

Chapter 2 – Alternatives

A total of four alternatives were considered by the interdisciplinary team. Alternative 1, no grazing; Alternative 2, current management and Proposed Action; and Alternative 3 are analyzed in detail and described below. A fourth alternative was considered but not analyzed in detail.

Alternatives Considered but Not Analyzed in Detail

An alternative was considered which would represent grazing systems and schedules at the time the JCRAA proposal was initiated in 1999 as published in the Notice of Intent to Publish an Environmental Impact Statement. In the last five years, several changes have been made to the current grazing strategy to adapt to changing conditions. For example:

- The Davis Creek Allotment permit was modified to discontinue use of the private land in conjunction with the Forest Service permit. Areas of unsatisfactory range condition were addressed at the same time by installing a fence to subdivide the Davis Creek Pasture into smaller pastures, improving the ability to control livestock movement. A separate fencing effort was completed in 1997, creating the Bennett Riparian Pasture on Swamp Creek for the Davis Creek Allotment. Livestock numbers were also reduced from 224 to 112 cow-calf pairs. As a result, all pastures within the Davis Creek Allotment are expected to improve in condition, stream conditions are closely controlled, and areas of unsatisfactory range condition have been addressed.
- The permittee for the Fine Allotment has started using a private parcel so that Fine Allotment pastures can be rested every third year.
- Within the last four years, the Table Mountain and Hunting Camp Allotments have been managed together, resulting in a reduction in the grazing season by 15 days.
- A 700-acre stream-bottom parcel in Swamp Creek was transferred through a land exchange to National Forest System lands in 1998. This streamside area was rested for the following three years, and an active streamside restoration project has been initiated for Swamp Creek, including planting, fencing, development of off-stream watering sites, and hardening of water gaps.

An alternative that would continue grazing practices in effect in 1999 was considered but not analyzed in detail because better strategies for managing these allotments have been developed over time and are reflected in Alternative 2 as described below.

Alternatives Considered and Analyzed in Detail

Alternative 1

Alternative 1 represents the 'no grazing' alternative. Under this alternative, all Term Grazing Permits would be canceled upon implementation of the decision and resolution of the appeals process. No permits would be issued for the eleven affected allotments.

All range developments currently in existence on the allotment would be abandoned. Subsequent decisions would need to be made regarding retention of any improvements (such as water developments) for other resource needs, and funding for maintenance would need to be secured. All interior fences and any water developments not needed for wildlife or other purposes would be removed. Permittees would be reimbursed for their amortized share of cooperative range improvements where they participated in the development (FSH 1109.13 Chapter 70). Allotment exterior boundary fences would be assigned to any adjacent permittees for continued maintenance.

Term Private Land Grazing Permits and Term Grazing Permits with On/Off Provisions would be cancelled. If the private landowners wanted to continue grazing the associated private lands, landowners would be obligated to fence the boundaries or to otherwise ensure that their livestock do not trespass on NFS lands.

Response to Key Issues

With respect to the key issues, Alternative 1 is responsive to Issues 1, 2, 3, 4, and 6 because livestock grazing would not be authorized. These issues reflect concerns with how the authorization of grazing as shown in the proposed action addresses the wild and scenic river outstandingly remarkable values, potential research natural areas, the threatened occurrences of Spalding's catchfly, and big-game winter range. Issue 5, related to limitations on adaptive livestock management techniques, would not be responded to because no livestock grazing would be authorized.

Alternative 2

Alternative 2 represents the Proposed Action described in Chapter 1. This alternative also reflects current livestock management strategies. Because many of the allotments do not operate under an Allotment Management Plan, livestock management has developed over time in response to issues. As species are listed under the Endangered Species Act, monitoring indicated that Forest Plan standards and guidelines were not being met, or permittee experience identified a more reasonable means for managing livestock within the allotment, the Annual Operating Instructions (AOI) were adjusted to address these changes. Consequently, the most recent set of AOIs for these allotments defines the current management alternative. Implementation of the allotment management plans that

emerge from this analysis would be implemented in spring 2005. A description of Alternative 2 with respect to key issues and for each of the eleven allotments follows.

Response to Key Issues

Key Issue 1 - Alternative 2 responds to Key Issue 1 (Joseph Creek Wild and Scenic River) by implementing Forest Plan standards and guidelines for residual forage within the Wild and Scenic River Corridor. Continuation of the current grazing system would continue to protect the Outstandingly Remarkable Values of Fisheries and Water Quality. The alternative would cause no increase in streambank instability, no increase in maximum summer water temperature, and no increase in cobble embeddedness in Joseph Creek.

Key Issue 2 - Alternative 2 responds to Key Issue 2 (upstream effects on the Joseph Creek Wild and Scenic River) by implementing Forest Plan standards and guidelines for shrub utilization within the Meadow Segment of Swamp Creek. This alternative also specifies a discrete grazing schedule similar to current grazing schedules specified in the Annual Operating Instructions for the Swamp Creek Allotment.

Key Issue 3 - Alternative 2 responds to Key Issue 3 (proposed research natural areas) by implementing Forest Plan standards and guidelines for residual forage within the Horse Pasture Ridge and Haystack Rock proposed Research Natural Areas. This alternative also specifies a discrete grazing schedule for the Wilder and Horse Pasture Ridge Pastures of the Table Mountain Allotment.

Key Issue 4 - Alternative 2 responds to Key Issue 4 (Spalding's catchfly) by incorporating measures to protect known occurrences on Tommy's Ridge and Fire Ridge. Protections include avoiding grazing during the critical growth period for catchfly, incorporating a grazing system that maintains or moves toward a condition of good with a static or upward trend, and adopting Forest Plan allowable utilization standards for unsatisfactory range condition for South Crow and Doe Gulch Pastures. Approximately 3032 acres of at-risk potential catchfly habitat would be surveyed, which is 28 percent of the total at-risk area.

Key Issue 5 - Alternative 2 responds to Key Issue 5 (adaptive livestock management techniques) by continuing authorization of livestock grazing as currently reflected in the permits and Annual Operating Instructions. Each proposed change in livestock management would be reviewed within the context of pre-specified animal months and seasons of use for each pasture. Tribal assertion of tribal rights for pasturing of horses would be accommodated, but may require additional NEPA analysis before a decision to implement that change could be made.

Key Issue 6 - Alternative 2 responds to Key Issue 6 (big-game winter range) by implementing Forest Plan standards and guidelines for managing residual forage in big-game winter range. Oregon Department of Fish and Wildlife biologists state that the current grazing system is not limiting forage availability for wintering big game.

Key Issue 7 - Alternative 2 responds to Key Issue 7 (range condition) by adopting Forest Plan guidelines for unsatisfactory range condition on 5 pastures. For these pastures,

specific changes in grazing systems would be made, including alerting permittees of the need to improve livestock distribution throughout these pastures, altering the season of use by deferment or rotation with rest, and assertion of Forest Plan utilization standards for areas with unsatisfactory range condition. The Bennett and Upper Swamp Pastures would be addressed by continuation of the Swamp Creek Restoration project. Livestock use of shrubs would be held to Forest Plan allowable utilization standards. Before Forest Plan standards are exceeded, livestock would be removed from these pastures.

Description by Allotment

The grazing systems for Alternative 2 are described below. Note that with each allotment, a specific approach for addressing grazing management of federal and adjoining private lands is described. Refer to the shaded box for a description of permit types. Additional components of Alternative 2 are included in Mitigation and Monitoring on Pages 50-54. Refer to Figure 2 for a map of the allotments and pastures.

Al Cunningham Allotment - Up to 321 head-months would be authorized for grazing the four-pasture Al Cunningham Allotment with 161 associated with the federal portion and 160 associated with the private portion. Livestock would graze this allotment in the spring and/or in the fall. Private lands within these four pastures would be administered under a term grazing permit with on/off provisions. Additional private lands adjoin the allotment, but are fenced from the four pastures. These private lands would be used to complete the permittee's livestock operation in the summer and winter, but would not be administered under a Forest Service permit. Refer to Table 4 for the seasons of use that would be applied to the pastures within this allotment.

Resource objectives and management considerations associated with this allotment would include:

- Provide deferment for all pastures by generally having spring use the first year, spring use and light fall use the second year, and fall use the third year.
- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Sumac Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.

Managing Federal Lands and Adjoining Private Lands

Term Grazing Permit With On/Off Provisions- Where the federal land portion of the permittee's total operation is relatively small compared to the private land portion and it is feasible to use the federal and private lands in conjunction with each other, this type of permit is issued. This permit reflects the livestock numbers, pasture rotation, and grazing season agreed to by the permit administrator and the permittee for both the federal and private land portion. Management of the private lands is otherwise the responsibility of the landowner. The private land is referred to as "non-waived" because the Forest Service does not exercise control over the grazing management of those private lands other than the numbers, rotation, and schedule for the entire allotment. The federal component of the allotment, however, is subject to Forest Service standards and guidelines for grazing management.

Term Private Land Grazing Permit - Where the private land portion of the permittee's total operation is relatively small compared to the federal land portion and it is feasible to use the federal and private lands in conjunction with each other, this type of permit is issued. Livestock numbers and season of use are based upon the capacity of the private lands. Grazing management of the private land is "waived" by the landowner to the Forest Service and is subject to the same standards and guidelines that apply to the federal land portion. Private Land Grazing Permits are issued when it is advantageous to the government to take on the additional management responsibility and resource protection.

Term Grazing Permit – In circumstances where the allotment contains federal land, but not private land, this type of permit is issued.

In addition to the circumstances described above, all of the allotments have some adjacent private lands that are used as a part of the permittee's total operation. In some cases, these lands adjoin the allotment, but are separated from the federal land portion by fences. In other cases, allotments are operated in conjunction with private base ranch properties that are far removed from the allotment. Use of these private lands is not administered under a Forest Service permit. However, for purposes of this analysis, this private land use is considered when analyzing the cumulative effects of the alternatives on the human environment as described in Chapter 3.

Cougar Creek Allotment - In the Cougar Creek Allotment, up to 2702 head-months would be authorized for grazing this nine-pasture allotment from April through October. Refer to Table 4 for the seasons of use that would be applied to the pastures within this allotment.

Resource objectives and management considerations associated with this allotment would include:

- Rest spring pastures every third year.
- Defer use of summer pastures until fall at least every third year.
- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Sumac Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.
- Defer grazing near Cougar Creek and Peavine Creek until after July 1 of each year to prevent livestock from entering these creeks when steelhead redds are present.

Crow Creek Allotment - Up to 262 head-months would be authorized for grazing the six-pasture Crow Creek Allotment from March through December, with 31 associated with private land and 231 associated with federal land. Private lands within these six pastures would be administered under a term private land grazing permit. Additional private lands adjoin the allotment, but are fenced from the six pastures. These private lands would be used to complete the permittee's livestock operation, but would not be administered under a Forest Service permit. Refer to Table 4 for the seasons of use that would be applied to the pastures within this allotment.

Resource objectives and management considerations associated with this allotment would include:

- For pastures grazed in the spring and fall, defer fall grazing at least one year in four
- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Defer grazing near Crow Creek until after July 1 of each year to prevent livestock from entering these creeks when steelhead redds are present.
- In the North Crow, South Crow, and Doe Gulch Pastures, protect Spalding's catchfly populations between-mid-May and late-August with fencing, caging, herding or avoid grazing during this period.
- In the North Crow, South Crow, and Doe Gulch Pastures, place salt so that livestock will not be encouraged to move toward the known populations of Spalding's catchfly.
- Manage the North Crow, South Crow, and Doe Gulch Pastures in a manner that improves range condition to good with a static or upward trend.
- Adopt Forest Plan utilization standards for unsatisfactory range condition in the South Crow, and Doe Gulch Pastures to provide for improving range conditions.

Davis Creek Allotment - Up to 631 head-months would be authorized to graze the six-pasture Davis Creek Allotment from March through October. Refer to Table 4 for the seasons of use that would be applied to the pastures within this allotment.

Resource objectives and management considerations associated with this allotment would include:

- Provide rest or deferment for all pastures at least every third year.
- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Elk Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.
- Defer grazing near Swamp Creek and Davis Creek until after July 1 of each year to prevent livestock from entering these creeks when steelhead redds are present.

Dobbins Allotment - Up to 378 head-months would be authorized for grazing the two-pasture Dobbins Allotment from May through November with 302 head-months associated with private land and 76 head-months associated with federal land. Private lands within these two pastures would be administered under a term grazing permit with on/off provisions. Refer to Table 4 for the seasons of use that would be applied to the pastures within this allotment.

Resource objectives and management considerations associated with this allotment would include:

- Work cooperatively with the permittee to protect any steelhead redds in Crow Creek on the private land portion of the allotment by delaying livestock entry into the pasture or fencing surveyed redds.

Elk Mountain Allotment - Up to 179 head-months would be authorized to graze the two-pasture Elk Mountain Allotment from May through September. Private lands within these two pastures would be administered under a term grazing permit with on/off provisions. Refer to Table 4 for the seasons of use that would be applied to the pastures within this allotment.

Resource objectives and management considerations associated with this allotment would include:

- Work cooperatively with the permittee to protect any steelhead redds in Elk Creek on the private land portion of the allotment by delaying livestock entry into the pasture or fencing surveyed redds.

Fine Allotment - Up to 253 head-months would be authorized for grazing the six-pasture Fine Allotment from May through November, with 4 head-months associated with private land and 249 head-months associated with federal. Refer to Table 4 for the seasons of use that would be applied to the pastures within this allotment.

Resource objectives and management considerations associated with this allotment would include:

- Provide rest or deferment for all pastures at least every third year.
- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Peavine Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.

Hunting Camp/Table Mountain Allotments - Up to 3104 head-months would be authorized to graze the three pasture Hunting Camp Allotment and the seven-pasture Table Mountain Allotment. These two allotments have been managed together for the past four years and are therefore addressed together. Private lands within the Table Mountain Pastures would be administered under a term private land grazing permit. Refer to Table 4 for the seasons of use that would be applied to pastures within these allotments.

Resource objectives and management considerations associated with these allotments would include:

- Provide rest or deferment for all pastures at least every third year.
- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Monitor access of livestock to Cougar Creek during the steelhead spawning season. If livestock are able to reach the creek, protect the redds through fencing, herding, or changing the rotation.

Joseph Creek Allotment - Up to 135 head-months would be authorized for grazing the one-pasture Joseph Creek Allotment from April through December. Livestock would graze this allotment in the spring and/or in the fall. Private lands within Joseph Creek Allotment would be administered under a term private land grazing permit. Refer to Table 4 for the season of use that would be applied to the allotment.

Resource objectives and management considerations associated with this allotment would include:

- Provide rest or deferment for the pasture at least every third year by use of another allotment or private land.

Swamp Creek Allotment - Up to 4901 head-months would be authorized to graze the nineteen-pasture Swamp Creek Allotment from April through October, with 232 head-months associated with private land and 4669 head-months associated with federal lands. Private lands within these nineteen pastures would be administered under a term private land grazing permit. Refer to Table 4 for the seasons of use that would be applied to pastures within this allotment.

Resource objectives and management considerations associated with this allotment include:

- Provide rest-rotation in the Buck, Lower Swamp, Red Fir, Baker, Barney, and Snake Pastures in order to promote improvement of upland vegetative condition.
- Defer grazing for all pastures at least every third year.
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Crow Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.
- In the Catchfly and Dorrance Pastures, review Spalding's catchfly each year. If trampling or herbivory is occurring, fence, cage, herd, or avoid grazing during the critical growth period (mid-May through late-August).
- In the Catchfly and Dorrance Pastures, place salt so that livestock will not be encouraged to move toward the known populations of Spalding's catchfly.
- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.

Table 3 summarizes land ownership within the allotment boundaries and lists the permit types associated with administering the allotments.

Table 3 - Land Ownership Within Allotments and Permit Types for Alternative 2

Allotment Name	Federal Acres	Private Acres	Total Acres	Permit Types
Al-Cunningham	1629	393	2022	3 term grazing permits with on/off provisions
Cougar Creek	17,583	0	17,583	5 term grazing permits
Crow Creek	1275	298	1573	1 term grazing permit 1 term private land grazing permit
Davis Creek	5738	0	5738	1 term grazing permit
Dobbins	255	1360	1615	1 term grazing permit with on/off provisions
Elk Mountain	207	355	562	1 term grazing permit with on/off provisions
Fine	1515	0	1515	1 term grazing permit 1 term private land grazing permit
Hunting Camp Table Mountain	10229 14581	0 488	10229 15069	1 term grazing permit 1 term private land grazing permit
Joseph Creek	1002	569	1571	1 term private land grazing permit

Swamp Creek	33047	1444	34491	4 term grazing permits 1 term private land grazing permit
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This alternative would authorize grazing of cattle on these allotments. Requests to graze horses would initiate a separate action under NEPA.

Table 4 displays the stocking and seasons of use for each of the eleven allotments and pastures, as well as management considerations that need to be addressed by the grazing schedule. Use would not begin earlier than two weeks before the established season nor end more than two weeks after the established season. If utilization standards are reached prior to planned dates, or resource conditions warrant, livestock removal shall be based on these factors rather than on the planned season of use date.

Stocking is shown in Table 4 in terms of head-months. A head-month is a unit of measure that counts one animal for 30 days. A cow-calf pair qualifies as one animal in these calculations if the calf is 6 months of age or less.

Table 4 – Summary of Alternative 2

Allotment and Pasture	Acres	Timing *	Duration	Maximum Stocking (head-months)	Resource Objectives	Management Considerations
AI-Cunningham	2022	April - October		161 federal 160 private		
South Alford	603	April - May or September - October	45 days or 70 days	60		
Sumac	243	April - May or September - October	45 days or 70 days	65	Steelhead habitat	Addressed by pasture timing and stocking
North Alford	542	April - May or September - October	45 days or 70 days	60		
Shoot Canyon	634	April - May or September - October	45 days or 70 days	100		
Cougar Creek	17,583	April - October		2702		
Trap Canyon	724	April - May	45 days	150	Big-game winter range	Addressed by pasture timing and stocking
Breeding Pasture	693	April - May	45 days	150	Steelhead habitat	Addressed by pasture timing and stocking
Sumac	1273	April - May or June - August	45 days	270	Steelhead habitat Range condition Big-game winter range	Addressed by pasture timing and stocking
Hinton Corner and Boner	383	June	30 days	100		
Cougar	5046	July - August or September - October	50 days	785	Steelhead habitat Range condition	Addressed by pasture timing and stocking
Peavine	4602	July - August or September - October	50 days	785	Steelhead habitat Range condition	Addressed by pasture timing and stocking
Baldwin	2700	August - September	30 days	475		
Muddy	2162	June	30 days	250		
Crow Creek	1573	April - December		231 federal 31 private		
North Crow	386	April – late-May September - December	60 days 90 days	125	Spalding's catchfly	Addressed by pasture timing and stocking
South Crow	116	April – late-May September - December	60 days 90 days	55	Spalding's catchfly Range condition	Addressed by pasture timing and stocking
Crow Creek & Road	220	July - August	30 days	30	Steelhead habitat	Addressed by pasture timing and stocking

Chapter 2 - Alternatives

Allotment and Pasture	Acres	Timing *	Duration	Maximum Stocking (head-months)	Resource Objectives	Management Considerations
Special Use	609	April - May September - December	60 days 90 days	90		
Doe Gulch	242	September - December	30 days	90	Spalding's catchfly Range condition	Addressed by pasture timing and stocking
Davis Creek	5738	April - October		631		
Davis South	860	June - August and September -October	60 days	325	Steelhead habitat Big-game winter range	Addressed by pasture timing and stocking
Hillside	393	June - August	15 days	120		
Elk Creek	850	April - May or June - August	20 days	155	Steelhead Habitat	Addressed by pasture timing and stocking
Starvation	625	June - August	10 days	80		
Davis West	1510	April - May, June - August, or September - October	60 days	325	Big-game winter range	Addressed by pasture timing and stocking
Davis East	1050	April - May, June - August, or September - October	30 days	200	Big-game winter range	Addressed by pasture timing and stocking
Bennett	450	July - August	45 days	70	Steelhead habitat	Addressed by pasture timing and stocking
Dobbins	1615	May - November		76 federal 302 private		
Dobbins	1615	May - November		73 federal 305 private		
Elk Mountain	562	May - September		36 federal 143 private		
Homestead	166	May - September	75 days	36 federal 143 private		
Emmons	396	May -- September	75 days	90		
Fine	1515	May - November		249 federal 4 private		
Westside	279	May - June, June - September, or October - November	60 days	50		
Homeplace	207	May - June, June - September, or October - November	60 days	80		

Allotment and Pasture	Acres	Timing *	Duration	Maximum Stocking (head-months)	Resource Objectives	Management Considerations
Peavine 1	158	May - June, June - September, or October - November	60 days	40	Steelhead habitat	Addressed by pasture timing and stocking
Peavine 2 & Peavine 3	108 110	May - June, June - September, or October - November	60 days	60		
Peavine 4	653	May - June, June - September, or October - November	60 days	80		
Hunting Camp and Table Mountain	10228 15069	April - December		2884 federal 220 private		
Tamarack (HC)	3329	June - August	30 days	250	Big-game winter range	Addressed by pasture timing and stocking
Kirkland (HC)	6515	June - August	45 days	550	Big-game winter range	Addressed by pasture timing and stocking
Holding Pasture (HC)	384	June - August	30 days	75	Big-game winter range	Addressed by pasture timing and stocking
Wilder (TM)	1680	April – May and September - December	45 days 60 days	300 spring 375 fall	Steelhead Habitat Big-game winter range Research Natural Area Wild and Scenic River	Addressed by pasture timing and stocking
Joseph Breaks (TM)	4319	April – May and September - December	45 days 60 days	300 spring 375 fall	Steelhead Habitat Big-game winter range Wild and Scenic River	Addressed by pasture timing and stocking
Thorn Hollow (TM)	1902	April - May or June - August	45 days	320	Steelhead Habitat Big-game winter range	Addressed by pasture timing and stocking
Horse Pasture Ridge (TM)	1443	June - August	30 days	360	Steelhead Habitat Research Natural Area	Addressed by pasture timing and stocking
Corral Springs (TM)	2628	June - August	45 days	420		
Table Mountain (TM)	2763	June - August	45 days	580		
Dog Fight (TM)	334	September - December	20 days	100		
Joseph Creek	1571	April - December		135		
Joseph Creek	1571	April - May and November – December	45 days 45 days	75 60	Steelhead Habitat Wild and Scenic River	Addressed by pasture timing and stocking

Chapter 2 - Alternatives

Allotment and Pasture	Acres	Timing *	Duration	Maximum Stocking (head-months)	Resource Objectives	Management Considerations
Swamp Creek	34490	April - October		4669 federal 232 private		
Lower Swamp & Snake Canyon	1327 1130	April - May	60 days	400	Steelhead habitat Big-game winter range	Addressed by pasture timing and stocking
Baker Gulch & Barney Flat	1199 1475	April - May	60 days	400	Steelhead habitat Big-game winter range	Addressed by pasture timing and stocking
Red Fir	586	April - May	60 days	250	Steelhead Habitat	Addressed by pasture timing and stocking
Lower Davis	2836	April - May	60 days	730	Steelhead Habitat Big-game winter range	Addressed by pasture timing and stocking
Miller Springs	2023	June – August or September – October	45 days	350	Big-game winter range	Addressed by pasture timing and stocking
Beef Pasture	2161	April- May, June - August, or September – October	45 days	400	Steelhead Habitat Big-game winter range	Addressed by pasture timing and stocking
Swamp Creek	183	June – August or September - October	60 days	50	Steelhead Habitat	Addressed by pasture timing and stocking
Upper Davis	2733	June - August	45 days	250	Steelhead Habitat Big-game winter range	Addressed by pasture timing and stocking
Little Elk	8921	June – October	110 days	2500	Steelhead Habitat Range Condition Big-game winter range	Addressed by pasture timing and stocking
Elk	3478	September - October	30 days	165	Steelhead Habitat	Addressed by pasture timing and stocking
Dorrance	1748	June - October	75 days	540	Steelhead Habitat Spalding's catchfly	Addressed by pasture timing and stocking
Holding Pasture	45	September - October	30 days	150	Steelhead Habitat	Addressed by pasture timing and stocking
Horse Pasture	15	Incidental use	Incidental	25	Steelhead Habitat	Addressed by pasture timing and stocking
Upper Swamp	1344	June – August or September - October	60 days	150	Steelhead Habitat Riparian Plants Big-game winter range	Addressed by pasture timing and stocking
Bennett	1210	June – August or September - October	60 days	150	Steelhead Habitat Riparian Plants	Addressed by pasture timing and stocking
Buck Creek	2076	April - May	60 days	400	Steelhead Habitat Wild and Scenic River	Addressed by pasture timing and stocking
Catchfly		September - October	30 days	75	Steelhead Habitat Spalding's catchfly	Addressed by pasture timing and stocking

Note that the stocking for each allotment is not the sum of the stocking for each pasture. Not all pastures are grazed each year due to rest and rotation schedules.

Alternative 3

Alternative 3 was developed with acknowledgement that changes will occur in resource conditions, issues, and agency direction throughout time. This alternative incorporates adaptive management techniques to address those changes. Potential changes that this alternative may respond to include wildfire, drought, ranching operational changes, ecological conditions, Federal listing of additional species under the Endangered Species Act, Forest Plan revision, and possible execution of Tribal treaty rights. Alternative 3 is the 'preferred alternative'.

This alternative departs from the current management by identifying areas where specific resource objectives influence livestock grazing patterns. It acknowledges that grazing management systems are more responsive to the environment when dictated by range condition rather than by fences or pasture/allotment boundaries. Pasture and allotment boundaries were developed over time for a variety of reasons. However, those reasons may not persist through time, and grazing boundaries may be adjusted to better meet desired resource conditions and/or grazing operational needs.

Overlaid on this base are the maximum duration and stocking that could occur within each allotment, which are the same as for Alternative 2. Alternative 3 proposes the same level of overall livestock forage utilization across the 11 allotments as Alternative 2. The Crow Creek Allotment contains an adaptive feature where a reduction in stocking would occur if other efforts to improve range condition in the South Crow and Doe Gulch Pastures do not occur. The stocking level for Alternative 3 is based on Alternative 2 because current management indicates that only 5 of the 65 pastures within this analysis area are indicating unsatisfactory range conditions. Of these 5 pastures, unsatisfactory condition in 4 pastures is a relic of historical grazing (shrub depletion in the Upper Swamp and Bennett Pastures and persistence of annual grasses in the South Crow and Doe Gulch Pastures). Consequently, Alternative 3 uses stocking levels associated with Alternative 2 as an indicator of adequate carrying capacity for these allotments.

Under Alternative 3, livestock permittees may or may not continue to operate solely on the allotment to which they are assigned under Alternative 2. Alternative 3 allows a particular herd of livestock the flexibility to cross allotment boundaries, if needed. Pasture rotations and boundaries would be altered to address changes in climate, resource conditions, management direction, and grazing issues while still meeting the base resource objectives.

Response to Key Issues

Alternative 3 responds to the key issues described in Chapter 1 as follows.

Key Issue 1 - Alternative 3 responds to Key Issue #1 (Joseph Creek Wild and Scenic River water quality) by incorporating forage and browse utilization standards specific to the Wild and Scenic River corridor. Grazing within the corridor will be managed for a good to excellent ecological condition, and riparian shrubs will be browsed by livestock and big game to no more than 20 percent.

Much of this area coincides with the Table Mountain/Joseph Breaks Big Game Winter Range Area mentioned in Key Issue 6. The Wild and Scenic River corridor will follow the same standards for residual forage (50 percent of the plant material is retained at end of fall grazing).

Key Issue 2 – Alternative 3 responds to Key Issue 2 (upstream effects on the Joseph Creek Wild and Scenic River) by incorporating forage and browse utilization standards specific to the Swamp Meadow portion of the Upper Swamp Pasture and the Bennett Pasture of the Swamp Creek Allotment.

To address riparian function (and consequently, water quality) within Swamp Creek, this alternative would implement a monitoring program for shrubs and streambank stability to ensure restoration is occurring at a natural rate. Rather than relying on riparian terrace stubble height to govern riparian conditions, the annual monitoring protocol would ensure that objectives for shrubs and streambank stability were being met. Grazing seasons and stocking would be adjusted to meet these objectives.

Key Issue 3 – Alternative 3 responds to Key Issue 3 (potential Research Natural Areas) by incorporating forage utilization standards specific to the Horse Pasture Ridge and Haystack Rock potential Research Natural Areas. Grazing within these areas will be managed to maintain a good or excellent range condition. This will occur by implementing allowable utilization standards of no more than 10 percent.

Key Issue 4 - Alternative 3 responds to Key Issue 4 (Spalding's catchfly) by incorporating into the alternative description the same protections for known occurrences as prescribed in Alternative 2. Alternative 3 also sets priorities for inventorying areas where potential habitat for Spalding's catchfly has been identified and is at risk to impacts from livestock grazing. A total of 5,922 to 10,662 acres of risk areas would be inventoried. If populations are found, they would be protected similar to the known populations in the Crow Creek and Swamp Creek Allotments.

Key Issue 5 – Alternative 3 responds to Key Issue 5 (adaptive management) by providing adaptive management tools such as changing allotment boundaries, pasture boundaries, providing larger grazing areas, changes in season or numbers to allow for more flexibility in grazing management. These tools would be used to address specific climatic, or resource conditions, or to address ranching operational changes, wildfire, or changing agency management direction. The overall stocking and season of use would be the same for each allotment under Alternatives 2 and 3. However, Alternative 3 does not prescribe specific stocking or duration of grazing for each pasture. Unless a resource objective or the range readiness of a pasture constrains the grazing time period, Alternative 3 allows for a wider range of dates for scheduling that grazing period in specific pastures than does Alternative 2.

Examples of situations that would benefit from the adaptive approach of this alternative include the following hypothetical situations:

- A summer wildfire eliminates the opportunity to graze two pastures the following spring. Instead, the livestock are allowed to graze an adjoining pasture so long as

utilization standards are not exceeded and resource objectives are met.

- A pasture fence was placed over 30 years ago to resolve a dispute between former permittees. The dispute no longer exists, and the current permittees want to move the fence to improve their ability to control livestock access to riparian areas.
- A pasture fence splits two pastures from north to south when the better configuration for protection of steelhead habitat would be to split the pastures from east to west.
- A new plant is added to the federal list of threatened and endangered species. To protect the plant, a riparian pasture fence boundary needs to include an additional area.

Alternative 3 would authorize grazing of cattle or horses on these allotments. Appropriate conversions for animal type (such as cow-calf pairs, yearlings, steers, bulls, dry cows, horses) would be made to ensure that the maximum stocking (head-months) identified for each allotment was not exceeded. Requests to graze horses, such as those associated with assertion of tribal treaty rights, would be accommodated under this alternative without requiring further analysis under NEPA.

Key Issue 6 - Alternative 3 responds to Key Issue 6 (big-game winter range) by incorporating forage utilization standards specific to big-game winter range areas that are more restrictive than Forest Plan utilization standards. While Oregon Department of Fish and Wildlife biologists identified no current grazing management strategies that conflict with big game wintering, Alternative 3 contains an adaptive management component that could inadvertently introduce a conflict with big-game. In addition, current elk populations are below the management objective due to several survival factors such as open road densities, hiding cover, hunting seasons, and predation. Consequently, this alternative establishes a more restrictive forage utilization standard for the big-game concentration areas in the event that elk populations increase to the management objective and the adaptive component of this alternative causes a change in livestock grazing systems. In each of these five concentration areas, grazing system will ensure that at least 50 percent of the plant material is maintained at the end of the grazing season so that wintering big game have adequate forage.

Key areas would be read, or established where needed, within elk winter range to measure residual plant height in early October. If plants such as Idaho fescue or bluebunch wheatgrass fall below 50% of normal plant growth then livestock would be moved to maintain ample forage for elk and other wild ungulates.

Key Issue 7 – Alternative 3 responds to Key Issue 7 by implementing a more adaptive set of grazing regimes for the 11 allotments. If monitoring indicates that a decline in range condition is developing, the period of time when pastures are grazed could be changed with greater flexibility than in Alternative 2.

Description by Allotment

The grazing systems for Alternative 3 are described below. Additional components of Alternative 3 are included in Mitigation and Monitoring on Pages 50-54. Refer to Figure 2 for a map of the allotments and pastures.

Al-Cunningham Allotment - The amount of forage production available from the Al-Cunningham Allotment would remain the same as Alternative 2 for the same overall grazing season. The allotment would provide up to 321 head-months of forage production between April and October. However, Alternative 3 allows more flexibility to accommodate anticipated changes in land ownership in and around this allotment. The private land within and adjacent to this allotment is included in the proposed Blue Mountain Land Exchange. These private lands contain ranch facilities that support hay production and would be acquired as National Forest System lands. The Al-Cunningham Allotment is grazed as part of this private land. Acquisition of the ranch and agricultural lands will create an opportunity to change management of this allotment. The allotment management plan will emphasize restoration of steelhead habitat and the adjoining riparian area along Joseph Creek and control of noxious weeds and other undesirable non-native species. Depending on the current permittee's interest in continuing the grazing permit, the area could be managed in a variety of ways: continue grazing under the current system, preserve as a grass-banking area to provide deferment or rest of spring pastures for other allotments in the area, or reallocate the area to adjoining allotments.

Resource objectives and management considerations applicable to the Al-Cunningham Allotment are as follows:

- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Sumac Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.

Cougar Creek Allotment - The amount of forage production available from the Cougar Creek Allotment would remain the same as Alternative 2 for the same overall grazing season. The allotment would provide up to 2702 head-months of forage production between April and October. The Cougar Creek Allotment includes several prescribed burning projects. The Haypen Vegetation Management Project is in the process of implementation and involves prescribed burning to reduce natural fuels accumulations in much of the western portion of the allotment. The Baldwin Vegetation Management Project is in the planning process, and will also reduce natural fuels accumulations through prescribed burning, but in the northern portion of the allotment. While these projects are scheduled for fuels reduction, they are accomplished using natural features and roads for control, and consequently burn some of the intervening grasslands. Flexibility in grazing schedules between pastures and adjacent allotments such as Hunting Camp and Table Mountain and Al Cunningham Allotments will be needed to ensure prescribed burning and grazing

activities allow for disturbance recovery.

Resource objectives and management considerations applicable to the Cougar Creek Allotment are as follows:

- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Address unsatisfactory range conditions within the Sumac Pasture through rest or deferment and by applying allowable utilization standards from the Forest Plan for unsatisfactory range conditions.
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Sumac Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.
- Defer grazing near Cougar Creek and Peavine Creek until after July 1 of each year to prevent livestock from entering these creeks when steelhead redds are present.
- Maintain big game winter range in the Cougar Creek Area by retaining at least 50 percent plant material of grasses in the fall.

Crow Creek Allotment - The amount of forage production available from the Crow Creek Allotment would initially remain the same as Alternative 2 for the same overall grazing season. The allotment would provide up to 262 head-months of forage production between April and October. The South Crow Creek and Doe Gulch Pastures in this allotment exhibit areas of unsatisfactory range condition. These pastures also contain occurrences of Spalding's catchfly. Grazing of these pastures will only be allowed if grazing promotes improved rangeland condition and does not lead to adverse impacts on Spalding's catchfly. The seasons of use and number of livestock permitted within the South Crow and Doe Gulch Pastures would be altered if an improving trend could not be maintained in problem areas. Options may also be available for moving livestock currently permitted with this allotment to the Swamp Creek Allotment or to the Al-Cunningham Allotment, depending on its status after the Blue Mountain Land Exchange.

Resource objectives and management considerations applicable to the Crow Creek Allotment are as follows:

- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Address unsatisfactory range conditions in the South Crow and Doe Gulch Pastures by reducing livestock numbers, changing seasons of use, or eliminating grazing altogether if an upward trend in conditions cannot be achieved.
- Defer grazing near Crow Creek until after July 1 of each year to prevent livestock from entering these creeks when steelhead redds are present.
- In the North Crow, South Crow, and Doe Gulch Pastures, protect Spalding's catchfly populations between-mid-May and late-August with fencing, caging, herding or avoid grazing during this period.
- In the North Crow, South Crow, and Doe Gulch Pastures, place salt so that livestock

will not be encouraged to move toward the known populations of Spalding's catchfly.

- Manage the South Crow and Doe Gulch Pastures in a manner that improves range condition to 'good' with a static or upward trend.
- Use Forest Plan allowable utilization standards for unsatisfactory range condition in the South Crow and Doe Gulch Pastures to provide for improving range conditions.

Davis Creek Allotment - The amount of forage production available from the Davis Creek Allotment would remain the same as Alternative 2 for the same overall grazing season. The allotment would provide up to 631 head-months of forage production between April and October. However, Alternative 3 would allow more flexibility in grazing management from changes in resource conditions, issues, agency direction, or operations.

Resource objectives and management considerations applicable to the Davis Creek Allotment are as follows:

- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Elk Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.
- Defer grazing near Swamp Creek and Davis Creek until after July 1 of each year to prevent livestock from entering these creeks when steelhead redds are present.
- Maintain big-game winter range in the Starvation Ridge Area by retaining at least 50 percent plant material of grasses in the fall.

Dobbins Allotment - The amount of forage production available from the Dobbins Allotment would remain the same as Alternative 2 for the same overall grazing season. The allotment would provide up to 378 head-months of forage production between May and November. However, Alternative 3 would allow more flexibility in grazing management from changes in resource conditions, issues, agency direction, or operations.

Resource objectives and management considerations applicable to the Dobbins Allotment are as follows:

- Work cooperatively with the permittee to protect any steelhead redds in Crow Creek on the private land portion of the allotment by delaying livestock entry into the pasture or fencing surveyed redds.

Elk Mountain Allotment - The amount of forage production available from the Elk Mountain Allotment would remain the same as Alternative 2 for the same overall grazing season. The allotment would provide up to 179 head-months of forage production between May and October. However, Alternative 3 would allow more flexibility in grazing management from changes in resource conditions, issues, agency direction or operations.

Resource objectives and management considerations applicable to the Elk Mountain Allotment are as follows:

- Work cooperatively with the permittee to protect any steelhead redds in Elk Creek on the private land portion of the allotment by delaying livestock entry into the pasture or fencing surveyed redds.

Fine Allotment - The amount of forage production available from the Fine Allotment would remain the same as Alternative 2 for the same overall grazing season. The allotment would provide up to 253 head-months of forage production between April and October. However, Alternative 3 would allow more flexibility in grazing management from changes in resource conditions, issues, agency direction, or operations. The Fine Allotment has two pastures that do not adjoin the other four pastures. Where opportunities arise, this alternative would allow boundary adjustments between adjoining allotments to improve operations.

Resource objectives and management considerations applicable to the Fine Allotment are as follows:

- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Peavine Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.

Hunting Camp/Table Mountain Allotments - The amount of forage production available from the Hunting Camp/Table Mountain Allotments would remain the same as Alternative 2 for the same overall grazing season. The allotment would provide up to 3104 head-months of forage production between April and December. However, Alternative 3 would allow more flexibility in grazing management from changes in resource conditions, issues, agency direction, or operations.

Resource objectives and management considerations applicable to the Hunting Camp/Table Mountain Allotment are as follows:

- To promote riparian health for steelhead habitat, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season.
- Monitor access of livestock to Cougar Creek during the steelhead spawning season. If livestock are able to reach the creek, protect the redds through fencing, herding, or changing the rotation.
- Maintain adequate big-game winter range in the Table Mountain/Joseph Breaks Area and the Hunting Camp Ridge Area by retaining at least 50 percent plant material of grasses in the fall.
- Maintain range conditions within the Wilder and Joseph Breaks Pastures that are

within the Joseph Creek Wild and Scenic River corridor in a good to excellent ecological condition. Allow no more than 20 percent shrub utilization, and allow no more than 50 percent utilization of grasses.

- Grazing within the Wild and Scenic River corridor will be conducted so that livestock do not congregate on the Joseph Creek trail.
- Maintain the vegetative values of the potential Research Natural Areas for Haystack Rock and Horse Pasture Ridge by allowing no more than 10 percent utilization of forage in these areas.

Joseph Creek Allotment - The amount of forage production available from the Joseph Creek Allotment would remain the same as Alternative 2 for the same overall grazing season. The allotment would provide up to 135 head-months of forage production between April and December. However, Alternative 3 would allow more flexibility in grazing management from changes in resource conditions, issues, agency direction, or operations.

Resource objectives and management considerations applicable to the Joseph Creek Allotment are as follows:

- Maintain vegetative conditions within the Joseph Creek Pasture that are within the Joseph Creek Wild and Scenic River corridor in a good to excellent ecological condition. Allow no more than 20 percent shrub utilization, and allow no more than 50 percent utilization of grasses.
- Grazing within the Wild and Scenic River corridor will be conducted so that livestock do not congregate on the Joseph Creek trail.

Swamp Creek Allotment - The amount of forage production available from the Swamp Creek Allotment would remain the same as Alternative 2 for the same overall grazing season. The Swamp Creek Allotment is grazed by several permittees, one of which has recently elected 'non-use' of the permit for 3 of the last 4 years. If all of the permittees elect to stock the allotment in any given year, it is not likely that utilization standards could be met. At each annual permit review meeting, the permittees would need to agree upon an approach for voluntarily reducing stocking to the carrying capacity of the allotment.

Alternative 3 addresses riparian conditions along the Meadow Segment of Swamp Creek by establishing a monitoring protocol related to shrub utilization and streambank stability.

Resource objectives and management considerations applicable to the Swamp Creek Allotment are as follows:

- Maintain adequate big-game winter range in the Starvation Ridge Area and Miller Ridge Area by retaining at least 50 percent plant material of grasses in the fall.
- Maintain vegetative conditions within the Buck Pasture that are within the Joseph Creek Wild and Scenic River corridor so they are in good to excellent ecological condition. Allow no more than 20 percent shrub utilization, and allow no more than 50 percent utilization of grasses.
- Grazing within the Wild and Scenic River corridor will be conducted so that

livestock do not congregate on the Joseph Creek trail or lowest ½ mile of the Swamp Creek trail.

- Except where otherwise noted, require that at least a 4-inch stubble height at the greenline and a 3-inch stubble height on riparian terraces remain at the end of the season to promote riparian health for steelhead habitat.
- Within the Bennett Pasture and the Swamp Meadow portion of the Upper Swamp Pasture, establish a monitoring protocol for shrubs and streambank stability based upon recommendations from the National Riparian Service Team (2004).
- Prior to grazing during the steelhead spawning and incubation period (April 15 - July 1), monitor Crow Creek for the presence of steelhead redds. If redds are found, protect them through fencing or changing the rotation.
- In the Catchfly and Dorrance Pastures, review Spalding’s catchfly each year. If trampling or herbivory is occurring, fence, cage, herd, divide the pasture through fencing, or avoid grazing during the critical growth period (mid-May through late-August).
- In the Catchfly and Dorrance Pastures, place salt so that livestock will not be encouraged to move toward the known populations of Spalding’s catchfly.
- Manage the Catchfly and Dorrance Pastures in a manner that maintains ecological condition of ‘good’ with a static or upward trend.

Table 5 – Land Ownership Within Allotments and Permit Types for Alternative 3

Allotment Name	Federal Acres	Private Acres	Total Acres	Permit Types
Al-Cunningham	1629	393	2022	<p>For National Forest System lands - any combination of term permits that do not exceed the maximum stocking.</p> <p>For private land – any combination of term private land permits or on-off permits for private lands in satisfactory range condition.</p>
Cougar Creek	17,583	0	17,583	
Crow Creek	1275	298	1573	
Davis Creek	5738	0	5738	
Dobbins	255	1360	1615	
Elk Mountain	207	355	562	
Fine	1515	0	1515	
Hunting Camp	10229	0	10229	
Table Mountain	14581	488	15069	
Joseph Creek	1002	569	1571	
Swamp Creek	33047	1444	34491	

Table 6 displays the stocking and seasons of use for Alternative 3. Under Alternative 3, the overall stocking and season of use would be the same for each allotment under Alternatives 2 and 3. However, Alternative 3 does not prescribe specific stocking or

duration of grazing for each pasture. Unless a resource objective or the range readiness of a pasture constrains the grazing time period, Alternative 3 allows for a wider range of dates for scheduling that grazing period in specific pastures than does Alternative 2.

Table 6 – Summary of Alternative 3

Allotment and Pasture	Acres	Timing *	Duration	Maximum Stocking (head-months)	Resource Objectives	Management Considerations
AI-Cunningham	2022	April - October		161 federal 160 private		
South Alford	603	April - October	Determined by range condition and resource objectives			
Sumac	243	April - October			Steelhead habitat	Monitor redds, protect if found
North Alford	542	April - October				
Shoot Canyon	634	April - October				
Cougar Creek	17,583	April - October		2702		
Trap Canyon	724	April - October	Determined by range condition and resource objectives		Big-game winter range	Retain 50% plant material on October 1
Breeding Pasture	693	April - October			Steelhead habitat	Monitor redds, protect if found
Sumac	1273	April - October			Steelhead habitat	Monitor redds, protect if found
					Range condition	Apply unsatisfactory range condition utilization standards
Hinton Corner and Boner	383	April - October			Big-game winter range	Retain 50% plant material on October 1
Cougar	5046	April - October			Steelhead habitat	Graze after July 1
Peavine	4602	April - October			Steelhead habitat	Graze after July 1
Baldwin	2700	April - September				
Muddy	2162	April - October				
Crow Creek	1573	April - December		231 federal 31 private		
North Crow	386	April – June 1 September - December	Determined by range condition and resource objectives		Spalding's catchfly	Avoid grazing during critical growth period
South Crow	116	April – June 1			Spalding's catchfly	Avoid grazing during

Chapter 2 - Alternatives

Allotment and Pasture	Acres	Timing *	Duration	Maximum Stocking (head-months)	Resource Objectives	Management Considerations
		September - December			Range condition	critical growth period Apply unsatisfactory condition utilization standards or defer use
Crow Creek & Road	220	July - October			Steelhead habitat	Graze after July 1
Special Use	609	April - December				
Doe Gulch	242	September - December			Spalding's catchfly Range condition	Avoid grazing during critical growth period Apply unsatisfactory condition utilization standards or defer use
Davis Creek	5738	April - October		631		
Davis South	860	April - October	Determined by range condition and resource objectives		Steelhead habitat	Monitor for redds, protect if found
Hillside	393	April - October			Big-game winter range	Retain 50% plant material on October 1
Elk Creek	850	April - October			Steelhead Habitat	Monitor for redds, protect if found
Starvation	625	April - October				
Davis West	1510	April - October				
Davis East	1050	April - October			Big-game winter range	Retain 50% plant material on October 1
Bennett	450	July - October			Steelhead habitat	Graze after July 1
Dobbins	1615	May - November				73 federal 305 private
Dobbins	1615	May - November	Determined by range condition and resource objectives			
Elk Mountain	562	May - October		36 federal 143 private		
Homestead	166	May - October	Determined by range condition and resource objectives			
Emmons	396	May -- October				

Allotment and Pasture	Acres	Timing *	Duration	Maximum Stocking (head-months)	Resource Objectives	Management Considerations
Fine	1515	April - November		249 federal 4 private		
Westside	279	April - November	Determined by range condition and resource objectives			
Homeplace	207	April - November				
Peavine 1	158	April - November			Steelhead habitat	Monitor for redds, protect if found
Peavine 2 & Peavine 3	108 110	April - November				
Peavine 4	653	April - November				
Hunting Camp and Table Mountain	10228 15069	April - December		2884 federal 220 private		
Tamarack (HC)	3329	June - October	Determined by range condition and resource objectives		Big-game winter range	Retain 50% plant material on October 1
Kirkland (HC)	6515	June – October			Big-game winter range	Retain 50% plant material on October 1
Holding Pasture (HC)	384	June - October			Big-game winter range	Retain 50% plant material on October 1
Wilder (TM)	1680	April - December			Steelhead habitat	Adhere to PacFish standards Retain 50% plant material on October 1 Allow no more than 10% utilization of RNA Allow no more than 20% shrub and 50% forage utilization in WSR
					Big-game winter range	
					Research Natural Area	
					Wild and Scenic River	
Joseph Breaks (TM)	4319	April - December	Steelhead habitat	Adhere to PacFish standards Retain 50% plant material on October 1 Allow no more than 20% shrub and 50% forage utilization in WSR		
			Big-game winter range			
Thorn Hollow (TM)	1902	April - December	Steelhead habitat	Monitor for livestock access to Cougar Creek Retain 50% plant material on October 1		
			Big-game winter range			

Chapter 2 - Alternatives

Allotment and Pasture	Acres	Timing *	Duration	Maximum Stocking (head-months)	Resource Objectives	Management Considerations
Horse Pasture Ridge (TM)	1443	June - October			Steelhead habitat	Stream inaccessible to livestock Allow no more than 10% utilization in RNA
Corral Springs (TM)	2628	June - October				
Table Mountain (TM)	2763	June - October				
Dog Fight (TM)	334	September - December				
Joseph Creek	1571	April - December		135		
Joseph Creek	1571	April - December	Determined by range condition and resource objectives		Steelhead habitat Wild and Scenic River	Stream inaccessible to livestock Allow no more than 20% shrub and 50% forage utilization in WSR
Swamp Creek	34490	April - October		4669 federal 232 private		
Lower Swamp & Snake Canyon	1327 1130	April - October	Determined by range condition and resource objectives		Steelhead habitat Big-game winter range	Fencing in place Retain 50% plant material on October 1
Baker Gulch & Barney Flat	1199 1475	April - October			Steelhead habitat Big-game winter range	Stream inaccessible to livestock Retain 50% plant material on October 1
Red Fir	586	April - October			Steelhead habitat	Adhere to PacFish standards
Lower Davis	2836	April - October			Steelhead habitat Big-game winter range	Adhere to PacFish standards Retain 50% plant material on October 1
Miller Springs	2023	May - October			Big-game winter range	Retain 50% plant material on October 1
Beef Pasture	2161	April - October			Steelhead habitat Big-game winter range	Fencing in place Retain 50% plant material on October 1
Swamp Creek	183	July - October			Steelhead habitat	Graze after July 1
Upper Davis	2733	July - October			Steelhead habitat	Fencing in place

Allotment and Pasture	Acres	Timing *	Duration	Maximum Stocking (head-months)	Resource Objectives	Management Considerations
					Big-game winter range	Retain 50% plant material on October 1
Little Elk	8921	July – October			Steelhead habitat Big-game winter range	Graze after July 1 Retain 50% plant material on October 1
Elk	3478	July - October			Steelhead habitat	Graze after July 1
Dorrance	1748	June - October			Steelhead habitat Spalding's catchfly	Graze after July 1 Avoid grazing during critical growth period
Holding Pasture	45	September - October			Steelhead habitat	Graze after July 1
Horse Pasture	15	July - October			Steelhead habitat	Graze after July 1
Upper Swamp	1344	April - October			Big-game winter range Meadow Segment	Retain 50% plant material on October 1 Adopt NRST monitoring protocol
Bennett	1210	April - October			Meadow Setement	Adopt NRST monitoring protocol
Buck Creek	2076	April - October			Steelhead habitat Wild and Scenic River	Monitopr for redds, protect if found Allow no more than 20% shrub and 50% forage utilization in WSR
Catchfly		March – May 15 September - October			Steelhead habitat Spalding's catchfly	Monitor for redds, protect if found Avoid grazing during critical growth period

Activities Common to Alternatives 2 and 3

Range Improvements - Permittees are responsible for maintaining fences and water developments as described in each permit. Approximately 205 miles of fence and 265 water improvements occur within the JCRAA and require maintenance. Maintenance and installation of range improvements is an activity that is categorically excluded from analysis in an Environmental Impact Statement or Environmental Assessment. As timely and necessary, these proposals will be addressed through environmental analysis commensurate with categorically excluded activities.

Changes in Private Ownership – Permits to graze on federal lands are frequently associated with private inholdings. Some of these private holdings are grazed under Forest Service term grazing permits with on/off provisions or term private land grazing permits. If land ownership changes or if a permittee wishes to change a permit between waived and non-waived status, the permittee would need to provide sufficient information that range conditions are at least satisfactory on the private land. The Forest Service recognizes that these permits provide an equitable way to deal with private inholdings while reducing the amount of fencing, but the agency would want to ensure that unsubstantiated estimates of capacity on private land do not become a burden on federal land.

Range Management Strategies – Range management strategies that are based on range science are incorporated into the Allotment Management Plans and Annual Operating Instructions specific to each allotment/pasture and specific to resource needs of a given year. The objective behind these strategies is to manage a healthy ecosystem in mid seral stage with upward trend. These objectives are met through an ongoing monitoring and adjustment process. Monitoring is completed through identification of key areas and establishment of utilization standards.

Management strategies are subject to change in response to resource conditions, climate, listed species, or Forest Plan guidance. Range management strategies applicable to both Alternatives 2 and 3 include the following:

- Avoid grazing of pastures during the spring and early summer months (March-June) on a repetitive annual basis.
- Rest or defer use of pastures at least every third year through use of pasture rotations or private land.
- Use salt placement and herding to improve distribution of livestock throughout pastures.
- When water resources are low, consider hauling water or moving cattle to other pastures or off forest.
- Incorporate the following utilization standards from the Forest Plan (Pages 4- 52 and 53) into the Annual Operating Instructions. The numbers in this table indicate what percentage of the available forage may be used by the end of the season and

are used for allotments where a moderate level of fencing and water developments are present. Livestock are removed from the pasture before these standards are exceeded.

Table 7 – Forest Plan Allowable Utilization Standards

Range condition	Riparian		Upland		
	Grass and grass-like species	Shrubs	Grass and grass-like species		Shrubs
			Forested	Grasslands	
Satisfactory	45%	40%	45%	55%	45%
Unsatisfactory	0-35%	0-30%	0-35%	0-35%	0-30%

To assist permittees and range administrators in implementing the utilization standards above, forage weight-height curves were developed for use at the Wallowa Mountains Office of the Wallowa-Whitman National Forest (refer to the analysis file). An approximate conversion of the previous utilization standards for upland grasses to stubble height is as follows:

- Upland mixed species = 3 inches
- Idaho fescue = 2 inches
- Bluebunch wheatgrass = 4 inches

PacFish standards were incorporated into the Forest Plan which state that grazing will be managed in a manner that does not prevent the attainment of Riparian Management Objectives. This standard was interpreted in the Region 6 PacFish Grazing Guideline Revision memo dated August 14, 1995 and the PacFish/InFish Monitoring Guidelines for the Wallowa-Whitman Grazing Program dated May 6, 1996. Allowable utilization of riparian vegetation was established by these memos as shown in Table 8. Additional stubble height is required to be left ungrazed where riparian conditions are unsatisfactory.

Table 8 - Conversion of Allowable Utilization Standards to Residual Stubble Height

Range condition - Riparian condition	Riparian		
	Grass and Grass-like Greenline	Sedge and Rush Sinks	Kentucky Bluegrass / Mixed Species
Satisfactory – Proper Functioning Condition	4 inches	3 inches	2 inches
Unsatisfactory – Functioning at Risk or Nonfunctioning	6 inches	4 inches	4 inches

Alternative Comparison and Summary

The following comparison displays Alternatives 2 and 3 in general terms to assist the reader in understanding the differences between the action alternatives.

Alternative 2	Alternative 3
<p>Assigns livestock numbers and seasons of use for each allotment and for each pasture</p>	<p>Defines resource objectives</p>
<p>Addresses resource concerns with the proposed allotment and pasture rotation through mitigation</p>	<ul style="list-style-type: none">• Spalding's catchfly• Summer steelhead• Big game winter range• Potential Research Natural Areas• Wild and Scenic River corridor• Range condition
<p>Allows changes in pasture rotation within an individual allotment provided</p> <ul style="list-style-type: none">• mitigation is added to address resource concerns• pasture seasons of use are maintained• pasture head months are not exceeded	<p>Sets maximum livestock head months and grazing season for each allotment</p>
	<p>Allows movement of livestock among pastures and allotments provided</p> <ul style="list-style-type: none">• resource objectives are met• allotment head months are not exceeded• allotment seasons are not exceeded

Table 9 illustrates how each alternative responds to the indicators identified for each of the key issues.

Table 9 – Key Indicators by Alternative

Issue and Indicators	Alternative 1	Alternative 2	Alternative 3
Issue 1: Wild and Scenic River			
• Percent streambank stability in 10 yrs	95	95	95
• Increases In summer water temperature in 10 yrs	0	0	0
• Increases in % cobble embeddedness in 10 yrs	0	0	0
• Decreases in stream shade in 10 yrs	0	0	0
• Allowable shrub utilization in WSR Corridor	wildlife only	30	20
• Allowable forage utilization in WSR Corridor	wildlife only	55	50
Issue 2: Wild and Scenic River			
• Allowable utilization of shrubs in the Meadow Segment of Swamp Creek	0	Up to 30	Determined by monitoring
• Strambank stability along the meadow section of Swamp Creek in five to ten years	95	75 to 85	85 to 95
Issue 3 - Potential Research Natural Areas			
• Area within the potential Horse Pasture Ridge RNA maintained as good or excellent	250 acres	250 acres	250 acres
• Area within the potential Haystack Rock RNA maintained as good or excellent	400 acres	400 acres	400 acres
Issue 4 – Spalding’s Catchfly			
• Spalding’s catchfly risk areas subjected to livestock grazing impacts	0	10,662	10,662
• Acres of risk areas that would be inventoried for the presence of Spalding’s catchfly within 3 to 6 years	0	3,032	5922 to 10,662
Issue 5 – Adaptive Management			
• Treaty rights asserted without further analysis?	No	No	Yes
• Minimum area where stocking is specified.	Not Applicable	Pasture	Allotment
Issue 6 – Big Game Winter Range			
• Percent plant material retained at the end of fall grazing in the Starvation Ridge Area, Miller Ridge Area, Hunting Camp Ridge Area, Two Bit / Sumac Area and Table Mountain/Joseph Breaks Area.	100 %	45 %	50 %
Issue 7 – Range Condition			
• Range conditions within 10 to 20 years in the Sumac Pasture	Satisfactory	Satisfactory	Satisfactory
• Range conditions within 10 to 20 years in the South Crow and Doe Gulch Pastures	Unsatisfactory	Unsatisfactory	Unsatisfactory
• Allowable utilization of shrubs in the Meadow Segment of Swamp Creek	0%	Less than 30%	Determined by monitoring

Mitigation Measures

Mitigation measures pertinent to the action alternatives are listed below. Mitigation measures address potential impacts by avoiding adverse impacts, minimizing adverse impacts by limiting activities, or rectifying adverse impacts through rehabilitation. In addition to the mitigation measures listed below, measures are included from the Forest Plan (including PacFish/InFish) and agreements reached during the ESA consultation process for this proposal.

Mitigation Measures Common to Alternatives 2 and 3

- Riparian/upland utilization standards will be met through season of use, riding, placing salt, and maintaining upland water sources.
- Allotments identified with unsatisfactory range conditions will be managed to promote upward trends. Specific direction will be identified in the subsequent Annual Operating Instructions for each allotment.
- Permittees will be provided with a current list of noxious weeds and Threatened and Endangered plant identification material. A map showing known noxious weed infestations and Threatened and Endangered plant sites within each allotment will be reviewed at each annual operating meeting. Permittees will be asked to add known noxious weed locations not shown on the map.
- To reduce the risk of introducing noxious weeds, all equipment used to maintain water developments will be cleaned in a manner sufficient to prevent noxious weeds from being carried onto the analysis area. This requirement does not apply to passenger vehicles or other equipment used exclusively on roads. Cleaning will occur off of National Forest System lands. Cleaning will be inspected and approved by the Forest Officer in charge of administering the project.
- To reduce the risk of introducing noxious weeds, any seed used in the maintenance of water developments or in restoration projects will be certified weed free.
- To reduce cattle impacts on riparian vegetation and stream channels, permittees will herd cattle during the grazing season at a frequency needed to reduce livestock concentration in riparian areas.
- To reduce cattle impacts on riparian vegetation and stream channels, permittees will select stock driveway locations that are on existing roads or avoid riparian areas.
- To reduce cattle impacts on riparian vegetation and stream channels, permittees will not place salt for livestock within ¼- mile of riparian areas.

Mitigation Measures Specific to Alternative 3

- To protect rare plant populations, salt placement to improve distribution during the grazing season would not occur within 1/8 mile of known Threatened, Endangered, or Sensitive plant populations.
- To limit physical damage to known occurrences of Wallowa Mountain Ricegrass, Engelmann's daisy, and Hazel's prickly phlox, work with permittees on identification of these plants and instruct permittee to not place salt within 1/8-mile of any occurrence.
- To reduce the potential for physical impacts from livestock management to Engelmann's daisy and Hazel's prickly phlox, instruct permittees not to establish any new stock drive-ways in steep canyon terrain without first surveying for this species, and routing the driveway to avoid any found occurrences.
- To monitor forage utilization near Spalding's catchfly, ensure that adequate numbers of "key areas" are established in terrain that represents grassland conditions in the vicinity of the known Spalding's catchfly sites. Make these a priority for reading.
- To reduce the risk to sensitive riparian areas, the following steps will be taken on projects identified. Where site-specific ground-disturbing projects are identified, a separate environmental analysis will be completed to address potential impacts associated with the ground-disturbing activities:

Use adaptive techniques such as herding, salting, adjusting season of use, developing upland water sources, and fencing to draw livestock away from sensitive areas.

Relocate water gaps to appropriate sites, harden gaps with rock and wood placement, and develop offsite water sources.

When livestock trailing causes premature channelization or headcutting of intermittent streams and ephemeral draws, place woody material, fence, or change the timing of grazing to address these problems as they occur.

Continue to re-locate troughs from in-channel locations.

Monitoring

The following items are needed to keep impacts at acceptable levels while moving range conditions toward desired conditions. These items would be applied to the project as it is implemented on the ground. These monitoring items address Forest Plan direction, Section 7 conclusions by the Level 1 Team, commitments within the Lower Grande Ronde Subbasin Biological Assessment (USDA 2001), terms and conditions within the Biological Opinion for Effects on Steelhead from Implementing the Forest Plan (DOC 1999), Interagency Implementation Team's implementation and effectiveness monitoring (IIT), and additional elements determined necessary by the Interdisciplinary Team for the JCRAA.

Monitoring Common to Alternatives 2 and 3

- Complete range IIT implementation monitoring annually on key areas within the JCRAA.
- Participate in IIT effectiveness monitoring as the analysis area is selected by the IIT for random review.
- Complete condition and trend monitoring on established plots within the JCRAA on at least a 20-year frequency.
- Complete utilization monitoring at key areas. Complete monitoring on an annual basis for pastures where particular resource concerns emerge or where previous utilization standards were exceeded the previous year. If utilization is exceeded, adjust the AOI for the following season to address the season of use, numbers, or on-the-ground management techniques.

Range Monitoring Terminology

IIT Implementation Monitoring – An implementation monitoring module was established by the Interagency Implementation Team (IIT) for determining compliance with Pacfish/Infish, and the 1998 Biological Opinions prepared by NOAA-Fisheries for Steelhead consultation on the Forest Plan. The module identifies pastures containing ESA listed fish or critical habitat and monitors specific conditions at identified key areas within each pasture. The location of key areas is determined for each allotment/pasture based primarily on the presence or absence of perennial streams that can be accessed by livestock. If key area end-of-season standards are not met, measures such as changing season or numbers, fencing, changing utilization standards, or increasing on-the-ground management are developed with permittees and included in the following year's AOI.

IIT Effectiveness Monitoring - A protocol for effectiveness monitoring of riparian areas/subwatersheds has also been developed by the IIT. This monitoring provides direction for a centralized team to conduct effectiveness monitoring throughout the 26 Pacfish/Infish National Forests. The watersheds are randomly selected. The Upper and Lower Joseph Creek watersheds were last monitored in 2003.

Condition and Trend Monitoring - Trend in upland vegetation condition is monitored at established benchmark areas as funding permits. Generally, "Parker Three Step" protocols are followed to reassess original transect data. Trend in riparian vegetation/habitat is also monitored through permanent photo points that are designed to be re-photographed every 5 years or as funding allows. These records are on file at the Wallowa Mountains Office in Enterprise.

Utilization Monitoring – Compliance with utilization standards is monitored to ensure the basic plant and soil needs are being met. Allowable utilization is measured by percent weight for grasses and forbs and percent annual growth for shrubs as described in the Forest Plan. For ease of data collection, these standards have been converted to residual stubble height for common grass species. Refer to Table 8. Trigger monitoring is used to ensure utilization standards are not exceeded. Priority pastures for trigger monitoring are selected based upon IIT strategies, potential problems identified by range personnel and zone biologists, pastures with a history of not meeting standards, pastures with critical resource issues, and pastures with a high level of public interest or sensitivity. Permittees are also required to monitor their pastures frequently enough to ensure that livestock are moved prior to exceeding utilization standards.

Monitoring Specific to Alternative 3

- Meadow Segment of Swamp Creek – Follow the National Riparian Service Team recommendations for annual monitoring of shrub utilization and streambank stability in the Swamp Meadow portion of the Upper Swamp Pasture and the Bennett Pasture for the Swamp Creek Allotment. Use monitoring results to determine what level of grazing can continue in conjunction with meeting restoration goals.
- Spalding's catchfly - Establish and conduct vegetation trend monitoring in representative pastures where populations of Spalding's catchfly occur, to ensure that range condition is on an upward trend.
- Spalding's catchfly - During the grazing season, monitor representative Spalding's catchfly populations for livestock impacts each year for five years. If detrimental impacts such as herbivory, trampling, or bedding are identified, implement one or more of the following actions:
 - Change the grazing season, numbers or duration, or eliminate grazing.
 - Fence or cage all or significant portions of the Spalding's Catchfly sites/habitat.
 - Ride, salt, or otherwise draw the cattle away from the Spalding's Catchfly sites.
 - Move gates or alter cross pasture fences to better facilitate cattle movement away from Spalding's Catchfly sites.
- Spalding's catchfly - For 3 of every 5 years, census at least 3 of the 8 Spalding's catchfly sites to determine persistence in the occurrences.
- Spalding's catchfly - Ensure that adequate numbers of "key areas" are established in terrain that represents grassland conditions in the vicinity of the known Spalding's catchfly sites. Make these a priority for reading.
- Engelmann's daisy - While conducting utilization monitoring, observe the representative Engelmann's daisy patches in the Holding and Tamarack Pastures of the Hunting Camp Allotment. If needed, move key areas to better represent range conditions and Engelmann's daisy populations. If more than incidental livestock use of Engelmann's daisy is observed, change the grazing schedule for the following year.
- Wallowa Mountain Ricegrass - Revisit representative Wallowa Mountain Ricegrass occurrences in pastures being grazed in the spring at least once every 5 years. Establish management indicator occurrences for annual site-visit monitoring as prescribed in the draft species management plan.
- Elk Winter Concentration Areas - Establish and monitor key areas in elk winter concentration areas so that at least 50 percent plant material is retained within the concentration areas in early October on key species such as bluebunch wheatgrass and Idaho fescue.

Preferred Alternative

Alternative 3 is the agency preferred alternative.

Reserve this page for Figure 2 – Alternatives 2 and 3 Map

