CHAPTER 1 – INTRODUCTION

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

- *Introduction:* The section includes information on the history of the project proposal, the purpose of and need for action, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.
- *Comparison of Alternatives, including the Proposed Action:* This section provides a more detailed description of the agency's proposed action as well as alternative methods for achieving the stated purpose. These alternatives were developed based on significant issues raised by the public and other agencies. This discussion also includes possible mitigation measures. Finally, this section provides a summary table of the environmental consequences associated with each alternative.
- *Environmental Consequences:* This section describes the environmental effects of implementing the proposed action and other alternatives. This analysis is organized by resource area. Within each section, the affected environment is described first, followed by the effects of the No Action Alternative that provides a baseline for evaluation and comparison of the other alternatives that follow.
- *Agencies and Persons Consulted:* This section provides a list of preparers and agencies consulted during the development of the environmental assessment.

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

Background

The Long Prairie Allotment is approximately 5,700 acres and has supported livestock grazing since the inception of the Mt. Hood National Forest in 1906. Vegetation includes mixed conifer forests, meadows, and open, grassy slopes. Average annual precipitation ranges from 50 inches on the west side to 30 inches on the east side, occurring mostly during the winter months. Elevation ranges from 2,200 to 4,200 feet. The area supports a wide variety of human uses, including recreation, wood products, and grazing. The area is important for fisheries, wildlife, plant, and other natural values. This allotment is currently administered on the Hood River District of the Mt. Hood National Forest.

Historically it was debated as to whether the reissuing of existing grazing permits was considered a Federal action requiring review under the NEPA. Prior to 1995, many grazing allotments throughout the country were relying on older environmental analysis. To resolve the issue, Congress included language in the Rescission Act of 1995 (Public Law 104-19, Section 504) that requires the Forest Service to identify all allotments for

which NEPA analysis is needed, and to prepare and adhere to a schedule for conducting an assessment of grazing actions under NEPA. In response to the Rescission Act, the Forest Service established a fifteen-year schedule for completion of this work. In the meantime, section 504(b) and (c) of the act allows the Forest Service to continue to issue grazing permits on existing allotments where NEPA has not yet been completed (or may be outdated) as long as the terms and conditions of the permit are not changed.

Grazing actions on public land are viewed as an on-going action. In order to understand the context of grazing activity today, it is important to consider the history of grazing in the West. Prior to the 1930s, extensive unregulated grazing on public land was a major problem until Congress enacted laws that required grazers to own a local home ranch to qualify for a permit to graze. One of these was the Granger-Thye Act of 1950: Public Law 81-478 (April 24, 1950) established the direction for National Forest System allotment management, including the authorization to issue grazing permits for terms up to 10 years; the authorization to use grazing fee receipts for rangeland improvement; and, the establishment of grazing advisory boards. Also, requirements such as including base property and commensurability were also designated by statute to ensure economic stability to local communities, to foster stewardship toward the public land resources, and to manage the rangelands for sustainability.

The period of unregulated grazing before the Granger-Thye Act resulted in adverse environmental consequences such as soil loss and watershed modifications that created many of the permanent and semi-permanent impacts seen today. Some of these impacts, such as the capability for sites to restore native plant communities, must be recognized and understood to ensure that unrealistic expectations for management are not part of the action alternatives.

This assessment of vegetation and watershed conditions takes into account the historic level of use that occurred on these allotments prior to the establishment of management and control of livestock numbers with the enactment of the Granger-Thye Act of 1950. The purpose of the Granger-Thye Act was to establish controls on public land grazing resource and encourage stewardship. It was the idea that the core of that stewardship would create a link between the use of public land and an established private landowner who would bring stability to the community and bring these lands into a sustainable level of production for both forage and wildlife habitat.

Purpose and Need for Action

Long Prairie is an existing allotment. The purpose of this proposed action is to continue authorization of livestock grazing in a manner that is consistent with the Mt. Hood Forest Plan, as amended. The specific needs for proposing change to the current management of the allotment are detailed below.

- There is a need to analyze consistency with changes that have occurred since the last environmental analysis that was completed in 1985. Changes include: implementation of the Northwest Forest Plan, the Mt. Hood National Forest Land and

Resource Management Plan (Forest Plan), and changes to the Endangered Species Act.

- There is a need to improve areas that are receiving high use where cattle are congregating along streams and in prairies.
- There is a need to move the allotment area toward the desired future condition based on the Mt. Hood Forest Plan.

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, 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 contains lands identified as suitable for domestic livestock grazing in the Mt. Hood Forest Plan, and livestock grazing is consistent with the goals, objectives, standards and guidelines of the Forest Plan (Forest Plan, Four-1 to Four-344). It is Forest Service policy to make forage available to qualified livestock operators from lands suitable for grazing consistent with land management plans (Forest Service Manual 2203.1). Additionally, it is Forest Service policy to continue contributions to the economic and social well being of people by providing opportunities for economic diversity and by promoting stability for communities that depend on range resources for their livelihood (Forest Service Manual 2202.1). By regulation, forage producing lands will be managed for livestock grazing where consistent with land management plans (36 CFR 222.2 c).

Desired Future Condition

The desired condition in the Mt. Hood Forest Plan is to provide for some level of livestock use while preventing unacceptable damage to other resource values from commercial livestock grazing (Forest Plan, Four-4). There is a need for change from current management on the Long Prairie Allotment as there are portions within the allotment where cattle are congregating and causing resource damage. Cattle numbers have been reduced substantially over the years and carrying capacity studies have indicated that the allotment has enough forage to support the current level of cow/calf pairs or more; however, because of problems associated with distribution of cattle across the allotment, the high-use areas are not moving toward desired conditions as identified in the Forest Plan. See Figure 1-2 for a map of high-use areas identified in the allotment.

One cause of the lack of distribution is that historically only one location was utilized for turning out the cattle at the start of each grazing season and herding the animals for removal at the end of each season. Long Prairie has been the designated drop-off and pick-up location for roughly 80 years. Cattle tend to spend longer periods where they are turned out, until they slowly spread themselves out across the allotment. The concentration of cattle in this area has posed a risk to archeological resources as well as stream health, aquatic species, and soil quality. This proposal together with ongoing and future actions attempts to address these resource concerns.

The majority of permanent range occurs in the meadows and riparian areas of this allotment. Cattle tend to concentrate in Gibson Prairie in the southern portion of the allotment where there is desirable forage and accessibility to water.

Riparian areas within the allotment also tend to receive concentrated use by cattle. Field surveys indicate that there is a need to modify distribution of cattle in order to improve the rate of stream and soil recovery. Specifically, the hydrologist, fisheries biologist, and soil scientist from the Hood River Ranger District have identified areas along West Fork Neal Creek and North Fork Mill Creek where streambank trampling may be contributing to reduced channel stability. Cattle seek out riparian areas for shade, forage, and water. In addition, several stream segments and portions of some of the headwater tributaries are used by cattle throughout the summer and may affect the resident fish populations and habitat. Cutthroat trout are present in West Fork Neal and North Fork Mill creeks throughout their reaches within the allotment, and threatened steelhead trout are present in both creeks downstream of the allotment boundary.

Hood River Ranger District personnel documented extensive bank trampling and multiple cattle stream crossing trails at the headwaters of West Fork Neal Creek and North Fork Mill Creek during and at the conclusion of the 2004 grazing season. Numerous areas of bank trampling, fine sediment introduction, channel down cutting, and riparian vegetation removal were noted and mapped along a 0.5 mile section of West Fork Neal Creek in the south end of Long Prairie. A total of 27 areas of bank trampling and 23 stream cattle crossings (or an average of one crossing or trampled bank every 50 feet of stream) were identified.

The pasture division fences separating the three pastures (Surveyor's Ridge, Long Prairie, and Gibson Prairie) are in either fair or poor condition which has led to a lack of distribution across the allotment. While turned out in one pasture, cattle have been able to travel to pastures not officially in use, taking advantage of sections of ineffective fence.

It is the concentrated use of the prairies and riparian areas that have caused the impacts listed previously. The proposed action together with ongoing and future projects responds to the problems of distribution and helps move the allotment toward the desired condition described in the Mt. Hood Forest Plan.

Proposed Action

To meet the purpose and need for action, the Hood River Ranger District on the Mt. Hood National Forest proposes to continue authorization of livestock grazing on the Long Prairie Allotment, with specific range improvements to improve distribution across the allotment and meet the desired future condition for the area. This proposal includes authorizing 52 cow/calf pairs, with a normal grazing season of June 15th to September 30th.

The emphasis of the proposed action is to avoid resource impacts to riparian areas from cattle along West Fork Neal Creek and North Fork Mill Creek within the allotment. It would include various range improvements to increase the distribution of cattle across the

allotment including the placement of salt blocks in the uplands, increasing the number of locations to turn cattle out at the beginning of each season, and increasing the number of alternative water sources.

The proposed action intends to use an adaptive management approach where resource indicators would be monitored over time to determine if management activities were reaching the desired outcome. If not, changes could be made mid-stream. All the elements of grazing management, including timing, frequency, intensity, and duration could be adjusted to bring grazing activities into line with project objectives. Changes in grazing management would be based on resource recovery with the goal of meeting or moving toward the desired future condition. See pages 14-17 for a full description of how the principle of adaptive management would work.

Specifics of the proposed action are described and analyzed throughout the document as Alternative 3. This grazing proposal would be implemented in the Forest Service's fiscal year 2006. However, the current permittee may choose not to turn cattle out until the 2007 grazing season. If this proposal or an alternative is selected, the details will be documented and detailed in the Long Prairie Allotment Management Plan (Forest Service Handbook 2209.13 Sec. 94.1) located at the Barlow Ranger District in Dufur, Oregon.

An Explanation of Words Used to Describe Livestock Numbers
(Note: there is also a glossary attached)

Cow/Calf Pairs
A cow/calf pair is defined as a mature cow with a nursing calf, less than six months old.

Animal Units / Animal Unit Months (AUMs)
Animal Unit: A unit of measure for rangeland livestock equivalent to one mature cow over 6 months of age. An animal unit is based on average daily forage consumption of 26 pounds of dry matter per day.

Animal Unit Month (*AUM*): The amount of forage needed to sustain one cow for one month. The term AUM is commonly used in three ways: (1) stocking rate, as in X acres per AUM, (2) forage allocation as in X AUMs in allotment A, and (3) utilization as in X AUMs consumed from Unit B.

Management Direction

This Environmental Assessment hereby incorporates by reference the project record (40 CFR 1502.21). The project record contains specialist reports and other technical documentation used to support the analysis and conclusions in this environmental assessment. Specialist reports were completed for range management, hydrology, fisheries, soils, noxious weeds, wildlife, recreation, botany, and heritage resources. Separate biological evaluations and/or biological assessments were completed for

botanical species, aquatic species and terrestrial wildlife species as part of the consultation process with the National Marine Fisheries Service (NMFS) and the US Fish & Wildlife Service (USFWS). The project record is located at the Hood River Ranger District in Mt. Hood, Oregon.

This environmental assessment process 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, Clean Water Act (CWA), and the Endangered Species Act (ESA). This environmental assessment is tiered to the Mt. Hood National Forest Land and Resource Management Plan Final Environmental Impact Statement and Record of Decision, and incorporates by reference the accompanying Land and Resource Management Plan (also called the Forest Plan), as amended by the Northwest Forest Plan. The project is consistent with all applicable Federal, state and local laws.

Land Allocation

There are several land allocations as designated by the Northwest Forest Plan (NWFP) and Mt. Hood Land and Resource Management Plan (Forest Plan) within the Long Prairie Allotment (see Figure 1-3). The west side of the allotment is inside the Surveyor's Ridge Late Successional Reserve (LSR), as designated by the NWFP. The desired future condition from the Surveyor's Ridge LSR Assessment is to provide the maximum amount of habitat for late successional and old growth associated species. A small section of the southeast corner of the allotment is designated winter range for deer and elk. The desired condition is to have adequate quantity and quality of forage for wintering deer, turkeys, and elk. The majority of the allotment is in matrix or wood products emphasis from the NWFP and Forest Plan respectively.

Decision Framework

Based on the interdisciplinary analysis presented in the environmental assessment and the project record, the Hood River District Ranger will decide whether livestock grazing should be authorized on all, part, or none of the allotment area. If some level of livestock grazing is authorized, then management prescriptions will be identified (including standards and guidelines, grazing management, and monitoring) to ensure that desired condition objectives are met or that movement occurs toward those objectives in an acceptable timeframe.

Public Involvement

The proposal was listed in the Mt. Hood quarterly, planning newsletter. A scoping letter detailing the proposed action was sent to interested members of the public on August 20, 2004, and available for comment until September 18, 2004. Scoping comments were received from representatives of Bark, Oregon Natural Resources Council (ONRC), and Oregon Department of Fish and Wildlife (ODFW), Mid-Columbia Field Office. In addition, as part of the public involvement process, the agency met with the permittee on January 26, 2005 to discuss the proposal.

A preliminary analysis of the effects of the proposed action and alternatives to the proposed action was available on June 27, 2005 for a 30-day comment period. Bark and Oregon Natural Resources Council (ONRC) sent in a combined comment letter, an email was received by Steve Blackmore (a member of Portland United Mountain Peddlers), and Kate McCarthy, a local resident phoned the district office with comments on the proposal.

Using the comments from the public and other agencies, the interdisciplinary team developed a list of issues to address.

Issues

Significant or key issues are defined as unresolved issues between alternative uses of available resources related to the proposed action. They are used in environmental analysis to formulate alternatives, prescribe mitigation measures, or analyze environmental effects. The Council on Environmental Quality (CEQ) requires the Forest Service to identify and eliminate from detailed study the issues which are not significant (40 CFR1501.7). Issues may be eliminated from further analysis when the issue is outside the scope of the proposed action; is already decided by law, regulation, Forest Plan, or other higher level decision; is not clearly relevant to the decision to be made; or is conjectural and not supported by good scientific or factual evidence. A list of non-significant issues and reasons regarding their categorization as non-significant may be found at the Hood River Ranger District in the project record.

The following key issues around the proposed action have been identified:

Competition with Wildlife Species

- Cattle grazing on elderberry during the late summer period within the Long Prairie Allotment may impact the plant (including breaking off whole branches) and reduce the food source for band-tailed pigeons, grouse, mountain quail, black bears and other wildlife.

  Discussion of this issue can be found in Table 2-3 of the Alternatives section, and in the disclosure of the effects to wildlife on pages 98 and 99. Impacts to elderberry from cattle will be monitored and mitigated if necessary (see page 19, #4).

- There is concern that cattle grazing could decrease forage availability for deer and elk within the Long Prairie Allotment, causing them to become displaced.

  Discussion of this issue can be found in Table 2-3 of the Alternatives section, in the disclosure of the effects to wildlife on pages 98 and 99, and in the range management section addressing forage and carrying capacity on pages 30 and 31 (including Table 3-3).

- There is concern that the construction of a fence to exclude cattle from the North Fork Mill Creek drainage would inhibit the migration and dispersal of wildlife.

  Discussion of this issue can be found in Table 2-3 of the Alternatives section, and in the disclosure of the effects to wildlife on pages 99 and100. A specific mitigation

measure has been designed to reduce impacts to wildlife from fencing projects (see page 19, #6).

Botanical Species

- Cattle grazing within the Long Prairie Allotment may have a negative impact on native botanical species, such as the *Botrychium manganese*, a Forest Service, Pacific Northwest Region, sensitive species. Cattle concentrated in meadows may trample and graze on these sensitive plants and have a detrimental effect.

  Discussion of this issue can be found in Table 2-3 of the Alternatives section, in the disclosure of the effects to botanical species on page 113-121. A mitigation measure has been included that is designed to protect these species from any potential impacts from cattle (see page 19, #3).

Noxious Weeds

- Cattle grazing activities on the Long Prairie Allotment have the potential to disturb soil and create bare ground, which may facilitate the spread of existing noxious weeds.

  Discussion of this issue can be found in Table 2-3 of the Alternatives section, and in the disclosure of the effects cattle may have on the spread of noxious weeds (page 44-47). Specific mitigation measures have been designed to minimize the spread and new establishment of invasive plant species (see page 19, #2).

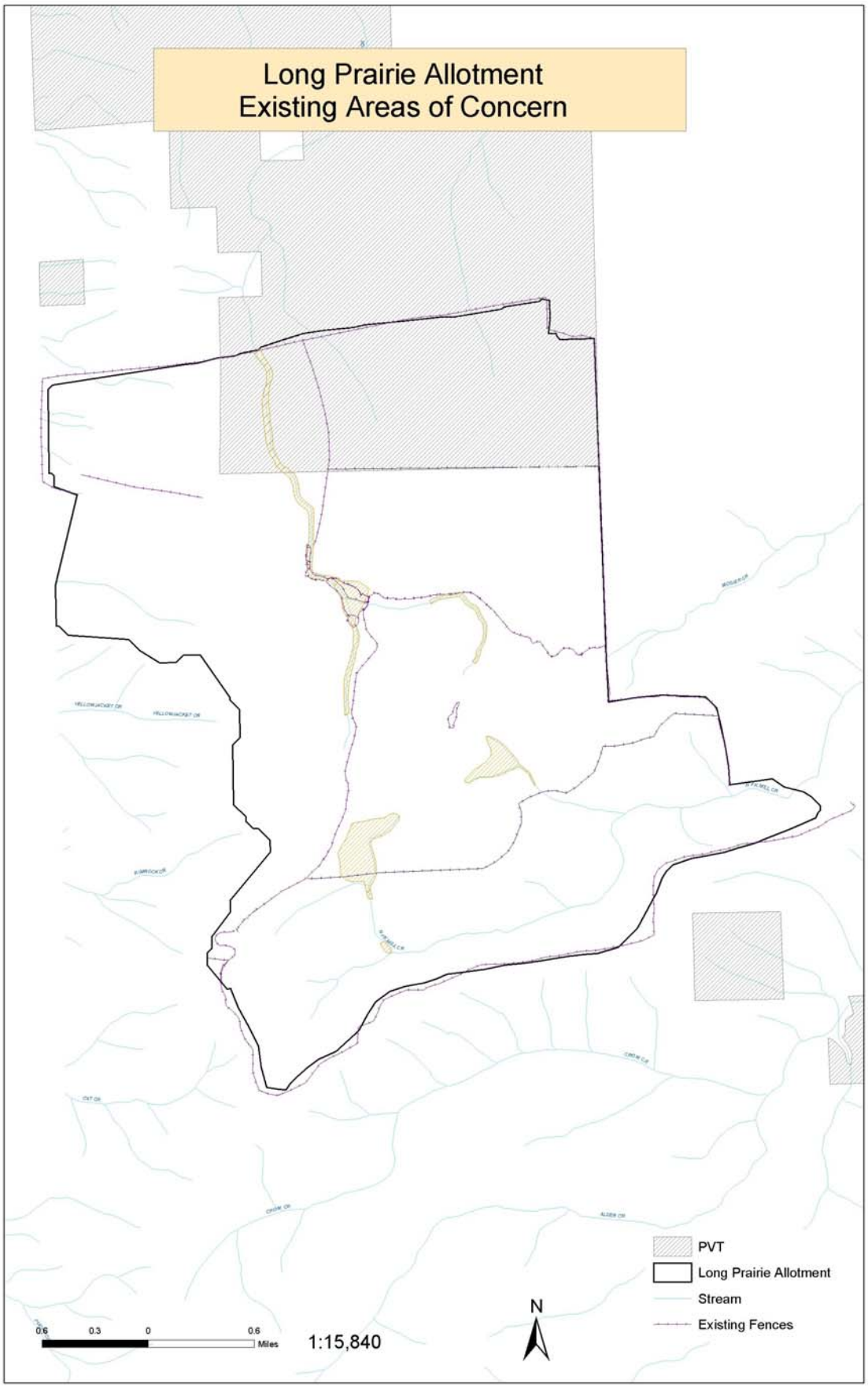

Figure 1-2. Map of High-Use Areas Identified in the Long Prairie Allotment.