation of the 18 LRMPs as amended by PACFISH standards and guidelines on Snake River salmon and steelhead.

- The ***Biological Opinion Bull Trout Asotin Creek Watershed, Ongoing and Proposed Activities in the Umatilla National Forest*** by the U.S. Fish and Wildlife Service dated December 16, 1998.

- ***Canada Lynx Conservation Agreement*** signed in May, 2005 and the ***Canada Lynx Conservation Assessment and Strategy*** (LCAS) as amended (Ruediger, et al. 2000).

- The Umatilla Forest's ***Biological Assessment on the Effects of Ongoing Activities and Existing Projects On the Canada Lynx (Lynx Canadensis)*** dated April 20, 2000.

- The Forest Service's ***Integrated Scientific Assessment for Ecosystem Management in the Interior Columbia Basin***, released 1996.

- ***Umatilla National Forest Environmental Assessment for the Management of Noxious Weeds*** and associated Decision Notice, signed May 24, 1995. This document identifies Forest-wide prevention and treatment methods for specifically identified noxious weed populations.

- ***Ecosystem Analysis of Fish and Aquatic Habitat for the Asotin Creek Watershed***, dated 1994. This is a watershed-level ecosystem analysis of current and reference conditions that include the Peola C&H Allotment, along with recommendations for restoration.

- The ***Peola C&H Allotment Project Record*** (hereafter referred to as the analysis file) [40 CFR 1502.21]. The analysis file contains Specialist Reports and other technical documentation used to support the analysis and conclusions in this EA. The analysis file is available for review at the Pomeroy Ranger District, Pomeroy, Washington.

- ***The Pomeroy Ranger District Motorized Access and Travel Management Plan,*** Pomeroy Ranger District, July 1993. A comprehensive program resulting in a transportation system which provides for a broad mix of both motorized and non-motorized recreation opportunities while moving toward Forest Plan desired future conditions.

- Other sources of information cited in this EA and its analysis file, such as specialist reports, published studies, and books.

Management Area Direction

The Umatilla Forest Plan identifies the type and intensity of management that may occur on subsequent National Forest lands. This is done through the allocation of "management areas." The Forest Plan defines specific management area goals and standards to guide project activities toward achieving a desired future condition for each designated management area and

collectively for the Forest as a whole. Following is a brief summary of direction and goals for Management Areas located within the Peola C&H Allotment (see also map in Appendix A). A complete description of each Management Area can be found in the Umatilla Forest Plan. Note that grazing is permitted in all management areas listed below except A6-Developed Recreation.

A4-Viewshed 1 (23 acres of National Forest land) – Manage the area seen from a travel route, use area, or water body where some forest visitors have a major concern for the scenic qualities (sensitivity level 2) as a natural appearing to slightly altered landscape. A moderate level of livestock grazing is permitted (Forest Plan 4-105).

A6 Developed Recreation (27 acres of National Forest land) – Provide recreation opportunities that are dependent on the development of structural facilities for user conveniences where interaction between users and evidence of others is prevalent. Domestic livestock grazing will ordinarily be excluded from developed site (Forest Plan 4-117).

A9 Special Interest Area (37 acres of National Forest land) – Manage preserve, and interpret areas of significant cultural, historical, geological, botanical, or other special characteristics for educational, scientific, and public enjoyment purposes. Domestic livestock may be permitted to utilize existing forage without changing overall natural characteristics or conflicting with the purpose of the area (Forest Plan 4-131).

C1 Dedicated old Growth (705 acres of National Forest land) – Provide and protect sufficient suitable habitat for wildlife species dependent upon mature and/or overmature forest stands, and promote a diversity of vegetative conditions for such species. Moderate levels of livestock grazing are permitted; however, forage in general will be limited to that which is normally present under densely forested canopies (Forest Plan 4-144).

C3-Big Game Winter Range (9,742 acres of National Forest land)—Manage big game winter range to provide high levels of potential habitat effectiveness & high quality forage for big game species. Domestic livestock grazing is permitted at Range management strategy C (Forest Plan 4-151).

C3A-Sensitive Big Game Winter Range (442 acres of National Forest land) – Manage sensitive areas of big game winter range to provide high levels of potential habitat effectiveness (at or above the current levels). Domestic livestock grazing is permitted at Range management strategy C (Forest Plan 4-146).

C4-Wildlife Habitat (1,276 acres of National Forest land) – Manage forest lands to provide high levels of potential habitat effectiveness for big game and other wildlife species with emphasis on size and distribution of habitat components. Unique wildlife habitats and key use areas will be retained or protected. Domestic livestock grazing is permitted at Range management strategy C (Forest Plan 4-160).

C5-Riparian and Wildlife (407 acres of National Forest land) – Maintain or enhance water quality, and produce a high level of potential habitat capability for all species of fish and wildlife within the designated riparian habitat areas while providing for a high level of habitat

effectiveness for big game. Intensive range management, including superior grazing systems, such as periodic rest, will be practiced to protect and improve riparian vegetation and anadromous fish and wildlife habitats (Forest Plan 4-163).

C8 Grass-tree Mosaic (3,621 acres of National Forest land) – On areas known as grass-tree mosaic, provide high levels of potential habitat effectiveness, high quality forage for big game wildlife species, visual diversity, and protect erosive soils. Domestic livestock grazing is permitted at Range management strategy C (Forest Plan 4-173).

E2 Timber and Big Game (6,431 acres of National Forest land) – Manage forest lands to emphasize production of wood fiber (timber), encourage forage production, and maintain a moderate level of big game and other wildlife habitat. Manage range and livestock at Range management strategy C and D with improved management systems.

Treaty Rights

The Forest Service, through the Secretary of Agriculture, is vested with statutory authority and responsibility for managing resources of the National Forests. Commensurate with the authority and responsibility to manage is the obligation to consult, cooperate, and coordinate with Indian Tribes in developing and planning management decisions regarding resources on National Forest system land that may affect tribal rights retained through treaties or executive order.

Locally, the Peola C&H allotment area lies within the area ceded to the United States government by the Nez Perce Indians, as a result of the Treaty of 1855. The Tribe was contacted during the scoping phase of the project. Because tribal trust activities often occur in common with the public, the Umatilla National Forest strives to manage ceded land in favor of the concerns of the respective tribes, as far as is practicable, while still providing goods and services to all people.

Specific treaty rights applicable to that land base managed by the Umatilla National Forest are generally articulated in Article III of the 1855 Nez Perce Treaty, and include:

"The exclusive right of taking fish in all the streams where running through or bordering said reservation is further secured to said Indians; as also the right of taking fish at all usual and accustomed places in common with citizens of the Territory; and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land."

Although the 1855 Treaty does not specifically mandate the federal government to manage habitats, there is an implied assumption that an adequate reserve of water be available for executing treaty related hunting and fishing activities.

The District has used meetings and letters to inform the Nez Perce Tribe about the proposed continuation of grazing in the Peola Allotment. The District has not received a response voicing any concerns about this project. Resources that could be impacted by this project that supports reserved Treaty Rights include:

- Fish habitat and population, including salmonid species federally listed as threatened or endangered under ESA.
- Water quality
- Big game hunting opportunities
- Archaeological and traditional cultural properties

DECISION FRAMEWORK

Because implementation requires a Forest Plan amendment the Umatilla National Forest Supervisor is the responsible official to decide the continued authorization for grazing on the Peola C&H Allotment. The decision would include the kind and number of livestock, approximate season of use, permit terms and conditions, and the type of mitigation and monitoring needed. The decision-maker will determine whether there is a potential for significant effects, requiring further analysis through an Environmental Impact Statement. If the decision is to not continue grazing on the allotment the District Ranger will be the responsible official because no Forest Plan amendment would be needed.

Decisions to be made include:

1. What, if any, Forest Plan amendments are needed?
2. Whether or not to continue grazing on this allotment.
3. What monitoring or mitigation measures should be taken or needed?
4. If grazing is to continue what are the prescribed goals and objectives for this allotment and specific standards and guidelines.

This Environmental Assessment is not a decision document. Rather, it discloses the environmental effects or consequences of implementing the proposed action and alternatives to action. A Decision Notice (DN) signed by the deciding official will document the decision made as a result of this analysis.

Chapter II
Issues and Alternatives

Introduction

Chapter II describes the proposed action (which is also the No Action), a no grazing alternative, and alternatives considered but not developed. Included with the project description are management requirements, any measures needed to mitigate environmental effects, and a monitoring plan. The chapter concludes with a summary comparison of the alternatives as they relate to the purpose and need for action and identified issues. This comparison, along with a summary of environmental consequences detailed in Chapter IV provides the responsible deciding official with information needed to contrast the alternatives and make an informed choice between the alternatives.

Summary of the Scoping Process

Public scoping is required by NEPA (40 CFR 1501.7) to invite public participation, encourage an open process, and determine the significant issues that generate alternatives or voiced concern over potential environmental impacts. The Pomeroy District sought information, comments, and assistance from Federal and State agencies, local tribal governments, environmental groups, and individuals interested in or affected by the proposed action.

Methods used to inform the public and invite them to respond to the proposed project with their issues and concerns are as follows:

1. Listing the proposed project in several editions of the Umatilla National Forest's quarterly publications of the Schedule of Proposed Actions (SOPA) that informs the public of upcoming proposed projects.
2. Mailing a scoping letter and map of the proposed project area to approximately 97 interested parties. The letter described the proposed action and invited public comment.

One interested party responded to our scoping letter. This response addressed concerns for riparian and aquatic habitat and wanted to continue to be informed about the project.

The District consulted with Tribe by a scoping letter and at two Tribal watershed group meetings held on February 17, 2005 and October 19, 2005, then again at the five Forest coordination meeting on October 27, 2005, no concerns were voiced.

Permittees were notified by phone on January 23, 2006 and in person several times through-out 2005. Permittees were told that thru the Peola Environmental Assessment process that the Upper Sourdough pasture would likely be put into Resource protection to protect a Threatened plant, Silene Spaldingii (see significant issues page II-2). The Silene population is the fourth largest within the three states, Washington, Idaho and Montana, containing 500 plants or more. At this time it is uncertain if cattle have a direct or indirect effect to Silene Spaldingii. The plants are impacted by trampling or eating of individuals and by hoof action causing soil compaction and disturbance that may facilitate the spread of invasive plants. Even though grazing has been occurring in this pasture for many years, the potential loss of habitat from invasive plants posses the greatest risk to the Silene. Because potential impacts are unknown, the Permittees were informed that the pasture could be placed in resource protection until future research shows

whether or not cattle have an effect that places this plant species at risk or that grazing practices used in the pasture can reduce the risk to the spread of invasive plants.

The interdisciplinary team (ID team) reviewed the comments and identified issues that would be addressed in the analysis and incorporated in the project design and development of alternatives. Correspondence material received from public scoping are located in the project analysis file.

Significant Issues

A significant issue describes an unresolved conflict associated with the potential environmental effects of the Proposed Action (40 CFR 1500.4 (g), FSH 1909.15 12.3). They are issues that generate alternatives to the Proposed Action or impact project design and mitigation.

The Umatilla Forest Plans directs that suitable livestock range be allocated by permit consistent with the management objectives for resources established in the Forest Plans. This involves determining the proper level of permitted livestock numbers, season of use, facilities needed to manage livestock, operational feasibility for the permittee, etc.

After reviewing the comment received from scoping, the Interdisciplinary Team (ID Team) and District Ranger approved three significant issues for this project:

- There is concern about impacts to water quality and fish habitat by hoof action and heavy or intensive grazing of riparian vegetation that may move sediment into streams as cows travel along riparian areas. *Response - Best management practices have been included as part of the project's design features. The permit would be administered to meet Forest Plan standards and guidelines for grazing within riparian areas and be consistent with PACFISH standards and guidelines that protect riparian management objectives. (Forest Plan pages 4-63 to 4-65 and PACFISH C-12 and C-13)*

- Cattle movement increases the risk of noxious weeds spreading to new areas. *Response - The project design features includes a noxious weed prevention plan that will help reduce the risk of the permittee spreading new weeds onto the Forest and identifying new sites within the pastures so that an immediate response can be made.*

After public scoping and while the proposed action was being analyzed an additional concern was discovered. Sensitive and ESA listed plants that tend to have populations concentrated in an area rather than being dispersed across a landscape are at higher risk to impacts that could potentially degrade their habitat. Both *Silene spaldingii* and *Lomatium rollinsii* are plant species of concern with habitat found in the Peola Allotment.

- There is concern that continued grazing may degrade the habitat of *Silene spaldingii* and *Lomatium rollinsii* by allowing invasive plants to gain a foothold through trampling and displacement of the soils. These species are found in one currently active pasture, the Upper Sourdough Pasture. *Response - Another alternative could have been developed however the project allows for adjustments in cattle numbers and location of grazing activities for resource protection and would be able to protect these species and any future listed species. The Annual Operating Instructions can be used to make these*

adjustments to grazing practices until methods can be applied to protect the species or ways are found to control the spread of noxious weeds once cattle are on the Forest.

The ID Team also acknowledge there were resource values that will be addressed in this analysis to fully understand and compare the effects of the alternatives and determine if the action would have a significant impact that would require the preparation of an EIS. Impacts to the following resources will be disclosed in this document:

- **Water Quality/Fish Habitat –** Water quality and fish habitat are important resources in maintaining ecosystem sustainability and contributing to watershed restoration. Grazing activities may affect water quality and time of flows through alteration of soil, site characteristics, and other conditions (Forest Plan FEIS-IV-17). Primary physical stream and riparian characteristics and fish habitat properties capable of being affected by grazing activities are streamside vegetation; sediment and turbidity; and stream bank stability (Forest Plan FEIS IV-105).

- **Heritage Resources –** The National Historic Preservation Act and Executive Order 11593 require that areas be inventoried before any ground disturbing activity occurs. Implementation of actions from an Allotment Management Plan must ensure that significant heritage resource sites are not unacceptably impacted.

- **Wildlife Habitat - Management Indicator Species - Neo-tropical Migratory Birds–** Grazing and associated activities can impact several habitat types in the project area. The Forest Plan has selected management indicator species to represent animals associated with the major habitat types on the Forest. Habitat requirements of the selected indicator species are presumed to represent those of a larger group of wildlife species. The proposed grazing activities in the Peola EA could affect habitat for management indicator species, Canada lynx, and neo-tropical birds.

- **Proposed and Listed Threatened, Endangered, and Sensitive Species –** Aquatic, terrestrial, and plant species and their habitats could be affected by continued livestock grazing activities. The implementation of Allotment Management Plans must ensure that management does not jeopardize threatened or endangered species or cause a trend toward listing of sensitive plant, animal, and aquatic species.

- **Soils -** Proposed grazing activities could have short-term and long-term effects on soil resources. Management activities are to be designed and implemented to retain sufficient ground vegetation and organic matter to maintain long-term soil and site productivity.

- **Other Concerns** - A literature review authored by A. Joy Belsky and Dana M. Blumenthal entitled "Effects of Livestock Grazing on Stand Dynamics and Soils in the Upland Forests of the Interior West" (1997) has been used to argue that grazing throughout the west is contributing to the occurrence of severe wildfires on public lands. The claim is that livestock grazing alters forest dynamics by (1) reducing the biomass and density of understory grasses and sedges, which otherwise out-compete conifer seedlings and prevent dense tree recruitment, and (2) reduces the abundance of fine fuels, which formerly carried low

> intensity fires through forests. Grazing by domestic livestock has thereby contributed to increasingly dense western forests and to changes in tree species composition. In addition, exclosure studies have shown that livestock alter ecosystem processes by reducing the cover of herbaceous plants and litter, disturbing and compacting soils, reducing water infiltration rates, and increasing soil erosion.

The case studies summarized in this report are the results of persistently heavy grazing and does not represent the results of current grazing practices implemented through the Forest Plan. Forest Plan goals and objectives for vegetative health and standards and guidelines limit impacts to vegetative and soil resources. These standards and guidelines have been successful in providing stable or improving range conditions. This is discussed in multiple places in the EA; in the Range, Threatened, Endangered and Sensitive (TE&S) Plant Species, and wildlife sections of Chapter III and IV.

Borman (in press) points out that the level of livestock grazing in the case studies was heavy to very heavy and often season long. Stocking rates were sometimes twice the carrying capacity. Although past grazing management played a role in creating current conditions, other factors such as lack of historic fire returns and climactic variables were also an influence. The role of fire regimes is discussed in the fuels section in Chapter III. How the current grazing practices impacting fuel levels is discussed in the Fuels section of Chapter IV.

Although grazing played a part in the non-functioning state of many upland forested communities, current management practices that have occurred with grazing in the recent past (1960s to present) have made recent impacts innocuous. The vegetation changes brought about on the forested landscape through encroachment and increased stocking levels often require large-scale disturbance activities such as fire, thinning or harvest to recover functions. In contrast, nonforested vegetation (vegetation used for grazing) have shorter recovery processes that can be initiated with simple management changes such as decreases in livestock stocking rates, simple in stream restoration projects, and minor prescriptive fire. Impacts to individual plants from grazing occur from: the frequency of defoliation, the intensity of defoliation (intensity) and the season of use. Forest Plan standards and guidelines provides direction and measures to assure plant communities retain functionality and productivity and determine stocking rates, season of use, and grazing system. See discussions in the Fuels and Threatened, Endangered and Sensitive (TE&S) Plant Species sections in Chapter IV.

Comment Period

The 30 day comment period of the draft EA ended March 24, 2006. The District received six comments, five of them dealt with opposing putting the Upper Sourdough Pasture into resource protection and the other was concerned about effects to water quality and fisheries habitat. Appendix E contains responses to the fisheries concerns and references where in the EA or analysis file the existing conditions of Riparian Management Objectives and impacts were discussed.

Alternative Development Process

Chapter II describes in detail two alternatives; a grazing and a no grazing alternative. The ID team, made up of Forest Service resource specialists considered another action alternative but it was dropped from further analysis.

Each action alternative considered was designed to satisfy the purpose and need for action discussed in Chapter I, address key issues, and stay within Forest Plan standards and guidelines. A single grazing alternative is being carried through analysis because other action alternatives that were considered would not be consistent with Forest Plan standards and guidelines, would not provide protection for ESA listed fish, or reduce the risk for the spread of star thistle.

Alternatives Considered but Eliminated from Detailed Study

Grazing:

Use the Original Allotment Management Plan from 1969: This plan allowed for grazing 275 cow/calf pairs during a grazing season between June 1 and September 30 with an extended season in the fall from October 1 to November 15 for 45 cow/calf pairs. The late fall grazing would conflict with spawning of ESA listed fish species so this alternative was not developed or analyzed.

The table below reflects the number of livestock and days spent within each unit as addressed in 1969 AMP.

Table II-5. Livestock and Days

Unit/Season of Use E-Early M-Mid L-Late	Acres FS	Numbers Cow/Calf Pair	*Days in Unit
Dick Trail-E	1100	100	15
North Fork-E	1800	83	30
Sourdough-E	2200	122/222	30
Cottonwood-E	800	75 to 100	30
Lick I-M	1800	100	60
Lick II & III-M	4400	205	60
Charley Lower/Upper-L	7700	100/205	15/56
Dick-L	747	126 to 265	24 to 46

Using all Nine Pastures: This alternative was dropped because it did not provide resource protection in four pastures as described in Chapter 1. Not allowing grazing in the pastures identified for resource protection is still needed to protect federally listed plants.

Reducing the number of cattle allowed to graze: An alternative that looked at reducing the number of cattle permitted in the allotment was considered but not developed. Monitoring has shown current grazing practices and numbers are meeting Forest Plan standards and guidelines

for utilization and impacts. Range conditions show an improving trend. The few locations showing impacts from high use are due to cattle concentrating use in certain areas; these impacts can be corrected through salting or having riders disperse cattle. Reduction of the number of cattle is already a part of the proposed action in that it allows adjustments in grazing practices and numbers should monitoring or range conditions warrant a change. The proposed action already allows for the reduction in numbers so another alternative is not needed.

Alternatives to the Proposed Forest Plan Amendment for Canada Lynx Standards and Guidelines:

There were several alternatives proposed for the Forest Plan amendment. Many were considered but not carried through for analysis. It was felt that preparing a Forest Plan amendment for this project only was the best approach. Other alternatives considered include:

Incorporate all LCAS Chapter 7 recommendations for this project only: An alternative that would incorporate all of the recommendations listed in Chapter 7 of the LCAS into the Forest Plan to conserve Canada lynx *for this site-specific project* was considered. The Forest Service chose to incorporate only those standards and guidelines that were relevant to the purpose and need and alternatives for the Peola Allotment Management Plan. Incorporating management direction irrelevant to the project and scope of the decision to be made could have added unnecessary analyses and be confusing during project implementation.

Incorporate all LCAS Chapter 7 recommendations Forest wide: An alternative that would incorporate all of the recommendations listed in Chapter 7 of the LCAS into the Forest Plan to conserve Canada lynx *for the entire forest* was considered. This alternative would have amended the plan forest-wide and remained in effect until the Forest Plan was revised. This alternative may have addressed the project-specific purpose and need to provide management direction specific to Canada lynx, however, doing so would have required additional analysis of programmatic effects that are outside the scope of this decision. In addition, the Umatilla Forest Plan is currently being revised and expected to be approved by the end of 2007. New information about lynx and any resulting changes in management direction to conserve Canada lynx would be considered and blended within the context of the Forest Plan revision process. There is no need to duplicate the effort of the revision process in this site-specific analysis. For these reasons this alternative was considered but not analyzed in detail.

We also considered incorporating management direction for Canada lynx that differs from the conservation recommendations located in Chapter 7 of the LCAS. The LCAS, as amended, is based on the best currently available scientific information about lynx, and was authored by specialists representing four federal agencies including the USDI Fish and Wildlife Service. The LCAS has been reviewed and modified by the science team in response to new information, opposing views, and confusing science since it was published in 2000. Various viewpoints about lynx distribution and lynx habitat were considered by the authors of the Lynx Conservation Assessment and Strategy (Ruediger et al. 2000). This publication along with subsequent recommendations from the Lynx Steering Committee represents the most credible and applicable synthesis of science concerning ecology and management of lynx and lynx habitat in the contiguous United States. New information about lynx and any resulting changes in

management direction to conserve Canada lynx would be considered and blended within the context of the Forest Plan revision process. There is no need to duplicate the effort of the revision process in this site-specific analysis. For these reasons alternative strategies to the LCAS were considered but not analyzed in detail.

Alternatives Considered in Detail

Two alternatives; the Proposed Action, which is also the No Action (because it does not change current management activities in this area) and a no grazing alternative are described here for later analysis in Chapter 4 to contrast their effects on the environment. The basic purpose and design of each alternative is detailed in this section. Methods to avoid or mitigate possible undesired consequences of grazing are described in the Management Requirements, Constraints, and Mitigation Measures section of this chapter.

Alternative 1 – Proposed Action

For this analysis, the Proposed Action and No Action alternative are one and the same because under the traditional no action alternative management practices would continue as they currently do on National Forest System lands. In other words, there are no changes or additional management actions proposed. The Proposed Action makes no changes to the current management of the Peola Allotment.

This alternative would continue the authorization of domestic livestock grazing for 222 cow/calf pairs on National Forest System lands between June 1 and September 30th for a maximum of 1,192 Animal Unit Months (AUM). An AUM is the amount of forage required by one mature (1,000 pound) cow or the equivalent for one month. It is based upon the average daily forage consumption of 26 pounds of dry matter per day. Total grazing period would not exceed four calendar months, but could be less if resource conditions warrant and grazing use exceeds the prescribed utilization standards listed in Table II-3.

The Cottonwood II pasture would be dropped from the allotment because of the low availability of water and the difficulty in maintaining drift fences. The Lower Sourdough, North Fork, and Dick pastures would remain in resource protection with the possibility of returning to grazing if grazing can be designed to be compatible with the resource being protected. (If grazing in these pastures is considered in the future the addition of these pastures would require an additional NEPA decision.) Continuing resource protection in these pastures protects fish species listed under the Endangered Species Act as negotiated during the consultation process for the Umatilla Forest Plan and reduces the risk to degrading *Silene spaldingii* habitat by yellowstar thistle, a noxious weed (see Appendix A, allotment map).

Utilizing trends observed through monitoring various resource conditions may occasionally support a need for changing grazing instructions. Based on yearly monitoring, the number of cattle permitted and the time of use can change. The earliest date for turnout would be June 1st and latest date for keeping cattle on the allotment would be September 30th. However, fewer numbers, a shorter season of use, or a more restrictive utilization standard may be prescribed in order to meet resource objectives for the forest or the allotment.

Silene spaldingii, is an ESA listed plant located on the Upper Sourdough pasture. Cattle do not prefer this species; however, there is a chance of mechanical damage from trampling or incidental grazing. The largest threat to this species is loss of habitat due to invasive plant encroachment. To assure the *Silene spaldingii* is not affected by livestock activities, grazing in this pasture would be restricted to early season use. The restriction is designed to keep cattle out of the area after June 21, unless surveys for range condition indicate the plant bolted sooner causing grazing to be restricted earlier. Controlling the time of use in this pasture would adequately protect natural propagation of the species. If, due to livestock activities, invasive plants are found to be increasing and threatening the *Silene spaldingii* habitat, changes in management will be implemented to protect this habitat. These changes may include reductions in stocking, changes to seasons of use, or pasture rest.

Table II-1 below shows the estimated use by pasture listing the number of days that livestock spend in each pasture. The number of days can vary (longer or shorter amount of time) depending on utilization in key areas, weather and forage conditions. A pasture in resource protection will be in non-use until grazing practices can be implemented that allow for the protection of the resource of concern and following a new NEPA decision process.

Alternative 1 Allotment Table II-1

Unit/Season of Use E-Early M-Mid L-Late	Acres	Numbers	*Days in Unit
	FS	Cow/Calf Pairs	
Cottonwood - E	1,097	100/100	21
Upper Sourdough - E	1,403	172/122	21
Dick Trail - E	1,110	50/122	25
Lick – M & L	8,346	222	49/52
Charley – M & L	7,460	222	52/49
Lower Sourdough - E	644	Resource Protection	
North Fork - E	3,068	Resource Protection	
Dick - E	753	Resource Protection	

Permitted Numbers Table II-2

Permited Numbers	Kind	Class	Season of Use	Total AUM's
222	Cattle	Cow/Calf	6/1-9/30	1,192

Activities that would occur in association with the grazing permit issuance (i.e. connected activities) include:

- The Umatilla National Forest Land and Resource Management Plan would be amended to incorporate objectives, standards, and guidelines for Canada lynx.

Objectives would be incorporated into the Forest Plan on page 4-29, below Table 4-10 and above the paragraph starting with "Biological evaluation…" Standards and guidelines would be incorporated into the Forest Plan on page 4-91; bottom of the page, following Peregrine Falcon Habitat, with a heading for Canada lynx. The amendment would apply only for the duration of, and to those actions proposed in lynx habitat for the site-specific project. See Appendix C of this EA for a description of the proposed objectives, standards, and guidelines.

Monitoring Requirements and Responsibilities

The following monitoring would occur with Alternative 1 as part of implementing the grazing in the Peola Allotment. The effectiveness of each monitoring element is considered to be high based on analysis in the Forest Plan and supported by past monitoring and permit administration.

1. Utilization

a) Authorized Utilization Standards

Maximum utilization standards for this allotment are prescribed to assure continued maintenance or improvement of vegetation and soils both riparian and upland vegetative communities depending on range condition (Satisfactory or Unsatisfactory). Utilization of grass and forbs will be measured by percent weight of forage remaining[1], while shrubs will be measured by annual growth remaining (**Table II-3**). These utilization standards will be maximum levels of use regardless of which animal species uses the forage or browse. The standard reached first will be the most restrictive and livestock will be removed prior to that standard being exceeded. If standards do not maintain the desired conditions, a more restrictive standard will be prescribed.

The Forest Service range manager will monitor utilization during and after grazing. Monitoring of riparian vegetation will occur at Key Areas that are representative of the associated pasture. Key Areas are locations where forage utilization would first become evident, or where forage utilization would lead to unacceptable resource conditions. Upland monitoring will be conducted by the permittee, with visual inspections by the Forest Service range manager. If the range manager visually identifies an area of concern, more intensive measurements will be taken.

[1] Height/weight curves for many rangeland plant species have been converted to utilization measures to provide a quick, reasonable estimate of the level of grazing that could be sustained while still allowing plants to store carbohydrates for seasonal growth and persistence.

Table II-3. Percent utilization standards for the Peola C&H Allotment.

	Riparian		Upland		
	Grass and forbs	Shrub	Grass and Forbs		Shrub
			Forested	Grasslands	
Satisfactory Conditions	45%	40%	45%	55%	45%
Unsatisfactory Conditions*	35%	30%	35%	35%	30%

*These standards will be used if vegetative or soil conditions are trending downward. There are no such trends currently identified on the Peola C&H Allotment.

b) PacFish Amendment Standards

The Forest Plan (as amended by PACFISH), the Interagency Implementation Team standards, and the Biological Opinions direct modification of grazing practices that retard or prevent the attainment of riparian management objectives. These documents set standards to be applied on anadromous fish-bearing streams and tributaries that drain into them. To better achieve riparian management objections the Dick Pasture is currently in resource protection (nonuse) for the protection of anadromous fish habitat.

Action will be taken to remove cattle from a pasture when vegetation is grazed one inch above the maximum standard (Table II-4). These standards do not differentiate between livestock and other ungulates. Where shrub growth utilization and stubble height could both apply, the more restrictive standard will be used.

The Forest Service range manager will monitor these standards during and after grazing. Measurements will be applied to Charley and Lick Creek.

Table II-4. Interagency Implementation Team Vegetative Riparian standards

Measure	**Grass and grass-like species**			**Shrub**
	Greenline	**Sink**	**Terrace**	
Median Stubble Height	4 inches	5 inches	5 inches	
Annual Growth Utilization				30%

2. Compliance with Permit Monitoring

The Forest Service Range Manager will visit the allotment as needed throughout the grazing season to monitor grazing permit terms and conditions (i.e., improvements, maintenance, adherence to Forest Service issued written instruction, etc.) in accordance with District and Forest policy.

3. Cultural Resources
A cultural resource inventory has been completed. Monitoring of known sites should continue to determine if there are any impacts from grazing activities.

4. Sensitive Plant Species, *Astragalus arthurii*
Grazing is not expected to impact this species, however to verify that grazing is not contributing to a reduced population in the large Cottonwood pasture population, a trend monitoring protocol would be established.

Management Requirements, Mitigation, and Project Design Features for Alternative 1

The measures identified on the following table serve to minimize, reduce, eliminate or rectify the effects of management activities. The table also describes management requirements and design features incorporated for resource protection. Design features, standards and guidelines from the Forest Plan (including all amendments), and the Biological Opinion on the Forest Plan, are incorporated by reference in all action alternatives.

Several abbreviations are used in the responsibility column section of Table II–7. The following explains those abbreviations:

DR – District Ranger
ENG – Transportation Engineer
RG - Range
BT – Botanist
WB – Wildlife Biologist
Hydro – Hydrologist
FMO – Fire Management Officer
ARC – Archeologist
NWM – Noxious Weed Manager
SS– Soil Scientist
FB – Fish Biologist
Silv - Silviculturist

Table II-7. Design Features and Management Requirements

Objective	Task	Responsibility	Timeline
Implement PACFISH buffer Standards	Riparian vegetation will be monitored within Riparian Habitat Conservation Areas (RHCAs) for compliance with PACFISH & Forest Plan Standard and Guides. The four PACFISH categories are defined as follows: Category 1 – Fish-bearing streams – RHCAs consist of the stream and are on either side of the stream extending 300 feet slope distance from the edges of active stream channel. Category 2 – Perennial non-fish bearing streams – RHCAs consist of the stream and area on either side of the stream extending 150 feet slope distance from the edges of active stream channel. Category 3 – Ponds, lakes, reservoirs, and wetlands greater than 1 acre: RHCAs consist of the body of water or wetland and the area extending 150 feet slope distance from the edge of the maximum pool elevation of constructed ponds and reservoirs or from the edge of the wetland, pond or lake. Category 4 – Seasonally flowing or Intermittent streams, wetlands less than 1 acre, landslides, and landslide-prone areas. This category includes features with high variability in size and site-specific characteristics, and assumes listed stock. At a minimum the RHCAs must include: the area from the edges of the stream channel, wetland, landslide, or landslide-prone area to a distance equal to 100 feet.	FB, Hydro, RG	Before, during and after the activity

Objective	Task	Responsibility	Timeline
Protect water quality (Clean Water Act)	**Implement Best Management Practices (BMPs)** **RM-2-** Soil and water resources will be protected through management of livestock numbers and season of use. Livestock entry onto the allotment or into a specific pasture would not be permitted until the soils are dry enough to prevent damage and key plant species are ready to withstand grazing. Livestock numbers, season of use, and movement may be adjusted each year through the Annual Operating Instructions to allow for resource management needs. Adjustments to livestock numbers, season of use, and movement may also be made during implementation to respond to resource conditions that develop as the season progresses. These conditions may include drought, wildfire, achievement of key plant species utilization levels, stubble height, etc. The type of mitigation used would be determined by the Forest officer in charge based on the degree of the problem and its cause. If mitigation activities do not achieve desired results, additional action would be taken. **RM-3-** Preclude concentration of stock in areas that are sensitive to concentrated use and/or preclude prolonged use of an area which will result in loss of vegetative cover and soil compaction. All salt would be placed away from monitoring areas and available water and in areas where livestock use is usually light. In no case would salt be placed closer than ¼ mile to streams or other wetlands without prior approval. **RM-4-** Safeguard water quality under sustained forage production and manage forage harvest by livestock and wildlife. Forage resources are to be allocated on a pasture/unit specific basis to meet the basic plant and soil needs as a first priority. Forage production above basic resource needs may be allocated to wildlife and permitted livestock. Management activities would be designed and implemented to retain sufficient ground vegetation and organic matter to maintain long-term soil and site productivity.	Hydro, FB, RG	Prior to, during, and post activity
PACFISH Standards and Guides inside and outside of RHCA's	**GM-1** – Modify grazing practices (e.g. accessibility of riparian areas to livestock, length of grazing season, stocking levels, timing of grazing, etc.) that retard or prevent attainment of Riparian Management Objectives, or are likely to adversely affect listed anadromous fish. Suspend grazing if adjusting practices are not effective in meeting Riparian Management Objectives and avoiding adverse effects on listed anadromous fish.	Hydro, FB, RG	Prior to, during, and post activity

Objective	Task	Responsibility	Timeline
PACFISH Standards and Guides inside and outside of RHCA's	**GM-2** – Locate new livestock handling and/or management facilities outside of Riparian Habitat Conservation Areas (RHCAs). For existing livestock handling facilities inside the RHCA, assure that facilities do not prevent attainment of Riparian Management Objectives, or adversely affect listed anadromous fish. Relocate or close facilities where these objectives cannot be met. **GM-3** – Limit livestock trailing, bedding, watering, salting, loading, and other handling efforts to those areas and times that will not retard or prevent attainment of Riparian Management Objectives or adversely affect listed anadromous fish.	Hydro, FB, RG	Prior to, during, and post activity
Control and prevention of invasive plants (noxious weeds)	Utilization of the USDA-Forest Service Guide to Noxious Weed Prevention Practices (located in the analysis file) Livestock should be kept on a weed free pasture for at least 72 hours prior to moving onto National Forest System lands. Any hay or supplements fed to livestock within 72 hours of entering National Forest System lands will be certified weed free. Any vehicles entering National Forest System lands that are used in the administration of the Peola Allotment should be cleaned (steam cleaning is preferred) of any weed transporting material such as excess hay, mud, or seeds. Particular attention will be paid to radiators, undercarriages, beds, tires, and cabs. The Forest Service will keep the permittee appraised of known weed locations. Weed identification information will be provided to the permittee during the Annual operating instruction meeting. If new infestations are identified they will be immediately reported to the designated forest officer. Salt blocks should be placed to avoid concentrating animals in dry meadows or other locations that would increase the risk of degradation of listed plant species habitat by noxious weeds.	RG	Prior to, during, and post activity
Preserve and protect archaeological sites	It is necessary to consult with SHPO for major maintenance or replacement of range improvements within this allotment or for changes to the activity as a result of Allotment Management Plan. The location of salt blocks need to be reviewed by the archeologist prior to placement in pastures.	ARC, RG	Prior to, and during activity
Meet ESA requirements	If any federally listed species or critical habitats are found in the project area, the appropriate resource specialist will be contacted immediately. Special protection provisions will be included in all project contracts	SAT, FB, ENG, FMO, Hydro, Silv. RG	Prior to, and during activity

Objective	Task	Responsibility	Timeline
Threatened Plant Species	Protect and monitor known or new discovered site populations of Silene Spaldingii's designated by Forest Botanist. Fences will be maintained to preclude any direst or indirect effects to Spalding's catchfly from adjoining pastures. The USFWS will be contacted id the Forest Service determines that livestock have disturbed areas within known *S.spaldingii* population as a result of fence breach or other event. Salting of livestock in adjacent pastures will occur away from fences of pastures with *S spalingii*. Existing monitoring will continue for range and habitat conditions, as well as herbivory to selected subpopulations of Spalding's catchfly. Noxious weed management will continue in nearby pastures as well as those containing *S. spaldingii* to minimize effects to the catchfly.	BT, RG	During activity
TE & S Fish Habitat	Permittees are required thru the Annual Operating Instructions to ride their pastures twice a week and remove cattle from riparian areas to upper grazing areas.	RG,	During activity

Alternative 2 – No Domestic Livestock Grazing (No Grazing)

This alternative responds to the Forest Service policy of providing a no grazing alternative. Under this alternative, domestic livestock grazing on the Peola C&H Allotment would not be authorized and a Term Grazing Permit would not be issued upon implementation of the decision. Twenty-one water troughs on the allotment and one corral, in Lick and Charley pastures, would be removed. Existing ponds will remain in place for wildlife but not maintained in support of livestock management (see list and map of improvements in appendix B) Other authorized activities and administration such as, but not limited to, motorized access travel management, fire protection, dispersed recreation, noxious weed management, and road maintenance would continue.

Comparison of Alternatives

The following table provides a comparison of the two alternatives to the Purpose and Need and Issues and summarizes the environmental effects disclosed in Chapter IV.

Table II-6: Comparison of Alternatives Response to the Purpose, Need and Issues

		Alternative 1	Alternative 2
Provide grazing on these lands in accordance with multiple use mandates.		Meets need	Does not meet need
Total Acres Authorized		23,374 Forest lands	0
Provide flexibility to adjust to changes in weather, forage condition, or other circumstances		Meets need; however, grazing dates cannot be adjusted to allow for early suitable range conditions	Does not meet need
Stocking rates	Animal Unit Months (AUMs)	1,175 (222 cow/calf pairs)	0
	Total days of use	122 days	0 days
Operational period	Grazing season	June 1- September 30	No operations on allotment. Permittee would lose summer forage.

		Alternative 1	Alternative 2
Changes to Allotment Facilities	Reconstruct springs	0	0
	Maintain springs	21	3
	Remove springs	0	18
	Reconstruct ponds	0	0
	Maintain ponds	58	0
	Abandon ponds	0	58
	Reconstruct fence	0	0
	Maintain fence	33 miles	0
	Remove fence	0	33 miles
Range Vegetation Health	Condition and Trend	Currently the range is in satisfactory condition. Grazing would be administered to maintain current conditions or continue improving trend. If monitoring shows downward trend or if range conditions degrades the unsatisfactory utilization standard will be applied.	Same condition and trend as Alt. 1. Rate of improvement could be slightly faster than Alts 1 though immeasurable.
Noxious Weeds	Risk for invasive plant/noxious weed spread	Currently livestock are not causing an increase in invasive plant populations. The current satisfactory conditions and improving trends of vegetation and soils will reduce the risk of invasion. Areas most susceptible to invasion would be dry disturbed meadows and transportation routes. If this trend changes to stocking, seasons of use or utilization standards will be implemented.	No risk related to domestic livestock grazing activities. Wild ungulates continue to spread weeds.

		Alternative 1	Alternative 2
Soil	Areas susceptible to soil concerns and rate of recovery from past grazing	Grazed portions of the allotment, particularly level meadows and water sources, would be compacted and possibly puddled by hoof action. Recovery rate of soil surface conditions would be slower than alternative 2.	There would be no soils effects related to domestic livestock grazing within the planning area.
	Consistency w/ Forest Plan Standards for soil productivity	Consistent	Consistent
Riparian and Near Channel Condition		Current design and mitigation results in little bank erosion, grazing of vegetation, or animal waste in these areas.	No effects
Water Quality	Stream temperature	Unaffected by grazing.	Same as Alternative 1
	Sediment	Transport of exposed soil into perennial streams is negligible because of benching and location.	No grazing-related sediment produced.
	Developed water sources	Water sources would be repaired as necessary to minimize leakage or trampling.	No effects around water sources due to grazing. Sources would either be maintained for other resource purposes or abandoned.
Consistency w/Forest Plan and Clean Water Act		Consistent w/Forest Plan, Consistent with the Clean Water Act.	Same as Alternative 1
Sensitive Invertebrate	Lynn's Clubtail	No Impact	Same as Alternative 1
	Columbia Duskysnail	No Impact	Same as Alternative 1
Threatened Fish	Columbia River bull trout	May Effect- Not Likely to Adversely Affect	No Effect
	Snake River spring/summer Chinook salmon	No Effect	Same as Alternative 1
	Snake River steelhead	May Effect- Not Likely to Adversely Affect	No Effect
Sensitive Fish	Margined sculpin	May Impact	No Impact
Sensitive Fish	Redband trout	No Impact	May Impact

		Alternative 1	Alternative 2
	Westslope Cutthroat Trout	No Impact	Same as Alternative 1
Sensitive Amphibians	Tailed Frog	No Impact	Same as Alternative 1
	Northern Leopard Frog	No Impact	Same as Alternative 1
	Gray Wolf	No Effect	Same as Alternative 1
Endangered	Canada Lynx	May Effect – Not Likely to Adversely Affect	No Effect
Threatened	Northern Bald Eagle	No Effect	Same as Alternative 1
	California Wolverine	No Impact	Same as Alternative 1
Sensitive	Peregrine Falcon	No Impact	Same as Alternative 1
	Green-tailed Towhee	No Impact	Same as Alternative 1
	Gray Flycatcher	No Impact	Same as Alternative 1
	Great Gray Owls	No Impact	Same as Alternative 1
Threatened Plant	*Silene spaldingii*	May affect, likely to adversely affect	No Effect
Sensitive Plant	*Astragalus cusickii var. cusickii*	No Impact	Same as Alternative 1
	Astragalus arthurii	May Impact Individuals or Habitat, but Will Not Likely Contribute to a Trend Towards Federal Listing or Cause a Loss of Viability to the Population or Species	No Impact
	Calochortus macrocarpus var.maculosa	May Impact Individuals or Habitat, but Will Not Likely Contribute to a Trend Towards Federal Listing or Cause a Loss of Viability to the Population or Species	No Impact
	Carex hystericina	No Impact	Same as Alternative 1
Sensitive Plant	*Lomatium rollinsii*	Will impact individuals or habitat with a consequence that the action may contribute to a trend towards federal listing or cause a loss of viability to the population or species	No Impact
	Trifolium douglasii	No Impact	No Impact

		Alternative 1	Alternative 2
Management Indicator Species	American Marten	No change from baseline	Same as Alternative 1
	Pileated Woodpecker	No change from baseline	Same as Alternative 1
	Northern Three-toed Woodpecker	No change from baseline	Same as Alternative 1
	Primary Cavity Excavators	No change from baseline	Same as Alternative 1
	Rocky Mountain Elk	Some slight, localized changes in elk use of meadows and open forest; unmeasurable change in elk/deer productivity.	No effect on elk.
Avian Species	Consistency with Neotrop. Migratory Bird Treaty Act	Consistent	Consistent
	Birds in general	Slight risk of trampling nesting vegetation, eggs, or young; unmeasurable effects to bird productivity	No risk of trampling nesting vegetation, eggs, or young; habitats would achieve more natural state

Chapter III
Affected Environment

INTRODUCTION

This chapter describes relevant resource components of the existing baseline environment. In accordance with 40 CFR 1502.15, this chapter will describe the environment of the area(s) affected by the alternatives under consideration. Chapter III describes the physical, biological, economic, and social factors relative to the Peola C&H Allotment.

RANGE

This environmental assessment summarizes pertinent information from the Range Report found in the Project Record (40 CFR 1502.21). The report is located in the Project Record and includes more detailed data, methodologies, analyses, conclusions, references, and technical information used to assess existing condition and environmental effects.

Existing Condition:

The Peola C&H allotment was part of one of the original C&H Allotments on the district. Portions of the allotment have been grazed since 1870 by sheep, horses and cattle. Horses were excluded in 1929 and sheep in the mid 1930's. Although allotment and pasture names and acres have changed over the years, cattle have been consistent in the area since 1949 when the Peola C&H allotment was formed. Numbers of cow/calf pairs varied from 520 to the current number of 222. The Grazing season since 1949 to the present has ranged from 4 to 6.5 months.

Since 2001 the Peola C&H Allotment has been grazed by a total of 222 cow/calf pairs, with a grazing season of June 1 to September 30 annually. The allotment has five active pastures; three of the five are grazed early season with a rest-rotation grazing system and the remaining two pastures are grazed late-use on a deferred grazing rotation. The allotment has a total of 23,374 acres of National Forest lands. The Peola C&H allotment analysis area lies solely within the Asotin watershed. Currently there are two grazing permits for the allotment.

In 1992, 317 cow/calf pairs were authorized based on what forage was available using National Forest System lands, private lands, and a permit for the use of State of Washington Department of Natural Resources lands. However, these numbers have declined to the current 222 cow/calf pairs over the past 12 years because of pastures removed for resource protection, the private lands are no longer used, and the lease with the Department of Natural Resources expired.

Currently five of the original nine pastures are in use. The following is a short history of pasture use.

Cottonwood II – early pasture – removed in the late 1980's because water was unavailable and drift fences were not maintained.
Cottonwood – early pasture and still in use today.
Upper Sourdough – early pasture and still in use today but has populations of Silene Spaldingii, a threatened plant.
Dick Trail – early pasture and still in use today.

Lower Sourdough – early pasture and in resource protection so grazing cattle could not spread yellow star thistle seed across open areas and has some populations of Silene Spaldingii.
North Fork – has been is resource protection since 1993 because the main water source for livestock was North Fork of Asotin Creek which has anadromous fish. Non-use for resource protection eliminated any potential sediment delivery on salmon redds or trampling of spawning beds.
Dick – is currently in resource protection because the main water source for livestock is Charley Creek, an anadromous stream.
Charley – rotated between mid and late season and still in use today.
Lick – rotated between mid and late season and still in use today.

Existing range improvements located on National Forest lands include 21 springs, 58 pond developments, 1 corral and approximately 33 miles of fence. Total list and locations can be found in appendix B.

There are three condition and trend transects located within the Peola allotment and all of them are indicating an upward trend in the condition of vegetation and soil resources. All three were established in 1960 and have been re-read over the years. The most recent reading was conducted in 2003. Soil stability and vegetation conditions rated out as excellent on all three. Monitoring data since 1960 has displayed upward trends; vegetation have moved from poor and fair conditions to excellent and soil conditions has remained unchanged in excellent conditions. This indicates that current livestock management is consistent with standards and guidelines of the Forest Plan.

SOILS RESOURCE

This Environmental Assessment summarizes pertinent information from the Soils Specialist Report in the Project Record (40 CFR 1502.21). The report is located in the analysis file of the Project Record and includes detailed data, methodologies, analyses, conclusions, references, and technical information used to assess the existing condition and environmental effects.

Existing Soil Condition:

Steep sideslopes, shallow soil on (the) relatively level dry meadows and the preponderance of volcanic ash soil create the potential for adverse impacts from soil disturbing activities. Current conditions, to varying degrees, are a result from overgrazing by sheep and horses from late 1800s to mid 1930s. Sheep tended to congregate on the more level meadow areas removing vegetative cover to the extent that wind and water erosion occurred in places.

Ground cover in the shallow soiled, dry meadow areas is reflective of a variety of activities (including past grazing) that have affected soil quality relative to types of current vegetation that has established. Because of their steepness, the canyon sideslopes did not receive the same level of grazing intensity and soil conditions are not degraded in any readily observable manner.

The Peola allotment is relatively less impacted from historical grazing activities than other parts of the Blue Mountains because there are fewer AUMs being utilized. Current soil condition is reflective of this low use and monitoring indicates a positive trend in soil quality relative to

grazing effects that has not changed since condition and trend cluster were established in the 1960s.

Soil Characterization:

Soils are inventoried and described for the area in the Umatilla National Forest Soil Resource Inventory (SRI). In addition, field observations provided more detail and on-site knowledge of specific areas within the allotment. Dominant soil characteristics for each pasture are shown in the following table. Hazard interpretation utilizes both the SRI information and observations of the soil scientist.

Table III-1 Peola Soil Mapping Units and Associated Soil Characteristics

PASTURE	Dominate SRI Mapping Units	Surface Texture	Typical Depth	Erosion Hazard	Compaction* Hazard
Charley	12, 04, 06	silt loam	mod. deep	mod. to high	low (dry)
Lick	12, 91, 04	silt loam	shallow to mod. deep	high	low (dry)
Upper Sourdough	05, 91	gravelly loam	shallow	mod. to high	low (dry)
Dick Trail	05	very gravelly loam	shallow	high	low (dry)
Cottonwood	05	very gravelly loam	shallow	high	low (dry)
Lower Sourdough	05	very gravelly loam	shallow	high	low (dry)
North Fork	91, 12	gravelly loam	shallow to mod. deep	high	low (dry)
Lick	04	silt loam	shallow	high	low (dry)

* Wet soil conditions increases the risk for compaction from hoof action.

Even though the erosion hazard rating is high or moderate to high in all pastures, the relative overall compaction hazard only demonstrates low rating when dry.

WATER QUALITY

This environmental assessment incorporates by reference the Hydrological Reports located in the Project Record (40 CFR 1502.21). The more detailed report includes detailed data, methodologies, analyses, conclusions, references, and technical information used to assess existing condition and environmental effects.

Existing Condition:

The Peola Allotment is located in the Asotin River Watershed and includes portions of three subwatersheds (SWS) which are named for the major streams of the area:

HUC 170601030201 North Fork Asotin River
HUC 170601030202 Lick Creek
HUC 170601030204 Charley Creek

The Forest Plan as amended by PACFISH includes standards and guides for grazing which are designed to protect riparian conservation areas from degradation. Riparian Management objectives would be met by protecting vegetation for shade and impacts to stream temperature and bank and channel stability to reduce sedimentation related impacts. Specifically, criteria are designed to maintain and allow recovery at natural rates (where recovery is needed) of riparian objectives. Currently residual stubble height is used as the indicator for these standards. Monitoring of stubble height occurs on two riparian high use transects in the Peola Allotment; for Charley Creek and Lick Creek. Other riparian key areas have been monitored in the past, but were dropped when grazing was removed. Both of these sites have been monitored for more than 4 years and have met Forest Plan standards during all readings and show an improving trend. Several ongoing or recently completed projects contribute in the riparian recover efforts; decommissioning of National Forest roads in the lower Charley Creek and riparian fencing and the construction of a water gap in Lick Creek.

FIRE AND FUELS

This environmental Assessment hereby incorporated by reference the Fuels Specialist Report in the Project Record (40 CFR 1502.21). Report for fuels and air quality are located in the analysis file of the Project Record and includes detailed data, methodologies, analyses, conclusions, references, and technical information used to assess existing condition and environmental effects.

Existing Condition:

In the past, the conditions of the vegetation in the Peola Allotment area were changed by the disturbance regimes of fire, insects, and disease, with the three often acting in concert. It is clear that fire suppression and land management activities are a major factor in determining historical conditions and shaping the landscape that we now see in the area. Fire exclusion has altered successional patterns and created stand and forest conditions that differ from those that occurred in the past. Cattle use the frequent, stand replacement fire regime areas plus transitory range in plantations. The altering of the natural disturbance regimes has changed the historical stand structure, tree species compositions, tree stocking levels, and fuel loadings. Grazing has reduced forage components which make up the fine fuel. Cattle mainly use transitory rangelands which are increasing encroached by vegetative succession.

The frequent fires of the grasslands and ponderosa pine sites limited the amount of time for fuel to accumulate, thus the fires were of low intensity with few overstory effects. These low intensity fires produced the vertical stratification of the fuels, keeping a large gap between the overstory and the crown. This reduced the probability of crown fires, kept vistas clear, and

allowed for the re-establishment of conifers, shrubs, and grasses. The fires in the grasslands prevented the trees from encroaching, hence maintaining a high forage production for the area. These fires in the low-intensity regime were associated with ecosystem stability, as the ecosystem is more stable in the presence of fire than in its absence.

The drier mixed conifer sites had a low-intensity fire regime similar to the ponderosa pine sites, even though they are moister. The fire occurrence may have actually even been more frequent because of an increased litter load. The dry mixed conifer type contained ponderosa pine in addition to western larch, Douglas fir, grand fir, and small numbers of other species. The stand thinning and underburning favored pine and larch, and decreased the shade-tolerant fir understory. These stands were often single storied with an open, park-like appearance.

The vast majority of the Peola allotment area experienced this low-severity fire regime. A 1993 fire history study on Smoothing Iron Ridge in the North Fork Asotin Creek Subwatershed revealed that the mean fire return interval was 10.6 years, with a range of 3 years to 29 years. Fire return intervals were less than 25 years, with most less than 15 years until 1880. The most recent recorded fire was 1920. The study site is in the subwatershed on the southern edge of the allotment area and has very similar site characteristics

HERITAGE RESOURCES

This Environmental Assessment summarizes pertinent information from the Archeologist Specialist Report found in the Project Record (40 CFR 1502.21). The report is located in the analysis file of the Project Record and includes detailed data, methodologies, analyses, conclusions, references, and technical information used to assess existing condition and environmental effects.

Existing Condition:

The Peola C&H Allotment is located on the Pomeroy Ranger District of the Umatilla National Forest. There have been roughly 40 different heritage resource surveys conducted within the allotment. These surveys were comprised of large-scale pedestrian inventories that have covered 100% of the high probability land within the allotment. In addition to the inventories, a number of non-inventory type literature searches have been conducted in order to determine the possible effects of proposed undertakings on known sites eligible to or listed in the National Register of Historic Places (NRHP). Thirty-seven of the surveys conform to current Umatilla National Forest inventory standards, while three do not. However, the current surveys cover 100% of the Peola Allotment project area.

Approximately 36 heritage resources were located within the allotment. Ten of these resources are isolated artifacts and are not considered eligible for inclusion in the NRHP. The remaining 26 properties consist of 5 historic sites, and 21 prehistoric sites. The historic era sites represent early public and Forest Service administrative use. Cabin remnants and rock cairns thought to be related to grazing activities (livestock or stock drive-way route markers) are examples of historic types present in the project area. Additionally, a U.S. Forest Service guard station and CCC constructed campground are represented. Both sites have been evaluated for significance and determined eligible for the NRHP. The recreation and administrative sites are fenced off and excluded from grazing activities. The remaining historic sites have not been evaluated, but until

such time are protected and treated as eligible to the NRHP. A review of site forms for the rock cairns did not mention any damage from grazing activities of any kind, nor are they within 100 meters of a structural development. The cabin site was monitored and revealed no cattle disturbance.

Prehistoric sites are predominantly lithic scatters; rock features; and a rock shelter. The rock features consist of stacked rock alignments and may be related to hunting (hunting blinds). It is unclear if the alignments are historic or prehistoric in nature; however four of the six alignments have associated lithic artifacts. In addition, a rock overhang or shelter was recorded in close proximity to a small lithic scatter. Although the site forms indicate evidence of cattle in the area of the rock shelter and the rock alignment, no direct impacts from grazing activities are noted. None of these features are close to structural improvements where cattle tend to congregate. Of the fourteen lithic scatters, five have been mitigated in the past through data recovery excavations. The remaining five lithic scatters and the rock alignments are considered eligible to the NRHP. A review of the five site forms revealed varying site conditions including no disturbance, disturbance from natural erosion and weathering (natural deterioration), to disturbance related to past and current activities such as road construction, logging, and heavy recreational use. Four site forms mentioned grazing activities (among others) as possibly affecting the sites and/or were in close proximity to improvements such as springs, ponds, troughs, or fence lines; areas in which cattle may congregate. The four sites were inspected during the 2004 field season. Three of the sites monitored did not appear to be impacted by cattle activity. Mitigation measures were deemed necessary for the other site and involved relocation of a salt block station. This measure has taken place. Annual monitoring of the effectiveness of mitigation measures is recommended, as is periodic monitoring of other known sites within the allotment where impacts from cattle are difficult to identify and evaluate during a single field season.

Threatened, Endangered and Sensitive (TE&S) Plant Species

This environmental assessment summarizes pertinent information from the Botanist Report found in the Project Record (40 CFR 1502.21). The report is located in the analysis file of the Project Record and includes detailed data, methodologies, analyses, conclusions, references, and technical information used to assess existing condition and environmental effects.

Existing Condition:

The whole allotment has been surveyed for sensitive plant species by Umatilla NF botanists as listed in Table III-2. Each of these surveys covered only a portion of the allotment, but cumulatively they have covered all of it. A list of all plant species encountered in each of these surveys is on record in the Umatilla NF botanical database. In addition, Juanita Lichthardt, under the auspices of the Washington Natural Heritage Program, conducted a botanical survey over a larger area in June 1999 and reported several sightings of sensitive species within the allotment boundaries.

Table III-2 Botanical Surveys of the Peola Allotment

Survey Name	Year	Survey Scope
Lick Fuel	**1992**	**Complete species**
Smoothing Iron	**1993**	Complete species
Mud Spring	**1994**	Complete species

Survey Name	Year	Survey Scope
South Lick	**1995**	Complete species
North Fork Asotin	**1995**	Complete species
CENSOL survey	**1997**	**Limited species list**
Charlie creek	**1999**	Riparian only
Lick Creek	**1999**	Riparian only
Elk Point	**1999**	Complete species
North Fork Asotin Creek	**1999**	Complete species

Populations of three plant species listed as sensitive on the Regional Forester's Sensitive Plant List of July 2003 have been documented within the Peola Allotment, along with multiple subpopulations of the Federally Threatened species *Silene spaldingii* (Spalding's catchfly). The three regionally sensitive species are *Astragalus arthurii* (Arthur's milkvetch), and *Carex hystericina* (porcupine sedge) both listed as sensitive in Washington State, and *Calochortus macrocarpus* var. *maculosus* (Nez Perce mariposa lily) which is listed as endangered in Washington. A fourth species, *Lomatium rollinsii* (Rollins' biscuitroot), is listed as threatened in Washington and meets the criteria for inclusion on the R6 Sensitive list, but has only recently been proposed to that list. It is expected to be added to the list at the next update, so is included as a sensitive species in this analysis. Also in the allotment is *Lupinus garfieldensis* (Garfield lupine, previously known as *L. sericeus var asotinensis* or Asotin silky lupine). This species is notable because the Washington Heritage Program lists it as a "species of potential concern" that needs further study to determine its appropriate status; this species is noted but not analyzed here, as it is not currently proposed for the R6 Sensitive list.

The porcupine sedge occurs in the riparian area along the North Fork Asotin Creek in the North Fork pasture. Arthur's milkvetch occurs on south and east facing slopes in the North Fork, Upper Sourdough, and Cottonwood pastures in bluebunch wheatgrass plant communities. Rollins' lomatium and Garfield lupine occur on a south slope in Upper Sourdough pasture in a bluebunch wheatgrass community. The Nez Perce mariposa lily is widely scattered from open ridges to mid and sometimes lower slopes of all pastures except Dick Trail and Lick, primarily on ridgetops and south and west aspects in bluebunch wheatgrass plant communities, although it also spills over onto east and north aspects where it may be associated with Idaho fescue communities.

Silene spaldingii favors north aspects, occurring in association with Idaho fescue and the edges of shrub communities that include snowberry and rose. One subpopulation includes individual plants under widely scattered ponderosa pine in a matrix of Idaho fescue. *S. spaldingii* grows in both the Lower and Upper Sourdough pastures.

Table III-3 Occurrence by Pasture of Plant Species of Concern

Pasture	Alternative 1 Pasture Status and Use Period	Plant Species of Concern
Charley	**Active,** Mid and Late Use	***Calochortus macrocarpus* var. *maculosus***
Cottonwood	**Active,** Early Use	***Astragalus arthurii* , *Calochortus macrocarpus* var. *maculosus***
Dick	**Non-use for Resource Protection**	**none**
Dick Trail	**Active,** Early Use	**none**
Lick	**Active,** Mid and Late Use	***Calochortus macrocarpus* var. *maculosus***
Lower Sourdough	**Non-use for Resource Protection**	***Calochortus macrocarpus* var. *maculosus* , *Silene spaldingii***
North Fork	**Non-use for Resource Protection**	***Astragalus arthurii* , *Carex hystericina* , *Calochortus macrocarpus* var. *maculosus***
Upper Sourdough	**Active,** Early Use **(rested 2003-4, prescribed fire)**	***Calochortus macrocarpus* var. *maculosus* , *Lomatium rollinsii* , *Silene spaldingii***

Plant Species of Concern

Species	Habitat	Potential Impacts
Carex hystericina Sensitive plant Species	Riparian areas along North Fork Asotin Creek.	Grazing in riparian area
Astragalus arthurii Sensitive plant Species	South and East facing slopes in bluebunch wheatgrass. Uncommon in WA where it is on the Northwest edge of its range. Blooms early June, set fruit late June/early July.	May be palatable to ungulates but use is unknown. Likely being affected by the spread of noxious weeds because they occur on south slopes and ridges with shallow soils.
Lomatium rollinsii Sensitive plant Species	South slope in bluebunch wheatgrass. Early blooming endemic to Snake River grasslands. One of only five known sites in WA.	Grazing and agriculture development. Likely being affected by the spread of noxious weeds because they occur on south slopes and ridges with shallow soils.
Calochortus macrocarpus* var. *maculosus Sensitive plant Species	Widely scattered from open ridges to mid and sometimes lower slopes; primarily on ridgetops and south and west aspects in bluebunch wheatgrass also east and north aspects with Idaho fescue. Blooms July, seed set by early August.	Highly palatable to ungulates and susceptible to random herbivory during leaf and inflorescence growth stages, especially when in fruit. Likely being affected by the spread of noxious weeds because they occur on south slopes and ridges with shallow soils.
Silene spaldingii ESA Threatened plant Species	North aspects with Idaho fescue and edges of shrub communities that include snowberry and rose. Known from only 117 sites, 11 contributing to 87% of the known plants; one Peola site is one of 9 that contains more than 500 plants in relatively intact habitat. Spalding's catchfly is a long-lived plant (over 20 years, and up to 50 years or more, according to Peter Lesica, pers. com. 2003), well adapted to its grassland environment. An individual plant does not bloom, or even form an early rosette, every season, and bolts late in the summer in the years that it does bloom. Post-burn monitoring in 1998, combined with current monitoring data, indicate that *Silene* plants are present in plots from at least mid-April until late August or early September.	Massive range-wide loss of habitat for *Silene spaldingii* is due to a combination of conversion of much of the habitat to agriculture and degradation of remainder primarily by weed invasion. The fragmentation of habitat has left small, genetically isolated populations *Silene spaldingii*'s primary pollinator is a ground-dwelling bumblebee, *Bombus fervidus*, with a foraging range of probably less than a mile that could be impacted by compaction. Plants that bloom during a given season appear in late spring to early summer, and bolt to flower by mid to late July. They are still green and setting seed in August, when most other forbs are gone and grasses are losing their palatability. The catchfly's flowering stems are therefore susceptible to herbivory in mid to late summer, and appear to be selected then, at least by wild ungulates. Potential threats to the Peola *S. spaldingii* population are primarily weed invasion, and the herbivory and trampling of plants and their habitat by both wild and domestic ungulates. There is some evidence that populations can

Species	Habitat	Potential Impacts
Silene spaldingii ESA Threatened plant Species		be diminished, at least temporarily, by fire (P. Lesica, pers. comm., 2003), presumably if it occurs during the species' active growing season. Pollinator visitation rates to the threatened catchfly have been found to drop in the presence of flowering non-native species such as St. Johnswort that compete for the attention of *Bombus fervidus* (Lesica and Heidel, 1996). A decrease in pollination could jeopardize fecundity of particular plants and the recruitment of new individuals to the catchfly population. Soil compaction or loss may also detrimentally affect the habitat of the ground-dwelling bumblebee, reducing pollinator numbers and jeopardizing the *Silene*'s ability to reproduce. The Washington Department of Fish and Wildlife manages about a section of land at the upper end of Sourdough Gulch. that has been plowed and sown in the past to non-native pasture grasses. On Sourdough Ridge some of those grasses, especially intermediate wheatgrass, are spreading into the native plant communities on National Forest land. In several instances across the range of *Silene spaldingii,* particularly in Washington State, use of non-native pasture grasses appears to have eliminated catchfly habitat (Glenne 2004). While spread rates are probably not rapid, these tall and aggressive grass species may eventually pose a threat to some individuals and their plant communities in the Peola allotment. At least one subpopulation of *Silene spaldingii* is within 100 yards of the existing exotic grass plantings. One "field" on state land on the top of Bracken Ridge was plowed and planted in 2004 to exotic clover species, at least one of which, sweet clover (*Melilotus officinalis*), is known to be an aggressive invader of disturbed areas.

NOXIOUS WEEDS

This Environmental Assessment summarizes pertinent information from the *Noxious Weed Report* and *Botany Report* found in the Project Record (40 CFR §1502.21). The report is located in the analysis file and includes management history, prevention strategy evaluation, actions not considered feasible, site-specific prevention strategies, etc., used to assess existing condition and environmental effects.

Existing Condition:

The grassland plant communities in the northeast portion of the Peola allotment are in variable condition. Those on north facing slopes and many of the ridgetops are in good to excellent condition. On the deeper soils typically found on north aspects they consist primarily of dense stands of Idaho fescue, with some bluebunch wheatgrass and associated native forbs. The shallower soils characteristic of the ridgetops and upper south slopes support bluebunch wheatgrass, while basalt outcrops are dominated by Sandbergs bluegrass. South facing slopes harbor large patches of exotic, and often invasive, annual grasses and annual and perennial forbs including several state-designated noxious weeds. These patches are found most often in small draws or swales, and are most abundant on about the lower third of most of the ridges. The weedy draws have suffered ground disturbance that has displaced the native plants, leaving the soil open to colonization by the most aggressive species available. Actual species present at any given site represent a succession of exotics, with the most locally abundant species that first colonize the disturbance being succeeded over time by more aggressive and persistent species such as yellowstar, Scotch thistle, St. Johnswort, and tumblemustard.

Table III-4 Noxious Weed Species Documented within the Peola Allotment

Common Name	Species	Present in Grasslands
Spotted knapweed	**Centaurea biebersteinii**	**Yes**
Diffuse knapweed	**Centaurea diffusa**	**Yes**
Yellowstar thistle	**Centaurea solstitialis**	**Yes**
Houndstongue	**Cynoglossum officinale**	**No**
Dalmatian toadflax	**Linaria dalmatica**	**No**
Scotch thistle	**Onopordum acanthium**	**Yes**

Forest roads are the primary routes that spread noxious weeds onto the landscape. The roadsides along Lick Creek and Forest Road 41, which run through the northern portion of the allotment, support numerous weeds and exotic plant species including cheatgrass, several other annual bromes, bulbous bluegrass, intermediate wheatgrass, smooth brome, flannel mullein, moth mullein, giant sumpweed, knapweeds, bull thistle, Canada thistle, St. Johnswort, conyza, tumblemustard, yellowstar thistle, and large infestations of Scotch thistle. These populations act as a seed source, allowing wind, animal, and human transport of seeds upslope to disturbed soil. Movement of many of these species up the old road/trail in Sourdough Gulch has been occurring for years in spite of district efforts to limit their spread. Even where Scotch thistle and yellowstar have been successfully controlled in the bottom of the gulch, which is easily accessible by foot or ORV, small populations have escaped up some of the side draws and are fueling the spread of these species along disturbed corridors to the ridge tops. Species designated as “noxious weeds” by the State include some of the most aggressive ones that are targeted for control efforts; however, many species that are not so designated, such as introduced pasture grasses, cheatgrass, and tumblemustard, can also threaten native plant communities by over-running them, out-competing them, and eventually eliminating the native species.

The primary sources of plant community disruption that promote the spread of weed species appear to be fire, ground disturbance by hoof action, plowing and planting of state land on Bracken Ridge, and possibly gopher activity. The two most apparent types of hoof action are trailing by elk and/or cattle, and broader scale disruption of soil and plant cover on steep slopes and chutes when large numbers of elk move up or down steep areas with loose, or seasonally wet, soils. Most of the native perennial plant species can be uprooted and displaced, leaving the soil exposed to erosion and to the invasion of annual weeds. According to the wildlife specialist report, the Washington Department of Game manages for 1000 elk in the Lick Creek Game Management Unit which includes the Peola allotment. The grassland ridges of the Sourdough area are primarily considered winter range habitat; placing this area at risk for impacts to native plant communities by invasive plants.

Once annual species and noxious weeds have invaded a site, especially on the harsher south aspects of these ridges, the degraded areas do not recover (Monsen 1994). The more aggressive weedy species tend to spread from their primary infestations at a rate of spread roughly correlating with the degree of disturbance to the local plant communities. There is growing scientific support that large herbivores facilitate the invasion and establishment of non-native plants however the processes to predict the rate and amount of spread is not well know, particularly for impacts associated with livestock. Non-native plant species are known to invade sites with or without livestock grazing. As native grasses and forbs are lost to weeds on south slopes, ungulate grazing pressure escalates on north slopes, increasing opportunities for the weeds to move into even the more resilient plant communities, including prime habitat of the Spaldings' catchfly.

Infestations of non-native species within the Peola Allotment are currently most common in south-facing draws and chutes where soil has been disturbed and native plant communities lost. Yellowstar thistle has a foothold on the north side of Bracken Ridge in a small (50ft x 100 ft.) patch on a southwest facing slope of one of the lower elevation side draws. Chemical and hand-pulling treatments have limited the weed's spread to date, but it has not been eradicated and is known to have the capacity for rapid expansion under appropriate conditions. Yellowstar increased its occupied acreage at one site in Idaho from 150 acres one year to 2000 acres the following year (Hill and Gray 2003).

Scotch thistle is more widely scattered, with a few plants apparent in a half dozen small side draws off Sourdough Gulch. In at least one spot on Sourdough Ridge, thistle plants are present in a "saddle" at the ridge top.

There are thirty-one known noxious weed sites identified within Peola C&H Allotment. Of the thirty-one known sites twenty-one sites contain multiple noxious weed species. Eight of the sites are known to be diffuse knapweed, one site spotted knapweed, one site Hoary Cress Whitetop, one site Russian knapweed, two sites of Yellow Starthistle, seven sites of Canada Thistle, one site of Hound's Tongue, one site of Common St. John's Wort, two sites of Dalmation Toadflax, six sites of Scotch Thistle and one site of Common Tansey. Two sites, 061400400054 and 061400400036 contains Yellow Starthistle are actively treated with picloram. These sites are located in pastures closed for resource protection; monitoring indicates a reduction in the number of plants per acre since spraying began in 1996. Sites range from .68 to 233 acres in size with

plants numbering from 2 to 500 plants per acre prior to treatments. The following table shows type, size, location, and current treatment.

Table III-5 Identified Noxious Weed Sites within Peola C&H Allotment

Site #	Weed	Gross Area (acres)	Pasture	Treatment History
06140400320	Hoary Cress Whitetop	.29	Dick	Manual 1994
06140400166	Scotch Thistle	30	Cottonwood	Monitoring
06140400168	Diffuse Knapweed & Scotch Thistle	23	Dick Trail/Cottonwood	Manual 1996-1999 Currently being monitored
06140400416	Diffuse Knapweed & Canada Thistle	1	Dick Trail	Manual 1995, 1999, 2004
06140400169	Diffuse Knapweed & Scotch Thistle	.50	Dick Trail	Manual 1996-1999
06140400036	Yellow Starthistle & Scotch Thistle	68	Lower Sourdough	Chemical 1996-2004
06140400321	Scotch Thistle & Common Tansey	.29	Charley	Manual 1994
06140400323	Diffuse Knapweed	.36	Lick	Manual 1994
06140400324	Canada Thistle	.37	Charley	Monitoring
06140400325	Dalmation Toadflax	.40	Lick	Manual 1994
06140400327	Canada Thistle	12	Charley	Monitoring
06140400054	Diffuse Knapweed, Russian Knapweed & Yellow Starthistle	233	North Fork	1997 Prescribed Fire
06140400175	Diffuse Knapweed	10	Lick	Manual 1996-1999
06140400194	Scotch Thistle	148	North Fork	Monitoring
06140400332	Canada Thistle	5	Charley	Monitoring

Site #	Weed	Gross Area (acres)	Pasture	Treatment History
06140400186	Diffuse Knapweed	18	Upper Sourdough/North Fork	Manual 1996-1999
06140400343	Common St. John's Wort	.35	Lick	Monitoring
06140400430	Spotted Knapweed	2	Upper Sourdough	Manual 1996-2001, 2004
06140400347	Hound's Tongue	.26	Lick	Monitoring
06140400350	Canada Thistle	.20	Charley	Monitoring
06140400435	Canada Thistle & Dalmation Toadflax	8	Charley	Manual 1996 & Monitoring
06140400357	Diffuse Knapweed & Canada Thistle	12	Charley	Manual 1996-1999 & 2004

Out of the 573 acres of noxious weeds located on this allotment 449 acres are located in the three pastures in resource protection.

Wildlife Species and Habitats

This environmental assessment summarizes pertinent information from the Terrestrial Wildlife Report and Biological Evaluation found in the Project Record (40 CFR 1502.21). The report is located in the analysis file of the Project Record and includes detailed data, methodologies, analyses, conclusions, references, and technical information used to assess existing condition and environmental effects. The **scale of analysis** for wildlife is the 23,374 acres of National Forest land encompassed by the allotment. District records, GIS, aerial photographs, and field reconnaissance were used to assess the current condition of wildlife species and their habitats in the analysis area.

Existing Condition:

Big Game

About half (49 percent) of the Peola allotment is allocated to C3 - Big Game Winter Range, C3A - Sensitive Big Game Winter Range and C4 - Wildlife Habitat by the forest plan. These management areas allow the grazing of domestic livestock By implementing forest plan standards and guidelines both the quantity and quality of forage for big game will be enhanced or maintained through improved livestock grazing systems, controlled season of use, and active prescribed burning program (Forest Plan).

The condition of winter range is the most limiting habitat component. In early spring these habitats are critically important to deer and elk, especially pregnant females, who need good sources of high-quality forage during that time of the year. Competition for food (condition and availability of winter/early spring forage for deer and elk) is the greatest concern. The second concern relates to the condition of riparian habitats, which are important areas for fawning and calving by deer and elk. Forage/browse availability in summer range areas is not considered to be a limiting factor. The quality and quantity of forage in winter areas is currently good to excellent.

Road densities are relatively low in the winter range areas; 1.4 miles per square mile. There are only 58.6 miles of road within the 26,824 acre Asotin winter range. A road closure is in effect from December 1 thru March 31 for all roads within the winter range. On April 1 thru June 30 there is a road closure in the same area for elk calving purposes. Only the 41 and 44 roads are open to vehicle traffic during the calving closure.

Mule deer are common and white-tailed deer are seen occasionally in the Peola allotment, currently numbering around 350 individuals. (Pat Fowler, WDFW pers. comm.)

The **Rocky Mountain elk** is a Management Indicator Species identified by the Forest Plan to represent general forest habitat and winter ranges. About 880 elk were estimated in the last survey, which is just under the management objective of 1000 for the Lick Creek Game Management Unit (GMU) (Pat Fowler, WDFW pers. Comm.) An elk fence forms the southern boundary of the Peola GMU which serves to keep the elk off of private land.

Bighorn sheep range overlaps the south and east parts of the Peola allotment, but the sheep tend to stay further east near the Asotin State Wildlife Area. A supplemental feeding area for bighorn sheep has recently been established.

Neotropical Migratory Birds

Neotropical migratory birds occupy a wide variety of habitats. Most of the birds in the Blue Mountains are “foliage-gleaners”, which forage primarily by collecting insects or fruit from vegetation rather than from the ground (Sallabanks et al. 2001). Riparian vegetation is particularly important to Neotropical migratory songbirds (Sallabanks et al. 2001). There are approximately 30 bird species that could be affected directly by grazing livestock because they nest or fledge their young on the ground or within 3 feet of the ground (Wildlife Report). Twenty of these ground dependent species are neo-tropical migratory birds.

Threatened, Endangered and Sensitive (TE&S)Wildlife Species

Threatened and Endangered species are managed under the Endangered Species Act to ensure that federal actions do not result in a downward population trend. Sensitive species are those recognized by the Pacific Northwest Regional Forester as needing special management to prevent being placed on Federal or State endangered species lists. Based on local studies, surveys and monitoring, as well as published literature regarding distribution and habitat use, the following Threatened, Endangered, and Sensitive wildlife species have the potential to occur in or adjacent to the analysis area: California wolverine, peregrine falcon, great gray owl, gray flycatcher, and green-tailed towhee, gray wolf, and Canada lynx.

California wolverine (Sensitive): Wolverines are wide-ranging carnivores that could be present in the area at any time. They may occasionally pass through the area. No denning habitat is known to be present in the analysis area. Wolverines have not been documented on the District, but there have been unconfirmed reports. Wolverine habitat is primarily found in the Wenaha Tucannon Wilderness to the south of the analysis area.

Peregrine falcon (Sensitive): This species is not known to occur within the analysis area, but has been observed nearby. No peregrine falcon nests have been found on the forest. Peregrine falcon may occasionally forage in the analysis area.

Green-tailed towhee (Sensitive): The green-tailed towhee has been documented on the district, but not within the analysis area. However, given the open forest and shrubland vegetative conditions in the area, there is a possibility that the Green-tailed towhee may be present.

Gray flycatcher (Sensitive): The gray flycatcher has been documented on the district. This species is typically found in sagebrush, juniper, or open pine woodlands with bitterbrush in the understory. There is a possibility that they may occur in the analysis area.

Great gray owls (Sensitive): are known to occur on the Pomeroy Ranger District. Although there have been no documented sightings, there is a strong likelihood of great gray owl occurrence within or adjacent to the Peola Allotment.

Gray wolf (Endangered): The gray wolf could occur in the area, although their presence has not been documented. Wolves are occasionally reported in the Blue Mountain region. The Idaho wolf population has been increasing steadily, and dispersion into the Blue Mountains will likely continue.

Canada lynx (Threatened): The Blue Mountains are considered to be on the fringe of the range of Canada lynx. A few lynx are known to have occurred in the area historically, and several recent but unconfirmed sightings have been reported in the Blue Mountains. Based on limited verified records of lynx, the lack of reproductive records, low frequency of occurrences, and correlations with cyclic lynx populations in Canada, lynx are considered dispersers/transients and not reproducing residents in the Blue Mountains of SE Washington and NE Oregon (Verts and Carraway 1998, McKelvey et al (Chapter 8) in Ruggiero et al 2000, Stinton 2001 and USFW 2003). The majority of potential lynx habitat is found at high elevations (>5000') in cool, moist habitat types. About one-third (2726 acres) of the Charley pasture is considered potential lynx habitat falling within the Asotin Lynx Analysis Unit (LAU).

Lynx habitat on the Umatilla National Forest was mapped using the vegetation and environmental conditions for the Northern Rocky Mountains Geographic area, and more specifically, the Blue Mountain Section, including NE Oregon and SE Washington. Primary vegetation was based on the direction provided in the Canada Lynx Conservation Assessment and Strategy (LCAS) (Ruediger et al. 2000), and follow-up guidance from the forest service

regional office and the lynx biology team. Sixth code HUCs were used as the basis for delineating Lynx Analysis Units (LAUs) across the Forest.

Five LAUs are connected and generally occur in an elongated cluster in the northern portion of the forest. The Asotin LAU is the furthest north, and is connected to the Wenaha LAU to the southwest. All other areas surrounding the Asotin LAU are either dry forest types or nonforested, which are not considered lynx habitat. There are no state wildlife management areas or other administrative units immediately adjacent to the Asotin lynx habitat. The Asotin Lynx Analysis Unit contains 50,627 acres of potential lynx habitat, entirely within the Umatilla National Forest administration boundary. About 20% (10,156 acres) of the habitat is currently in an unsuitable condition for lynx foraging or denning (Table III-6).

Table III-6 Current condition of lynx habitat in the Asotin Lynx Analysis Unit (acres).

LAU	Potential	Denning	Foraging	Unsuitable	Percent Suitable	Percent Unsuitable [1]
Asotin	50,627	19,819	20,652	10,156	80 %	20 %

Threatened, Endangered and Sensitive(TE&S) Aquatic Species

This environmental assessment summarizes pertinent information from the Fish Biologist Report and Biological Evaluation found in the Project Record (40 CFR 1502.21). The report is located in the Project Record and includes detailed data, methodologies, analyses, conclusions, references, and technical information used to assess existing condition and environmental effects.

Existing Conditions:

Within the analysis area there are approximately 950 acres of Riparian Habitat Conservation Area (RHCA) that contains about three miles of fish bearing habitat in Lick and Charley Creeks. This habitat contains resident rainbow trout (Oncorhynchus mykiss) also known as redband. There is no chinook salmon, bull trout, or steelhead habitat or species present within the current grazed pastures. Though the Lick and Charley pastures border the North Fork Asotin Creek, a bull trout stream, cattle cannot access the stream because of natural barriers. The basalt rock rim and step slopes discourage cattle from moving downslope to the stream. The allotment does not contain critical steelhead habitat as mapped by the National Marine Fisheries Service. Steelhead are known to be present below the analysis area in Charley Creek and chinook salmon migrate past the confluents in Asotin Creek. Water within the area of analysis contains nearly 8.5 miles of Class III non-fish bearing perennial channels, 8.9 miles of intermittent and nearly 31.5 miles of ephemeral channel (swales).

The riparian vegetation species community type for this area is dominated by Black Cottonwood (*Populus trichocarpa*), Alder (*Alnus spp.*), and Rocky Mountain Maple (*Acer glabrum*) in the inner riparian, with Ponderosa Pine (*Pinus ponderosa*), Grand Fir (*Abies grandis*), Douglas-fir

[1] Lynx potential habitat in currently unsuitable condition.

(*Pseudotsuga menziesii*), Engelmann Spruce (*Picea engelmannii*), and various grass/forb species interspersed in the outer riparian zone.

Table III-7 Summary of the Biological Evaluation Process for all Endangered, Threatened, and Sensitive Aquatic Species occurring, or Suspected of Occurring within the Project Area.

SPECIES	STATUS *	HABITAT PRESENT?	SPECIES PRESENT * *
INVERTEBRATE			
Lynn's Clubtail	P/S	No	No
Columbia Duskysnail	P/S	No	not found to date
FISH			
Snake River Spring/Summer Chinook	T	No	No
Snake River Steelhead	T	No	suspected
Redband Trout	S	Yes	suspected
Columbia River Bull Trout	T	yes	occasionally
Margined Sculpin	P/S	Yes	suspected
Westslope Cutthroat Trout	S	potential	No
AMPHIBIANS			
Northern Leopard Frog	P/S	Potential	not found to date
Tailed Frog	P/S	YES	not found to date

*.....P = Federally Proposed Threatened species, T = Federally listed Threatened species, S = Regional Forester's Sensitive species list.
** ...Indicate whether the particular species is present, a date of the survey, or the number of species estimated.

Fish bearing waters have been stream surveyed using Hankin and Reeves methodology. Each stream has been surveyed at least once in the past 10 years.

Table III-8 Stream lengths and classifications for Peola Allotment Analysis Area

Subwatershed & number	Stream Lengths (Miles) by Stream Class N. Fork Asotin Watershed #176010302							
	Stream Class					Total Fish Bearing	Total Perennial	Total Stream Miles With Class 4
	1	2	3	4	5			
2a. Lower. Charley Cr. (Private & State)	6.4	3.2	0. 0 *	14.8	44.0	9.6	9.6	24.4
2b. Upper. Charley Cr.	0.0	3.5	8.1	9.9	34.4	3.5	11.6	21.5
2c. Lick Cr.	0	9.0	1.9	31.6	59.8	9.0	10.9	41.5
2d. North.Fork Asotin Below Mid Branch	9.8	0.0	.6	20.8	40.0	9.8	10.4	31.2
Data Source	Umatilla National MOSS/GIS program * Denotes Data Unavailable							

Definitions of stream classes are as follows: Class I – anadromous fish present, Class II – resident fish present, Class III – non-fish bearing perennial channel, Class IV – non-fish bearing intermittent channel, and Class V – ephemeral channel.

Chapter IV
Environmental Consequences

INTRODUCTION

The purpose of this chapter is to disclose the environmental consequences of implementing the alternatives described in Chapter II. The effects on components of the environment, which result from implementation of each alternative, are discussed in terms of direct, indirect, and cumulative effects. Direct and indirect effects are consequences expected to occur immediately following implementation of an alternative. Cumulative effects represent the combined effects of past, existing, and reasonably foreseeable future activities (see Appendix D). The analysis of cumulative effects recognizes that separate activities can combine and interact, resulting in effects that are beyond the effects of individual actions.

RANGE

Impacts to range conditions and productivity are summarized from the range report along with supplemental information provided in the EA.

Grazing Management

Alternative 1 - Proposed Action

Implementing this alternative will continue to meet the Umatilla National Forests goal of utilizing forage production on capable and suitable rangelands to support grazing by domestic livestock as well as support the local economic need to allow a permittee to continue grazing on this allotment. The existing condition and trends for this allotment reflect records that go back to 1949 when approximately 300 cow calf pairs were permitted. The number of cattle have not changed much over the years with higher numbers occurring when private lands were also included in the allotment management plan. Current management of the allotment indicates that grazing has been consistent with the Forest Plan and that resource damage is not occurring. Cattle have been a potential source of impacts, but compared with the amount of big game using the area as both winter and summer range and the limited time cattle are allowed in the pastures under dry conditions, grazing has not been a major contributor to degrading conditions. There are scattered areas of concentrated use; however, trend monitoring of the rangelands does not indicate resource damage is occurring.

Direct/Indirect Effects:

Grazing would continue at current levels allowing 222 cow/calf pairs to graze on forest lands from June 1 to September 30 annually using a management system that is designed to meet Forest Plans goals and objectives. This alternative sets annual compliance that focuses on end results for pasture utilization and links the results to season of use, permitted numbers, grazing strategy, and desired future conditions. Monitoring of range conditions would dictate when cattle should be moved in order to stay within the Forest Plan standards and guidelines.

Domestic grazing would reduce the amount of annual residual grass, forbs, and shrub vegetation without causing changes to productivity. Standards for utilization also include the use of forage

by big game. Stubble height and other utilization standards are used to assure plants are not grazed to levels that would impair their productivity and sustainability. The applied utilization and resource management standards would provide for maintenance or improvement of vegetative and soil resource conditions that are consistent with the Forest Plan and this EA's Purpose and Need. Cattle are removed from a pasture when the utilization standard is reached. The assured plant vigor provided by the utilization standards would keep grazing from having a negative impact on the total annual production of forage vegetation. The deferred and rotational grazing systems used in the allotment would vary the time of year each pasture is grazed so plants have the ability to reproduce and recover. Grazing at the planned intensity and timing on its own would do little to impact existing vegetative communities. Potential impacts from hoof action can have indirect impacts by providing disturbance for invasive plants establishment and is discussed in more detail in the Threatened, Endangered, and Sensitive Plant section later in this Chapter. The noxious weed prevention plan will also reduce the risk for invasive plant establishment by early detection and treatment measures.

Cumulative:
There are no other management activities that would cumulatively impact productivity and sustainable forage. Past timber harvest continues to provide transitory rangelands that are available for use by cattle and big game. This allotment has no associated permitted livestock grazing up stream from this allotment. Herbivores, other than permitted livestock, use the same or similar vegetative resources; however this use is included when determining utilization of available forage and triggers the removal of cattle off the pasture or allotment. To assure the protection of forage resources, the permitted livestock stocking and/or management would be administratively adjusted when preseason evaluation indicates the vegetation would not be adequate for the permitted numbers of cattle. There is currently livestock grazing occurring outside the allotment on private lands. Fences keep both the permitted and private lands cattle from sharing pastures. The occasional trespass of cattle does not contribute a cumulative impact that would degrade range productivity.

Alternative 2 - No Domestic Livestock Grazing

Direct/Indirect and Cumulative Effects:
This alternative is the no grazing alternative; the permit for this allotment would be canceled. Removing cattle from lands that are capable of providing forage for domestic livestock would not meet the goal of the Forest Plan of providing the opportunity where it is available and other resource needs can be protected or the grazing does not violate law or regulations.

All range developments currently in existence would be removed, except for ponds which would be maintained for wildlife. Removing livestock would decrease the amount of soil disturbance associated with grazing activities and increase vegetation cover because of reduced foraging. There would be no measurable impacts to productivity by removing livestock from the allotments though visually grass would appear taller and more biomass would be left at the end of the season. Stock trails and other isolated areas of soil disturbance would re-vegetate slowing and eventually remediate any historic soil disturbance. Vegetative communities would change based on natural succession and changes in intensity of disturbance processes.

SOIL RESOURCE

Effects are summarized from input provided by the Soils Scientist in the Soils Report with supplemental information presented in the EA.

Alternative 1 - Proposed Action

Direct/Indirect:
Monitoring results over the past 10 years indicates that current pasture management is effective in minimizing or eliminating adverse effects to soil productivity or from erosion. The degree and extent of soil surface cover disturbance would be well within forest plan standards for displacement (a measure of effective ground cover). Monitoring of grazing activities indicates little to no sites exceeding detrimental soil conditions. Grazing impacts to soils are typically limited to erosion (due to loss of vegetative protection and surface disruption) and puddling, effects associated with hoof-action. A few very small areas around watering sites and heavily used trails are the only areas of concern, therefore; the direct, indirect and cumulative effects from grazing associated with these trails and near watering holes do not cause measurable impacts to soil productivity at the pasture level. These are mostly upland sites with little to no opportunity for sediment to be transported into streams. Close monitoring of soil moisture in the spring has ameliorated potential Impacts to soil by delaying turnout of cattle until soil conditions can support the grazing when needed. Controlling the time of turnout reduces potential detrimental soil impacts from compaction. The few sites that exceed displacement and compaction standards do not contribute to the overall loss of soil productivity because the areas are small in size and will never come close to the 15 percent of an activity area standard for detrimental soil condition, even when other activities such as timber harvest or trails are included.

Current grazing management would continue surface protection with little to no erosion occurring and suitable maintenance of surface organic matter. Evaluating range condition prior to turnout is effective in eliminating or minimizing puddling impacts due to hoof action on saturated soils. Monitoring of current grazing practices indicate that soil impacts would continue to be consistent with Plan guidelines.

Cumulative Effects:
Combined soil impacts (displacement and compaction) associated with timber harvest, prescribed fire, and recreation would be consistent with Forest Plan guidelines. Soil impacts from the few areas of disturbance caused by grazing would not measurablely contribute to the percent of detrimental displacement and compaction where it overlaps with other activities. Forest Plan standards and guidelines would continue to be met within the allotment.

Alternative 2 - No Domestic Livestock Grazing

Direct/Indirect:
The removal of cattle from the allotment would lessen the impacts to soils associated with trampling; only impacts from big game would remain. Compaction and displacement around watering ponds and troughs would be reduced as vegetation recovers. Some erosion may

continue to occur on some of the major stock trails because of use by people or wildlife. Vegetation litter would increase and provide a greater source of organic matter and protection of soils.

WATER QUALITY

Effects are summarized from input provided in the Hydrology Report with supplemental information presented in the EA.

Alternative 1 - Proposed Action

Direct/Indirect Effects:

An old roadbed/skid trail known as Beaverslide is used by the permittee to trail cattle in the Charley Creek drainage. Where Beaverslide crosses Charley Creek the stream banks are damaged for a length of about 20 feet and a short piece of the steep roadway also contributes sediment to the channel. The crossing by cattle occurs twice annually. The ongoing road decommissioning project will reduce but not eliminate this effect because the area where cattle cross the stream would remain impacted by trampling and soil displacement. The expected damage to the channel bed and to water quality by sedimentation from using the crossing is negligible because of the short duration of use, the regrowth of vegetation, and the channel bed is armored with cobble at this location. It is unlikely that sediment effects from this area are measurable more than a few hundred feet below the crossing, and then only during crossing.

The water gap on Lick Creek is heavily used and bank armoring minimizes but does not eliminate sedimentation into Lick Creek. The disturbance is confined by fencing to protect Lick Creek outside of this watering spot. Lick Creek goes subsurface just downstream of the water gap and sediment or temperature effects from the water gap would not affect downstream water quality.

Current management of cattle in the allotment meets Forest Plan and PACFISH standards for vegetation utilization in upland and riparian key sites. The Utilization standards set under PACFISH are designed to prevent damage to vegetative communities that would retard recovery of Riparian Management Objectives (RMOs). Grazing to these standards would maintain the health and vigor of near channel vegetation, which provides bank stability and protects channel morphology and minimizes accelerated sedimentation. The health and vigor of near channel vegetation, together with channel morphology are the main determinants of water temperature. By meeting utilization standards in the riparian areas, grazing is managed so as to prevent harm to water quality and to allow recovery, where necessary.

Based on past experience documented in key site monitoring, grazing as proposed in Alternative 1 would protect water quality, improved riparian conditions and continue the trend of recovery in any areas degraded by past grazing.

Cumulative Effects:

Asotin Creek flooded during the major rain-on-snow event in 1996. Substantial channel damage occurred in the floodplain down steam of NFS lands. The Asotin Model Watershed/Asotin

Conservation District and cooperators (including the USFS) implemented many recovery and restoration projects. Some private land holders fenced livestock out of the near channel areas, and hardwood and conifer planting took place in some scoured floodplain areas on private lands. Asotin Creek and its riparian area are in an improving trend because of the improvements on private land and natural recovery from the flood. Grazing on National Forest System lands would not retard this recovery because the North Fork pasture will not be grazed and the protection measures offered by the Forest Plan have been effective in reducing impacts to riparian areas.

Ongoing and foreseeable future activities that overlap the allotment on NFS lands include timber harvest and fuel reduction burning inside and outside of harvest units associated with the Charley EIS. Timber harvest and prescribed fuels reduction were designed and have, to date, been implemented to meet relevant PACFISH and Forest Plan standards. These standards rely on protecting Riparian Habitat Conservation Areas (RHCAs) from actions that would damage or slow recovery of the same RMOs that grazing standards protect. These activities have no water quality effects that would accumulate with grazing in the Peola Allotment.

Ongoing road decommissioning of the NFS portion of a road adjacent to lower Charley Creek (Reach 2) will reduce trailing by cattle and, over time, allow the recovery of bank stability. Erosion control and seeding on this project will initiate recovery of vegetation. Most of the the road decommissioning is in a non-forest landscape, but Charley Creek has the potential to support riparian vegetation. Above the road decommissioning project, in Reach 2 and 3, a system road in the RHCA of Charley Creek causes some accelerated sedimentation into the creek, though near channel ground cover provides substantial filtering to road runoff. The forested stand adjacent to the creek in this reach provides shade, some large wood recruitment, and other terrestrial inputs.

Riparian fencing and the construction of a water gap have aided in improving riparian conditions on Lick Creek. The water gap is located along about 30 feet of Lick Creek and was constructed to minimize erosion and sedimentation. The banks were lined with filter fabric and armored with rock encouraging livestock access from the north side of the creek.

Ongoing road decommissioning along Charley Creek, discussed above, could have minor sediment effects where existing road washouts are adjacent to the channel and removing fill could lead to short term (less than one day per site) turbidity. Erosion control such as placement of straw “blankets” and straw wattles, as well as seeding with native grass seed will minimize erosion and sedimentation from the project. Minor, unmeasurable sediment effects could occur during the first runoff season after completion of the work (spring runoff 2006). The overall effect of the road decommissioning would be positive in the short term and in the long term; an immediate reduction of risk of fill failure on the road, reduction in stock trailing near the channel, and an improvement in ground cover (new vegetation) near the channel.

Road decommissioning and trailing cattle across Charley Creek at Beaverslide would both lead to short term (hours), localized increases in turbidity and sedimentation. These effects would not happen at the same locations or at the same time. The road decommissioning would be

completed weeks before the Beaverslide crossing took place. There would be no negative cumulative effect between these actions.

Alternative 2 - No Domestic Livestock Grazing

Direct/Indirect and Cumulative Effects:
In this alternative the small, annual sediment effects of use at the Lick Creek water gap and the Beaverslide stream crossing on Charley Creek would not occur. Localized sediment effects would be reduced and water quality would improve an immeasurably small amount.

This alternative would end domestic livestock grazing and there would be no action which could accumulate with past, ongoing, or foreseeable future actions.

FIRE AND FUELS

Effects are summarized from input provided in the Fuels Report with supplemental information presented in the EA.

Alternatives 1 and 2

Direct/Indirect Effects:
Impacts to fuels and fire effects would be similar for both alternatives. Current grazing practices would show little difference between grazing and not grazing in the ability of the landscape to function with fire. Long-term Condition and Trend data as well as Riparian Classification and status baseline data indicate stable to upward trends with moderate to high status of ecological function in the project area. Range conditions are being managed such that fuel conditions retain the character of the fire regime. Should prescribed fire or a natural fire occur, the landscape would function naturally in the fine fuels vegetation. The impact to the individual plants and the plant communities is not at a level where grass and grass-like species are unable to compete for resources with encroaching trees or brush. Thus the grasslands continue its role in the spread of fire with high enough intensity to kill encroaching young trees.

Grazing impacts to forest lands would be unchanged. Available forage in transitory range would be available until the plantations or stand closes crowns, reducing available forage. The grazing would not change the expected fire behavior in the timbered stands nor would it measurably change species or stand conditions. If stands are condition class 2 or 3, grazing would contribute little to returning the stand to character of its historic fire regime. Grazing alone would not be able to maintain condition class 1 on the landscape, historic disturbance processes, such as fire, would have to occur as well.

Although past grazing management did influence the current conditions, current grazing standards and practices have been set to account for the individual needs of plants as well as the needs of other resources such as wildlife and soils. This includes upland forested sites that have had well-established understory components. Data indicates functional plant communities with good soil conditions and stable trends. These trends allow the rangeland landscape to function naturally in response to fire.

Cumulative Effects:
Proposed prescribed fire on a large portion of the analysis area would begin to lower the ground fuel loadings to that which would exist under a natural fire regime and reduce the density of fir understories. Combined, these two effects would serve to make the stands more crown-fire safe and to reduce the potential for catastrophic wildfire. Though the prescribed fire would improve the production and quality of forage, grazing would not interfere with the continual use of fire on the landscape. Vegetation cover would improve and be maintained by the stable or improving trend conditions. Enough vegetation would always be retained to allow fire to carry over the proposed burn area.

THREATENED, ENDANGERED and SENSITIVE (TE&S) PLANT SPECIES

Effects are summarized from input provided in the Botany Report and Biological Evaluation with supplemental information presented in the EA.

Consequences of the project alternatives to sensitive and federally threatened plant species are evaluated qualitatively, based on multiple years of observation of the site and professional judgment of the Umatilla Forest Botanical Resources staff. Where data are lacking, as for palatability and use of Arthur's Milkvetch or spread rates of invasive species, a conservative approach is favored, to protect any species of concern until more information is available.

The continued grazing of the Upper Sourdough pasture is of primary concern because it has habitat for the federally ESA listed Threatened plant *Silene spaldingii* and two Region 6 sensitive plant species. Hoof action is the primary threat to native plant communities because invasive plants can gain a foothold even with low levels of soil disturbance. According to a March 2003 survey (see wildlife specialist report), 880 elk currently frequent the Peola allotment. They are the primary source of ground disturbance facilitating the spread of non-native plant species, especially in the Upper Sourdough pasture. Cattle would be turned onto the Upper Sourdough pasture for three weeks during the *Silene's* growing and fruiting season. The numbers of cattle would increase the number of ungulate hooves impacting the ground by more than 30% during this time. The number of cattle and the duration of grazing in small pastures represent a lesser increased risk for the spread of invasive plants and fewer acres of impacts. The larger pastures would have more cattle which results in a higher risk for invasive plants spread over greater acreage. While it is impossible to assess quantitatively the increase in rate of weed spread that may be associated with this increase in hoof action, forage use, and seed vector movement, it seems reasonable to assume that some increase would occur (Jones 2002, Kimball & Schiffman 2003, Parks *et al*. 2004). Impacts to the species are disclosed below.

Alternative 1 - Proposed Action

Species	Determination and Rationale
Carex hystericina	This species is only found in the North Fork Pasture, since this pasture is proposed for non-use, there would be no impact to the species.
Trifolium douglasii	This species has not been found in the allotment even though it occurs in grasslands. There would be no impact to this species.

Species	Determination and Rationale
Astragalus cusickii var cusickii	This species has not been found in the allotment even though it occurs in grasslands. There would be no impact to this species.
Astragalus arthurii	The species occurs in two pastures, North Fork and Cottonwood. The species would not be impacted in the North Fork pasture because it is not being used. The large population in the Cottonwood Pasture would be impacted by trampling and mechanical breakage. The early season grazing would impact the species during bloom and fruiting periods. Observations by botanist Karl Urban noted that cattle did not appear to graze this plant. The primary populations of this species have persisted in the Snake River Canyon in conjunction with grazing. Populations are well distributed in Idaho such that the state does not designate the species as sensitive or rare. Continued grazing and use by local elk herds are the primary sources of soil disturbance and predation on native plant communities. Because the Cottonwood Pasture population includes nearly 200 plants scattered over 320 acres, patchy weed invasion is likely to affect localized portions of the pasture and potential habitat but would not pose a threat to this species. Since the species has co-existed with grazing and remains persistent, sporadic grazing impacts from consumption, if it occurs at all, will not contribute towards a trend in listing. This action May Impact Individuals but is not likely to cause a trend towards federal listing or loss of viability.
Lomatium rollinsii	This species was only found in the Upper Sourdough Pasture growing in one of five sites found in the State of Washington. Consumption by elk and cattle is unknown. The impacts from elk during winter months, when the plant is dormant, would be much less than that caused by grazing during the growing season. The early season grazing as proposed in this pasture would be most detrimental to this plant if it proves palatable because it blooms and fruits in May and June. Continued grazing and use of the winter range by elk would disturb soil increasing the susceptibility of the plant's habitat to invasion and usurpation by weedy species. Because this species favors south slopes, which is the habitat most prone to degradation and conversion to non-native species, additional tramping and soil disturbance from early grazing would create potential footholds for invasive plants in addition to that from big game. There are also potential impacts should this plant prove palatable to cattle when grazing occurs during their growth, bloom, and fruiting season. The continuation of grazing in this pasture may impact individuals or habitat with a consequence that the action may contribute to a trend towards Federal listing or cause a loss of viability to the population of this species with limited range and spread.
Calochortus macrocarpus* var. *maculosus	Herbivory does not appear to kill the plants, but prevents seed set for the season. Because it grows sparsely and scattered, it does not appear to be systematically grazed. This species is the most widespread of the species of concern, and is relatively abundant on ridgetops and upper slopes throughout the Upper and Lower Sourdough, North Fork, Charley, Lick, and Cottonwood pastures. Populations in Lower Sourdough and North Fork pastures would not be affected by this alternative since they will not be grazed. Plants in the other pastures would be subject to consumption by cattle. Because the plants are widely scattered, individual plants may be at risk from grazing, but herbivory is typically sporadic and affects a small proportion of the plants. The lily population is even more scattered than *Astragalus arthurii*, and because it primarily grows on the ridge tops and even north slopes that are the least weedy grassland aspects, it is less affected by patchy weed invasion. Impact by grazing to this wide ranging species may impact individual but is not likely to cause a trend towards Federal listing or a

Species	Determination and Rationale
	loss of viability. It has also remained persistent with cattle grazing and winter foraging by elk.
Silene spaldingii	This plant is found in both the Upper and Lower Sourdough pastures. The Lower Sourdough Pasture is not being used so there would be no grazing impacts associated with this pasture. The Upper Sourdough pasture is proposed for early use. Literature on this species suggests that grazing before mid-June may avoid direct herbivory. Monitoring of local subpopulations suggests that while young plants may be small enough to avoid being eaten during a season of light grazing they could still be subject to the direct effects of herbivory and trampling. Spring rosettes of *Silene spaldingii* may come up as early as April and remain close to the ground, their low stature making them unlikely to be consumed by grazing animals. The rosettes may go dormant by late June, but under favorable weather conditions may remain green through late summer, fall and winter. The Upper Sourdough Pasture has one of the largest known concentrations of this species in its current range. During the three weeks cattle would be on the pasture, grazing would increase by nearly a third the number of hooves impacting the ground when added to that of wintering elk. The impacts associated with trampling and soil disturbance can increase the spread of invasive plant species and the associated soil compaction from hoof action could degrade habitat for the plant species primary pollinator, a ground dwelling bumblebee. Management practices such as fencing or season of use would be effective to reduce trampling and soil compaction. The most problematic threat to *Silene spaldingii* in this allotment is loss of habitat to invasion by exotic plant species. It is unknown how long individual catchfly plants can endure as their native communities are lost. Two recent studies provide conflicting results. Menke (2003) found no loss of *S. spaldingii* vigor between invaded and uninvaded populations at a site in Idaho, although in 2002 Caplow found that vigor of the catchfly decreased as weed cover increased at a site in Washington. In general, very few native species can persist and compete long term with aggressive non-native species such as yellowstar and Scotch thistle. Even if individual plants can survive in a weed-infested environment, recruitment of new catchfly plants is decreased or eliminated under such conditions, dooming invaded populations to eventual demise (Glenne 2004). Cattle would also increase the number of potential vectors for spreading the seeds of weed species. The increased potential for soil displacement and seed sources increases the risk for weeds to gain a foothold. *Silene spaldingii* is not wide spread in its habitat so the viability of sites with the concentrated populations is more easily threatened by invasive weeds once they gain a hold. Threats can also come from other management activities that have and continue to occur in the area. The State of Washington has plowed and seeded its lands with exotic clovers or grasses in an effort to hold elk on the winter range. These exotic species are aggressive and in some cases are only 100 feet from sites with *Silene spaldingii* populations. They are slow to spread but represent a potential source of plants that could eventually occupy current sites of *Silene spaldingii*. The improvements also encourage elk to concentrate in the area near known sites. Approximately a third of the populations of *Silene spaldingii* grows near ridgetops and is susceptible to potential impacts from ORVs. There is risk to habitat degradation caused by soil compaction and displacement as well as the spread of weeds seeds by the ORV and other dispersed use. The risk to impacts is low because this area of the District only allows OHV and other motorized dispersed use within 300 feet of roads. Because the unauthorized use of ORVs could occur along ridges there is potential for invasive plants to be spread in the areas of disturbance and degrade or compete with *Silene spaldingii*.

Species	Determination and Rationale
Silene spaldingii	The continued grazing increases the risk to eventual loss of habitat because it adds to the number of potential vectors that spread and create habitat for invasive weed species. *Silene spaldingii* is not widespread and populations tend to clump creating a situation where there is high risk for weed species to displace populations. Because of the potential degradation and loss of habitat, the continuation of grazing as proposed in Alternative 1 has been determined to May Affect and is Likely to Adversely Affect *Silene spaldingii.*

Alternative 2 - No Domestic Livestock Grazing

While the impacts of factors other than cattle on native plant habitat (as discussed under Alternative 1) would continue under this alternative, there would be no added impact from cattle grazing. The rate of weed spread would be dependent on levels of habitat degradation by wild ungulates and human activities, as well as degree of weed control by the district, but would not be accelerated by domestic grazers.

The sensitive and ESA plant species listed below would not be directly grazed or trampled by cattle under this alternative. Cattle would no longer contribute to soil disturbance by hoof action nor be a vector for weed species. With fewer disturbances, the rate of weed spread would be expected to decrease slightly and the rate of improvement of altered plant communities that retain some of their native component would be expected to increase slightly over the long run. It is not possible to quantify the above changes or rates of change except to note that this alternative would decrease ungulate impacts to the allotment by 244 pairs for 21 days each summer.

Alternative 2 has been determined to have no impact on *Carex hystericina, Astragalus arthurii, Calochortus macrocarpus* var. *maculosus, Lomatium rollinsii* and no effect on *Silene spaldingii.*

Noxious Weeds

Effects are summarized from input provided in the Noxious Weed Report with supplemental information presented in the EA.

Alternative 1- Proposed Action

Direct/Indirect and Cumulative Effects:

Cattle would be a vector to the spread of noxious weeds. High use areas that include livestock trails, stock driveways, and areas around range improvements would continue to be susceptible to noxious weed introduction because of concentrated use. Prevention measures would be effective in reducing the rate of spread. Areas of concentrated use are checked regularly so new sites could be treated before they became a problem. The permittee have been educated on noxious weed identification and would continue to inform and report to the District any new weed infestations.

Alternative 2-No Domestic Livestock Grazing

Direct/Indirect and Cumulative Effects:
The absence of livestock would slightly reduce the rate of spread of noxious weeds. As cattle are removed from livestock trails, stock driveways, and areas around range improvements, these areas would begin to revegetate and stabilize over the long term, and the amount of area susceptible to noxious weed introduction would be reduced. However, wildlife would continue to contribute to the spread of noxious weeds.

WILDLIFE SPECIES AND HABITATS

Effects are summarized from input provided in the Wildlife Report and Biological Evaluation with supplemental information presented in the EA.

Alternative 1 - Proposed Action

Big Game

Direct/Indirect:
Livestock grazing can result in competition between livestock, deer, elk, and bighorn sheep for the available forage resources, however, the Forest Plan utilization standards includes the cumulative annual use of forage by big game and domestic livestock. Livestock grazing during the spring, summer, and early fall can leave winter/early spring range areas with insufficient forage reserves to carry the desired numbers of big game through the critical winter/early spring period. Impacts to big game winter range is not expected because the Forest Plan Standards and Guidelines incorporate big game needs for forage, the pastures located in the winter range are used early in the year, and the number of cattle and/or timing of use would be adjusted if monitoring indicated grazing was impacting the amount of forage available in the winter and early spring. Forage productivity is being protected by the Forest Plan Standards and Guidelines (see range discussion).

Monitoring of current grazing practices indicate that livestock and elk forage values would continue to be consistent with Plan guidelines. Adherence to the proposed season of use, forage utilization standards, effective removal, and effective monitoring for compliance would help minimize the potential effects to big game species.

The cattle turn on date of June 1 should not interfere with the critical elk calving period.

Cumulative effects
Any impacts from past livestock grazing to riparian areas are showing improvement because of riparian protection measures that have been implemented and would continue as part of the permit. Existing water developments are helping to keep livestock out of riparian areas. Critical areas have been fenced, salt is being used to draw animals away from riparian areas, and riders monitor cattle location and move them out of riparian areas. A water source for big game (1800 gallon) was installed during 2003. Future prescribed burning will likely increase the quality and quantity of habitat for wildlife as well as available forage. Grazing would have no cumulative effect to thermal and hiding cover that would decrease after the Sweeney, Big Fir, and Charley

timber sales are completed. There are many factors (including weather, hunter access, harvest regulations, predation, among others) that influence big game population levels. The proposed grazing is not expected to cause changes to big game populations. The current level of livestock grazing should have no measurable effect to big game because of adherence to the proposed season of use, forage utilization standards, effective removal of cattle when utilization standards are approached, and effective monitoring for compliance with standards. The cattle turn on after calving, so riders are not likely to displace big game during this time.

Neotropical Migratory Birds

Direct, Indirect, and Cumulative Effects:
Livestock use has the potential to alter bird behavior, habitat, and productivity. Grazing of shrubs, forbs, and grasses, combined with the potential spread of noxious weeds reduces the overall amount of high quality habitat available for many avian species. There would also be a slight risk that nesting vegetation, eggs, and young would be trampled by large-hoofed livestock. Individual birds could be disturbed by cattle presence, potentially leaving nests unattended for longer periods than normal. Cumulative effects to vegetation and cover would come primarily from timber harvest and prescribed burning. The impacts from grazing to vegetation and cover would not be measurable when compared to the effects from fire or timber harvest. Livestock grazing would cause additional reductions in habitat quality for birds; however the increase would be slight. Due to the limited duration and the wide distribution of cattle activity, actual effects on bird productivity are likely immeasurably small.

Threatened, Endangered and Sensitive Wildlife Species

Direct/Indirect:
Wolverine, peregrine falcon, green-tailed towhee, gray flycatcher, and great gray owl:
Proposed grazing would not measurably affect habitat conditions or prey resources, nor cause long-term movements of any sensitive species. While it is possible for short-term disturbance to occur, the likelihood is relatively low since these species are currently not known to frequent the area, and because of the small percentage of area affected relative to the habitat distributions.

Gray wolves are not known to currently inhabit the district, and no denning or rendezvous sites are known, therefore there would be no effect to individuals. The proposed action would also have no effect to habitat for wolf prey species. Therefore, there would be no effect on individuals, nor the quantity or quality of habitat.

The U.S. Fish and Wildlife Service (FWS) did not consider grazing a 'risk factor' to lynx populations when **Canada lynx** was listed (USDI 2003). However, grazing could impact lynx habitat in some areas. For example, human activities associated with livestock grazing (vehicle traffic, protection of livestock from predators, etc.) have the potential to disturb individual lynx foraging or traveling through the project area. Cattle grazing in lynx habitat could reduce grasses, forbs, and shrubs that would otherwise be available for snowshoe hare.

Livestock grazing in the Peola allotment is not likely to degrade lynx foraging and denning habitat. Most grazing occurs in non forested areas not readily used by snowshoe hare. Lynx

habitat is at high elevation and is grazed late in the season with light use. Cattle generally make very light use of shrubs and areas that snowshoe hare would use during the winter. No fire or timber harvest related openings occur in lynx habitat within the allotment, therefore regeneration of shrub and tree components are not of concern. No aspen stands or shrub-steppe habitats are grazed in lynx habitat within this allotment. Riparian and willow areas are not suppressed by grazing because livestock use is managed to minimize riparian impacts in order to protect fish habitat. With adherence to the proposed season of use, forage utilization standards, and effective monitoring for compliance, there would be very little effect on lynx habitat.

Consultation regarding the effects of grazing in the Peola Allotment to Canada lynx has been completed (USDA 2000). The FWS concurred that continued grazing in the Peola Allotment "may affect, but is not likely to adversely affect" Canada lynx (USDI 2000). Grazing would continue under the same management guidelines as consulted in 2000.

Cumulative Effects:

The addition of grazing activities to the effects of past, ongoing, and future foreseeable projects would have no measurable cumulative effect to gray wolf, and no impact to wolverine, peregrine falcon, green-tailed towhee, gray flycatcher, and great gray owl. Ongoing timber harvest in particular could affect these species; however, the addition of grazing would not cause a measurable change in disruption or habitat loss.

Past projects within the Asotin LAU created some unsuitable Canada lynx habitat, and this is reflected in the baseline condition for the LAU. Many of these areas should grow into suitable foraging habitat in the next 5-10 years. Ongoing forest management activities and public uses in the area generally occur in the daytime when lynx are less active. The effects of these ongoing activities in lynx habitat are reflected in the baseline existing conditions (Table III-8), and the FWS has concurred that these activities do not have adverse impacts to lynx (USDI 2000).

Planned timber harvest in the Sweeney Timber Sale, together with present and past management actions in the LAU, would result in a 2% total reduction of suitable habitat in the LAU since the listing of Canada Lynx in 2000. The 2% change in habitat is within the Forest Plan standard that requires no more than 15% of the lynx habitat be changed to an unsuitable condition in a 10-year period.

The amount of foraging habitat in the Asotin LAU would decrease by 1% after completion of the Sweeney Timber Sale. The amount of unsuitable habitat in the LAU would be 21%, which is consistent with the Forest Plan standard limiting unsuitable to no more than 30%. No additive decrease would occur from grazing in the Peola Allotment.

About 60% of the lynx habitat in the Charley pasture of the Peola Allotment will be unsuitable for 15-20 years. The Charley pasture in the Peola Allotment contains more fringe lynx habitat that has been heavily managed, while core lynx habitat in the LAU is found further south in roadless and wilderness areas. The Asotin LAU overall is expected to continue to contribute to the conservation of Canada lynx (Ruediger et al. 2000).

The proposed grazing activities in combination with past, ongoing, and future foreseeable projects may affect but would not likely adversely affect" Canada lynx. Livestock grazing in the Peola allotment is not likely to degrade lynx foraging and denning habitat. Since there is no known resident lynx population in the Blue Mountains, no physical disturbance would be expected. An occasional brief disturbance to individuals could occur, causing the animal to move around the activity. Mortality of individual lynx is not expected because there are no ongoing or proposed activities identified as mortality risk factors (trapping, shooting, predator control, and highways).

Because the Forest Plan Amendment only applies to lynx habitat within the Asotin Cattle and Horse Allotment, there are no other required changes in the forest plan or required actions across the forest in other areas within lynx habitat. The incorporation of this management direction will not cumulatively affect the amount of timber made available for public use nor will there be changes in livestock grazing permits or plans of operations for mining in other areas of the forest because there are no direct and indirect impacts to these resources anticipated. This amendment will not change or require future changes to access and travel management plans. All other cumulative effects of amending the forest plan for lynx are as described for direct and indirect effects.

Alternative 2 - No Domestic Livestock Grazing

Big Game

Direct/Indirect:
Elimination of livestock grazing within a 23,000 acre area would result in more forage available for elk and other big game species. Without livestock, more food would be available year-round. This would be especially important in the winter and early spring months, when food availability is limited. Over time there would be improved riparian habitat conditions, which would improve overall forage quality and quantity and provide better calving and fawning habitat.

Neotropical Migratory Birds

Direct / Indirect:
Elimination of domestic livestock grazing would result in reduced ground and vegetation disturbance within a 23,000 acre area. Cessation of grazing would allow for a gradual improvement in native vegetation and riparian habitat conditions over time. Noxious weed spread would be reduced. Bird species would benefit from an increase in habitats found in a more natural state. There would be no risk of nesting vegetation, eggs, and young being trampled by livestock. Potential temporal disturbance to birds during nesting, post-fledging, and foraging activities would also be reduced.

Threatened, Endangered and Sensitive Wildlife Species

Direct/Indirect:

Eliminating grazing would have no impact to **wolverine, peregrine falcon, green-tailed towhee, gray flycatcher, and great gray owl**. The quality and availability of habitat components for these species would not change.

Gray wolves are not known to currently inhabit the district, and no denning or rendezvous sites are known, therefore there would be no effect to individuals. The proposed action would also have no effect to habitat for wolf prey species. Therefore, there would be no effect on wolves, nor on the quantity or quality of prey habitat.

The quality and availability of **Canada lynx** habitat in the Asotin LAU would slightly improve. Under this alternative, there would be no grazing-related management activities within the Peola allotment. Any potential competition or conflict between livestock grazing and the development and maintenance of lynx foraging habitat would be eliminated. Some of the potential conflicts between humans and lynx would be reduced. Since no management activities are proposed, Alternative 2 would have no effect to Canada lynx.

Threatened, Endangered and Sensitive (TE&S) Aquatic Species

Effects are summarized from input provided in the Fisheries Report and Biological Evaluation with supplemental information presented in the EA.

The following section is an individual species assessment for the "Threatened or Endangered" species present in the "Analysis Area" and the Regional Forest Supervisors "Sensitive" species list. Each species will have an individual Biological Determination based upon presence/absence and relationship of each to the vicinity of the project during various life stages.

Alternatives 1 & 2

Direct/Indirect and Cumulative Effects:
Review of existing data indicates that the following species either do not have habitat present within this project area or surveys indicate the species has not been found within or adjacent to the project area. It has been determined there would be no effect to Lynn's clubtail dragonfly - *Gomphus lynnae* (PS), Columbia Duskysnail – *Lyogyrus n.sp. 1* (PS), West-slope cutthroat trout - *Salmo clarkii lewisi* (S), Tailed frog - *Ascaphus trucei* (PS), and Northern Leopard Frog (P/S).

Alternative 1 - Proposed Action

Snake River Spring/Summer/ and Fall Chinook Salmon

Direct/Indirect:
It has been determined that grazing would have no effect on ESA listed Snake River chinook salmon. This determination is based on the premise that no spring/summer chinook and/or habitat exist within the project and that available habitat and species is distant (approximately 8

miles downstream) to the project area. The North Fork of Asotin Creek is the primary location of spawning habitat in this watershed and the no grazing in the North Fork pasture would continue for resource protection; grazing would not impact stream temperatures or water quality. Fall Chinook are not present in the Asotin Creek Watershed, they spawn in the Grande Ronde, distant (over 15 miles) to the allotment.

Spring/summer Chinook salmon do not utilize Charley Creek for either spawning or rearing habitats. There is a thermal barrier (temperatures too high) that is unfavorable to chinook salmon, the mouth of the stream is somewhat inaccessible, and there was a man-made fish barrier in Charley Creek about 1/4 mile upstream that may hinder upstream travels during low flows. Stream survey data from previous years concluded that there is no chinook salmon in Charley Creek.

Lick Creek has no migratory fish habitat because of thermal, man-made, and dry channel fish barriers. The water gap on Lick Creek is heavily used and bank armoring minimizes but does not eliminate sedimentation into Lick Creek. The disturbance is confined by fencing to protect Lick Creek outside of this watering area. Lick Creek goes subsurface just downstream of the water gap and sediment or temperature effects from the water gap would not affect downstream water quality. The majority of the chinook spawning occurs in Asotin Creek above the Lick Creek confluent, 5 miles from the allotment.

Cumulative Effects:
There is potential for the introduction of sediment and/or other materials to the creek during the seasonal high flows in the short term, however, the contribution from grazing would not be measurable when added to timber sales or other activities on private lands. There would be no measurable effect on downstream habitat attributes below the forest boundary. The completion of the restoration activities (ie. road obliteration, cutslope planting & stabilization), reconstruction of the road surface and the culvert replacements would cause short term flushes of sediment during the first stream flow events however sediment produced from grazing would not cumulate to measurable levels, above background, because of riparian protection measures incorporated into all project designs. Sediment introduced into the system during grazing activities would affect migrating fish and would be either flushed from spawning area before fish arrive or enter streams below spawning areas.

Alternative 2 - No Domestic Livestock Grazing

Direct/Indirect:
It has been determined that removing grazing would have no effect on ESA listed Snake River chinook salmon because cattle would be removed from the landscape and there would no longer be a risk of cattle accessing riparian areas.

Snake River Steelhead (Management Indicator Species)

Alternative 1 - Proposed Action

Marine Fisheries Service critical habitat for steelhead is not found in the project area. Spawning surveys indicate that steelhead do not spawn within the allotment and passage barriers probably prohibit upstream migration of juveniles into the project area. Non-anadromous *O. mykiss* were observed in Charley Creek during stream surveys and, based on WDFW surveys, Charley Creek is one of the most prolific resident *O. mykiss* spawning areas for its stream size in the State.

1994 and 1996 stream surveys in Lick Creek concluded that anadromous steelhead were not present in Lick Creek. The surveys did find non-anadromous *O. mykiss*; however, fish passage barriers prevent migration to the headwaters.

Asotin Creek does provide spawning and rearing habitat below the confluents of Lick Creek. Optimal summer rearing habitat is not present due to thermal barriers.

The North Fork of Asotin Creek is also known as occupied steelhead habitat. Spawning habitat ranges from the confluence of the South Fork of Asotin Creek south as far as Middle branch; the rearing habitat may extend further upstream.

Direct/Indirect:
It was determined that grazing as proposed with pastures in resource protection would have no effect on steelhead. This determination is based on the premise that no steelhead and/or habitat exist within the pastures proposed for grazing and that available habitat and species presence is approximately 2 miles downstream from the allotment. Charley Creek has extensive spawning in the first two miles from it's confluence with Asotin Creek and juveniles occupy habitat further up stream to the State land.

Grazing activities in Lick Creek would not impact water quality because the dry channels during the summer and fall months and subsurface flows in Lick Creek prohibit any sediment produced during grazing from reaching the main stem Asotin. The water gap used by the cattle has taken measures to protect water quality and riparian conditions. High flows would flush any sediment from the system prior to spring spawning, even before migrating fish enter the system. Most steelhead spawning occurs above in Asotin Creek above the confluence with Lick Creek, 5 miles from the allotment. During high flows juvenile steelhead may reach the Lick pasture above the summer dry channel area and mix with the redband trout. They could leave with the lowering of flows or remain in isolated pools. Cattle are not in the pasture during the time of high flows so contact is greatly reduced and riparian protection measures and control at the water gap reduces contact during the time of pasture use. Steelhead have not been identified when surveys occurred, however, the limited access to the stream by cattle (the water gap) would not likely impact an individual.

Overall, habitat components related to stream cover, temperature, and large woody debris would not be impacted by grazing. The North Fork pasture would not be grazed, protecting fish habitat and riparian protection measures would be implemented to meet Forest Plan Standards and Guidelines. The hardening at the Lick Creek water gap and Beaverslides reduce sediment inputs and the streams' condition would continue to function to trap and slowly release immeasurable sediment delivered to the stream channel by grazing.

Cumulative Effects:
Same as for Snake River chinook salmon discussed above.

Alternative 2 - No Domestic Livestock Grazing

Direct/Indirect:
It has been determined that removing grazing would have no effect on ESA listed Snake River steelhead because cattle would be removed from the landscape and there would no longer be a risk of cattle accessing riparian areas.

Redband Trout (Management Indicator Species)

Alternative 1 - Proposed Action

Direct/Indirect:
It has been determined that grazing may impact individuals or habitat but not lead towards federal listing. Interior redband trout is known to be present in the North Fork Asotin Creek, Lick Creek, and Charley Creek. There would be low disturbance to occupied habitat because of riparian protection and not grazing the North Fork pasture. Cattle may access the habitat that is present, but permittees are required to move the animals upon discovery in the riparian areas of these creeks. Most of the habitat has geographic and/or physical barriers (such as down logs, timber, rock bluffs, etc) that curb the access to fish habitat. Grazing occurs outside of the spawning period.

Cumulative Effects:
There is potential for the introduction of sediment and/or other materials to the creek during the seasonal high flows in the short term, however, the contribution from grazing would remain immeasurable when added to timber sales (that have riparian protection measures as part of their design) or other activities on private lands. The completion of the restoration activities (ie. road obliteration, cutslope planting and stabilization), reconstruction of the road surface and the culvert replacements would cause short term flushes of sediment during the first stream flow events, however, sediment produced from grazing would not cumulate to measurable levels because of riparian protection measures incorporated into all project designs. There would be no measurable effect on downstream habitat attributes below the forest boundary. Sediment introduced into the system during grazing activities would impact the behaviors of individual fish in the area of disturbance but would not contribute to impacts on spawning or cause silt deposits on spawning gravels because the grazing would not occur during spawning season.

Alternative 2 - No Domestic Livestock Grazing

Direct/Indirect:
It has been determined that removing grazing would have no impact on redband trout because cattle would be removed from the landscape and there would no longer be a risk of cattle accessing riparian areas.

Columbia River Bull Trout

Alternative 1 - Proposed Action

Direct/Indirect:

It has been determined that the proposed grazing within the North Fork Pasture in resource protection, would have no effect on Columbia bull trout. Bull trout are not present in Charley Creek as shown by stream surveys conducted in 1994 and 1996. No suitable spawning and rearing habitat were observed during these surveys and follow-up spawning surveys have never indicated the presence of bull trout. Similar surveys in Lick Creek indicate that bull trout are not present in this stream either.

Spawning, rearing, and over-wintering habitat is present in North Fork Asotin Creek above the confluence with the Middle Branch North Fork Asotin. Keeping the North Fork Pasture in resource protection and not grazing keeps cattle from entering the stream in a section used primarily for migration. Impact from sediment delivery or trampling of the stream gravels is avoided. Even though both Charley and Lick pastures border the North Fork Asotin, natural barriers along the ridgetop and the steep slopes keep cattle from reaching the stream. The continuation of the current grazing conditions would not impact water quality or fisheries habitat in the North Fork Asotin Creek.

Cumulative Effects:
Same as for Snake River Salmon discussed above.

Alternative 2 - No Domestic Livestock Grazing

Direct/Indirect:
It has been determined that removing grazing would have no effect on ESA listed Columbia River bull trout because cattle would be removed from the landscape and there would no longer be a risk of cattle accessing riparian areas.

Margined Sculpin

Alternative 1 - Proposed Action

Direct/Indirect:
Review of existing data indicates that Margined sculpin habitat may be present within project areas and the species has been identified within the Asotin Creek watershed. Background sediment and low stream flows make it unlikely that the fish occur in Charley Creek and the species would not be present in Lick Creek for habitat reasons. Riparian protection measures and not grazing the North Fork Pasture reduce impacts to this species. Implementation of Alternative 1 may impact individuals or habitat, but will not likely contribute to a trend toward federal listing or cause a loss of viability to the population or species. Determination for Alternative 2 is no impact.

Cumulative Effects:

Same as discussed for redband trout.

Alternative 2 - No Domestic Livestock Grazing

Direct/Indirect:

It has been determined that removing grazing would have no impact on Margined sculpin because cattle would be removed from the landscape and there would no longer be a risk of cattle accessing riparian areas.

SPECIFICALLY REQUIRED DISCLOSURES

This section describes how the action alternatives comply with applicable State and Federal laws, regulations, and policies.

National Historic Preservation Act (Heritage Resources) – Allotment and grazing maintenance activities, including salting, have the potential to effect heritage properties. A review of the Umatilla National Forest heritage files indicate that the Peola Allotment project area has been surveyed for cultural resources. The surveys were conducted in accordance with guidelines established by the Umatilla National Forest Cultural Resources Inventory Plan (Fulgham 1989). As a result of these surveys, 36 historic or prehistoric sites were found within the project area. Section 106 responsibilities for this undertaking, permit re-issuance for the Peola C&H Allotment, has been completed and forwarded to the Washington SHPO. Any grazing maintenance activities, including establishment of salting locations, will be looked at as separate undertakings and will require the appropriate tribe and SHPO consultation. A no effect determination for permit re-issuance for the Peola Allotment has been forwarded to the Washington SHPO.

Wild and Scenic River Act - No designated or potential wild and scenic river sections would be affected by implementation of any alternative.

Clean Water Act -The Clean Water Act requires states to identify beneficial uses, to establish water quality standards that protect those uses, to develop a list of water quality impaired streams which do not meet standards (303d list), and to develop a Total Maximum Daily Load (TMDL) for water quality impaired streams. The State of Washington, Department of Ecology has identified Use Designations to meet this requirement (WAC Chapter 173-201A, Table 602). Beneficial uses are the same for each of the major streams of the allotment, North Fork Asotin Creek, Charley Creek, and Lick Creek:

Aquatic Life Uses	Char (bull trout) spawning and rearing
Recreation	Extraordinary Primary Contact
Water Supply Uses	Domestic, Industrial, and Agricultural
Miscellaneous Uses	Wildlife habitat, harvesting, commercial/navigation, and boating/aesthetics

The 2002-04 water quality assessment for the state of Washington identifies NFS segments of the North Fork of Asotin Creek, Lick Creek, and Charlie Creek which are water quality limited, that is, do not meet the water temperature standard. The Washington State Department of Ecology (DOE) has scheduled Total Maximum Daily Load (TMDL) development in this basin for 2007.

Umatilla National Forest water temperature monitoring is ongoing in the allotment area and is presented in the following table.

Table IV-2 Water Temperature ° F

Year	NF Asotin @ Lick Creek	Lick Creek @ Forest Boundary	Charlie Creek along FR 4206	Charlie Creek @ Forest Boundary
1998	69°	56°	61°	
1999	65°	60°	58°	
2000	70°	62°	59°	
2001	67°	62°	58°	
2002	67°	Lost	61°	63°
2003	68°	56°	discontinued	62°
2004	67°	56°	discontinued	59°

Through the use of management plans and Best Management Practices (BMPs), which provide the basis for maintaining and improving water quality in the forested landscape, the project is consistent with the Clean Water Act. Grazing and associated activities follow standards and guidelines (S&Gs) listed in the Umatilla National Forest Plan, as amended by PACFISH (USDA and USDI 1995), and accepted BMPs used for compliance with the Water Pollution Control Act, PL 92-500, as amended. PACFISH provides management direction in the form of interim Riparian Habitat Conservation Areas (RHCAs) and S&Gs for all NFS lands (see Management Requirements and Constraints above).

Based on current management direction and policy and on documented monitoring of riparian key site areas for utilization of vegetation, the proposed grazing plan for the Peola Allotment would not contribute to elevated water temperatures and would not retard recovery of water temperature in the Allotment. The proposed grazing plan for the Peola Allotment is in compliance with the Clean Water Act.

Prime Farmland, Range Land and Forest Land - No adverse effects on any prime farmland, rangeland and forest land not already identified in the Final FEIS for the Umatilla Forest Plan would be expected to result from implementation of any alternative. All alternatives associated with this proposal are in accordance with Secretary of Agriculture Memorandum 1827 and Department Regulation 9500-3 for prime farmland, rangeland and forest land.

Civil Rights, Women and Minorities - No adverse effects on civil rights, women, and minorities not already identified in the FEIS for the Forest Plan would be expected to result from implementation of any alternative.

National Forest Management Act and Forest Plan Consistency – The effects disclosed in this analysis shows that grazing is consistent with the Umatilla National Forest Plan and the National Forest Management Act that guided the development of the Forest Plan. Grazing would meet the goals and objectives of the Forest Plan and is a permitted use consistent with the land management areas contained within the allotment. Impacts to range, soil, water, wildlife, fisheries, and botany have been disclosed and demonstrated to meet Forest Plan Standards and Guidelines. Though an ESA listed plant species and a Region 6 sensitive plant species could be adversely affected by continued grazing in the Upper Sourdough pasture, there is the ability to reduce the impact and meet Forest Plan and Forest Service policy by not grazing the pasture as disclosed in the effects analysis for the no grazing alternative.

Wetlands and Floodplains - No adverse effects on wetlands and floodplains not already identified in the FEIS for the Forest Plan would be expected to result from implementation of any alternative. Wetlands associated with streams and springs would be protected using mitigation guidelines previously identified.

Energy Requirements - No adverse effects on energy requirements would be expected to result from implementation of any alternative.

Public Health and Safety - Public health and safety would not be affected from implementation of any alternative.

Environmental Justice – No local minority or low income populations were identified during scoping or effects assessment. No minority or low-income populations are expected to be impacted by implementation of any of the alternatives, in accordance with Executive Order 12898.

Grazing and Weed Invasion – We have reviewed Belsky's **Livestock Grazing and Weed Invasions in the Arid West** (2000) article. The project design has set implementation standards that maintain native vegetative communities and soil resources in a healthy and resilient condition.

OTHER RESOURCE CONCERNS AND OPPORTUNITIES

Probable Adverse Environmental Impacts that Cannot be Avoided - There is risk that continued grazing of the Upper Sourdough pasture would likely adversely affect the ESA listed plant, *Silene spaldingii*, and cause the Region 6 sensitive plant species, *Lomatium rollinsii* to trend towards federal listing under ESA. This impact can be remedied by not grazing the pasture. The effects analysis for the no grazing alternative indicates that not grazing this pasture would have no effect on *Silene spaldingii* and no impact on *Lomatium rollinsii*. Not grazing the pasture does not get rid of the potential trespass of cattle into this pasture, but not grazing the pasture would reduce the continued impacts.

Congressionally Designated Areas - There are no Congressionally Designated Areas within the analysis area.

Research Natural Areas - There is one Special Interest Area located along the boundary of the analysis area. No cattle are permitted in this area. The area was established and preserved as a grassland forest mosaic of Bluebunch Wheatgrass and Douglas-fir Communities.

Relationship Between Short-Term Use and Long-Term Productivity - Maintenance of healthy soils in terms of organic matter and structure is a key prerequisite to maintaining healthy ecosystems (Forest Health Report). Long-term productivity depends on maintaining the basic ecosystem resources and their function. For this project, implementation of standards and guidelines as outlined in the FEIS for the Forest Plan are designed to provide for continued long-term site productivity. However, there would be some short-term impacts related to the implementation of any of the action alternatives.

Irreversible and Irretrievable Commitment of Resources – Irreversible commitment of resources refers to a loss of future options with nonrenewable resources. Irretrievable commitment of resources refers to a loss of production of renewable resources.

No irreversible or irretrievable effects are anticipated from any of the alternatives. No irreversible commitments of land would occur. No unavoidable adverse effects over and above those addressed in the Forest Plan FEIS (Chapter 4, pages IV-231-233) have been identified.

Potential Conflicts with Plans and Policies of Other Jurisdictions - There are no known conflicts with plans and policies of other jurisdictions associated with implementing the alternatives. The FEIS for the Forest Plan (Chapter 4, pages IV 226-227) discusses this in further detail.

Chapter V
Agencies and Persons Consulted

Interested parties were sent a scoping letter for this project. The directory of interested parties was taken from a mailing list maintained at the Umatilla National Forest Supervisor's Office. Interested parties included the Confederated Tribes of the Nez Perce Indian Tribe, Washington Department of Fish and Wildlife, as well as environmental organizations (The Lands Council, Blue Mountain Biodiversity, etc.) and interested individuals.

A 30-day notice and comment period to solicit information, concerns, and any issues specific to the proposed action was published in the legal notice section of our newspaper of record (East Oregonian, Pendleton, OR). The time frame for comments ended October 18, 2003. Responses received from this notice included one letter sent by U.S. Mail and two responses by email. All written correspondence and email messages and our response to substantive comments are located in the analysis file and are a matter of public record (36 CFR Part 215 dated June 4, 2003).

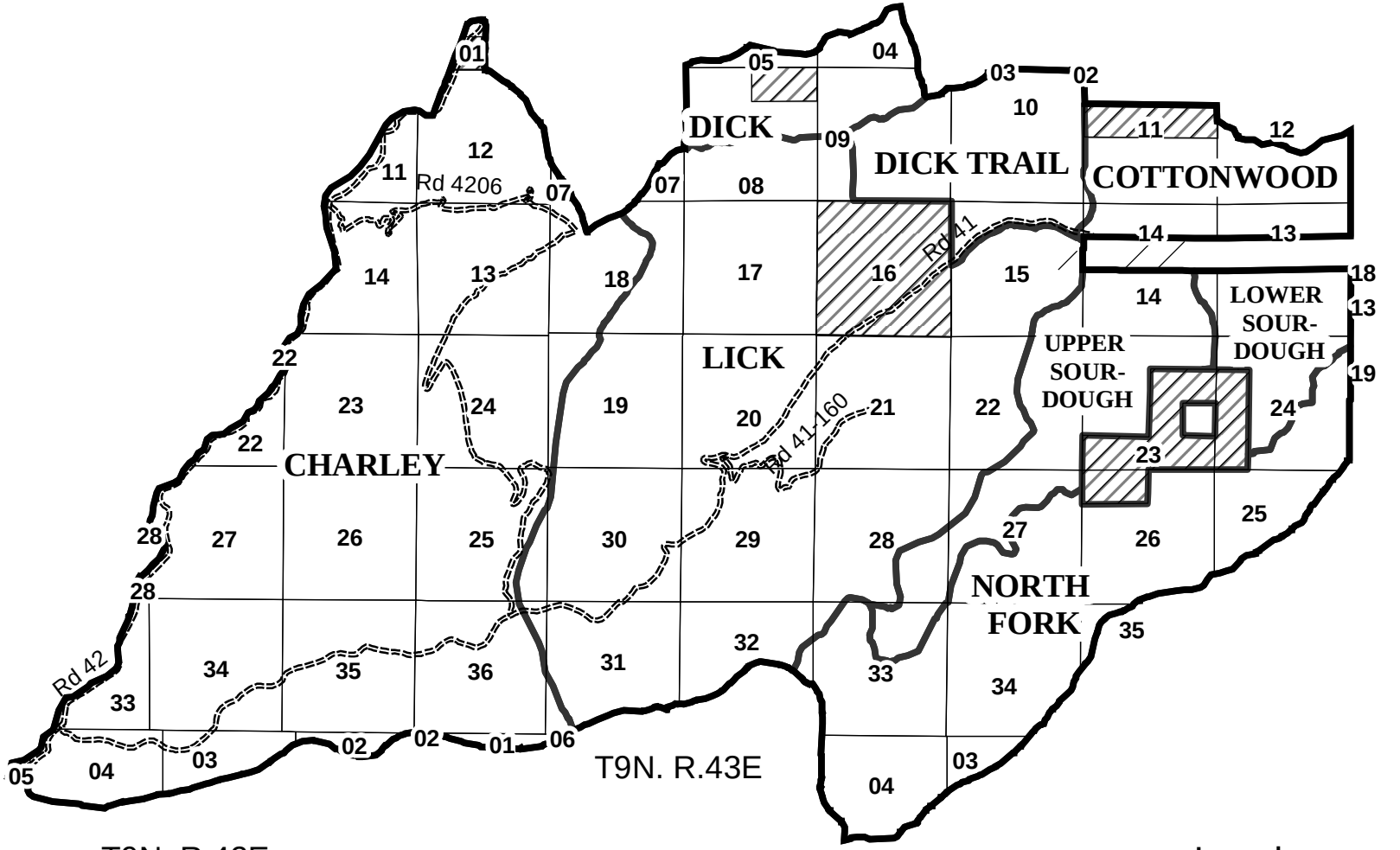
Forest Service personnel contributors to the Environmental Assessment are listed below:

Contributors

Angela Whittaker	Range Technician
Glen Westlund	District Planning
Jill Bassett	North Zone Archeologist
Del Groat	Fisheries Biologist
Bill Dowdy	Wildlife Biologist
Steve Carlson	Fuels Assistant Fire Manager Officer
Holly Harris	North Zone Wildlife Biologist
Stacia L. Peterson	Hydrologist
Craig Busskohl	Forest Soils Scientist
Jean Wood	Forest Botanist
Terri Jeffreys	NEPA Advisor
Dave Hatfield	Planning Staff Officer
Mitchel Bulthuis	Range Program Manager
Dave Herr	Environmental Coordinator

Appendix A

PEOLA C&H ALLOTMENT



Legend

- Alltoment Boundary
- Pastures
- State Land
- ==== Open Roads

0 0.4 0.8 1.6 2.4 3.2 Miles

Scale 1:15,840

Appendix C - Lynx Standards and Guidelines

Conservation Measures Applicable to all Programs and Activities

Programmatic Planning - Standards

1. Management direction will generally apply only to lynx habitat on federal lands within Lynx Analysis Units (LAUs).

2. Lynx habitat will be mapped using criteria specific to each geographic area to identify appropriate vegetation and environmental conditions. Primary vegetation includes those types necessary to support lynx reproduction and survival. It is recognized that other vegetation types that are intermixed with the primary vegetation will be used by lynx, but are considered to contribute to lynx habitat only where associated with the primary vegetation.

3. To facilitate project planning, delineate LAUs. To allow for assessment of the potential effects of the project on an individual lynx, LAUs should be at least the size of area used by a resident lynx and contain sufficient year-round habitat.

4. To be effective for the intended purposes of planning and monitoring, LAU boundaries will not be adjusted for individual projects, but must remain constant.

5. Prepare a broad-scale assessment of landscape patterns that compares historical and current ecological processes and vegetation patterns, such as age-class distributions and patch size characteristics. In the absence of guidance developed from such an assessment, limit disturbance within each LAU as follows: if more than 30 percent of lynx habitat within a LAU is currently in unsuitable condition, no further reduction of suitable conditions shall occur as a result of vegetation management activities by federal agencies.

Programmatic Planning - Guidelines

1. The size of LAUs should generally be 16,000 - 25,000 acres (25-50 square miles) in contiguous habitat, and likely should be larger in less contiguous, poorer quality, or naturally fragmented habitat. Larger units should be identified in the southern portions of the Northern Rocky Mountains Geographic Area (Oregon, and SE Washington). In the west, we recommend using watersheds (e.g., 6th code hydrologic unit codes (HUCs) in more northerly portions of geographic areas, and 5th code HUCs in more southerly portions). Coordinate delineation of LAUs with adjacent administrative units and state wildlife management agencies, where appropriate.
2. Areas with only insignificant amounts of lynx habitat may be discarded, or lynx habitat within the unit incorporated into neighboring LAUs. Based on studies at the southern part of lynx range in the western U.S., it appears that at least 6,400 acres (10 square miles) of primary vegetation should be present within each LAU to support survival and

reproduction. The distribution of habitat across the LAU should consider daily movement distances of resident females (typically up to 3-6 miles).

1. After LAUs are identified, their spatial arrangement should be evaluated. Determine the number and arrangement of contiguous LAUs needed to maintain lynx habitat well distributed across the planning area.

Project Planning - Standards

1. Within each LAU, map lynx habitat. Identify potential denning habitat and foraging habitat (primarily snowshoe hare habitat, but also habitat for important alternate prey such as red squirrels), and topographic features that may be important for lynx movement (major ridge systems, prominent saddles, and riparian corridors). Also identify non-forest vegetation (meadows, shrub-grassland communities, etc.) adjacent to and intermixed with forested lynx habitat that may provide habitat for alternate lynx prey species.
2. Within an LAU, maintain denning habitat in patches generally larger than 5 acres, comprising at least 10 percent of lynx habitat. Where less than 10 percent denning habitat is currently present within a LAU, defer any management actions that would delay development of denning habitat structure.
3. Maintain habitat connectivity within and between LAUs.

Conservation Measures to Address Risk Factors within the scope of the Peola Allotment Management Plan Environmental Assessment

Project Planning - Standards

1. Do not allow livestock use in openings created by fire or timber harvest that would delay successful regeneration of the shrub and tree components.

2. Manage grazing in aspen stands to ensure sprouting and sprout survival sufficient to perpetuate the long-term viability of the clones.

3. Within the elevational ranges that encompass forested lynx habitat, shrub-steppe habitats should be considered as integral to the lynx habitat matrix and should be managed to maintain or achieve mid seral or higher condition.

4. Within lynx habitat, manage livestock grazing in riparian areas and willow carrs to maintain or achieve mid seral or higher condition to provide cover and forage for prey species.

.

Appendix D

Past Projects within Peola C&H Allotment

Name	Burn Type	Acres	Year
Moonshine	Natural fuels	771	1999
Pinkham	Natural fuels	1000	2000
Lick Timber Sale	Activity fuels	144	2001
Lick Timber Sale	Activity fuels	274	2002
Red Fir	Natural fuels	1200	2002
Lick Timber Sale	Activity fuels	97	2003
Red Fir	Natural fuels	98	2003
Getaway	Natural fuels	310	2003
Lick Timber Sale	Activity fuels	225	2004
Charley Timber Sale	Activity fuels	287	2004
Charley Timber Sale	Natural fuels	418	2004
Joint Fire Science Project	Activity fuels	120	2004

There has been past timber harvest, non-commercial thinning and other vegetation management that have been accounted for in describing current conditions.

Present Projects (within 1 to 2 years)

Name	Type	Acres
Upper Charley	Activity fuels-Helicopter	682
Upper Charley	Activity fuels-Skyline	976
Upper Charley	Activity fuels-Tractor	1236
Upper Charley	Natural fuels	1347
Hairpin	Natural fuels	628
Dry Fork	Natural fuels	614
Noxious Weeds	Chemical	221
Sweeney	Non-Commercial Thinning	150
Big Fire	Non-Commercial Thinning	50
Sweeney	Timber Sale	2,585
Big Fir	Timber Sale	2,820

Reasonable Foreseeable Future Projects

Name	Type	Acres or Miles
Red Fir	Natural fuels	713
Cottonwood	Natural fuels	1200
Road Obliteration		8 to 25 Miles

Appropriate actions will be taken to control noxious weeds, at this time, we are uncertain of how many acres will exist.

Appendix E Comment period

Concern	Where in EA	Response
I. Center for Tribal Water Advocacy		
The EA fails to adequately prevent the effects of livestock grazing on riparian and stream habitats, fish and wildlife species. The EA does not address utilization standards and whether a change in utilization is needed for ESA or protection of bank stability. There is no disclosure of impacts from grazing to PACFISH RMOs.	Chapter 2, Pages 4 and 5 Alternative Considered; page 7, Description of Proposed Action, pages 9 and 10 Monitoring standards. Chapter 4: Range pages 1 and 2; Soils, 2 and 4; Water Quality, 4 to 6; Wildlife, 11 to 14; Fisheries, 15 to 19 Forest Plan pages 4-63 to 4-65; 4-60 BMPs 2 e;	The project has been designed to protect Riparian areas though not grazing several pastures, including the North Fork Asotin, an important steelhead stream. More aggressive grazing could have been proposed by opening the pastures currently in resource protection, but they were not carried forward because the protection of fish and plant habitat was still considered important. Monitoring measures that include standards for utilization have been successful in preventing riparian damage. The Proposed utilization standards are the same as Forest Plan standards that were consulted with the Fish and Wildlife Service and Marine Fisheries Service for ongoing projects and the standard is being studied for effectiveness as part of the Terms and Conditions of the biological opinion. Key areas of riparian use are being monitored and cattle would begin to be moved from the pasture when utilization is within an inch of the standard. The EA acknowledges areas of concentrated use around watering areas or crossings. Overall the impacts to water quality are immeasurable and with not grazing the North Fork Asotin pasture, impacts to fisheries habitat from grazing would not normally impact the listed species unless a cow got through the fences. Impacts to Lick Creek would also be unnoticed because grazing occurs in the area above the water gap below which the stream goes subsurface. Continuing resource protection in these pastures protects fish species listed under the Endangered Species Act as negotiated for during the consultation process for the Umatilla Forest Plan or reduces the risk to degrading *Silene spaldingii* habitat by yellowstar thistle, a noxious weed.
Provide a reasonable analysis of the cumulative effects of conditions on downstream non-federal lands and for federal lands.		Impacts are confined to the Forest and are immeasurable to fish and riparian habitat and water quality at the Forest boundary. Impacts from grazing on National Forest system lands are not expected to have a cumulative affect with actions occurring on private lands.
Analysis fails to demonstrate that PACFISH standards are currently being met. No statement on existing condition as to substrate nor a discussion on impacts to substrate caused by grazing.	EA Chapter 3 Water Quality; BE for Aquatic Species EA chapter 4 Soils and Water Quality	Riparian areas show an improving trend. Keeping cattle out of perennial stream areas, except for the crossing at Beaver Slide and the Lick Creek Water Gap, plus monitoring for riparian utilization standards show improving riparian vegetation trends. Impacts to soil that causes displacement occurs in the uplands with little to no opportunity for sediment to be transported into streams. The EA does not summarize Existing PACFISH data, but it is found in the BE.
Impacts are inconsistent with the	All Resources analyzed	Impacts to each resource of concern were compared to

Forest Plan standards.	in Chapter 4 Chapter 4 page 21	Forest Plan standards and the effects from the proposed grazing were determined to be consistent with the Forest Plan.
Impacts to riparian vegetation by changes to succession of hardwoods. EA failed to discuss that grazing degrades and impedes recovery of bank stability. Grazing would increase erosion and sediment delivery when considering the existing channel widening and bank destabilization in Asotin Creek.	Forest Plan FEIS page IV-109 EA chapter 4, soils, water quality	Mitigation measures, standards and guidelines, and utilization standards from the Forest Plan implement grazing strategies that continue improvement of riparian conditions. The historical low numbers of cattle in the allotment has never pushed riparian condition conditions to levels of concern, other than at high use areas around access to water. These are either developed areas away from streams or the water gap on Lick Creek which is hardened to protect water quality and has drift fences to keep cattle from accessing the rest of riparian area. Continued monitoring by the permittee and the Forest Service keep cattle dispersed so that intensive use of riparian areas does not occur. By not grazing the North Fork Pasture and fencing on private lands along Asotin Creek, riparian and fisheries habitat in Asotin show an improving trend. Based on past experience, documented in key site monitoring, grazing as proposed in Alternative 1 would protect water quality, improve riparian conditions, and continue the trend of recovery in any areas degraded by past grazing (finding from EA for Water Quality).
Monitoring is considered inadequate.	Chapter 3, water quality, Chapter 4: Range, Soils; Water Quality.	Monitoring methods have been determined to be adequate for protection of water and aquatic resources.
The project violates law by continuing grazing in 11 pastures.	Chapter 1, page 2	Only five of 8 pastures are proposed for continued use for grazing. A ninth pasture was dropped completely from the allotment because it does not have enough water. This reduction of pastures has reduced the number of cattle from a high 520 when private lands were used to 1960s of 274 to 222 at the present. The three pastures placed in resource protection are to prevent damage to habitat to ESA listed species and reduce the risk of noxious weeds (star thistle) from being carried to other pastures. Modifications have been made using the annual operating instructions to protect restoration investments for Threatened Endangered and Sensitive (TES) aquatic and plant species and noxious weeds by placing three of the original nine pastures in resource protection.