

Chapter 1

Proposed Action and Purpose and Need

1.1 INTRODUCTION

This environmental assessment (EA) is being prepared to address the direct, indirect, and cumulative effects of proposed livestock grazing on the Bald Knob, West Pine, Eightmile and Rock Creek South Allotments, located on the west side of the Paradise Valley southwest of Livingston, Montana (See General Area Map 1). The Livingston Ranger District, Gallatin National Forest, is proposing to reauthorize livestock grazing permits on the Bald Knob, West Pine, and Eightmile Allotments and possibly close the Rock Creek South Allotment, which is currently vacant with the grazing permit having been waived back to the Forest Service in 1995.

Two action alternatives and a no action alternative are being considered in detail. Both action alternatives would continue grazing on the Bald Rock, West Pine, and Eightmile Allotments. The Current Management Alternative (Alternative 2) would leave the Rock Creek South Allotment vacant but keep it available for future grazing permits to be issued. The Adaptive Management Alternative (Alternative 3) would recommend closure of the Rock Creek South Allotment and incorporate Adaptive Management direction into all of the other Allotment Management Plans (AMP's). The No Action Alternative (Alternative 1) would not re-authorize grazing permits for any of the West Paradise Allotments and would incorporate a two- year phase out period for livestock grazing on National Forest lands.

This analysis is being prepared in compliance with the National Environmental Policy Act (NEPA), Council of Environmental Quality (CEQ) regulations, and the Gallatin National Forest Land and Resource Management Plan (1987). Gallatin Forest Plan standards would be followed. The information and analysis in this document will be used to determine whether to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI) (40 CFR 1508.9). The purpose of the NEPA process is to help public officials make decisions that are based on the understanding of environmental consequences, and to take actions that protect, restore, and enhance the environment (40 CFR 1500.1 (c)). This process also ensures the public has opportunities to become informed and involved throughout all aspects of the process.

The Rescission Act of 1995 gave the Forest Service the ability to re-issue grazing permits pursuant to an assigned NEPA schedule. Streams, associated wetlands, and riparian vegetation are the key to maintaining fisheries, wildlife habitat, and wildlife corridors, as well as esthetic environments for forest users. Therefore the framework for these analyses is focused on the management of livestock grazing on National Forest allotments in an effort to characterize existing stream and vegetative conditions and to assign management sideboards for which to hold livestock permit holders accountable and to assess the long-term effectiveness of these sideboards in achieving desired future conditions for the allotments.

1.2 PROJECT AREA DESCRIPTION AND BOUNDARY

The West Paradise Allotment project area includes the Bald Knob, West Pine, Eightmile, and Rock Creek South Allotments, which are located on the west side of Paradise Valley on the east side of the Gallatin mountain range (See General Area Map 1). The allotments are administered by the Livingston Ranger District. Livestock grazing has been an important use of lands within and around the Livingston area since the 1800's. Grazing has been authorized since the formation of the Gallatin Forest in the early 1900's and it continues to be an important part of region's economy today.

The Gallatin National Forest Land and Resource Management Plan (1987) set goals for management of rangeland habitats and livestock grazing. Overall goals are to maintain or improve the forage resource and provide for a small increase in livestock grazing (Forest Plan, p. II-1). Management applications of the West Paradise Allotments associated with the alternatives are designed be consistent with these goals, especially with the implementation of the proposed action (Alternative 3), which by incorporating Adaptive Management Strategies, could allow flexibility for small increases in livestock grazing in the future as long as improvements to the forage and steam resources continue to be made.

Average precipitation in these allotments varies from about 16 to 34 inches a year with about 40% occurring as snow in lower elevations and 60% at higher elevations. Precipitation decreases sharply with decreasing elevation. On average, June receives the largest amount of moisture. Average snowfall varies from about 70 inches at the Forest Boundary to about 200 inches in the highest portions of the Eightmile Allotment. Precipitation intensity is relatively moderate. Precipitation intensity is relatively moderate. The 2 year-6 hour precipitation varies from about 0.9 to 1.3 inches (Miller et. al., 1973). Winters are long and cold and snow usually remains at the higher elevations for about eight months. Summertime high temperatures remain in the 60's, 70's and 80's with occasional 90 degrees. Average annual runoff in the allotments (on a per acre basis) is about 0.9 acre-feet/acres.

Parent material within the three southern allotments (Eight Mile, West Pine, and Rock Creek South) is primarily weathered Tertiary volcanic rocks on moderate to steep slopes. These soils are moderately to highly productive on grasslands and transitional grassland/Douglas fir forest. These soil types are compactable when wet, but there are not a lot of perennial streams in any of these allotments.

Soils in the Bald Knob Allotment consist primarily of weathered sedimentary sandstone/shale formed from glacial aged landslides that are moderately productive, supporting some meadow and forage production. However, the majority of this allotment is forested, thus having low forage productivity. Only a small portion of this allotment is on National Forest system land.

Bald Knob Allotment

The Bald Knob Allotment is located approximately 18 miles southwest of Livingston, Montana in the Gallatin Mountain Range (See Map 2). This allotment consists of approximately 2,658 acres, 16 percent Forest Service lands (approximately 438 acres) and 84 percent private lands (approximately 2,220 acres). These lands included Sections 26, 27, 34 and 35, T3S, R7E. Elevation ranges from approximately 6,200 to 7,746 feet. This allotment includes Trail Creek and Browns Gulch.

Originally, the Bald Knob area was included in the Trail Creek Allotment. This area has primarily been grazed by cattle since 1914. Past records for this allotment indicated that there was a history of trespass causing numbers and utilizations to vary. The Browns Gulch area grazing numbers had very little variation from 1954 to 1982; they ranged from 15 head down to 7 head from July 1st to September 30th. By 1983 a BSL Land Exchange (LEX) had been completed, changing the Trail Creek Allotment boundary to exclude the Bald Knob area. In May 1999, a Term On/Off Grazing Permit¹ was issued for 10 head on the National Forest System lands and up to 150 head on private lands from 7/1 to 9/30 (an approximate total of 453 head months (HM) for the allotment). There are no specific grazing rotations for this allotment.

West Pine Allotment

The West Pine Allotment is located approximately 15 miles southwest of Livingston, Montana in the Gallatin Mountain Range (See Map 3). This allotment consists of approximately 1,993 acres (approximately 1,510 Forest Service and 483 Private) in Sections 5, 6, and part of 8, T4S, R8E and portions of Sections 31 and 32, T3S, R8E. Elevation ranges from approximately 5,800 to 7,800 feet. This allotment includes West Pine Creek, North Fork Pine Creek and several other unnamed tributaries.

In 1987 a land exchange was completed between the Forest Service and O'Hair Ranch Company that resulted in the creation of the West Pine Allotment. This LEX closed the Coke Allotment, which had two grazing permits that were then transferred to the West Pine Allotment.

In 1987 two grazing permits were issued for this allotment. A Term On/Off grazing permit was issued for 28 head on National Forest System Lands with up to 44 head on private lands and a Term Grazing Permit² for 28 head with variable seasons not to exceed 92 days

1 Term On/Off Grazing Permit is one permit issued to a qualified candidate when a logical grazing area contains both Forest controlled and private lands. This type of permit is usually issued when a minor portion of the logical grazing area, normally less than 1/3 is controlled by the Forest Service.

2 Term Grazing Permit is one issued for livestock grazing on National Forest Lands for up to 10 years.

(approximately a total of 220 HM). The dates would range between July 1st and October 15th. Both of these permits run as one herd in a deferred rotation grazing system³.

In 1998, the Term On/Off grazing permit was modified to 48 head on National Forest System Lands with up to 72 head on private lands not to exceed 92 days while the Term Grazing Permit stayed the same (approximately a total of 306 HM).

In 2001 the Fridley Fire burned most of the West Pine Allotment. This allotment was rested for two years after the burn. Several fences were replaced and a one new section was constructed since the natural barrier was burned.

Eightmile Allotment

The Eightmile Allotment is located approximately 15 miles southwest of Livingston, Montana in the Gallatin Mountain Range (See Map 4). This allotment encompasses both private land and Forest Service System lands. There are approximately 6,181 acres (4,945 FS and 1,236 private) within 8 sections in T4S, R8E and 4 sections in T4S, R7E. Elevation ranges from 5,900 to 8,700 feet. This allotment includes Eightmile (which runs through the southern border of the allotment), Shingle Mill Draw, Big Draw, Dry Creek and several unnamed tributaries to Dry Creek.

This allotment has been grazed by cattle since the early 1900's. This allotment has two units, the Eightmile Unit and the Dry Creek Unit. The Eightmile Unit consists of Sections 24, 25 and 36, T4S, R7E and Sections 19, 20, 30, 31 and part of 18, T4S, R8E. The Dry Creek Unit consists of Sections 7, 8, 17 and part of 18, T4S, R8E (See Map 4). The estimated carrying capacity for the entire allotment varied between 120-206 head between the dates of 6/16 and 10/15 on Forest Service System lands and to 50- 65 head on private lands over the past 90 years.

The Eightmile Unit has two permits, a Term Grazing Permit for 37 head and a Term Private Land Grazing Permit for 19 head from not to exceed 92 days within 6/1 to 9/30 (approximately 169 HM).

The Dry Creek Unit has been vacant for approximately eight years; it was waived back to the Forest Service in 2001. There were two permits issued for this unit, a Term Grazing Permit for 99 head and a Term Private Land Grazing Permit⁴ for 50 head from 8/1 to 9/30. In May of 1999, the permit was then modified because the private land portion of the permit was acquired by the Forest Service, therefore terminating the Private Land Grazing Permit and adding the 50 head to the Term Grazing Permit (149 head from 8/1 to 9/30, 294 HM).

³ Deferred rotation grazing system is to delay grazing until the range plants have had time to set seed. For a two pasture grazing allotment, cattle start early in one pasture the first year and late in the same pasture the next year, allowing for the plants to recover.

⁴ Term Private Land Grazing Permit is one issued to a qualified applicant who owns or controls at least 1/3 of the land within the grazing permit. The applicant waives exclusive grazing use of the private lands to the Forest Service.

In 2001 the Fridley Fire burned portions of the Eightmile Allotment. The fire burned areas considered to be unsuitable range within the allotment; therefore it did not affect the permit holder.

Rock Creek South Allotment

The Rock Creek South Allotment is located approximately 40 miles southwest of Livingston, Montana in the Gallatin Mountain Range (See Map 5). This allotment consists of approximately 8,146 acres (approximately 4,567 FS and 3,579 Private) within 4 Forest Service Sections and 2 private sections in T6S, R6E, approximately 7 Forest Service section and 3 private sections in T7S, R6E. The elevation ranges from 7,200 to 8,400 feet. This includes Rock Creek, Fisher Creek, Stoughten Creek, Donahue Creek, North Fork Donahue Creek and several unnamed tributaries.

Historical records indicate that grazing use began around 1912. At that time the entire area was designated the Rock Creek Grazing Division with a several month season of April 15th to November 15th. This grazing division contained both the Rock Creek unit⁵ and the Donahue unit. In 1941, Donahue became a separate allotment. In the late 1970's they were combined again to form the Rock Creek Allotment (Rock Creek and Donahue) since there was only one permittee for both units and they owned all of the private land within the allotments.

Early use was by sheep (approximately 2,500 head) on the Donahue Unit and the private sections of the Rock Creek unit. Records indicate that different sections made up the allotments and units on different years. It is not actually known how all of the sections of land have been used over the years.

By the 1930's, cattle had nearly replaced sheep. Early distribution practices had no apparent direction until 1952 when a set schedule was implemented. The Rock Creek South Allotment carrying capacity was 170 head from 6/20 to 10/5 (approximately 604 HM). In 1979, the allotment implemented a two pasture a deferred rotation grazing system. Eventually this was turned into a four pasture deferred rotation grazing system. With this system, the permit was changed to 191 head from 7/1 to 10/15 (approximately 671 HM).

The Rock Creek Grazing Permit was waived back to the Forest Service in October of 1994 and is still vacant today.

⁵ Units are now classified as allotments (Donahue and Rock Creek) were distribution units of the Division.

1.3 EXISTING CONDITION SUMMARY

The following existing condition summaries provide brief descriptions of vegetative and stream conditions that currently occur within the Bald Knob, West Pine, Eightmile, and Rock Creek South Allotment boundaries. Detailed descriptions of existing conditions for individual streams and riparian vegetative conditions can be found in the Affected Environment portions of Chapter 3 for the various resources. Descriptions of existing conditions for other resources can also be found in Chapter 3 of this document.

Throughout this analysis area, there are a wide variety of vegetative communities. These allotments consist of approximately 18,978 acres of intermingled National Forest System and private lands. Of these acres, approximately 3,592 acres are considered suitable for grazing. The suitable livestock grazing areas are located in open meadows and under coniferous forest in fairly scattered locations across the allotments, along roadways and in openings created by timber harvest. According to field visits and vegetation mapping, the upland vegetation is in fair to good condition. Different condition levels are determined from measuring species composition, forage production, percent litter retention and percent bare ground and if they are at desired levels.

The Fridley fire of 2001 has changed, in some areas, the vegetative aspect of West Pine and Eightmile allotments.

1.4 DESIRED FUTURE CONDITIONS

The desired future condition (DFC) of an area describes the conditions that management is intended to produce. The DFC reflects the capability of the landscape, the various laws and regulations that apply to an area, and the values, or “products” that are desired. The DFC is portrayed through descriptions of how an area could look and function. DFCs for the West Paradise Allotments were derived from utilizing a combination of Land and Resource Management Practices (LRMP) goals and objectives, standards derived from the Forest Plan regarding riparian vegetation utilization and streambank stability. A more detailed description of determining desired future conditions and developing use levels can be found in Chapter 3 of the EA. A detailed discussion of individual stream conditions and riparian DFC determinations for all streams located within the allotments can be found in Chapter 3-18 through 3-30. A riparian vegetation discussion can be found in Chapter 3-31 through 3-33 and an upland vegetation discussion can be found in Chapter 3-34 through 3-43.

Generalized DFC for the streambank stability, riparian vegetation, and upland vegetation resource elements are described below:

- (a) **Streambanks:** Maintain all streams within the allotments in a proper functioning condition. The desired conditions are for adequate vegetation, landform, or large woody debris to be present to allow the stream and floodplain to function within its inherent range as determined by its landform and geologic context.

- (b) **Riparian Vegetation:** Desired conditions for riparian vegetation are for plant communities associated with springs and riparian areas to exhibit dominance of desired native sedges, grasses and forbs. Desired woody species are vigorous and reproducing successfully as demonstrated by an unaltered growth form and representation of all age classes. Introduced and native species usually associated with long term, intense grazing may be present but at relatively low levels. Riparian vegetation expands to the fullest extent possible.

- (c) **Upland Vegetation:** Maintain good to excellent upland vegetation condition through improved livestock distribution, proper utilization levels, and management of grass and forbs to decrease invasive weed species including spotted knapweed, bull thistle, musk thistle, Canada thistle, and houndstongue.

1.5 PURPOSE AND NEED FOR ACTION

The purpose and need for action is to continue allowing livestock grazing (where appropriate) on National Forest System (NFS) lands within these allotments in order to utilize the forage resource and provide opportunities for business ventures in livestock production.

The purpose of doing NEPA is to comply with the Multiple-Use Sustained Yield Act (16 USC 528) and the Rescission Act (PL 104-19, Sec 504a). An adaptive management strategy as described in Forest Service Handbook 2209.13, Chapter 90 (effective 2005) is being considered with the proposed action (Alternative 3) as a means to continue meeting Forest Plan Standards for maintenance of vegetation, wildlife, riparian, and other resource values, while also maintaining or improving rangeland conditions within the allotments. Adaptive Management would be incorporated into the allotment management plans if Alternative 3 were selected.

1.6 PROPOSED ACTION

The proposed action (Alternative 3) would continue permitted livestock grazing under management designed to meet DFCs, as described on p. 1-6 that are consistent with Forest Plan standards. This alternative focuses on DFC rather than specific seasons of use, permitted livestock numbers, or grazing rotations. This alternative is based on the principle of applying Adaptive Management Strategies (FSH 2209.13). Adaptive Management is the process of utilizing monitoring data to determine if management changes are needed to improve resource conditions within allotments, and if so, what changes, and to what degree.

Adaptive management establishes the limits of what livestock grazing practices are allowed including timing, intensity, frequency, and duration. These limits are represented as standards that are monitored to ensure that prescribed actions were followed. Monitoring also determines if management changes are needed. Building adaptive management flexibility into allotment management allows for decisions that are responsive to needed adjustments in permitted actions. Future administrative actions that adhere to the decision notice can then be implemented without additional analysis. Examples of administrative decisions include:

- Determination of dates for grazing
- Livestock numbers
- Class of animal
- Grazing systems
- Range readiness

With implementation of the proposed action, grazing permits on Bald Knob (Map 2), West Pine (Map 3), and Eightmile (Map 4) Allotments would be re-issued. The Rock Creek South Allotment (Map 5) grazing permit would not be re-issued and the allotment would be recommended for closure.

Under Adaptive Management, a course of action is chosen as a starting point that is believed to best meet or move towards desired resource objectives. The starting points with the proposed action for the grazing systems on these allotments would be as follows:

- Bald Knob Allotment would be grazed with a permit for 10 cow/calf pairs on the FS and up to 150 cow/calf pairs on the private land from 7/1 to 9/30 annually.
- West Pine Allotment would be grazed with permits that consist of 76 cow/calf pairs and a private land permit for 24 cow/calf pairs. Both of these permits would be issued from 7/1 to 9/30 annually.
- Eightmile Allotment would utilize the Eightmile and Dry Creek units. The Dry Creek unit, which has been vacant since 2001 would become available for grazing. There would be two permits issued for the entire allotment for approximately 169 HM between the dates of 6/1 to 9/30 not to exceed 92 days that would allow 37 cow/calf pairs from 7/1 to 9/30 on National Forest land and 19 head from 7/1 to 9/30 on private lands within the allotment.
- Rock Creek South Allotment would remain vacant and be recommended for closure.

Grazing would be allowed to continue at these levels provided that implementation of the riparian guidelines and upland utilization standards are moving towards or meeting DFC.

Implementation of the proposed action (Alternative 3) is presented in phases for the allotments where improvements that may contribute to meeting DFC have been identified. Detailed descriptions of the proposed actions can be found on pp. 2-4 through 2-13. The phases correspond to increasing levels of complexity and financial investment allowing for a progression of management intensity. The need for implementation of these phases would be determined by the monitoring results. Monitoring is a critical component of adaptive management. A complete description of the mitigation, and monitoring required for each of the allotments can be found on pp. 2-17 through 2-24.

Monitoring would occur over time, with the evaluation of the results used by the ID Team and District Ranger to make adjustments to management as needed. Monitoring and management adjustments would help ensure adequate progress toward defined resource objectives. All adaptive management actions would be within the scope of effects documented in this environmental assessment. If different actions are considered necessary, then a new analysis under NEPA would be conducted before a decision is made.

Table 1-1 provides a comparison between the existing condition and the desired future condition for each of the allotments. The differences between these conditions drive the purpose and need for the proposed action.

Table 1-1 Comparison of Existing Condition to Desired Future Condition by Allotment

Allotment	Existing Conditions	Desired Future Conditions
Bald Knob Allotment	Upland and riparian areas and streams are meeting FP standards and LRMP goals and objectives.	Continue to meet FP Standards and LRMP goals and objectives for all riparian and upland areas.
West Pine Allotment	Upland vegetation is meeting FP Standards and LRMP goals and objectives. Most riparian areas and streams (except West Pine Creek and the North Fork of West Pine Creek) are meeting FP Standards and LRMP goals and objectives relative to grazing. Departures in West Pine Creek and North Fork of West Pine Creek are due to post-fire effects from the 2001 Fridley Fire and independent of grazing management. Water sources are limited.	Continue to meet FP Standards and LRMP goals and objectives for all riparian and upland areas currently meeting DFC. Repair and/or improve existing watering structures. Develop additional water sources. Grazing management actions to promote increased vigor of native vegetation are prescribed, where grazing is a factor to meeting DFC.
Eightmile Allotment	Upland and most riparian areas and streams are meeting FP Standards and LRMP goals and objectives. The lower reach of Dry Creek is functioning at risk with an upward trend due to past riparian harvesting. Water sources are limited.	Continue to meet FP Standards and LRMP goals and objectives for riparian and upland areas currently meeting DFC. Native shrub and deciduous tree planting along sensitive reaches of Dry Creek. Develop additional water sources.
Rock Creek South Allotment	Upland and riparian areas and streams are meeting FP Standards and LRMP goals and objectives (Allotment has not been grazed for 12 years) There are no fences separating private and NFS lands.	Continue to meet FP Standards and LRMP goals and objectives for all riparian and upland areas.

1.7 DIRECTION FROM THE GALLATIN FOREST PLAN AND OTHER APPLICABLE LAWS

Proposed grazing must be consistent with the Multiple Use Sustained Yield Act of 1960 (16 USC528), National Environmental Policy Act of 1969 (NEPA), the Federal Land Policy and Management Act of 1976 (FLPMA), and the Final Environmental Impact Statement and Land and Resource Management Plan (Forest Plan) for the Gallatin National Forest (Record of Decision signed 9/23/87). Adaptive Management (FSH 2209.13) guidelines are also being utilized in association with development of the proposed action (Alternative 3). Compliance with several other laws, regulations, and guidelines that are also applicable to this project are addressed in Chapter 3, pp. 3-103 through 3-114:

National Forest Direction

The Multiple-Use Sustained-yield Act of 1960 (16 U.S.C 528) The Multiple Use Sustained Yield Act of 1960 states "it is the policy of the Congress that the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes

The National Environmental Policy Act of 1969 (NEPA) NEPA establishes the format and content requirements of environmental analysis and documentation.

The Federal Land Policy and Management Act of 1976 (FLPMA) FLPMA authorizes the Secretary of Agriculture to issue permits for various uses on National Forest System lands. Part of the function of the Forest Service is to manage the grazing of domestic livestock and to keep their numbers in balance with the carrying capacity of the range (40 CFR 200.1 & 200.3). Volume 57, No. 182 of the Federal Register states NEPA analysis is required to analyze the potential site-specific effects of grazing on individual allotments, to determine what standards and guidelines should be incorporated in a renewed permit, and to consider whether the activity should be permitted to continue.

Adaptive Management (FSH 2209.13) Adaptive management prescribes allowable limits for the timing, intensity, frequency, and duration of livestock grazing practices. These limits are represented as standards that are monitored to ensure that prescribed actions are being followed. Monitoring also determines if management changes are needed. Future administrative actions that adhere to the decision notice can be implemented without additional analysis.

Building adaptive management flexibility into allotment management allows for decisions that are responsive to needed adjustments in permitted actions. Historically, decisions have been narrowly focused, such as deciding to authorize the number, kind, or class of livestock with specific on-and off-dates under a certain type of grazing system. These kinds of decisions restrict management flexibility in meeting desired conditions and project objectives.

The Gallatin National Forest Land and Resource Management Plan (1987)

Direction is provided by the Final Environmental Impact Statement (FEIS) and Land and Resource Management Plan (Forest Plan) for the Gallatin National Forest (USDA Forest Service 1987 PF 206 & 206(a)). The Forest Plan provides direction for all resource management programs, practices, uses, and protection measures for the Gallatin National Forest. The Gallatin Forest Plan sets goals and objectives for livestock grazing on the Forest and allocates portions of the land base to help achieve these goals (Forest Plan, pages II-1, II-4, & II-13).

The Gallatin Forest Plan provides overall management direction in the form of objectives, guidelines and standards. The objectives for range resources include: Improved forage management will be used to maintain or enhance the range environment and to provide for increased animal unit months (AUMs); Development and use of available forage will depend upon the livestock industry's ability and desire to make the necessary investments and the Plan calls for continuing to administer about 15,000 AUMs of grazing use on private lands that are intermingled with National Forest lands within grazing allotments. Guidelines and standards from the Forest Plan (FP, p. II-20) include:

1. Allotment management plans will be completed on a scheduled priority basis.
2. Some allotments will be closed.
3. Vacant livestock allotments will be evaluated and allotment plans prepared prior to livestock use.
4. Domestic sheep will not be reintroduced to vacant allotments in grizzly bear MS-1 areas.
5. Structural and nonstructural improvements to increase forage production will be planned and scheduled through the allotment management process.
6. Livestock grazing in riparian areas will be controlled at levels of utilization listed in Management Area 7.
7. Allotments with continuous grazing during the growing period will be evaluated and alternative-grazing systems will be applied.

The Gallatin Forest Plan subdivided the forest into 26 management areas (MA's). These areas are described in detail in Chapter III. of the Forest Plan (FP, pp. III-2 through III-73). The West Paradise Allotments fall primarily in Forest Plan Management areas MA7 (riparian), MA8 (timber management), MA10 (range/timber), MA11 (timber/livestock), MA12 (wildlife/dispersed recreation), and MA17 (livestock/wildlife).

The Forest Plan uses management areas to guide management of specific National Forest lands within the Gallatin National Forest. Each management area (MA) provides for a unique combination of activities, practices, and uses. The Bald Knob, West Pine, Eightmile, and Rock Creek South Allotments include six management areas..

The Forest Plan (Chapter III) contains a detailed description of each management area as it relates to significant issues. Following is a brief description of the applicable management area direction for each of the MAs affected by the action alternatives:

Management Area 7 (MA7)-Riparian: These are riparian management areas (FP, p. III-19). Riparian pertains to the banks and other adjacent terrestrial environs of freshwater bodies, water courses, and surface emergent aquifers. Much of this area is not

mapped because it is often a narrow zone that is not practical to map or estimate the number of acres within MA7. The management goal for MA7 is:

- 1) Manage the riparian resource to protect the soil, water, vegetation, fish, and wildlife dependent on it.

The Forest plan (MA7) requires the GNF to "manage riparian vegetation, including overstory tree cover, to maintain streambank stability and promote filtering of overland flows". The Forest plan monitoring requirements listed in Table IV-1, item 5, lists two guidelines and standards which relate to limits of cumulative allowable management caused change to sediment filtration i.e. "more than a 25% loss in effective streambank cover" and stream channel stability i.e. "20 point increase in stream channel score within 5 years due to management practices".

The MA7 standards for range include provisions to maintain or improve riparian conditions:

- Range improvements such as fences and water structures may be constructed to help meet the forage utilization standards.
- Salting for livestock distribution will be outside of riparian areas.
- Concentration of livestock will be kept at a level compatible with riparian zone-dependent resource needs through development of pasture systems and associated improvements

Management Area 8 (MA8)-Timber Management: These areas consist of lands, which are suitable for timber management. Although this area consists primarily of capable forestland, there are inclusions of non-forest and nonproductive forestlands (FP, pp. III-24 through III-26). Management goals for MA 8 include:

1. Provide for productive timber stands and optimized timber growing potential.
2. Develop equal distribution of age classes to optimize sustained timber production and improve vegetative diversity.
3. Allow for other resource uses if compatible with the first two goals.
4. Meet Montana water quality standards and maintain channel stability.

In MA 8 the standards for range include:

- Use the Northern Region and Gallatin National Forest "Guidelines for the Protection of Regeneration from Livestock Grazing" to ensure protection of conifer regeneration.

Management Area 10 (MA10)-Range/Timber:- These areas contain open grasslands, which provide forage for livestock interspersed with suitable timberlands (FP, pp. III-30 through III-32). Management goals for MA 10 include:

1. Maintain healthy stands of timber and promote a level of timber growth consistent with the other goals.
2. Improve range management to optimize livestock grazing.
3. Use timber harvest to create transitory livestock range.

In MA 10 the standards for range include:

- Coordinate grazing and timber management to ensure tree regeneration after harvest.
- Structural improvements may be used to distribute grazing.

Management Area 11 (MA11)-Forested Big Game Habitat: – These areas consist of forested big game habitat. They include productive forest lands that are available for timber harvest, provided that big game habitat objectives are met (FP, pp. III-33 through III-36). Management goals for MA 11 include:

1. Maintain elk habitat effectiveness following timber harvest.
2. Base vegetative management on vegetative characteristics needed for featured wildlife species.
3. Allow a level of timber harvest consistent with goals 1 and 2.
4. Meet Montana water quality standards and maintain stream stability.

In MA 11 the standards for range include:

- On big game winter range, meet big game forage needs before making forage allocations to livestock.
- Base allocation of big game summer range forage on range allotment analysis.

Management Area 12 (MA12)-Wildlife/Dispersed Recreation – These areas provide important habitat for summer and winter wildlife use in a variety of terrain and vegetative types and also offer dispersed recreational opportunities. (FP, pp. III-37 through III-39). Management goals for MA 12 include:

1. Maintain and improve the vegetative condition to provide habitat for a diversity of wildlife species.
2. Provide for a variety of dispersed recreational opportunities
3. Provide forage for livestock consistent with goal 1.

In MA 12 the standards for range include:

- On big game winter range, meet big game forage need before making forage allocations for livestock.
- Base allocation of big game summer range forage on the range allotment analysis.
- Range improvements may be scheduled when identified in the allotment management plan.

Management Area 17 (MA17)-Range/Big Game:- These areas consist of grasslands or nonproductive forestlands on slopes less than 40 percent that are suitable for livestock grazing and contain important big game habitat. They contain some of the most productive and heavily used portions of range allotments (FP, pp. III-52 through III-53). The goal of MA 17 is:

1. Maintain or improve vegetative conditions and forage production for livestock and wildlife usage.

In MA 17 the standards for range include:

- On big game winter range, big game forage needs are to be met before making forage allocations to livestock.
- Base allocation of big game summer range forage on range allotment analysis
- Schedule structural improvement when identified in an approved allotment management plan.
- Schedule forage improvement projects, such as sagebrush burning and poisonous plant control.

1.8 SCOPE OF THE PROPOSED ACTION AND DECISION TO BE MADE

The Council on Environmental Quality (CEQ) regulations implementing NEPA require that federal agencies consider three types of actions: (1) *connected actions*, which are two or more actions that are dependent on each other for their utility; (2) *cumulative actions*, which when viewed with other proposed actions may have cumulatively significant effects, and should therefore be analyzed together; and (3) *similar actions*, "which when viewed with other reasonably foreseeable or proposed actions, have similarities that provide a basis for evaluating their environmental consequences together." (40 CFR 1508.25(a)). These actions help identify a range of alternatives.

The scope of actions to be addressed in this analysis is limited to management of cattle grazing within the project area. Portions of the project area consist of intermixed National Forest and private lands that would be managed by the Forest Service. Private lands managed separately from National Forest System lands are not included within the allotments and are not being analyzed.

Range and vegetation management practices are addressed together because the timing and geographic location represent a similar action under 40 CFR 1508.25(a)(3). Range improvement construction, reconstruction, vegetation treatment, and protecting or improving upland and riparian habitats represent connected actions under 1508.25(a)(1)(iii). The scope of the proposed action is site-specific to range and vegetative management practices.

The Responsible Official for this proposal is the District Ranger of the Livingston Ranger District. Based on the analysis in this document, the District Ranger will make the following decisions and document them in a Decision Notice (DN) if a Finding of No Significant Impact (FONSI) can be made:

- Should the Forest Service continue to allow livestock grazing on any or all of the range allotments within the project area?

If so:

- What management and mitigation requirements are needed to move resource conditions towards meeting desired future conditions (1-9) in an acceptable timeframe?
- What monitoring requirements are appropriate to evaluate project implementation?

1.9 PREVIEW OF THE REMAINING CHAPTERS

Chapter 2: Alternatives and Issues Considered – Chapter 2 describes the scoping and public involvement process along with the issues to be analyzed as a result of both internal and external scoping. Alternative 1 (no action-no grazing), Alternative 2 (current management) and Alternative 3 (adaptive management) are described in detail. Other alternatives considered, but not in detail are also discussed. Mitigation requirements that are components of the proposed action and other alternatives are described. Monitoring methods used to assess aspects of the projects, including Adaptive Management monitoring requirements, are also included in Chapter 2.

Chapter 3: Affected Environment and Environmental Effects - Chapter 3 combines two major parts of a NEPA analysis: the affected environment and the environmental effects concerning the resource issues associated with the proposed action and the other alternatives. The physical, biological, and human resources of the environment that may be affected by the no action and the various action alternatives are examined. The affected environment and environmental effects have been combined to give the reader a more thorough explanation of the resources and how they may be affected by the proposed action and the other alternatives. Past, present, and reasonably foreseeable activities, management direction, and applicable laws and regulation are also included in Chapter 3.

Chapter 4: Preparation and Consultation – Chapter 4 lists the Forest Service employees that were involved in preparing the EA and the individuals, organizations, and other agencies consulted. The mailing list and distribution of the EA are also discussed.