

# ***ALLOTMENT MANAGEMENT PLAN***

## ***CALISPELL CREEK ALLOTMENT***

**Colville National Forest**

**Newport/Sullivan Lake Ranger Districts**

**2014**

**REVIEWED BY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_  
Mike or Pat Edwards, **Permittee**

**REVIEWED BY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_  
Chase Bolyard, **Rangeland Management Specialist**

**APPROVED BY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_  
Gayne Sears, **District Ranger**

This Allotment Management Plan is hereby made part of the Term Grazing Permit Number NEW0001 in accordance with Part 2 Item 8 (a) issued to Mike or Pat Edwards and signed by John Buehler, Newport District Ranger on February 4, 2009.

# **Allotment Management Plan Calispell Creek Allotment**

## **Introduction**

The Calispell Creek Allotment is located in the southern portion of the Newport Ranger District, east of Newport, Pend Oreille County, Washington. The project area includes Forest Service lands encompassed by the following watersheds; Middle Fork Calispell Creek, North Fork Calispell Creek, Gletty Creek and Tenmile Creek. The permittee authorized to graze on this allotment is Mike or Pat Edwards. This allotment is currently permitted for cattle and has developments to support this type of use. The allotment is comprised of 27,161 acres which is divided into 3 pastures. The Calispell Creek Allotment has most recently been managed according to the 1979 Allotment Management Plan and has been modified over time to account for changes.

This Allotment Management Plan (AMP) has been developed to implement the Calispell Creek Grazing Allotment Management Planning Decision Notice signed by Travis Fletcher, Acting Newport and Sullivan Lake Ranger Districts District Ranger, on August 23, 2011. Grazing on the allotment is in compliance with all standards and guides of the Colville National Forest Land and Resource Management Plan (The Forest Plan), as amended by INFISH, as well as all other applicable policies, laws, and regulations.

## **Desired Future Conditions**

The Colville National Forest Land and Resource Management Plan desired future condition for the Forest in ten years states that livestock grazing will be more intensively managed. Livestock use will stay within the established use rates. Permittee control will be at an adequate level and, overall, more intensive management systems will be employed. All allotments will emphasize riparian habitat protection and/or recovery.

## **Current Conditions and Site Specific Desired Future Conditions**

### **Upland Habitat Types**

Most of the allotment is timbered. Transitory range occurs in openings created by timber harvest and fire. Primary range occurs on rocky outcrops, dryer slopes, and wet meadows. A large portion of the lands classified as primary in the late 1970's has become timbered or brushy. Forage species may include Idaho fescue, bluebunch wheatgrass, pinegrass, orchard grass, smooth brome, timothy, and bluegrass, depending upon the site. Browse species include snowberry, oceanspray, ninebark, serviceberry, alder and willow, again, depending upon the site.

Vegetation on the allotment has been greatly influenced by the historical presence of fire and more recently, the exclusion of fire. The exclusion of fire has allowed an increase in fuel volumes, degradation of shrubs, and loss of species diversity. Grasses and shrubs that historically regenerated in the presence of fire now offer less forage and browse habitat for both livestock and big game wildlife.

Noxious weeds have invaded the Calispell Creek Allotment and are impacting the quality and quantity of forage available to livestock and wildlife. Noxious weeds are found primarily along travel corridors and on dry slopes adjacent to the travel corridor. They can also be found on dry slopes on private lands adjacent to the allotment. The most notable noxious weeds are diffuse knapweed, oxeye daisy, goatweed, yellow hawkweed and hound's tongue.

The riparian areas are primarily located along narrow corridors adjacent to stream channels. Tree species present include Engelmann spruce, Douglas fir, quaking aspen, cottonwood, alder, and birch. Due to composition and structure of the timber stands along many of the streams, livestock have limited access to most riparian areas. One exception to this is Middle Fork Calispell Creek, which was extensively homesteaded in the early 1900's and has herbaceous vegetation up to the stream's edge in several locations.

A list of the sensitive species is contained in the Biological Evaluation for this project. These habitats, which may be affected by livestock, include rocky outcrops, wetlands, wet or dry meadows, Middle Fork Calispell Creek, North Fork Calispell Creek, Gletty Creek, Tenmile Creek and some tributaries to these creeks. Past surveys done for other projects and new survey done in 2010 specifically for this project surveyed these habitats. Maps of sensitive plant species locations are on file at the Supervisor's Office. Species found in the allotment include Crenulate moonwort (*Botrychium crenulatum*), water avens (*Geum rivale*), treelike clubmoss (*Lycopodium dendroideum*), and blue-eyed grass (*Sisyrinchium septentrionale*). One is known from within two miles of the project area, crested shield fern, (*Dryopteris cristata*). Sensitive plant populations continue to be monitored by the Forest.

### **Monitoring**

The monitoring activities shown in Table 1. will take place in conjunction with the monitoring already identified in the Forest Plan. Forest Plan monitoring is discussed in Chapter 5 of the Forest Plan starting on page 5-11. Forest Plan monitoring is also further discussed in the Monitoring Guide for the Land and Resource Management Plan, Colville National Forest. Monitoring will be done to ensure that the selected alternative, including mitigation measures, BMP's, has been implemented correctly, and that mitigation measures and BMP's are effective. Results of monitoring will be available to interested and affected parties.

**Table 1. Monitoring Criteria for Calispell Creek Allotment**

<b>Item</b>	<b>Measure</b>	<b>Procedure and Frequency</b>	<b>Area to be Monitored</b>	<b>Target or Objective</b>
1a	Utilization of forage in riparian areas	On going during entire grazing season on a yearly basis. Use stubble height measurements and ocular estimates.	Critical areas shown on map in Figure 2-2.	Within Forest Plan Standards
1b	Utilization of upland forage	Forest Plan Monitoring item 18. Use stubble height measurements and ocular estimates in all pastures. Once in every four years.	Key upland areas and suitable riparian areas	Within Forest Plan Standards
2a	Bank and floodplain damage due to livestock	Bengeyfield and Svoboda (1998) method starting approximately halfway through the grazing season	Middle Fork Calispell Creek within Delaney Meadows	Not to exceed 20% bank alteration
2b	Bank and floodplain damage due to livestock	Bengeyfield and Svoboda (1998) method starting approximately halfway through the grazing season	Streams within Bartlett and Big Swamp pastures (location to be determined)	Not to exceed 20% bank alteration
3	Proper functioning condition	Conduct PFC evaluations per BLM report TR-1737-9 (1993).	Critical areas shown on map in Figure 2-2.	PFC, or moving toward PFC in 5 to 10 years
4	General riparian and channel condition and designation	At the beginning of the implementation of the selected alternative and at least every 3 years thereafter. Characterize riparian vegetation and compare to potential natural vegetation using the CNF Riparian Vegetation Classification (Kovalchik, 1993 or revisions). Observe channel morphology, stability, and bed material. Conduct PFC evaluations per BLM report TR-1737-9 (1993).	All critical areas and 1 response reach of each subwatershed	Achieve Desired Future Condition in riparian areas: 50% or more of reach with cover of key indicator species for that community type; PFC

Item	Measure	Procedure and Frequency	Area to be Monitored	Target or Objective
5	BMP PRM-3	Use allotment inspections to document the use of management standards, management practices, and mitigation measure on the allotment.		
6	Sensitive Plant populations	Monitor sensitive plants according to Forest Plan monitoring guide.	Known sensitive plant populations	Maintain plant population viability
7	Range Improvements	Forest Plan Monitoring item 16. Inspect range improvements. Yearly inspect new improvements and 10% of existing improvements District wide.	<u>All new improvements and 10 percent of existing improvements</u>	Ensure compliance with standards and performance of maintenance.
8	Range condition and trend	Forest Plan Monitoring item 19. Use condition and trend transects, ocular estimates, or photo points once in 10 years.	<u>Representative sample of all units within an allotment</u>	Detect changes in condition and trend of changes.
9	Soil condition	Observe soil moisture conditions.	<u>Key upland areas and suitable riparian areas</u>	Prevent soil damage due to livestock impacts on too wet soils

Item	Measure	Procedure and Frequency	Area to be Monitored	Target or Objective
10	Water quality	Sample water quality using established procedures.	Representative locations of Matson and Hodgson Creek; at the special use water system. Sample at such areas as meadows and road crossings; at water developments	Detect contamination of water by warm blooded animals, including livestock

### **Current Riparian Conditions**

Middle Fork Calispell Creek, North Fork Calispell Creek, Gletty Creek, and Tenmile Creek are perennial streams within the allotment. These stream systems generally flow east into Power Lake, Calispell Lake and the Pend Oreille River. Delaney Meadow is an extensive meadow complex along Middle Fork Calispell Creek that was created by homesteading. Other small homestead meadows exist at various location within the allotment, such as Bartlett Meadow. Springs and seeps occur throughout the allotment but are localized with little off-site flow.

There are three fish bearing streams in the Calispell Creek Allotment- North and Middle Forks of Calispell Creek and Tenmile Creek. The North and Middle Forks on NFS lands contain eastern brook trout (*Salvelinus fontinalis*) and coastal rainbow trout (*Oncorhynchus mykiss irideus*) (USFS 2005-2007). Hybrids, confirmed through genetic analysis, of westslope cutthroat trout (*Oncorhynchus lewisi clarki*) and coastal rainbow trout (*Oncorhynchus mykiss irideus*) have been found in the upper headwaters of Tenmile Creek, a tributary to the North Fork (Powell et al 2002). . In October of 2010, lower Calispell Creek was designated as critical habitat for the recovery of the bull trout (*Salvelinus confluentus*) in northeastern Washington. Bull trout, historically, were known to inhabit this area. This designated habitat is below the analysis area and an impassable cascade. Biotic surveys were completed by Forest Service and Kalispel Tribal personnel in branches of Calispell Creek (1992, 1994, 2001 and 2002) to determine fish presence. No bull trout were found during these surveys.

The streams and riparian areas of the allotment provide a direct beneficial use to fish, wildlife, and livestock. Activities such as hunting, fishing, and dispersed camping also benefit from healthy stream and riparian areas. Indirect benefits are provided to downstream users on private lands including irrigation and livestock watering, well systems, and recreational activities along the Pend Oreille River.

Overall, riparian areas within the allotment meet State of Washington Water Quality Standards, the Forest Plan, and Riparian Management Objectives in INFISH. Cattle impacts, including bank damage, channel width widening, and soil compaction, are localized at road crossings and in Delaney Meadow. The trend for riparian areas within the allotment appears to be either static or downward as time and successional changes occur in the vegetation.

### **Livestock Management**

The Forest Supervisor of the Colville National Forest proposes the following action for the Calispell Creek Allotment to begin in the year 2012:

Graze 87 cow/calf pairs of commercial livestock on the Calispell Creek Allotment between June 1 and September 30. Livestock use will not exceed 461 AUMs though seasonal adjustments in timing of use may occur. Depending on allotment conditions range readiness (drought, fire, saturated soil conditions, forage use, etc.), this season of use may be modified or shortened to avoid or reduce unwanted impacts to resources and to maintain consistency with Forest Plan

management direction. Adaptively manage these livestock through an allotment management plan that meets the Forest Plan, as amended, and other current laws and regulations, while protecting or enhancing ecosystem values including streams, riparian areas, wildlife, and vegetation. Included in the overall management of the allotment are specific management practices designed to maintain grass communities and Delaney Meadow, to protect or improve fisheries in Middle Fork Calispell Creek, and to protect populations of sensitive plants.

Adaptive management, as proposed in the Calispell Creek EA, means that changes in management of livestock on the allotment will be made based upon the results of monitoring; In other words, livestock management that responds to changes on the ground. However, these management adjustments must stay within the limits placed by the management standards, management practices, and mitigation measures identified in Chapter 2 of this EA. Examples of adaptive management include; changing salting and herding patterns, delaying turnout, and reducing numbers or season of use. In this EA, adaptive management does not include increasing numbers or extending season of use outside of the established use period.

Before a proposed Federal action such as this one about livestock grazing on the Calispell Creek Allotment can be implemented, the National Environmental Policy Act (NEPA) requires a specific process to be followed. This process includes documentation of the analysis of the proposed action and alternatives to the proposed action as well as disclosure of environmental effects. This document, the Calispell Creek Grazing Allotment Environmental Assessment (Calispell Creek Allotment EA), is the required documentation of the analysis and the disclosure of the environmental effects.

This document tiers to the Colville National Forest Land and Resource Management Plan FEIS, as amended (Forest Plan FEIS), the EA for Integrated Noxious Weed Treatment (Weed Treatment EA) and Inland Native Fish Strategy EA (INFISH EA).

### **Management Standards and Practices for the Preferred Alternative**

Management standards are the thresholds that must not be exceeded in order to maintain or move towards the desired future condition for resources within the Calispell Creek Allotment. Management practices are actions that become a part of the activity proposed in the Preferred Alternative if it is selected for implementation in order to achieve management standards.

#### **Management Standards**

Forest Plan standards and guidelines apply to the Calispell Creek Allotment. In addition, the following site-specific standards were developed during the analysis of the effects. These standards were derived from existing direction and current science, as well as from professional judgment.

1. Stream reaches are in proper functioning condition or if functioning at risk, then in an upward trend per “Riparian Area Management: Process for Assessing Proper Functioning Condition” (BLM publication TR 1737-9 1993).



2. Forage utilization in riparian areas leaves an average 4 inches residual stubble height. It is expected that maintaining a 4-inch residual stubble height will also maintain the shrub use within acceptable limits.
3. Livestock related bank disturbance (bank caving, shearing, sloughing, compaction due to hoof action) is not to exceed 20 percent. Transects for evaluating livestock disturbance to streambanks will be identified and monitored as a result of this project in Delaney Meadows and other locations as determined appropriate by the IDT.
4. Prevent, to the extent possible, the introduction and establishment of newly invading noxious weeds. Reduce and prevent, to the extent possible, the spread of existing populations of noxious weeds.
5. In areas around water developments and salt grounds, limit livestock related detrimental soil disturbance to 20 percent or less except immediately surrounding the trough or salt lick.

### **Management Practices**

1. A late turn on date or early turn off date, a shortened season of use, and/or reduced stocking levels may be necessary based on annual fluctuations in soil moisture and vegetation condition due weather.
2. Move livestock when either Management Standard 2 or 3 above have been approached or exceeded in any given area due to livestock related activities. If a second area approaches or exceeds either Management Standard 2 or 3, remove livestock from the allotment.
3. Construct, repair, and maintain structures or other improvements, especially those implemented as mitigation measures, to the standards prescribed by Colville National Forest Supplement No. 12 to Forest Service Manual (FSM) 2200, dated 7/87. A copy of the supplement is contained in Appendix B. This includes fences, water developments, debris barriers, and hardened watering sites.
4. Use herding and salting to achieve the above identified management standards. The frequency of herding will vary depending upon riparian and upland soil and forage conditions. Herding is likely to be needed most during when hot, dry conditions are present or during unusually wet periods. Salt and supplements are to be at least ¼ mile from riparian areas as described in the Term Grazing Permit. Do not place salt and supplements in draws and bottoms.
5. Use prevention and early treatment methods for newly invading species and populations of noxious weeds.
6. Revegetate areas that have been disturbed by livestock such as around water developments and salt grounds. Reduce impacts to these areas so that the sites remain

vegetated as much as possible, recognizing the areas immediately surrounding troughs and salt licks will remain disturbed.

**Mitigation Measures**

Monitoring may show that certain measures are necessary to mitigate the effects of the activity proposed.

The proposed action is designed to reduce impacts to water quality and fish habitat by restricting cattle access to these sensitive riparian areas. Included in the proposed action are 1,500 feet of fence construction (enclosures), 6.5 acres of meadow ripping and seeding, relocation of one cattle guard, installation of 4 water troughs, and 131 acres of small trees would be removed, or cut down to keep existing meadows open.

**Summary of Projects by Pasture**

<b>Project</b>	<b>Location</b>	<b>Treatment</b>
<b>Delaney Pasture</b>		
cattle guard	County Rd 2022 T. 32 N., R. 43 E. Sec 19	relocate existing cattle guard
water troughs	T. 32 N., R. 42 E. Sec 25 & 35	develop three new water sources
hardened crossings	Middle Fork Calispell Creek	improve two existing hardened stream crossings
meadow retention	T. 32 N., R. 43 E. Sec 30 T. 32 N., R. 42 E. Sec 25,26,35,36	remove encroaching conifers from approximately 92 acres of existing meadows
fence removal	T. 32 N., R. 42 E. Sec 25	remove approximately 2,753 feet of fence
aspen protection	T. 32N., R. 42 E. Sec. 25	Construct fencing around aspen sprouts on up to 3 acres on meadow edges.
permit boundary adjustment	T. 31 N., R. 43 E. Sec 7 T. 31 N., R. 42 E. Sec 1-5, 8-12	remove approximately 4,900 acres from the permit boundary due to private ownership
<b>Bartlett Pasture</b>		
water trough	T. 32 N., R. 43 E. Sec 17	develop one new water source
riparian protection	T. 32 N., R. 43 E. Sec 17	construct approximately 1,500 feet of fence to exclude cattle from riparian areas
aspen protection	T. 32N., R. 42 E. Sec. 13	Construct fencing around aspen sprouts on up to 2 acres on meadow edges.
meadow retention	T. 32 N., R. 43 E. Sec 17 & 20 T. 32 N., R. 42 E. Sec 12 & 13	remove encroaching conifers from approximately 39 acres of existing meadows
ripping & seeding	T. 32 N., R. 43 E. Sec 20	approximately 6.5 acres would be treated to reduce soil compaction and increase productivity
fence maintenance	T. 32 N., R. 43 E. Sec 21 T. 32 N., R. 42 E. Sec 11 & 12	heavy maintenance needed on approximately 10,763 feet of fence
fence removal	T. 32 N., R. 43 E. Sec 17 & 19	remove approximately 1,233 feet of fence
retain existing fence	T. 32 N., R. 42 E. Sec 11, 12 & 14	maintain approximately 1,794 feet of

**Summary of Projects by Pasture**

<b>Project</b>	<b>Location</b>	<b>Treatment</b>
		fence
permit boundary adjustment	T. 32 N., R. 43 E. Sec 8 T. 32 N., R. 43 E. Sec 28	<ul style="list-style-type: none"> <li>• removal of approximately 160 acres from permit boundary due to private ownership;</li> <li>• addition of approximately 160 acres to permit boundary to match the forest boundary</li> </ul>
<b>Big Swamp Pasture</b>		
cattle travelway	T. 32 N., R. 42 E. Sec 14 & 15	brush out approximately 2 miles of FR 3530-010 for use as a cattle travelway and protect four stream crossings
rockpit	T. 32 N., R. 42 E. Sec 14	a potential ½ acre rock source for armoring points along the cattle travelway
fence maintenance	T. 32 N., R. 42 E. Sec 10	heavy maintenance needed on approximately 860 feet of fence
retain existing fence	T. 32 N., R. 42 E. Sec 9	maintain approximately 300 feet of fence
permit boundary adjustment	T. 32 N., R. 41 E. Sec 1, 2, 11 & 12 T. 32 N., R. 42 E. Sec 4-9 T. 33 N., R. 41 E. Sec 25 & 36 T. 33 N., R. 42 E. Sec 29-33	remove approximately 5,100 acres from the permit boundary due to private ownership and ski area

**Table 1. Summary of projects by pasture**

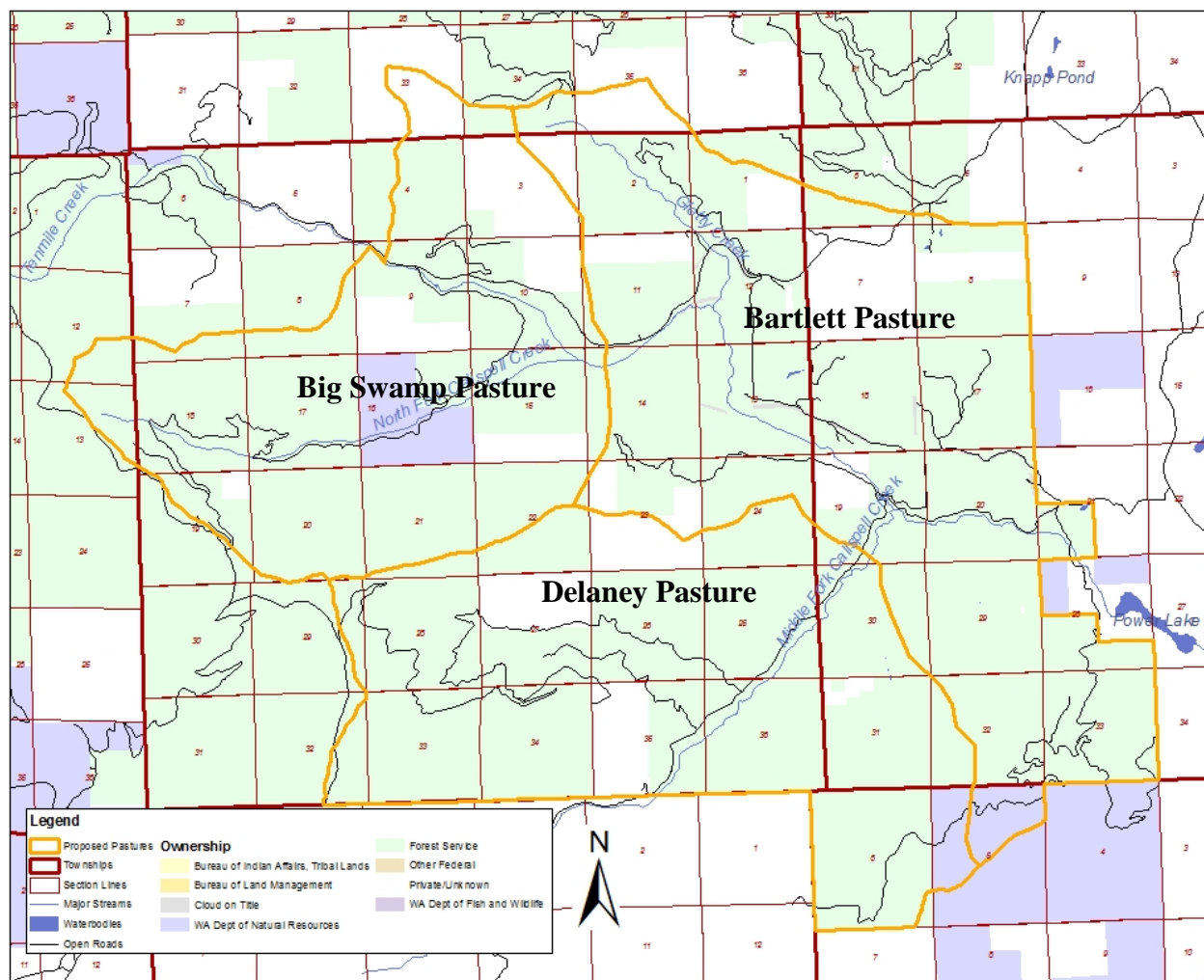


Figure 1. Map of the Calispell Creek Allotment

### Allotment Management

In order to achieve desired conditions and to be in compliance with the Forest Plan, the Calispell Creek Allotment Decision Notice, Biological Assessments/Opinions, and other laws and policies, the following requirements are to be followed and may be modified over time to be compliant/consistent with changes in or additional laws and policies:

#### **General Management**

- 1) It is the permittee's responsibility to conduct scheduled livestock moves, provide field inspections to assure compliance with the term grazing permit, the AMP, or other instructions, assure livestock are in the appropriate location, and track utilization. All livestock will be moved to the next pasture in rotation or removed from the allotment by the scheduled move date or before management standards (such as proper utilization, stubble height or bank trampling standards) are exceeded.

- 2) Range Readiness and Turn On: Livestock entry on to the allotment or into a specific unit will not be permitted until such time as plant species are ready to graze and soils are dry enough to withstand grazing. See appendix B for the range readiness indicators.
- 3) Pasture Move Dates: Actual move dates will be determined, to the extent practical, by on the ground inspection. The permittee will plan on having the pasture move completed by the scheduled date or by the time that the allowable use level is reached, whichever comes first. Livestock movement between pastures will not take more than five days.
- 4) It is the permittees responsibility to maintain a current knowledge of the status of the allotment with regard to utilization levels, and either plan on moving early if needed or request an extension. Livestock remaining on the pasture after the scheduled off date or beyond the period in which the permittee was instructed to move these livestock the permittee may be billed for excess use at the unauthorized use and/or action may be taken against the term grazing permit. If the permittee believes that the additional time in the pasture is justified, the Forest Officer must be notified at least 10 days in advance to permit an adequate inspection and determination. Approval will be obtained in writing prior to extensions and may be denied for reasons other than resource concerns.
- 5) Allotment Exit: The off date is September 30<sup>th</sup>. Livestock may be required to move off the allotment early if utilization standards are met or if an event occurs that causes the Forest Service to require the permittee to move off early.
- 6) Livestock: Livestock will be only cow/calf pairs. Any deviation in use will need approval in advance by the District Ranger (example: yearlings). Any deviation in use must be requested by the permittee on the Annual Application so that the billing for that season can be prepared accordingly. Total numbers must be at least 90% of those permitted, unless non-use is requested and approved in advance. Any livestock found on the allotment that are not owned by the permittee are to be reported to the Forest Service immediately. Excess use by the permittee or unauthorized use by others is subject to administrative or civil action.
- 7) Nonuse in Part or in Whole: Unless non use is applied for in writing and approved in writing in advance, the permittee must place 90% or more of the permitted numbers on the allotment. Non-use applies only to numbers and not to seasons. Approval of non use is not automatic. Personal convenience non use cannot be authorized more than three consecutive years or four years in a ten year period. If personal convenience non-use is taken, a permit cannot be waived based on sale of permitted livestock.
- 8) Salting: All salt will be placed away from key areas and available water. Salt will be placed in areas where livestock use is usually light. In no case will salt be placed closer than 1/4 mile to streams or other wetlands without prior approval.

Salt should be placed in areas such as old road beds or bare rock sites which are not visible from open roads. Salt will not be placed within tree plantations where the smallest trees are less than 3 feet tall. Salting will not be located within 300 feet of any known heritage resource site.

- 9) Riding and Herding: Depending on the pasture, the permittee should plan on spending as much time as necessary in moving the livestock away from the meadows, riparian areas and other key areas. This is entirely to the benefit of the permittee as reaching of the allowable use standard on key areas before the scheduled move date will result in early livestock removal from a unit or off of the Forest. Actual use records are required by permittees at end of season.
- 10) Dead livestock located on Forest Service administered lands and within 300 feet from any water source or designated roads, trails, or recreation sites, will be promptly removed and properly disposed of by the permittee.

### **Invasive Species**

- 11) Noxious Weeds: The Forest Service is committed to aggressive control and eradication of new noxious weed infestations. This commitment must be shared with all those who participate on land management activities on National Forest System lands for weed control to be effective. The Forest Service is requesting permittee cooperation in the following standards to prevent the introduction and spread of noxious weeds:
- Locations of infestations shall be discussed with the permittee during Annual Operating meetings to prevent spread of these sites.
  - The permittee should inform the Forest Service of infestations on the allotment.
  - Vehicles used in managing livestock on the allotment shall be cleaned of any weed transporting material such as hay, mud, or seeds.
  - All hay used on USFS land shall be certified noxious weed free.

### **Cultural Resources**

- 12) Archaeological surveys will be conducted before any ground is disturbed through the implementation of this plan; if sites are encountered, site specific mitigation may be developed.
- 13) The permittee shall notify the Forest Service immediately by telephone and with written confirmation, the discover of human remains of funerary objects, sacred objects of cultural patrimony pursuant to regulation Section 10.4(b), of the Native American Graves Protection and Repatriation Act.

## **Implementation Monitoring**

### **1) Monitoring Implementation Standards**

**Allowable Use** - The following forage allocation is designed to meet the Colville National Forest Land and Resource Management Plan (The Forest Plan) Range Goals. The forage allocation listed is the maximum allowable utilization on the allotment in any specific area. Maximum utilization levels listed here are consistent with Forest Plan standards and guidelines and applicable Biological Assessments or Biological Opinions. The prescribed utilization levels were developed to address specific resource objectives for the allotment and are expressed as percent utilization. Percent utilization measurements are taken as a point in time.

**Table 2. Forage Utilization Standards**

Range Resource Level (FSH 2209,21 R6)	Maximum annual utilization (percent) 2/					
	Forest		Grassland		Shrublands	
	Satisfactory Condition 3/	Unsatisfactory Condition 4/	Satisfactory Condition 3/	Unsatisfactory Condition 4/	Satisfactory Condition 3/	Unsatisfactory Condition 4/
C – Livestock managed to achieve full utilization of allocated forage. Management systems designed to obtain distribution and maintain plant vigor include fencing and water development.	45	0-35	55	0-35	45	0-30

There are currently no areas classified as unsatisfactory. If future monitoring indicates that unsatisfactory situation exists, the location will be mapped, appropriate standards applied and permittee notified as to management changes.

**2) General Allotment Monitoring**

Forest Service Range Staff will visit the allotment as needed throughout the grazing season to monitor for compliance with grazing permit terms and conditions (i.e., improvements, maintenance, adherence to Forest Service issued written instruction, etc.).

**A)** Utilization monitoring indicates the amount of forage that remains to be harvested. Utilization of the available forage resource will look at both upland and meadow grass to determine the levels of use. Allotments will be administered based on the Colville National Forest Land and Resource Management Plan. Utilization limits are 45% in forested areas and 55% in grasslands. Landscape appearance forms are used to collect information from strategic locations and homestead meadows on the Forest Service allotments. Forest Service Range Staff compile utilization levels based on a height to weight curve of specific grass species. This is done by running transects across the landscape in different locations.

**B)** Compliance monitoring will insure proper management and use. Permitted allotments are periodically inspected during the grazing season to look for the specific number, kind, class of livestock, period of use and rotation of

pastures. Range improvements will also be inspected for routine maintenance and proper function.

- C) Monitoring of stream bank alteration as described in Bengeyfield and Svoboda (1998) would begin approximately half way through the season of use for the Delaney pasture. Condition of the stream channels and riparian vegetation are monitored to achieve the desired management objectives.

### Improvements

Of the 12 livestock management fences that exist on the ground, only the Delaney and North Fork (NF) Calispell Bridge fences are assigned to the permittee for maintenance currently. Neither of these fences serves a critical function in controlling livestock drift. There are fences currently in place that are essential in controlling livestock drift and are maintained by the permittee. Fences that serve a critical function in controlling livestock drift have been inventoried on the ground and would be assigned to the permittee for maintenance so that what is on the ground and what is included in permit are consistent with each other. There are also seven small enclosure fences not represented in the above table that are maintained by district wildlife staff.

**Table 3. Existing Improvements**

Improvement Name	Type of Improvement	Condition Rating	Length (ft)	Long-Term Need
Flowery Trail 1	Fence	Poor	2873	keep
Flowery Trail 2	Fence	Poor	7067	remove
Tenmile East	Fence	Good	336	keep
Tenmile West	Fence	Good	269	keep
NF Calispell Bridge	Fence	Poor	456	remove
East Bartlett	Fence	Poor	772	remove
Ninebark	Fence	Poor	857	remove
Donaldson	Fence	Good	277	keep
Delaney	Fence	Poor	2753	keep
MF Calispell	Fence	Good	875	keep
Flowery Trail 1 Wing	Fence	Good	197	keep
Tenmile South	Fence	Poor	980	remove



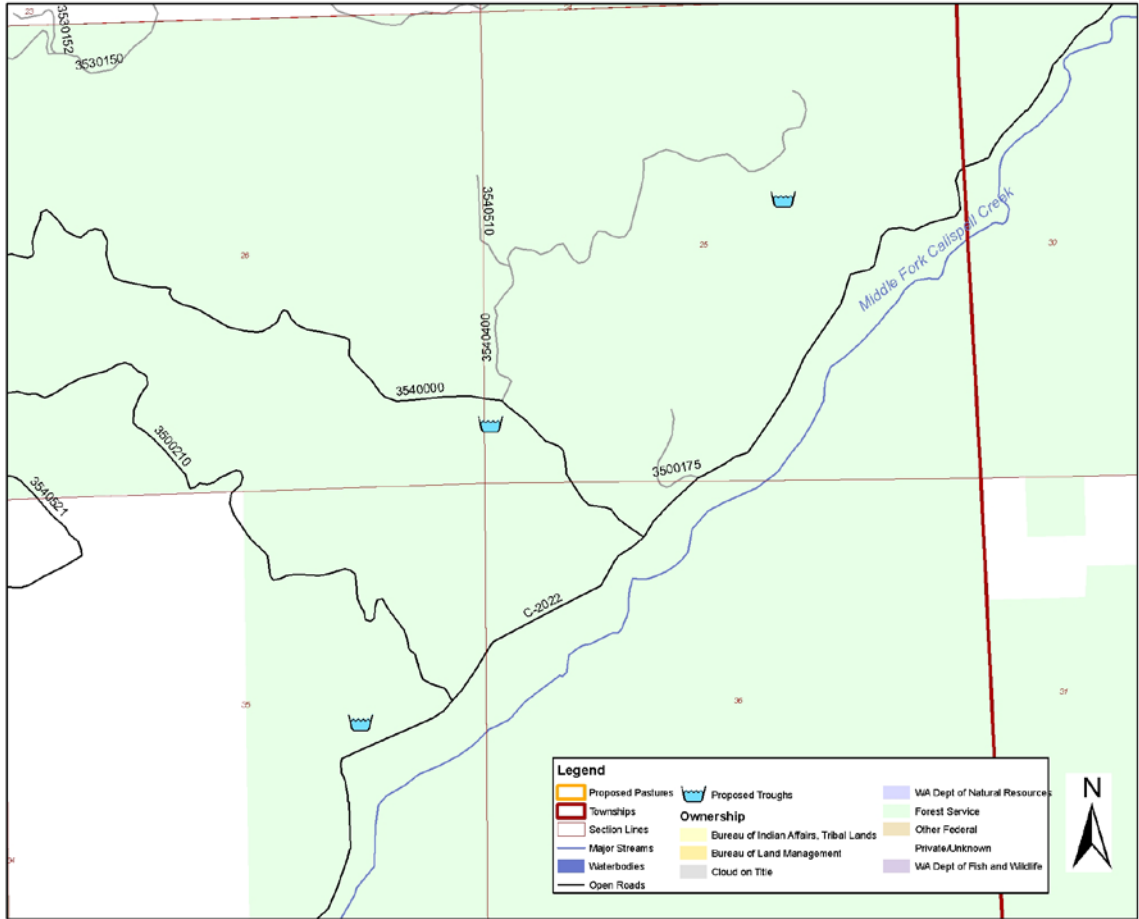
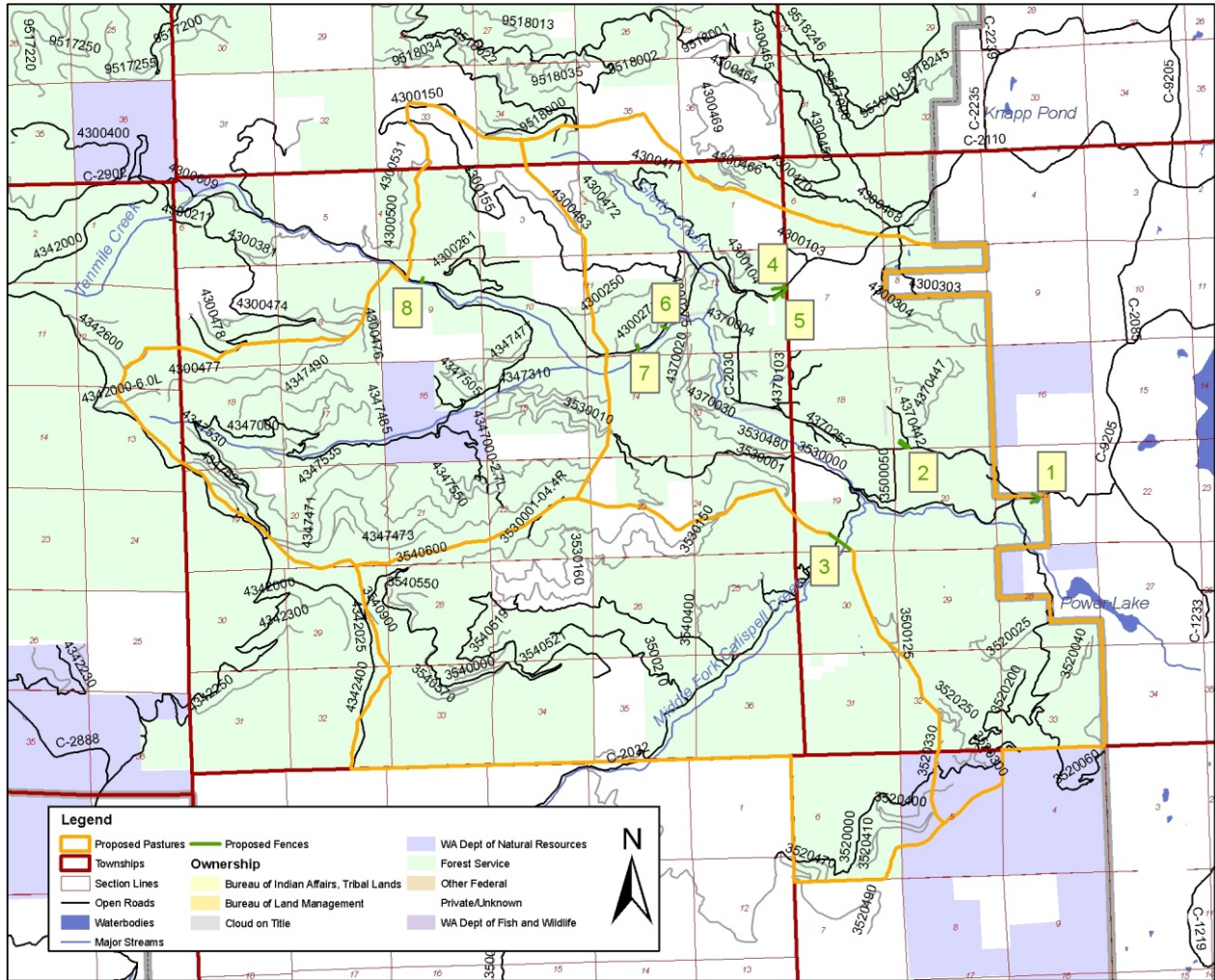


Figure 2. Map of proposed water development locations.



**Figure 3. Map of proposed fences**

Proposed Fences	
1	Middle Fork Calispell
2	Bartlett Enclosure
3	Delaney Drift
4	Flowery Trail 1
5	Flowery Trail 1 Wing
6	Tenmile East
7	Tenmile West
8	Donaldson

Note- there will also be drift fence constructed in T32N R43E S19 SE¼ that is not depicted on the above map.

**Table 4. List of proposed fences**

Maintenance responsibilities are shown on individual term grazing permits. Permittees will maintain all range improvements to Forest Service standards. All assigned improvements are to be maintained annually whether grazing occurs or not. Fences must be maintained prior to turn-on into the affected unit unless otherwise specified in the AOI.

Improvements that have met their planned life expectancy shall be scheduled for replacement under a permit modification. Scheduling may be dependent upon funding, timing, and the ability to obtain the appropriate clearances.

**APPENDIX A: RANGE READINESS**

**RANGE READINESS INDICATORS**

Record of Range Readiness Checks

Allotment \_\_\_\_\_ Forest \_\_\_\_\_ Name of Observer \_\_\_\_\_  
 Observation Location (Vegetation type, zone or elevation, area) \_\_\_\_\_

Date	Species or Indicator	Vegetation Development Stage (Record plant height and development stage)	Soil Condition (Firm, Soft, Muddy)
Conclusions and recommendations:			

Note: Record key species or as many indicator plants as needed. Sheet may serve for several checks in one year or checks in several years.

### Indicators of Range Readiness

#### Grasses

Wheatgrass	Agropyron app.	About 6 inches in height
Green Fescue	Festuca viridula	Leaves 5 inches in height, seed heads showing
Idaho Fescus	Festuca idahoensis	Leaves about 3 inches in height, seed heads showing
Prairie Junegrass	Koeleria cristata	Leaves about 3 inches in height, seed heads showing
Sandberg bluegrass	Poa secunda	Plants maturing, seed heads conspicuous
Pinegrass	Calamagrostis	Foliage 3-4 inches in height
Tufted hairgrass	Deschampsis cespitosa	4 inches or more in height, heads conspicuous

#### Grasslike

Elk sedge	Carex geyeri	Leaves 3 inches in height
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#### Forbs

Western yarrow	Achillea lanulosa	Flower stocks beginning to show
Arrowleaf balsamroot	Balsamorhiza app.	Leafage about ½ developed
Geranium	Geranium app.	Leafage about 4 inches high, flower in bloom
Groundsel	Senecio app.	Leafage ¾ mature
Dandelion	Taraxacum officinale	Leafage developed, full bloom

#### Shrubs

Serviceberry	Amelanchier app.	Part of blossoms out
Antelope bitterbrush	Purshia tridentate	Flower buds conspicuously swollen
Snowberry	Symphoricorpus app.	7 to 8 pairs of leaves unfolded from each bud

#### Soils

Normally dry sites should be fairly dry and firm. Wet meadows, unless lightly stocked, should have most of the area dry enough to carry stock without breaking the sod and destroying the cover. Both soil and forage indicators must be considered in determining range readiness.

### Indicators of Range Not Ready to Use

#### When in Flower

Spring Beauty	Claytonia
Lambtongue favcily	Erythronium
Fritillary	Fritillaria
Waterleaf	Hydrophyllum
Sagebrush buttercup	Ranunculus

#### Soils

Soils are wet, loose and subject to excessive compaction or damage from Trampling

## **APPENDIX C: ADAPTIVE MANAGEMENT/MONITORING**

### **Adaptive Management**

Adaptive management provides an implementation tool that goes beyond the “predict-mitigate-implement” model and incorporates an “implement-monitor-adapt” strategy that provides flexibility to account for inaccurate initial assumptions, to adapt to changes in environmental conditions or to respond to subsequent monitoring information that indicates that desired conditions are not being met.

So long as monitoring indicates that the environmental effects of each action do not exceed the bounds of those anticipated in the original decision and the actions serve to move the project toward the intended effects, implementation continues using the “implement-monitor-adapt” cycle without the need for new or supplemental NEPA review (FSH 1909.15 Chapter 10).

In an adaptive management approach, “implement-monitor-adapt”, monitoring provides the essential information to determine what response, if any, is needed. Use monitoring information to:

1. Determine if desired conditions are being met.
2. Identify inaccurate initial assumptions.

If monitoring demonstrates that desired conditions are not being achieved through the initial management action, modify the action to one or more of the identified adaptive management actions disclosed in the environmental document (FSH 1909.15 Chapter 50).

The proposed action is the only alternative which includes adaptive management. This adaptive management proposal has to be clearly identified and adjustments occur after monitoring has indicated the project implementation is not having the desired effect, or is causing unintended effects. This may include and is not limited to any effects by alternatives under the proposed action. The action to correct undesired effects taking place within the project area or at any time after the project is approved must describe the monitoring. The monitoring is used to identify where proposed activities are having an undesired effect. The responsible official during this process must also be informed if the resulting adaptive management has achieved its intended effect of resource protection. Adaptive management is the process to correct issues identified after the implementation and monitoring section is completed.

### **Effective Monitoring**

This is the monitoring to take place to assure achievement of restoration goals.

Effectiveness Monitoring is the long-term effectiveness of range management in maintaining and restoring riparian and aquatic systems.

The main purpose of effectiveness monitoring is to identify and quantify the direction and intensity of change for a given resource through time (Hellowell 1991) in order to evaluate changes in condition and progress towards meeting management objectives (Jones 2005).

## **Techniques**

The following is a list and description of techniques that would be used to accomplish administrative objectives.

The use of debris such as brush barriers within the Calispell Creek Allotment would be used to detour, improve distribution of livestock, protect resources, and provide a tool to manage livestock on the landscape. Other range improvements used as a resource may include new water developments and drift fencing. This applies not only to uplands, but also any areas lying within a riparian zone regardless of it being fish bearing, perennial, intermittent, seasonal stream or a spring or standing water. Adaptive management protects resources identified by specialists in site specific locations to maintain a specified level of land health to ensure the proper function and structure of the vegetation components. Resource protection would be accomplished by the means of brush barriers.

Adjustments in the number of permitted livestock, changes in the period of use and the use of resource protection tactics are all subject to change under this process and would be based on monitoring results. Changes would be identified and discussed in an interdisciplinary team setting and approved by the line officer.

### Adaptive Management based on current year monitoring

Discussions will be held between the IDT members when standards are exceeded. Possible management adjustments as a result of the monitoring will be developed and implemented. Possible management adjustments may include changing salting locations, adjusting timing of grazing use, etc. Adjustments will be incorporated into the Annual Operating Instructions.