United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

NOTICE OF PROPOSED DECISION

To Assign Grazing Preference and Issue a Ten-Year Grazing Permit, Adjust Animal Unit Month, Accept Allotment Management Plans, and Construct and Remove Range Improvements within the Bridge Creek Area Allotments (Hammond, Mud Creek, Hardie Summer, and Hammond Fenced Federal Range)

Dear Interested Party:

You are receiving this proposed decision because you are one of the applicants for available forage within the Bridge Creek area or an interested public.

PROPOSED DECISION ON AVAILABLE FORAGE AND GRAZING PREFERENCE

The purpose of this proposed decision is to apportion available forage within the Bridge Creek Area allotments of Hammond, Mud Creek, Hardie Summer, and Hammond FFR, and assign grazing preference. Grazing preference is defined in 43 CFR 4100.0-5 as "a superior or priority position against others for the purpose of receiving a grazing permit or lease. This priority is attached to base property owned or controlled by a permittee or lessee." Being apportioned grazing preference does not guarantee the preference holder a grazing permit. Issuance of a grazing permit is done through the NEPA process. The proposed decision to issue a grazing permit is below.

It is my proposed decision that Hammond Ranches Inc. (HRI) will be apportioned all available forage in the Bridge Creek area grazing allotments. This includes the Hammond, Hammond FFR, Mud Creek, and the Hardie Summer allotments.

HRI was apportioned this preference based on the factors in 43 CFR 4130.1-2 due to their extensive historic use of these allotments, past proper use of rangeland resources, a high level of general need, and advantages conferred by topography. In addition, this applicant owns or manages the majority of the private property located within the Hammond, Hardie Summer, and Hammond FFR allotments. HRI holds the water rights associated with the spring that feeds the pipeline currently within the Hammond Allotment. Without access to water, and with water sources other than the pipeline being limited, the Hammond Allotment would be difficult for an outside operator to properly utilize. HRI owns the property associated with a spring in the current Hardie Summer Allotment. If this spring were to be developed and feed a pipeline (as currently described in this proposed decision), it would provide off stream water that would help pull livestock from riparian areas within the Hardie Summer Allotment, benefiting ecological conditions and better balancing resources within that allotment. No other applicants would be able to create this off-stream water source. No other applicant possesses the history on these grazing allotments that is held by HRI.

PROPOSED DECISION ON ISSUING A TEN-YEAR GRAZING PERMIT AND ASSOCIATED ACTIONS

Background

The Andrews/Steens Resource Area, Burns District of the Bureau of Land Management (BLM), prepared an Environmental Assessment (EA) (DOI-BLM-ORWA-B060-2020-0001-EA) and finding of no significant impact (FONSI) for the Bridge Creek Area to analyze possible actions developed through Interdisciplinary Team (IDT) recommendations, other agency and public comments, consultation with native American tribes, and in coordination with applicants for available forage within the area. The actions included in this proposed decision were analyzed within the EA, and provide for the issuance of allotment management plans, grazing permits, grazing management, and range improvements. The selected actions also are calibrated to accomplish resource objectives and ensure that livestock grazing would conform to (or would continue conforming to) all Oregon and Washington Standards for Rangeland Health (further referred to as Standards) and Guidelines for Livestock Grazing Management (further referred to as Guidelines; Standards and Guidelines together are referred to as S&Gs).

The Bridge Creek area consists of four allotments: Hammond, Mud Creek, and Hardie Summer allotments, and the Hammond Fenced Federal Range (FFR). This area is located approximately 60 miles south of Burns, Oregon, near the town of Frenchglen, which is situated at the foot of the Steens Mountain (Map A – Vicinity[1]). The allotments are located within the Andrews / Steens Resource Area and partially within the Steens Mountain Cooperative Management and Protection Area (CMPA). The land status of each allotment is shown in Table 1.

Table 1: Land Status for Bridge Creek Area (Acres) by Allotment[2]

LAND ADMINISTRATION	HAMMOND	MUD CREEK	HARDIE SUMMER	HAMMOND FFR
Bureau of Land Management (BLM)-Managed	**10,994**	**8,142**	**5,975**	**1,267**
CMPA	*2,859*	*8,143*	*9,723*	*2,549*
Bridge Creek Wilderness Study Area (WSA)	*1,609*	*6,911*	-	*92*
Steens Mountain Wilderness	-	-	*39*	-
Lands with Wilderness Character	-	*0.22*	*1526*	*0.04*
Fir Groves Area of Critical Environmental Concern (ACEC)	-	-	*464*	*13*
U.S. Fish and Wildlife Service (USFWS)-Managed	**638**	**0.5**	-	**7**
Private	**1,966**	**0.5**	**3747**	**6,241**
TOTAL ALLOTMENT ACRES	**13,598**	**8,143**	**9,723**	**7,514**

[1] All maps are created using the best information available at the time. Many of the range improvements and boundaries shown in these maps have been digitized and not GPS'd. While the BLM continues to GPS these features and is continuously updating their data for accuracy, maps should only be used to provide a general visual. The actual location of the feature on the ground takes precedence over the location on maps.

[2] The row titled "BLM-Managed" includes all BLM-managed acres including acres of special designations and acres with no special designations. Bulleted special designations are identified; however, these acreages are not additive as some special designations overlap.

Authority and Compliance

The Bridge Creek Area AMP EA is tiered to the 2004 AMU and Steens Mountain CMPA Proposed RMPs and Final Environmental Impact Statements (EISs), as amended by the 2015 Oregon Greater Sage-Grouse (GRSG) Approved RMP Amendment (ARMPA)/ROD, and relevant information contained therein is incorporated by reference.

The authorities under which the portions of the proposed decision applicable to grazing are being issued include the Taylor Grazing Act of 1934, as amended; Federal Land Policy and Management Act (FLPMA), as promulgated through Title 43 CFR Subpart 4100, Grazing Administration – Exclusive of Alaska; and 43 CFR 1601.0-5(b). My proposed decision is issued under the following specific regulations:

- 4100.0-8 Land use plans: The Andrews Management Unit / Steens CMPA RMPs and RODs designate the Hammond, Mud Creek, Hardie Summer, and Hammond FFR allotments available for livestock grazing, and the permit is in conformance with the land use plan as defined at 43 CFR 1601.0-5(b);
- 4130.2 Grazing permits or leases: Grazing permits may be issued to qualified applicants on lands designated as available for livestock grazing. Grazing permits shall be issued for a term of 10 years unless the authorized officer determines that a lesser term is in the best interest of sound management; and
- 4130.3 Terms and conditions: Grazing permits must specify the terms and conditions that are needed to achieve desired resource conditions, including both mandatory and other terms and conditions.

The FLPMA contains the Bureau of Land Management's general land use management authority over the public lands and establishes management under principles of multiple use and sustained yield (section 302(a)). Balanced and diverse resource uses to be managed include range, timber, watershed, and wildlife (section 103(c)).

Multiple sections of the Steens Mountain Cooperative Management and Protection Act of 2000 (Steens Act) provide direction to manage for social and ecological health, and for economic purposes, including grazing.

Multiple sections of BLM Manual 6330 – Management of WSAs are directly relevant to the proposed actions discussed within the Bridge Creek Area AMP EA and discuss grazing and range improvements within WSAs.

The Proposed Decision has been designed to conform to the following documents, which direct and provide the framework for management of BLM lands within Burns District:

- Taylor Grazing Act (43 U.S.C. §§ 315–315r)
- National Environmental Policy Act (NEPA) (42 U.S.C. §§ 4321–4347)
- Federal Land Policy and Management Act (FLPMA) (43 U.S.C. §§ 1701–1787)
- Steens Mountain Cooperative Management and Protection Act of 2000 (16 U.S.C. §§ 460nnn–460nnn-122)
- Public Rangelands Improvement Act (43 U.S.C. §§ 1901–1908)
- National Historic Preservation Act (16 U.S.C. §§ 470, *et seq*.)

- Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the BLM in the States of Oregon and Washington, August 12, 1997.
- Integrated Invasive Plant Management for the Burns District Revised EA (DOI-BLM-OR-B000-2011-0041-EA), 2015
- Greater Sage-Grouse Land Use Plan Implementation Guide, 2016
- Washington Office (WO) Instruction Memoranda (IM) 2016-139, Policy for Resource Management Plan Effectiveness Monitoring for Renewable Resources with Additional Guidance for Plans Implementing the Greater Sage-Grouse Conservation Strategy
- WO IM 2018-22, Process for Evaluation Greater Sage-Grouse Land Use Plan Adaptive Management Hard and Soft Triggers
- WO IM 2016-145, Tracking and Reporting Surface Disturbance and Reclamation
- BLM Manual 6330 – Management of Wilderness Study Areas, 2012
- BLM Manual 6340 – Management of Designated Wilderness Areas, 2012
- Oregon Revised Statute 537.141 Uses of water not requiring water right application, permit or certificate
- All other Federal laws that are relevant to this document, even if not specifically identified

Summary of Public Participation

On October 13, 2020, the Burns District BLM mailed a scoping letter to17 interested publics, groups, and agencies regarding the proposed Bridge Creek Area AMP/EA. The scoping letter was also posted to BLM's National NEPA Register. Four letters were mailed to the Burns District BLM and four unique letters were submitted through the National NEPA Register from various individuals, groups, and agencies during the scoping period, which ended on November 14, 2020. The BLM also completed consultation, cooperation, and coordination (CCC) with six additional tribal governments, agencies, organizations, and individuals, including the applicants for available forage within the Bridge Creek Area. Comments received following the scoping period were incorporated into the draft EA as appropriate, which was released for a 13-day public comment period on December 8, 2020 and ending on December 20, 2020. During the comment period, the BLM received a total of ten comment letters via email and hard copy letters.

Decision

Having considered all alternatives and associated impacts based on analysis in DOI-BLM-ORWA-B060-2020-0001-EA, it is my proposed decision to implement the actions described below. The actions below have been selected from Alternatives 2, 3, and 4.

The proposed actions are: approval of the Hammond, Mud Creek, Hardie Summer, and Hammond FFR AMPs, issuance of a grazing permit, livestock grazing management, and range improvements, specifically Bridge Creek water gap extension, fence removal, fence construction, and spring and pipeline development with associated troughs. With the exception of the Bridge Creek water gap extension, which has been found to meet an exception to the WSA non-

impairment standard, all other range improvements would be constructed outside of WSA and Wilderness. The implementation of these actions will result in S&Gs continuing to be achieved, or if not achieved, ensure that livestock are not a causal factor.

Actions Common to All Grazing Alternatives (Goals and Objectives; Monitoring; Adaptive Management and Flexibility; Billing; Percentage of Public Land Calculations; Crossing Permits; and Salt, Mineral, and Protein Supplements) described in EA section 2.1 and Required Design Features and Project Design Elements described in EA section 2.2 would apply to the actions selected.

The following management actions will be implemented; each heading specifies which alternative or combination of alternatives the action is selected from.

Approval of the Hammond, Mud Creek, Hardie Summer, and Hammond FFR AMPs (All Action Alternatives)
Upon issuance of a final decision, the final decision and all of the components described below, will become AMPs for Hammond, Mud Creek, Hardie Summer, and Hammond FFR allotments.

Grazing Permit Issuance (Alternative 2, except in the Mud Creek and Hardie Summer Allotments which Combines Portions of Alternatives 2 and 4)
The BLM will issue one or more 10-year livestock grazing permits for Hammond, Mud Creek, Hardie Summer, and Hammond FFR allotments.

The season of use associated with each allotment will implement livestock grazing systems that ensure periodic growing season rest in all pastures and allow flexibility to meet resource needs such as early use of annual grasses. This will allow desirable herbaceous plant species the ability to satisfy growth requirements, seed production, and seedling establishment, promoting and/or maintaining plant vigor in the long-term (>10 years).

Mandatory terms and conditions are shown in Table 2.

Table 2: Proposed Mandatory Terms & Conditions

ALLOTMENT	CATTLE #	SEASON OF USE	ANIMAL UNIT MONTH (AUM)
Hammond	134	3/1 – 2/28	1,625
Mud Creek	131	6/1 – 10/15	Up to 590 (Beginning with 295 AUMs and increasing by up to 25% of the remaining AUMs annually over 4 years. This increase would only occur if monitoring shows ecological conditions are continuing to be maintained and providing adequate habitat for wildlife, including GRSG, and grazing effects are below the thresholds identified in Table 6)
Hardie Summer	81	7/1 – 11/15	Up to 364 (Beginning with 204 AUMs and increasing by up to 25% of the remaining AUMs annually over 4 years. This increase would only occur if monitoring shows ecological conditions are continuing to be maintained or improved, and providing adequate habitat for wildlife, including GRSG, and grazing effects are below the thresholds identified in Table 6)
Hammond FFR	439	3/1 – 2/28	368

Other terms and conditions applicable to all allotments on the permits will include:

a. The AMP, as provided for in 43 CFR 4120.2(a)(1–4), (b), is a term and condition of your permit.
b. Mandatory terms and conditions shown on a grazing permit are only for public lands. When there is privately controlled land within an allotment, these only apply to the publicly managed lands, and do not limit use of private lands in any way. If the private landowner chooses to graze their private lands within the allotments, outside the terms and conditions for the public land, it is their responsibility to ensure livestock remain on the privately controlled land. Any livestock on publicly managed land outside of what has been authorized may be considered unauthorized grazing use and be subject to trespass action under 43 CFR 4150.
c. Actual livestock number may vary dependent on length of annual grazing, as long as AUMs are not exceeded within a given grazing year.[3]
d. Annual period of use within each pasture can be adjusted for annual grazing, within the bounds of the grazing permit and AMP.
e. A two-week period of flexibility may be allowed, both prior to and following the permitted season of use. This would be a nonrenewable extension of the authorized season of use. There is no guarantee to the permittee this will be authorized in any given year, and authorization of it is at the discretion of the BLM. Total active use AUMs annually authorized will not exceed the amount permitted.[4]
f. Actual use billing is authorized per the AMP. An actual use record will be submitted within 15 days after completion of annually authorized grazing per 4130.3-2(d).
g. There will be a 50 percent utilization (as measured using the Ocular Landscape Appearance/Key Species Method) threshold on upland native key species and a 60 percent utilization threshold on upland desirable nonnative key species. The response of reaching this threshold will be the timely removal of livestock. While the BLM will be responsible for monitoring, in coordination with the permittee, the permittee remains responsible for removing livestock to ensure thresholds are not exceeded, whether or not BLM has conducted monitoring. Permittee exceedances of utilization will result in decreased AUMs in the subsequent year.
h. No salt or supplements (block, dry, or liquid) will be permitted within 0.25 mile of a water source or riparian area, or within 1.2 miles of the perimeter of an occupied or pending lek. Salt or supplements (block, dry, or liquid) will be permitted outside of these areas. Utilizing hay as a supplement will not be authorized under this term and condition and will require separate approval on an annual basis.
i. The permittee is required to maintain all improvements unless there is an agreement in place documenting an improvement as a BLM responsibility. Prior to being issued this grazing permit, the permittee signed an Assignment of Range Improvements Form 4120-8[5], which identified improvements for which the permittee is responsible. Fences that separate two BLM allotments are the responsibility of both permittees unless an agreement is in place showing specific

[3] Non-renewable AUMs would be authorized separately and would be in addition to the active use AUMs shown on the grazing permit.
[4] Non-renewable AUMs will be authorized separately and will be in addition to the active use AUMs shown on the grazing permit.
[5] The current Assignment of Range Improvement (unsigned) for allotments within the Bridge Creek area is in the EA Appendix H.

maintenance responsibility areas. Each permittee is responsible for ensuring the boundary fence is maintained prior to turning out their livestock. Maintenance activities that involve ground-disturbing activities need to be approved by the BLM prior to beginning work.

j. Active trailing, which is actively managed to avoid lingering or resource concerns, is allowed to occur through rested pastures. Active trailing across any of the allotments to access any other allotment on the permit will be authorized, but the trailing must be documented on the actual use form.
k. The livestock grazing permittee will be allowed to continue to utilize roads on BLM-managed land within the allotments, and adjacent to the allotments, in order to administer the grazing permit.
l. Permittee shall provide reasonable administrative access across private and leased lands to the Bureau of Land Management for the orderly management and protection of the public lands (43 CFR 4130 3-2(h)).

Other allotment-specific terms and conditions would include:

m. The increase in AUMs on the Hammond Allotment will occur over a 5-year period (226 AUMs added each year with full implementation occurring in 2025[6]) focusing in the pastures with a predominantly crested wheatgrass forage base. This increase will only occur as long as the allotment continues to meet applicable S&Gs or livestock is not a causal factor if S&Gs are not achieved. This level of use is within the range of AUMs that have historically been removed from this pasture[7]. Due to Bridge Creek WSA being within the Knox Spring Pasture, AUMs authorized within this pasture will not exceed the lowest estimated carrying capacity for this pasture, as determined in the 2007 Hammond Evaluation, which is 356 AUMs. This level of authorized AUMs does not exceed those allowed during the 1976 grazing fee year and so is a grandfathered use in the WSA.
n. AUMs permitted on the Mud Creek Allotment will be implemented in a phased in approach, beginning at 295 AUMs in the first year grazing is returned. After grazing is completed and monitoring occurs, if ecological conditions are being maintained or improved, AUMs will be allowed to increase by 25% (approximately 74 AUMs) the following year. This assessment will occur each year prior to increasing permitted AUMs. If at any point monitoring suggests desired ecological conditions are not being achieved, or would not be achieved with an additional increase, AUMs would be frozen at that prior years level and reevaluated by BLM. If BLM makes the same determination three years in a row, AUMs will be permanently set at that level and the grazing permit would be updated to reflect that change. AUMs may be reduced if monitoring finds thresholds were exceeded, and up to three years would be added onto the implementation period until it can be determined if exceeding the thresholds was due to livestock grazing, or other factors such as drought.
o. AUMs permitted on the Hardie Summer Allotment will be implemented in a phased in approach, beginning at 204 AUMs in the first year grazing is returned. After grazing is completed and monitoring occurs, if ecological conditions are

[6] This assumes implementation begins in 2021.
[7] Including both permitted and nonrenewable AUMs.

being maintained or improved, AUMs will be allowed to increase by 25% (approximately 40 AUMs) the following year. This assessment will occur each year prior to increasing permitted AUMs. If at any point monitoring suggests desired ecological conditions are not being achieved, or would not be achieved with an additional increase, AUMs would be frozen at that prior years level and reevaluated. If BLM makes the same determination three years in a row, AUMs will be permanently set at that level and the grazing permit would be updated to reflect that change. AUMs may be reduced if monitoring finds thresholds were exceeded, and up to three years would be added onto the implementation period until it can be determined if exceeding the thresholds was due to livestock grazing, or other factors such as drought.

Livestock Grazing Management (Alternative 2, Except for Mud Creek and Hardie Summer, which combine Alternatives 2 and 4)

Livestock grazing management is designed to provide periodic growing season rest for plant species. Use periods may vary annually (determined in an annual authorization with prior approval of BLM) in order to provide for recommended rest periods as described in the proposed grazing systems shown in tables 3-5. Livestock numbers may vary annually as outlined under "Adaptive Management"; however, total permitted AUMs will not exceed those permitted on each allotment.[8] Grazing treatments (i.e., early, graze, and defer; see EA Appendix F: Grazing Treatment Descriptions) are used in the proposed grazing systems to act as guidelines. This allows for modification based on the large variability of weather conditions from year to year. This variation results in key forage species entering vegetative states on differing dates, annually. Specific livestock use dates for the allotments will be determined on an annual basis, based on the vegetative stages of key forage species and the prescribed grazing treatments. These grazing systems will allow for periodic growing season rest. Adaptive management may result in the grazing systems being modified within the terms and conditions of the grazing permits, as long as periodic growing season rest occurs. Prior to authorizing annual grazing (including annual livestock numbers, season of use, and AUMs within individual pastures), the BLM will take into consideration monitoring data and current weather conditions, such as drought. Any adaptations in grazing systems require prior BLM approval. This may result in changes to stocking levels and timing of grazing in order to best meet objectives. Any modifications to the proposed grazing system will conform to the utilization threshold of 50 percent for native key forage species and 60 percent for desirable nonnative key forage species, unless otherwise specified.

[8] This excludes potential NR AUMs, which would follow specific terms and conditions, described below.

Table 3: General Grazing Rotation Hammond Allotment

Allotment	Pasture	Year 1	Year 2	Year 3	Year 4[9]
Hammond	Landing Strip #9	Early	Early	Early	Defer
	Krumbo Creek #2	Graze	Rest	Graze	Rest
	N. Dutch Oven Seeding #1	Early	Rest	Early	Rest
	Hole in the Ground #11	Graze	Rest	Graze	Graze
	Artesian #12	Graze	Graze	Graze	Rest
	Knox Springs #5	Defer	Defer	Defer	Defer
	Larkspur Reservoir #6	Defer	Defer	Rest	Defer
	Webb Springs #4	Rest	Graze	Rest	Graze
	S. Dutch Oven Seeding #10	Rest	Early	Rest	Early

Table 4: General Grazing Rotation Mud Creek Allotment

Allotment	Pasture	Year 1	Year 2	Year 3	Year 4
Mud Creek	Lower Field #1	Graze/Defer	Graze/Defer	Graze/Defer	Defer
	Upper Field #2	Graze/Defer	Graze/Defer	Defer	Graze/Defer

Within the Mud Creek Allotment, the initial utilization threshold will begin at a 30 percent utilization in the first year of grazing following issuance of a grazing permit. This utilization will be adjusted, up or down, based on monitoring, as described in the Adaptive Management and Flexibility Section 2.1.3. of the EA.

Table 5: General Grazing Rotation Hardie Summer Allotment

Allotment	Pasture	Year 1	Year 2	Year 3
Hardie Summer	Bridge Creek #3	Graze/Defer	Rest	Graze/Defer
	Cabin #1	Defer	Graze/Defer	Rest
	Little Fir Creek[10]	Rest	Defer	Rest
	Thompson	Rest	Defer	Defer

Hammond FFR is a "C" allotment with a low percentage of public lands (25.5 percent; based on acres) to private lands (74.5 percent), after proposed boundary adjustments. As such, the permittee is authorized to use the BLM-managed land, in coordination with any private land they may control. The use of BLM-managed land is typically minimal as it tends to be located in small pieces, often on steep hillsides, and with minimal draw for livestock. Use of BLM-managed land within the FFR will continue to meet applicable objectives, and any grazing use upon the public lands will conform to meeting the utilization threshold of 50 percent on native key forage species and 60 percent on desirable non-native key forage species, as well as following other thresholds and responses as described in table 6. Only BLM-managed land must be managed consistent with the BLM grazing permit; additional use on private land may occur at the discretion of the private landowner.

Non-Renewable (NR) Grazing (Alternative 2 for Hammond Allotment)

Non-renewable (NR) AUMs will be made available on pastures within the Hammond Allotment where utilization after permitted use is less than 35 percent. NR Grazing will not be authorized within the Mud Creek, Hardie Summer, or Hammond FFR allotments, or the Krumbo Creek Pasture of Hammond Allotment. The objective of NR grazing will

[9] After year 4, the grazing rotation would start back at year 1.

[10] Trailing through this pasture can occur even in rested years. Trailing should be active, though watering may occur in the creek when water is present.

be to address the additional grass and fine fuels that build up in years of above average production. NR grazing is allowed under 43 CFR 4110.3-1(a) and 4130.6-2. NR grazing will have the following terms and conditions:

a. NR grazing will only be authorized following use of all permitted AUMs within the allotment, or portion of the allotment, the permittee is authorized to use.
b. NR grazing will be allowed only when perennial bunch grasses are dormant, generally between July 15–February 28.
c. NR grazing may be authorized in pastures where utilization levels following permitted use are 35 percent or less.
d. NR grazing will only be authorized up to the 60 percent utilization threshold for crested wheatgrass and the 50 percent utilization threshold for natives.[11] Utilization calculations will include both permitted use and wildlife use. When pasture utilization reaches the utilization threshold, the response will be that livestock will be required to be removed in a timely manner. While the BLM will be responsible for monitoring, in coordination with the permittee, the permittee remains responsible for removing livestock to ensure thresholds are not exceeded, whether or not BLM has conducted monitoring. Permittee exceedances of during NR use will result in the permittee not being allowed to utilize NR the subsequent year, and continued use will be at the discretion of the BLM.
e. NR grazing will not be authorized in more than one-half of the pastures within the allotment in any given year.
f. NR grazing will be included on the actual use form and marked as NR grazing. The permittee would be billed for these AUMs, at the standard rate, based on their submitted actual use.
g. No NR grazing will be authorized within the Steens Mountain Wilderness.

Range Improvements (Alternatives 2 and 3)

All RDFs, BMPs, and PDEs as described in Appendix A of this proposed decision will be incorporated into the planning and implementation phases of all range improvements. Refer to Map B: Proposed Decision Map for the approximate location of improvements.

Water Gap Modification (Alternative 2)

At the Bridge Creek water gap, the existing fence and topography has been found to not be effective at keeping livestock from entering the Bridge Creek drainage. Therefore, an extension of the existing fences, approximately 0.02-mile-long, will be added to connect the two fences on the west side of the water gap. On the east side of the water gap, a new fence, approximately 0.18-mile-long will be constructed across the creek to fully prevent livestock from travelling along the Bridge Creek drainage. These fences will be constructed in the Bridge Creek WSA.

Fence Removal (Alternative 2)

Within the Hammond Allotment – Krumbo Creek #2 Pasture, all interior fences, approximately 5.3 miles, will be removed. These fences are no longer functional or needed. Within the Hardie Summer Allotment – Cabin Pasture #1, all BLM interior fences, approximately 2.85 miles, will be removed.

[11] Utilization is used as a threshold for NR grazing because the amount of AUMs available for removal prior to utilization reaching the 50 percent utilization threshold varies year to year due to fluctuating production. Allowing NR to adapt to current year conditions allows better flexibility to meet resource objectives and ensures overuse does not occur.

Fence Removal (Alternative 3)
Within the Mud Creek Allotment, the northwestern fence (two sections) that currently makes up the boundary between the Mud Creek Allotment – Lower Field and Hammond Allotment – Knox Spring Pasture will be removed, approximately 1.53 total miles. This boundary will be moved northwest of Bridge Creek along the rim where current gap fences will already prevent livestock from moving across the boundary. No fence removal will occur in Hammond Allotment.

Fence Construction and Boundary Adjustment (Alternative 2)
Within the Hardie Summer Allotment, approximately 4.91 miles of fence will be constructed. One new fence, approximately 1.56 miles long, will be constructed along the rim north of Little Fir Creek. Where possible, rim will be used instead of constructing a fence, which might reduce the amount of fence needed. This fence will extend east from the north-south fence of the Hammond FFR – Mud Creek Pasture, to the public land-private land boundary. Another new fence will be constructed at this point. The fence will go north following the land ownership boundary, until it reaches the currently existing fence. From the eastern end of the proposed Little Fir Creek fence, a new fence will also extend south, following the land ownership boundary, until it connects to the existing fence on the Cabin Pasture boundary; this section of fence (going north and south from the junction with the proposed Fir Creek fence) will be approximately 1.35 miles long.

Another new fence will be constructed along the public land – private property boundary in section 27. This fence will extend the existing fence between the Hardie Summer Allotment and the Hammond FFR – Mud Creek Pasture south. The proposed fence will turn east halfway through section 27, continuing to follow the land ownership boundary. The proposed fence will then turn north, still following the land ownership boundary, until it ties into an existing fence. This proposed fence will be approximately 2.0 miles long. None of this fence will be within, or on the boundary, of a WSA. This fence will border the Fir Grove ACEC, however, no trees will be removed during construction or utilized as part of the fence.
As fences are constructed and removed, BLM will adjust allotment and pasture boundaries as described below. When possible, the new fence lines will follow the land administration boundary; however, they will follow landscape contours rather than property boundaries, where practical. Fences will not be placed on private property. Fences will be placed within one-quarter mile of the location identified in the Proposed Decision Map.

In addition to changing fence lines, some pastures and their associated AUMs will be moved to different allotments. The Knox Pond, Baca Lake, and Kern Reservoir pastures will all be removed from Hammond Allotment and moved into the Hammond FFR Allotment. In the Hardie Summer Allotment, the North and Sylvies pastures will also be moved into the Hammond FFR. In addition, the private within the Hardie Summer Cabin Pasture will be fenced out; this area will also be moved into the Hammond FFR. Dust Bowl #1 Pasture in the Hammond FFR will be completely removed as there is almost no BLM-managed land within that pasture. These changes account for the AUM increase in the Hammond FFR Allotment and the small decrease in AUMs in the Hardie Summer Allotment. See Proposed Decision Map for the proposed allotment and pasture boundaries.

Spring and Pipeline Development (Alternative 3)
Spring and pipeline development can be seen on the Proposed Decision Map. Within the Hardie Summer Allotment, Big Spring, located on private land, will be developed, utilizing a spring box to collect water to support a 2-mile-long pipeline. This pipeline will run from the spring to the northeast within the Thompson Pasture, crossing the pasture and connecting to private property in the Hammond FFR – Mud Creek Pasture. A spur line, approximately 0.64 mile long will extend into the Bridge Creek Pasture. The pipeline will be buried where possible. Three troughs of galvanized steel, measuring approximately 4'x8', will be installed on public lands. Troughs may also be round tire troughs but would have a similar footprint to the galvanized troughs. Float valves will be installed on each trough.

Goals and Objectives for the Bridge Creek Area (All Action Alternatives)
Goals are broad statements of a desired outcome that is usually not quantifiable and may not have established timeframes for achievement. Objectives are a description of a desired outcome for a resource. An objective can be quantified and measured and, where possible, can have established timeframes for achievement.

Upland Vegetation
- *Goal:* Manage vegetation to achieve and maintain healthy watersheds.
  - *Objective:* Maintain or increase the relative frequency of deep-rooted perennial grasses, big sagebrush, and forbs species that provide food and nesting cover for GRSG in the allotments over the next 10 years.
- *Goal:* Increase the resistance of GRSG habitat to invasive annual grasses and the resiliency of GRSG habitat to disturbances such as fire to reduce habitat loss and fragmentation.
  - *Objective:* Reduce the existing presence of invasive annual grasses over the next 10 years.

Riparian Areas
- *Goal:* Maintain or improve riparian vegetation, habitat diversity, and geomorphic stability to achieve healthy, productive riparian areas and associated structure, function, process, and products.
  - *Objective:* Achieve or maintain a rating of proper functioning condition (PFC) for perennial streams over the next 10 years.
  - *Objective:* Maintain or improve riparian/wetland vegetation communities relative to ecological status and site potential over the next 10 years.

Monitoring (All Action Alternatives)
Throughout the 10-year term of the livestock grazing permit(s), both short-term indicators (measurements) and long-term indicators of livestock grazing's effect on vegetative communities will be monitored. Short-term indicators provide information necessary to help determine whether the current season's livestock grazing is meeting grazing use criteria, while long-term indicators provide data to assess the current condition and trend in condition of vegetative communities and/or stream characteristics (TR 1737-23 2011). For both uplands and riparian areas, short-term indicators must be used in combination with long-term indicators to identify cause and effect relationships and to assess progress towards meeting goals and objectives (TR 1737-23 2011; BLM

WO IM 2018-23). Short-term indicators, such as woody browse use, should not be confused as "objectives" for livestock grazing management because they can be highly episodic and dependent on climatic events (Mark Gonzalez, National Riparian Service Team, personal communication 2020). The short-term indicators need to be compared to trend over time for validation; both implementation monitoring and effectiveness monitoring are important. Another example to consider is that, "[s]tubble height is easy to use, [but] it is not a resource objective and therefore inappropriate as a prescriptive standard in grazing permits and land use plans" (Clary and Leininger 2000; USDA et al. 2003; Rangelands 2006). Heitke and others (2008) warn "it is important to remember that no protocol can be implemented without measurement error (Krebs 1989; Ramsey et al. 1992; Roper et al. 2002). Managers should therefore be careful when taking action based on a single evaluation—especially when the result is near a management standard or threshold." In summary, BLM uses short-term monitoring in combination with long-term trend monitoring to adaptively manage livestock grazing (see Adaptive Management section below).

Monitoring, by BLM staff[12] in coordination with the permittee(s), will take place within the allotments. All monitoring within the AMU will follow the direction provided in the AMU Monitoring Plan dated May 4, 2011 (or subsequent plan), and the 2005 AMU/Steens CMPA RMPs, as amended by the 2015 Oregon GRSG ARMPA/ROD, as appropriate.

Upland Vegetation Monitoring

- *Short-term Monitoring*
    - Key Species Method on a landscape (pasture) scale for pasture utilization (Utilization Studies and Residual Measurements, TR 1734-3, 1999). The target utilization levels for key forage plant species are no more than 50 percent utilization[13] on key native upland perennial species and 60 percent utilization on desirable nonnative species, such as crested wheatgrass (AMU/Steens CMPA RMPs 2005, p. 54). These utilization levels will apply to all alternatives, unless otherwise specified within the alternative description. Utilization monitoring is performed along a route transect by vehicle, foot, and/or horseback. Utilization routes are in areas livestock are able to access, with utilization points occurring at a set interval specific to the route. At each utilization point, an estimate of utilization is made; since these points are on an interval, they may fall in areas of higher than normal use (near water or salt), or in areas of lower than normal use. All utilization points are then averaged across the pasture and overall utilization is calculated on a pasture average basis. Utilization will be collected annually at the end of each grazing period as labor, access, and funding allow. If utilization exceeds utilization thresholds, allowable AUMs would be reduced the following year.
    - Photo monitoring provides visual records of utilization levels that can be used before, during, and after grazing. At each photo point, landscape photos will be taken in each cardinal direction. A minimum of two photo monitoring points will

[12] While monitoring will occur on the allotments, the extent and timeliness of it will depend on internal BLM factors such as funding and workforce and may not occur exactly when planned. In any case, permittees are responsible for removing livestock prior to exceeding utilization levels.

[13] Burns District BLM typically measures utilization percentage using an ocular method, not a weight method.

be established in the interior of each grazed pasture. This monitoring will occur at least following grazing for the first four years following the issuance of a grazing permit. After the first four years, photo monitoring will occur at least every 5-10 years, though may occur more often as needed.

- Visual Obstruction Reading (VOR) will be completed following the Robel Pole Protocol, Version 1.0 (2016), in the Lower Field of Mud Creek if livestock grazing occurs within this pasture prior to June 30th. This monitoring will occur annually for the first four years of grazing, and will help document cover remaining for wildlife following livestock use. If the results are under 7" while livestock are still present, then livestock would be removed from the area. If results are under 7" after livestock grazing has occurred, then grazing the following year would be reduced and the set utilization level would be reduced by 5 percent. If results are over 7" following grazing, then grazing the following year would either stay the same, or if the set utilization level is less than 50 percent on natives and 60 percent on desirable non-natives, the utilization level would increase by 5 percent and AUMs would be adjusted, within the permitted range. These adjustments will continue annually until this monitoring provides support for a set utilization and AUM level within this pasture that will indicate that cover requirements for sage-grouse are being met while allowing livestock use consistent with meeting cover requirements.
- Use supervision/compliance is monitoring that occurs to ensure permittees are in compliance with the terms and conditions of their permits (livestock only present if permitted, in the right locations, etc.). These forms ask about vegetation, livestock, wildlife, and public land visitors, among other things, and provide space to make notes and observations that can be used to adjust grazing (if needed) and plan for future project and maintenance needs while also recognizing and taking notes on other public land uses.
- Actual use reporting is due from permittees within 15 days of end of season livestock removal from BLM-managed land. In some cases, the BLM may require actual use to be submitted on an allotment or pasture basis. Actual Use Form 4130-5 (2018) is used by permittees to document how many head of livestock they turned out or gathered from a pasture and on what date. The BLM then uses this form to calculate actual use AUMs used within that pasture and within the allotment. In some cases, the permittee will then be billed for these AUMs (instead of being billed at turnout). The BLM uses this information, combined with other information, to plan for the next year's livestock grazing.

- *Long-term Monitoring*
  - Pace 180° (Johnson and Sharp 2012, TR 4400-4 1984) will be read to assess trend in upland condition. This method is a step-transect that allows measurements of occurrence of key forbs, shrubs, and perennial grass species composition, as well as basal cover calculations. As part of this monitoring, photos are taken, a Soil Surface Factor (SSF) form to assess soil stability is completed, as is an Observed Apparent Trend (OAT) to assess trend in condition. A modified method will be completed to include line-point intercept readings and allow a better calculation for vegetative cover. These plots will be read in years 1, 3, and 5 after grazing is reinstated. After year 5, this monitoring will be read approximately every 5 to 10 years.

- Terrestrial Assessment, Inventory, and Monitoring (AIM) in this area is part of a larger district-scale AIM project that was designed to conform to the GRSG Monitoring Framework (GRSG ARMPA, Appendix D, 2015, p. D-1).[14] This AIM project was initiated in 2015 and completed in 2020. The second phase of this project is the revisitation of plots. These plots will be revisited in the next five to ten years.
- Habitat Assessment Framework (HAF) analysis data has been completed at the mid, fine, and site-scale, and HAF suitability determinations for the Steens-South Pueblos Fine-Scale analysis area are done. The HAF summary report has not been completed. The BLM will continue to complete HAF suitability requirements as required in the GRSG AMRPA.
- Remote sensing has been completed within these allotments, providing an estimate of functional group composition, bare ground, annual grasses, and juniper cover. If funding is available, remote sensing may be completed again in five to ten years, which would allow for this data to be used in determining trend.

Riparian Area Monitoring

- *Short-term Monitoring*
  - Multiple indicator monitoring (MIM) (TR 1737-23 2011). At the end of each grazing season for the first five years, short-term indicators (measurements of the current grazing season use) of stubble height, streambank alteration, and woody browse would be collected on Little Bridge, Little Fir, and Big Fir creeks in the Hardie Summer Allotment and Krumbo Creek in the Hammond Allotment. On year five, short-term and additional long-term MIM indicators will be collected. MIM data collected will be assessed as to whether livestock grazing management is aiding in moving toward or achieving riparian objectives. If objectives are being achieved, the BLM will complete short-term MIM monitoring as needed.
  - Use supervision/compliance: Use supervision will occur during MIM data collection and on an annual basis as staff time and funding allows. Riparian areas of perennial streams, that are accessible to livestock, will be checked to ensure livestock are present only in areas where permitted. Notes and observations will be collected on the compliance form related to condition of the creek, livestock, wildlife, public land visitors, etc. This information will be used, in addition to other monitoring, in planning grazing the next year.
  - Photo monitoring provides visual records of utilization levels that can be used before, during, and after grazing. At each photo point, landscape photos will be taken in each cardinal direction. A minimum of two photo monitoring points will be established along each creek in the grazed pasture. This monitoring will occur at least following grazing for the first four years following the issuance of a grazing permit. After the first four years, photo monitoring will occur at least every 5-10 years, though may occur more often as needed.

- *Long-term Monitoring*
  - Proper functioning condition (PFC) assessments (TR 1737-15, 2015). PFC assessments have been conducted on the following creeks; Krumbo (2015), Webb Spring Creek (2019), Mud Creek (2003), Bridge Creek (2003), Big Fir (2006),

[14] The Burns District AIM/HAF project was designed to be statistically valid with 70 percent confidence at the district level.

Little Fir (2003), Fence (2019), Lake Creek (2019), and Little Bridge (2019). The PFC assessment synthesizes information that is foundational to determining the overall health of a riparian area. PFC generally lacks the sensitivity to detect incremental changes in riparian condition but can provide early warning of problems and point to opportunities by helping to identify key management issues, focus monitoring activities to maximize efficiency, and prioritize restoration actions on the "at-risk" systems or reaches of highest resource value. PFC assessments will be updated every 5-10 years or as needed following management changes or when quantitative data indicates a change in condition.

- MIM (TR 1737-23, 2011): Long-term indicators will be conducted on Little Bridge, Little Fir, and Big Fir creeks in the Hardie Summer Allotment and Bridge[15] and Krumbo creeks in Hammond Allotment every five years. This data, in combination with short-term indicator data, will be used to determine if management actions are making progress toward achieving long-term goals and riparian objectives.
- Photo points: Photos provide visual records of long-term streambank and riparian vegetative condition and trend (TR 1737-23 2011). These will be collected once every 2-3 years. Photos will be taken at existing photo point locations along Krumbo, Webb Spring, and Bridge creeks in Hammond Allotment, and along Little Bridge, Little Fir, and Big Fir creeks in Hardie Summer Allotment. Other riparian photo points will be established as necessary. Photo locations will be georeferenced so repeat photos could be taken. Photos will generally be taken during use supervision monitoring or end of season.
- Water temperature data is collected using temperature probes placed in perennial streams. This data will be gathered approximately every five years and will include two to three consecutive years of data collection.
- Aquatic AIM data will be re-collected approximately every five years and will follow the AIM National Aquatic Monitoring Framework: Lotic Field Protocol for Wadeable Systems (Technical Reference 1735-2). Aquatic AIM data was collected in 2019 on Krumbo, Bridge, Big Fir, Little Fir, and Mud creeks.
- Remote sensing data will be collected[16] within riparian areas to document indicators such as sinuosity and riparian and upland vegetation. Remote sensing will use a model to provide information along entire perennial creeks (instead of just at monitored areas) to use as a baseline for future comparison. Once baseline data has been collected, repeat remote sensing analysis will be completed every five to ten years.

Adaptive Management and Flexibility (All Action Alternatives)

Adaptive management is a system of management practices based on clearly identified objectives (identified in relevant RMPs and this document) and monitoring to determine if management actions are meeting desired objectives and, if not, facilitating management changes that will best ensure objectives are met. Adaptive management recognizes knowledge about natural resource systems is sometimes uncertain and, in this context, adaptive management affords an opportunity for improved understanding. Due to the uncertainties inherent in managing for sustainable ecosystems, some changes in

[15] Bridge Creek MIM monitoring would be collected in a representative area within the reach between the water gap and Malheur Refuge Boundary.

[16] Dependent upon funding and contracting abilities.

management may be authorized, which include (but are not limited to) *adjusting the rotation, timing, annual season of use of grazing, and livestock numbers* within the constraints of the grazing permit based on numerous factors including (but not limited to) the following:

- A finding that one or more standards are not being achieved and livestock are a causal factor,[17]
- The previous year's monitoring results considering the weather conditions (temperature and precipitation),
- The current year's forecasted weather conditions,
- Persistent drought causing reduced forage production and a lack of available water in areas originally scheduled to be used,
- Occurrence of wildfire, and
- To balance utilization levels.

Rangeland monitoring described above is a key component of adaptive management. As monitoring data indicates changes in grazing management are needed to meet resource objectives, changes are implemented in coordination with the grazing permittee(s). Flexibility in grazing management will be authorized, and changes in rotations will only be allowed as long as they continue to meet resource objectives. Flexibility is dependent upon the demonstrated stewardship and cooperation of the permittee(s) and occurs within the confines of the grazing permits. Additional flexibility may occur within the terms and conditions of the grazing authorization.

Thresholds, or use indicators, and responses take time to develop and validate because short-term indicators of grazing use may or may not reflect the meeting of long-term management objectives (Rangelands 2006). General thresholds and responses related to grazing management in these allotments will include those described in the table and will be applied as described in the monitoring section above. These thresholds may adjust over time through adaptive management based on short- and long-term monitoring and assessment of objectives.

[17] Currently (as with the previous S&G assessments) livestock is not a causal factor.

Table 6: Thresholds and Responses[18]

Activity	Threshold/Use Indicators	Response
Wildfire	Over 25% of acres in pasture is burnt and severity is high enough to remove existing deep-rooted perennial vegetation and require seeding.	Remove livestock grazing from burned area, or temporarily fence burned area, to exclude livestock grazing for two growing seasons. BLM retains discretion to close areas of any size due to fire depending on resource concerns.
Upland Grazing	50% utilization level on key native upland perennial species.	If livestock are still present when monitoring shows the utilization threshold is met, permittee would be required to remove livestock in a timely manner. Adjust livestock timing and/or duration of use for the following season. Reduce AUMs the following year if over 50%[19]. If under 50%, consider increasing AUMs (within total permitted AUMs) or authorizing non-renewable grazing.
	60% utilization level on desirable non-native species (e.g. crested wheatgrass).	If livestock are still present when monitoring shows the utilization threshold is met, permittee would be required to remove livestock in a timely manner. Adjust livestock timing and/or duration of use for the following season. Reduce AUMs the following year if over 60%. If under 60%, consider increasing AUMs (within total permitted AUMs) or authorizing non-renewable grazing.
	The Mud Creek Allotment - Lower Pasture utilization threshold would be set at 30% in first season of livestock grazing. This utilization threshold would be adjustable based on VOR monitoring in future years.	If livestock are still present when monitoring shows the utilization threshold is met, permittee would be required to remove livestock in a timely manner. Adjust livestock timing and/or duration of use for the following season. If VOR after grazing is less than 7", reduce utilization by 5%. If VOR after grazing is greater than 7", increase utilization by 5% or maintain utilization levels if close to the 7" threshold. Utilization cannot exceed the standard utilization maximums for upland grazing mentioned above.
Riparian Grazing	Streambank alteration of 25% or less[20].	When assessing annual use indicators and criteria and determining responses, BLM would follow the Process for Assessing Grazing Use Indicators and Criteria (Appendix E).
	Average stubble height on all key species of 6"[21].	
	Woody browse on willow species with a use class of "Light" (21-40%)[22] or less.	

Billing (All Action Alternatives)

Actual use (after-the-fact) billing will be authorized as part of this AMP because of the variability in forage production from year to year and the unreliability of water sources. Annual grazing will be authorized with a letter of authorization prior to turnout. Accurate records will be kept by the permittee(s), and an actual use grazing report will be

[18] Thresholds and responses apply to all alternative unless an alternative specifically describes a different threshold or response.

[19] This should not occur often as BLM works with the permittee to monitor and livestock should be removed prior to hitting this threshold. This response only in place if for unseen reasons, this does not occur.

[20] Goss and Roper (2018) suggest a conservative starting point for this metric of 25 percent. The percentage of streambank alteration is measured within a 0.25 m frame placed approximately every 5 m for 40 readings per side of the bank. MIM streambank alteration data collected in 2019 along Little Bridge, Little Fir, and Big Fir creeks indicate streambank alteration did not rise above 6.25 percent (BLM 2019; Hardie Summer Allotment Monitoring Report for the 2019 Grazing Season).

[21] "Implementing more conservative standards such as a 15-cm [6 inch] standard for stubble height seems prudent until there is sufficient site-specific data to justify more liberal standards" (Clary and Webster 1990, Goss and Roper 2018). Cleary and Leininger (2000) recommend a 10-15 (4-6 inch) riparian stubble height.

[22] Use classes are described in MIM TR 1737-23, (2011) (p. 38). MIM woody browse data collected in 2019 along Little Bridge, Little Fir, and Big Fir creeks indicate woody browse did not rise above 11 percent or the "Slight" (0-20 percent) use class. (BLM 2019; Hardie Summer Allotment Monitoring Report for the 2019 Grazing Season).

submitted to BLM within 15 days after the authorized use is completed within the Bridge Creek Area allotments. Advance billing may be allowed at the discretion of the BLM. If the terms and conditions of actual use billing are not met, actual use billing would no longer be allowed and advanced billing would occur.

Percentage of Public Land Calculations (All Action Alternatives)

The percentage of public land (% PL) is determined by the proportion of livestock forage available on public lands within the allotment compared to the total amount available from both public lands and those owned or controlled by the permittee (43 CFR 4130 3-2 (g)). Percentage of public land will be calculated using ecological site mapping and ecological site description (ESD) estimates of grass and grass-like production in a normal precipitation year. The number of acres in each ecological site, in each pasture, within the Bridge Creek area will be determined. These acres will then be divided into public lands and lands owned or controlled by the permittee. To determine the proportion of livestock forage, the number of acres public lands and of lands controlled by the permittee, in each ecological site and each pasture, will be multiplied by the grass and grass-like production estimates (lbs/acre) from the associated ESD. This will result in production estimated for public lands and for lands controlled by the permittee. The sum of these two values will result in total production for that ESD within the pasture. To calculate % PL for that pasture, the sum of production on public lands, for all ecological sites, will be divided by total production, for all ecological sites, within the pasture.[23] These calculations will be made after the determination of preference is made within these allotments, as the calculations will change depending on which applicant, or combination of applicants, is selected. While this value is used in calculations on the grazing authorization, it will not result in more AUMs being authorized on BLM-managed lands than what is described. However, as % PL values decrease from 100% PL, livestock head number will increase.

Crossing Permits[24] (All Action Alternatives)

Crossing permits, utilizing active trailing, which is defined as livestock being pushed by a rider and not allowed to drift, will be authorized to occur across the BLM-managed land within the Hammond, Mud Creek, Hardie Summer, and Hammond FFR allotments. Trailing may occur by both the authorized permittee for the allotment, or an adjacent permittee (not the authorized permittee) of the allotment. If trailing occurs by an adjacent permittee, it is their responsibility to coordinate movements with the allotment permittee to minimize conflict as much as possible. If trailing livestock get mixed in with permitted livestock, it is the trailing operators' responsibility to sort livestock and ensure all livestock get removed from the pasture. Crossing permits will be authorized under 43 CFR 4130.6-3.

Trailing will only be authorized in uplands (outside of riparian corridors), though crossing of riparian corridors will be permitted when needed. Trailing operators may take breaks while trailing, to allow livestock to water and mother up. Trailing would occur along roads to the extent possible and must avoid trailing through known sage-grouse

[23] Using ESDs for this calculation allows the BLM to utilize the best available data for production on BLM- and permittee-controlled lands. The BLM understands that these production estimates may be outdated, especially in areas where fire has occurred. However, it is expected that the production patterns, based on ecological sites and site potential, would be similar and can still be used to calculate % PL. This number would be updated if better production data becomes available, and when control of land or adjustment of pasture boundaries occurs.

[24] This applies to all alternatives, unless otherwise described under an alternative description.

leks. If trailing is over four miles, the trailing operator may overnight in the trailing pasture. Each trailing occurrence should last no more than two days. No more than ten days total of trailing/crossing will be authorized within any allotment per year.

Salt, Mineral, and Protein Supplements (All Action Alternatives)
The BLM will continue to authorize supplementation of salt, minerals, and protein in block, dry, and liquid form in all grazing alternatives, with restrictions listed in RDFs (Section 1.1.14) and in permit terms and conditions.

Rationale

A FONSI found the actions selected by the proposed decision were analyzed in DOI-BLM-ORWA-B060-2020-0001-EA and do not constitute a major Federal action that will adversely impact the quality of the human environment. The FONSI determined an environmental impact statement (EIS) is unnecessary and will not be prepared.

The selection of actions under this proposed decision is based on public comments, consultation with tribal and local governments and State agencies, discussions with the applicants for available forage, and conformance to applicable laws and regulations. The actions selected meet the Purpose of and Need for Action by:

- responding to external requests to consider whether to issue 10-year term livestock grazing permit(s) for the Hammond FFR and the Hammond, Mud Creek, and Hardie Summer Allotments, to consider adjusting pasture and allotment boundaries where possible in order to move pastures that are dominated by private property into the Hammond FFR, and adjust AUMs between the allotments as appropriate;
- adjusting available active use AUMs in the Hammond Allotment to address the higher production of crested wheatgrass that has occurred within the allotment, and the availability of additional forage, while still staying within a determined utilization threshold;
- implementing AMPs for the allotments and installing/modifying/removing range improvement projects to aid in management of the allotments;
- reducing standing fine fuel biomass through the temporary and periodic use of nonrenewable forage in the allotments;
- ensuring grazing management practices occurring on public land meet the S&Gs (43 CFR Subpart 4180);
- ensuring authorized livestock grazing is consistent with resource and management objectives from the August 2005 Andrews Management Unit (AMU) and Steens Mountain CMPA RMPs/RODs, as amended by the 2015 Oregon GRSG ARMPA/ROD;
- ensuring proper levels of permitted active use AUMs in order to maintain or increase the health, vigor, and ecological processes within the allotments; and
- reducing fine fuel biomass accumulation to decrease the risk of wildfire and subsequent spread of annual grasses.

This proposed decision includes issuing a grazing permit, increasing AUMs within the crested wheatgrass portion of the Hammond Allotment, above what was previously authorized, adjusting pasture and allotment boundaries through fence construction and removal, and pasture reorganization, extension of Bridge Creek water gap, and construction of a pipeline in the Hardie

Summer Allotment. For the Hammond Allotment and Hammond FFR, this proposed action is most similar to what was analyzed under Alternative 2, however, it includes some range improvements from Alternative 3. For the Mud Creek and Hardie Summer Allotments, this proposed action includes permitting AUMs up to the level analyzed in Alternative 2; however, AUMs will be phased in and will start at the levels analyzed under Alternative 4. In addition, utilization levels will be adjustable within the entire Mud Creek allotment, as analyzed for the Mud Creek Lower Field under Alternative 2; however, with this proposed decision, this will occur in both pastures of Mud Creek, and the beginning utilization level will be set at 30%, which was the utilization analyzed in Alternative 4. Utilization threshold (with an annual utilization limit of 50 percent on native key species and 60 precent on desirable non-native key species in the other allotments, as well as permittee flexibility and sound decisions, will help to maintain ecological conditions associated with livestock grazing and ensure livestock are not a causal factor in any S&G not being achieved. These management decisions, along with adaptive management, flexibility, additional monitoring, and thresholds and responses will continue to protect the area from ecological damage caused by livestock grazing and management.

This proposed decision will allow for grazing permits for Hammond, Mud Creek, Hardie Summer, and Hammond FFR allotments to be issued with adequate NEPA analysis.

The proposed decision is designed to address the BLM's requirement to manage lands for multiple use, including addressing resources and issues including, but not limited to, riparian, water quality, GRSG, annual grasses, fire, WSAs, and VRM. The proposed decision includes numerous tools to return grazing into the Bridge Creek Area slowly, to ensure that livestock grazing does not negatively affect resources in the long-term. The BLM is authorizing grazing in all allotments; this return of grazing will help reduce fine fuel accumulation and address concerns over increased fire risk as well as social and economic concerns. An increase in AUMs within the portion of the Hammond Allotment that has been seeded to crested wheatgrass also addresses concerns over fuel accumulation and better balances the forage base in the seedings with use. However, by requiring that this increase in AUMs in the Hammond Allotment be phased in over 4 years, it allows the BLM to monitor the effects of this increased use and ensure that this level of permitted AUMs will be sustainable and will maintain or improve ecological conditions. Providing NR AUMs within the Hammond Allotment will prevent fine fuel accumulation and an increase of residual vegetation from building in the crowns of the plants, protecting the health and vigor of the crested wheatgrass plants and maintaining a health system of deep-rooted perennial grasses that is more resistant to invasion by annual grasses and more tolerant of fire. The proposed decision also uses a phased in approach for returning livestock grazing to both Mud Creek and Hardie Summer allotments. In the first year of returned grazing the permit holder(s) will only be authorized to use 295 AUMs (Mud Creek) and 204 AUMs (Hardie Summer). When grazing is complete, BLM will conduct monitoring to assess utilization and ecological conditions. If the BLM finds that the allotments are responding well to livestock grazing, and ecological conditions are being maintained or improved, and grazing is still far enough below thresholds to suggest another increase in AUMs would not result in thresholds being exceeded, then AUMs will be increased by up to 25 percent of the remaining AUMs (less could be authorized, if needed, to ensure grazing does not exceed thresholds and balance resources). If monitoring finds a threshold is exceeded, AUMs will be reduced, and another year (or more) will be added onto the phase in period to allow enough monitoring to occur to determine if the level of livestock use is sustainable, and threshold exceedances were due to other factors such as drought, or if livestock grazing needs to remain lower. If a determination is

made three years in a row that AUMs cannot be increased based on monitoring, and it is determined that livestock grazing needs to be maintained at a rate lower than what is currently permitted, the grazing permit will be reissued with the lower AUMs. By phasing livestock grazing back into the allotments in this way, BLM would be able to ensure that the livestock grazing remains properly managed and either maintains or improves ecological conditions, in both riparian and upland areas, and provides required habitat components for wildlife, including GRSG, providing the best and most appropriate balance of resources.

The proposed decision also includes the removal of fences that are no longer needed, helping to reduce collision risk of GRSG, and entanglement risk to other wildlife and livestock, while increasing the areas naturalness. Fences within this decision were selected to improve livestock grazing management within this area. The extension of the Bridge Creek water gap will ensure that livestock do not have access to the portion of the Bridge Creek drainage or associated riparian areas within the Mud Creek Allotment. The proposed fences in Hardie Summer help separate BLM-managed land from private land, and create a small pasture around Little Fir Creek, which would allow that creek to received increased rest from livestock grazing, while allowing continued grazing on adjacent uplands. Any fences constructed with a high-collision risk for GRSG would be marked with reflectors to reduce this risk. In addition, the pipeline and troughs would provide for additional sources of off-stream water, which has been proven to be a main draw to livestock and can be a successful tool in helping reducing livestock grazing and loafing in riparian areas. In addition, thresholds and responses related to riparian indicators, as well as additional monitoring, livestock grazing management, and the development of the pipeline and Little Fir Creek Pasture will ensure that riparian conditions within the Hardie Summer are maintained or improved.

In addition to the elements above that help ensure proper livestock grazing management that is balanced with other resources, the proposed decision includes increased monitoring and thresholds and responses as a safety net to further ensure livestock grazing does not result in ecological damage. Monitoring is outlined for both short- and long-term, and is provided for both upland and riparian areas. Short-term monitoring includes: utilization, photo points, use supervision, compliance, actual use reporting, and visual obstruction readings for uplands, and for riparian areas includes MIM monitoring of short-term indicators, use supervision, compliance, and photo points. Long-term monitoring will include Pace 180°, modified to allow collection of line-point intercept data, soil surface factor assessment, observed apparent trend assessment, terrestrial AIM, HAF analysis, and remote sensing for uplands, and for riparian areas would include PFC assessments, MIM, photo points, water temperatures, Aquatic AIM, and remote sensing.

Within the Mud Creek Allotment, the utilization threshold will be variable and will be set to 30 percent on key species within both pastures. This utilization level will then be increased or decreased by 5 percent for the following year, based on visual obstruction readings after grazing as described in table 6. This method of variable thresholds tied to monitoring thresholds should help further ensure that livestock grazing does not have a long-term negative effect on wildlife habitat, including GRSG nesting and brood-rearing cover requirements. In addition, the season of use in the Mud Creek will be reduced to 6/1-10/15. By not allowing for early livestock grazing, GRSG and other wildlife species will be able to utilize all of the year's growth for cover during lekking and nesting.

Alternative 1 (Issue Grazing Permits with Terms and Conditions Identical to the Previously Issued Permit) was not selected as it would not result in improved ecological condition or livestock management that would ensure ecological conditions are stable or improving. Alternative 1 would not respond to portions of the purpose and needs, specifically adjusting AUMs in Hammond Allotment to address the higher production of crested wheatgrass; installing/modifying/removing range improvement projects to aid in management of the allotments; and reducing standing fine fuel biomass though the temporary and periodic use of nonrenewable forage. I have not selected Alternative 4 (Issue Grazing Permits at 50 Percent Previously Permitted Levels) in its entirety, or Alternative 5 (No Grazing: Grazing Permits Not Issued (No Action Alternative) because I determined the 30 percent, set, utilization levels would result in ecological risks associated with fire and accumulation of residual forage within the plants, and that this would outweigh any ecological benefits of the alternatives. In addition, this alternative did not allow for the range improvements selected that will further benefit ecological conditions. Alternatives 4 (in its entirety) and 5 would therefore not meet the purpose and need to reduce standing fine fuels within the Bridge Creek Area. I did, however, select components of Alternative 4, where appropriate to emphasize resource protection for GRSG and riparian areas in Mud Creek and Hardie Summer allotments. In selecting these components, I used them as starting points that are adjustable (utilization) or phased in (AUMs) with associated monitoring to allow for a slow return of grazing within the Mud Creek and Hardie Summer Allotments to ensure that livestock grazing would not negatively impact ecological conditions. I did not select Alternative 3 (Issue Grazing Permit(s) with Site Specific Terms and Conditions, Range Improvements, and Allotment/Pasture Boundaries – Option 2) in its entirety because some aspects of that alternative, specifically constructing fences within the Bridge Creek WSA, are not consistent with current policy (BLM Manual 6330 – Management of WSAs and VRM Management). In addition, the large increase in AUMs is not supported by current monitoring and that these levels would not be reached, but would be consistently limited by utilization thresholds, meaning those levels would not be expected to be sustainable in the long-term. In addition, the lack of a general grazing rotation leaves many areas of livestock management up to annual discussions and doesn't provide any ideas on how often and where rest would occur. This raises concerns about the ability of this alternative to continue to achieve Guidelines and effects of grazing under this alternative are difficult to accurately identify.

Consistency with BLM Manual 6330 – Management of WSAs

The proposed decision involves extending the Bridge Creek water gap and removing a fence that is currently the boundary between the Hammond and Mud Creek allotments, both within the Bridge Creek WSA. None of the changes will result in a permanent increase in permitted AUMs within the Bridge Creek WSA. The proposed decision's consistency with management direction for WSAs is described below.

Bridge Creek Water Gap Extension

The extension and construction of fences within the Bridge Creek water gap will only affect naturalness in the immediate vicinity of the fence (in an area that is already impacted by the existing water gap fences), and decreasing further away from the water gap. The location of this water gap within the Bridge Creek drainage, and not blading the fence line for fence construction, would ensure that the water gap fences are substantially unnoticeable. In addition, by constructing these fences, ensuring livestock are unable to get into the Bridge Creek drainage (reducing opportunities for unmanaged livestock grazing in the area) the associated riparian area will continue to improve in ecological

condition, increasing the feeling of naturalness. Maintenance for these exclosures will not require motorized equipment.

The extension of the Bridge Creek water gap and protection of the Bridge Creek drainage is consistent with exceptions to the non-impairment mandate as outlined in Section 1.6.C.2.f. *Protect or enhance wilderness characteristics or values*, which states that: "actions that clearly benefit a WSA by protecting or enhancing these characteristics are allowable even if they are impairing." Reducing the risk of livestock accessing the Bridge Creek drainage (when not authorized), will allow for associated riparian areas to be protected from over-grazing, improving their ability to function properly and enhancing ecological condition, improving naturalness in the area.

In addition, the proposed Bridge Creek water gap extension is in compliance with Section 1.6.D.3.a.ii. *New Livestock Developments*, which states that "in determining whether a development meets the protecting or enhancing wilderness characteristics exception, the BLM will determine if the structure's benefits to the natural functioning ecosystem outweigh the increased presence of human developments and any loss of naturalness." Through the associated EA, BLM has determined the benefit of protecting the Bridge Creek drainage from unauthorized grazing outweighs any unnatural effects to wilderness characteristics. Naturalness in this area will be enhanced by increasing ecological functioning.

Removal of the Current Hammond / Mud Creek Boundary Fence
Removing the current Hammond / Mud Creek Boundary Fence would result in 0.7 miles of fence currently within the Bridge Creek WSA effectively removing a structure currently impairing wilderness characteristics (naturalness). This is consistent with section 1.6.B.3.b. in BLM Manual 6330 allowing the BLM to remove structures and other facilities impairing wilderness characteristics.

As fences can impair wilderness characteristics, specifically naturalness, removing the fence from the WSA will result in an increase in naturalness of the WSA and enhance wilderness characteristics. Since this fence removal will enhance wilderness characteristics, it is allowed under 1.6.C.2. *Exceptions to non-impairment* class f. *Protect or enhance wilderness characteristics or values.*

The ability to continue to maintain all existing range improvements is supported by Section 1.6.D.3.a.i. which allows for maintenance activities in the same degree and manner as was being conducted on October 21, 1976.

Based on associated analysis and consistency with BLM Manual 6330, as described above, the proposed decision is not expected to impair any of the WSAs' suitability for preservation as wilderness by Congress, and as such will comply with Section 603(c) of FLPMA.

In summary, I have determined that Alternative 2, with a few range improvements from Alternative 3, and certain protections from Alternative 4, best meet the purpose and need for action and minimizes effects to natural resources while providing for livestock grazing in a manner consistent with the 2005 Andrews/Steens RMPs, as amended by the 2015 Oregon GRSG

ARMPA, as well as the Steens Act and BLM Manual 6330 – Management of WSAs. Based on the analysis of potential impacts contained the in EA, the BLM has determined in the FONSI that the proposed Bridge Creek Area AMP will not have a significant effect on the human environment within the meaning of section 102(2)(c) of NEPA of 1969 (FONSI pp. 1–3). Thus, an EA is the appropriate level of analysis, and an EIS will not be prepared.

Right of Protest and/or Appeal

Any applicant, permittee, lessee, or other interested public may protest the proposed decision under 43 CFR 4160.1 and 4160.2, in person or in writing within 15 days after receipt of such decision to:

Don Rotell
Field Manager, Andrews/Steens Resource Areas
Burns District BLM
28910 Hwy 20 W.
Hines, OR 97738

Additionally, protests may be submitted by email to blm_or_bu_bca_amp@blm.gov.

Any protest filed should clearly and concisely state the reason(s) why the proposed decision is in error. The BLM can accept protest documents filed via email or hard copy by mail or personal delivery for consideration (43 CFR 4.22(a) and 4160.2) but cannot accept electronic filing of protest documents by any other means, including compact disc, thumb drive, or similar media, due to Federal Information Systems Security Awareness policies. Protests may be filed via email even if the BLM has not received an executed "Consent to Receive Decisions via Email" from that individual or entity. Protesters who have executed the consent form still have the option to send or deliver a hard copy notice of appeal and/or petition to stay to the office of the authorized officer by mail or personal delivery.

Per 43 CFR 4160.3(a), in the absence of a protest, the proposed decision will not become the final decision of the authorized officer. A final decision will issue after the protest period concludes.

Signature

CASEY HAMMOND Digitally signed by CASEY HAMMOND Date: 2020.12.31 19:32:48 -05'00'

Casey Hammond
Principal Deputy Assistant Secretary,
Land and Minerals Management

Date