

# **Allotment Grazing Management Plan**

**for the**

## **Gooding C&H Allotment**

Reviewed by \_\_\_\_\_ Date \_\_\_\_\_

Written by \_\_\_\_\_ Date \_\_\_\_\_

Approved by \_\_\_\_\_ Date \_\_\_\_\_

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# **GOODING C&H ALLOTMENT MANAGEMENT PLAN**

## **Fairfield Ranger District, Sawtooth National Forest**

### **I. INTRODUCTION**

The 24,000 acre Gooding Allotment is located about 15 miles north of Fairfield, Idaho along the southern edge of the Smoky Mountains within the Sawtooth National Forest boundary. The elevation on the allotment varies from 7,000 feet to over 9,700 feet above sea level. Slopes on the lower elevation areas are mostly gentle and vary from 0 to 30 percent. Higher elevation areas are usually steeper and normally vary from 35 to 65 percent. Slopes up to 40 percent are normally considered suitable for cattle grazing. Annual precipitation for this area averages 16 to 25 inches and 60 to 70 percent of this occurs as snow. The Forest Service administers grazing on the allotment.

Past range analysis indicates that a most of the uplands on the allotment meet the desired vegetative condition, or the vegetative trend is moving toward the desired condition class. Except for King of the West Creek and upper West Fork Grindstone Creek, riparian vegetation at designated monitoring areas (DMAs) within the allotment is considered to be at mid seral or higher successional status and streams are considered to be meeting or moving towards their desired condition. King of the West Creek is in an unstable condition caused by past mining, roading, and grazing activities. Historic heavy grazing along the upper West Fork of Grindstone Creek has converted desirable riparian vegetation to a Kentucky bluegrass dominated site in need of healthy reproducing riparian shrubs. Grazing mitigation combined with grazing according to FP standards, especially within the riparian zones, is expected to achieve or maintain the following FP desired conditions.

### **II. MANAGEMENT DIRECTION**

#### **Forest Plan Management Goals:**

1. Maintain vigorous, reproductive stands of aspen and manage them to achieve age class diversity, adequate regeneration, and no net loss of stand acreage. Retain adequate ground cover in the aspen understory for soil protection.
2. Maintain a moderate to high vegetative resource value for livestock and big game on upland sites.
3. Maintain plants with moderate to high values for watershed protection and meet desired condition for ground cover in the allotment's sagebrush communities.
4. Control or eradicate Priority I and II noxious weed infestations as they occur on the allotment. Canada thistle exists but it is a Priority III noxious weed.
5. Maintain desired levels of ground cover (vegetation, litter, and rock) for each upland or riparian vegetative community classified as suitable for livestock grazing to prevent erosion that would exceed the natural erosion rate or the soil loss tolerance.
6. Maintain or increase levels of hydric species such as sedges, rushes, and willows in riparian corridors and wet meadows.

#### **Allotment Management Objectives:**

1. Maintain or improve the health, vigor, and diversity of upland forage quality. Achievement of this objective is based on the ecological processes associated with soil productivity and ecological health. The following desired conditions are identified as indicators of meeting this objective.

a) Effective Ground Cover (EGC) for Upland Sites

Land Type	EGC (%)
R1	70-90
B1A	70-85
M3B	70-90
M6A	70-85
M4C	80-85
M2	80-95
M3C	80-90
M3A	70-90

b) Desired Sagebrush Cover (Mountain Big Sagebrush)

Canopy Cover Class	0 to 10%	11% to 20%	>20%	>30%
Desired Sagebrush Cover	30 to 40% of area	30 to 40% of area	20 to 30% of area	5% or less

c) Aspen. (DBH = diameter @ breast height)

Aspen dominates the overstory canopy (aspen > 8" DBH). Over 2/3rds of the overstory is composed of aspen.

Aspen dominates the mid-level canopy (aspen 1-8" DBH). Over 2/3rds of this level canopy is composed of aspen.

There is significant aspen regeneration occurring to support a healthy stand. The stand has over 500 stems per acre < 1 in. DBH with less than 20% having multiple leaders or are hedged from browsing.

Less than 20% of the stand contains sagebrush.

d) Livestock Forage & Watershed Condition.

Moderate to high resource value ratings for livestock forage, big game forage, and watershed protection.

e) Riparian Vegetation.

i. Greenline successional status rating of 51 or greater (upper mid-seral or greater). (Winward 2000)

ii. Greenline Bank Stability Rating of 6 or greater (upper mid-seral or greater). (Winward 2000)

iii. Riparian vegetation plant communities cover about 600 acres or 2.5% of the allotment. While this is a small portion of the allotment, it is probably the most important area of resource concern related to livestock grazing management. Forest Plan direction specific to areas within the allotment are described in Little Smoky Creek Forest Plan Objective 0721. This objective identifies direction to: "Restore hydric and woody shrub species composition and density in bottom riparian areas within the Grindstone Creek, Carrie Creek, Worswick Creek, Red Rock Creek, and Rosetta Creek drainages, where vegetation has been altered by livestock grazing."

iv. Overall, many streams and riparian areas appear to be recovering from past grazing. Some problem areas, however, still remain. Streams where cattle impacts were most evident include: Bear Creek, Belle Creek, E.F. Worswick Creek, Little Smoky Creek in the Beef Pasture, Upper Stovepipe Creek, W.F. Grindstone, Grindstone, Carrie Creek, and Tyrannis Creek.

- v. Localized riparian concerns exist in the lower portions of King of the West and Tyrannis Creeks due to impacts caused by the combined influence of historic mining, grazing, and roads. Observations indicate a slight movement towards meeting desired riparian condition, however improvement will be greatly accelerated by limiting both period of grazing and numbers of cattle.
- vi. Allotment inspections indicate unsatisfactory riparian conditions exist in the lower half of King of the West and Tyrannis Creeks. The determination of unsatisfactory riparian conditions is based on annual inspections, photo points, Cowley & Burton Multiple Indicator Monitoring studies, Riparian Conservation Area delineation, and field reviews and observations by Forest specialists. Past roadwork, mining, and livestock use, both cattle and sheep, have contributed to problems including unstable stream banks, head cutting, alluvial deposition, and a gradual decline in overall riparian condition.

Riparian conditions on the allotment are generally satisfactory or are improving as shown by the surveys conducted in 1987 (see table below). Some less than satisfactory riparian conditions persist such as those identified in Forest Plan Objective 0721.

**Table 1 - 1988 & 1991 Level II Riparian Inventory**

<b>Stream Name</b>	<b>Reach</b>	<b>Est.Ecolog.Status</b>	<b>Apparent Veg.Trend</b>	<b>*Management Implications</b>
Main Fk. Grindstone	GS01	mid-seral	stable	GZ,RD
Main Fk. Grindstone	GS02	mid-seral	stable	GZ,RD
West Fk. Grindstone	WGS1	mid-seral	stable	GZ,RD,TH
Red Rock Creek	RR01	late-seral	none	GZ,RD
Red Rock Creek	RR02	mid-seral	stable	GZ,RD
Red Rock Creek	RR03	mid-seral	stable	GZ,RD
Little Smoky Creek	LS04	late-seral	stable	RC,RD,GZ
Little Smoky Creek	LS05	late-seral	stable	RC,RD,GZ
Little Smoky Creek	LS06	late-seral	upward	RC,RD,GZ

- 2. Objective #0721: “Restore hydric and woody shrub species composition and density in bottom riparian areas within the Grindstone Creek, Carrie Creek, Worswick Creek, Red Rock Creek, Rosetta Creek, Wood Gulch, Camp Creek, Sawmill Creek, and Cannonball Creek drainages, where vegetation has been altered by livestock grazing..”
- 3. Maintain or improve streambank stability at designated monitoring areas (DMAs).
  - a) 90% of potential
- 4. Protect springs, seeps, or wet meadows where allotment inspections identify unacceptable grazing impacts.
 

Cattle are attracted to springs, seeps, and wet meadows because they provide shade, water, and lush forage. Many of these sites are isolated and not connected too much larger riparian areas that are associated with streams. When and where grazing impacts are excessive they will be mitigated by providing site protection or reduced exposure to livestock.

  - a) Native hydric vegetation typical for these sites are present and in good vigor.
  - b) Headcuts are not present.

5. Reduce grazing/recreation conflicts to dispersed camping sites.
  - a) Public input and Forest Service observations will suffice to identify where this kind of conflict occurs. Once identified, corrective administrative actions can be initiated.
6. Eradicate the known noxious weed infestation within the Little Smoky travel corridor by 2010. Maintain the rest of the allotment free of class I and II noxious weeds.
  - a) A knapweed infestation exists adjacent to the Little Smoky road between Worswick and Grindstone Creeks. It has been and will continue to be treated annually; therefore it is expected to be eradicated within 5 years. The objective for all newly discovered infestations is also eradication.
  - b) Annually inspect and treat as appropriate the following areas:
    - i. Areas adjacent to known infestations
    - ii. High use dispersed recreation sites
    - iii. Worswick hot springs area
    - iv. Material borrow sites
    - v. Trail heads
    - vi. Gooding shipping corral
7. Sustain permitted HMs to the level of the current Term Grazing Permit (Permittee Objective).
  - a) The permittee believes this objective is attainable. Monitoring will be the basis for future permit or HM adjustments. Success in meeting this objective will be based on monitoring results relative to achieving or trending towards the achievement of desired conditions and compliance with permit terms and Forest Plan direction.

## **ALLOTMENT MANAGEMENT REQUIREMENTS**

### **Forest Plan Standards & Guidelines Related to Grazing:**

The Sawtooth National Forest Land and Resource Management Plan (Forest Plan) approved in 2003 establishes the Standards and Guidelines (S&Gs) for managing the rangeland resource. S&Gs related to grazing on the Gooding C&H Allotment will be incorporated into this long term (AMP) and the short term (AOI) management direction. The following S&Gs relate to proper grazing management of the Gooding C&H Allotment:

#### Range Standards and Guidelines:

1. Maximum forage utilization of representative areas within each pasture shall not exceed the values shown at the end of the growing season. To achieve specific vegetative management objectives variation in utilization standards can occur according to a site-specific or project-level decision (FSM 1922.5), (**ST-01/III-45**).
- a) **Riparian Areas:** Maximum 45 % use or retain a minimum 4-inch stubble height of hydric greenline species.
- b) **Upland Vegetative Cover Types:** Early season or season long pastures = 40 % use. Vegetative slow growth or late season pastures = 50 % use (~3" residual stubble on key grasses such as bluebunch wheatgrass and Idaho fescue).
2. Livestock trailing, bedding, watering, and other handling efforts shall be limited to those areas and times that maintain or allow for restoration of beneficial uses including native and desired non-native fish habitat (**ST-02/III-45**).
3. New water developments, corrals, and other handling or loading facilities shall not be located within riparian conservation areas (RCA's), unless it can be demonstrated that these facilities maintain or allow for restoration of beneficial uses including native and desired non-native fish habitat (**ST-03/III-45**).

4. Livestock salting will be prohibited in RCA's. Trailing sheep will be salted only at bed grounds. Salt will be placed in containers and moved with the sheep (**ST-04/III-45**).
5. New, reconstructed or replaced livestock water troughs must provide wildlife escape from drowning (**ST-O9/III-45**).
6. When riparian goals and objectives are not being met, forage utilization by cattle in riparian areas will not exceed 30 % use of the most palatable forage species, or must retain a minimum 6-inch stubble height of native hydric greenline species, whichever occurs first (**ST-0743/III-195**).
7. Where rangeland facilities or practices have been identified as potentially contributing to the degradation of water quality or habitat of aquatic species or occupied sensitive or watch plant habitat, facilities and practices causing degradation should be considered for relocation, closure, or changes in management strategy, alteration, or discontinuance (GU05/III46).
8. Where recreation prescriptions are applied, adjustments to grazing practices should be evaluated to resolve conflicts in areas of concentrated recreation use (GU-10/III-47).
9. Where riparian area restoration is an objective, grazing systems should be designed to incorporate the following parameters where appropriate (GU-02/III-46).
  - a. Provide residual vegetative cover (at least 6 inches of hydric vegetation) either through re-growth or rest treatments for at least 75 percent of the years in a rotation cycle.
  - b. Reduce the duration of riparian area grazing periods where needed. Grazing period reduction may be especially needed in the fall where woody riparian deciduous species are an important riparian vegetative component.
  - c. Design grazing periods to take advantage of favorable seasonal livestock dispersal behavior such as increased spring use on uplands due to wet riparian conditions or increased fall use on uplands due to cold valley bottom temperatures.
  - d. Incorporate sufficient growing season rest to provide for vigor, physiological needs, and regeneration of all riparian plants.
  - e. Where deciduous trees and shrubs are important in the composition, modify the frequency of grazing periods, reduce the grazing duration, or reduce grazing intensity to levels that provide for recovery/maintenance of healthy and diverse trees and shrubs.

#### Threatened, Endangered, Proposed, and Candidate Species (TEPC) Standards (ST):

1. Livestock trailing, bedding, watering, and other handling efforts shall be mitigated by avoidance to address adverse effects to occupied TEPC plant habitat (**ST-22/III-13**).
2. New water developments, corrals, and other handling or loading facilities shall not be located within occupied habitat of TEPC plant species unless it can be demonstrated these facilities will not adversely affect occupied TEPC plant habitat (**ST-23/III-13**).
3. Livestock salting and/or bed grounds shall be located outside TEPC plant habitat so these plants will not be adversely affected by trampling (**ST-24/III-13**).
4. Mitigate, through avoidance, the adverse effects of livestock access or activities that may result in trampling of redds or disturbance of spawning or reproductive staging of ESA listed fish species (**ST-25/III-13**).
5. Mitigate effects to occupied TEPC plant habitat through avoidance designed into the grazing system and adjustments in the way livestock are handled (**ST-26/III-14**).

#### Wildlife Standards & Guidelines:

1. Big game requirements for space and forage have priority in the management of winter range within allotments (**ST-07/III-27**).

2. Areas should be protected from project related disturbance during big game calving and fawning (GU-12/III-28).

**Gooding C&H Allotment Revision Decision Notice Direction:**

1. Limit grazing in King of the West, Tyrannis, and lower Carrie Creeks to a maximum of 10 days.
2. Avoid grazing in the Carrie Creek drainage above trail 16.
3. Require 35% non-use for resource protection of permitted stocking (head months) during the first grazing cycle (4-5 years).
4. Firm up carrying capacity following the first grazing cycle and modify the grazing permit consistent with monitoring results.
5. Issue new ten year term grazing permit consistent with the Decision Notice.

**Grazing Permit Terms and Conditions for Livestock Management:**

1. As required by the Allotment Management Plan (AMP) and/or Annual Operating Instructions, the permittee will furnish sufficient riding to properly distribute cattle within the appropriate grazing units.
2. Place salt no closer than 1/4 mile from water and 100 feet of roads. Avoid salting in areas where cattle naturally travel or in the exact spots as in previous years. Avoiding traditional spots will help them to recover.
3. Move salt from areas where feed has been used up.
4. Cattle should be drifted or trailed in small bunches wherever possible. Previously grazed units must be kept livestock free.
5. Promptly remove and properly dispose of any livestock that have died within 300 feet of live streams, springs, or road-ways. Also remove dead livestock within 1/2 mile of all sites where human habitation occurs.
6. Keep rider camps neat and litter free. Remove excess hay and other feed material from camp before the end of the grazing season.
7. All predator control will be in accordance with Federal and State laws and regulations. No poison baits or M-44s are permitted.
8. Abide by the terms and conditions of your Gooding Cow Camp special use permit.
9. Inform employees of the current fire danger and the permittee's fire prevention responsibility.
10. Hay infested with noxious weeds is not allowed on National Forest land. Hay that is fed on Forest land must be certified noxious weed free.

**Adaptive Management Process:**

Livestock grazing will be managed through an adaptive management strategy. Adaptive management is a strategy based on three principles: (1) achievement of realistic, clearly defined objectives, (2) ongoing monitoring to assess progress toward meeting those objectives (see Monitoring and Evaluation Section), and (3) the flexibility to alter management when monitoring suggests there is a need for change. This management strategy is most appropriate in dynamic situations, where change is the norm. Permittee flexibility during the adaptive management implementation period will be needed due to changing conditions influenced by weather or unexpected monitoring results.

One grazing cycle (4-5 years) would allow the Forest Service time to gather sufficient data to set the livestock carrying capacity for the allotment. During the first grazing cycle, stocking would be reduced to 65% (1500 HMs), of the current Term Grazing Permit. Reduced grazing would be accomplished by either decreasing livestock (head) turned out or by shortening the period of use at the



beginning or the end of the grazing season. During this firming-up period, 35% of the permitted HMs would be placed into the status of non-use for resource protection.

Flexibility is provided to adjust livestock grazing practices in response to unpredictable management situations caused by weather fluctuations, livestock behavior, or acts of nature such as wildfires. Adaptations would be constrained by Forest Plan direction and Term Grazing Permit terms & conditions. Based on monitoring results of the previous season, permitted numbers and length of stay would be predicted for the next grazing season. Seasonal adjustments would also be dictated by permittee success or failure in meet grazing standards.

The adaptive management procedure requires focusing on both the annual and long-term monitoring to determine if management is effectively meeting long-term goals. Establishing a relationship between annual grazing use and achievement of long-term goals emphasizes both end-of-season annual grazing use indicators, as well as long-term indicators of rangeland condition. Within-season annual grazing use indicators may also be established through the adaptive management process to determine when livestock should be moved from a grazing unit to achieve the desired end-of-season grazing use levels.

Annual grazing use indicators (including Forest Plan Standards and Guidelines), both during and at the end of the growing season, along with other required management practices, are a total package and when implemented and adhered to, will result in a reasonable expectation that long-term desired conditions will be achieved. The AMP is the document that prescribes management direction and associated actions or the means to achieving long-term goals. The AMP provides the link between monitoring and defining needed changes in management. The AMP is itself an adaptive document. Goals, objectives, desired conditions, monitoring, and management direction in the AMP may be modified as a result of monitoring, changing conditions, etc. without additional NEPA analysis as long as it is consistent with the Gooding C&H Allotment Revision NEPA decision issued on in 2008.

The NEPA analysis, its decision, and the attendant AMP contain the specifics pertaining to livestock management that promotes achieving the AMP objectives (includes the grazing prescription and specific management actions, requirements, and restrictions). Adaptive management as prescribed in the project level NEPA decision is implemented through the AMP using the adaptive management process described in Appendix 1. The process requires:

1. Explicit definition of management objectives in terms of the desired condition for resources affected by livestock grazing.
2. Application of appropriate indicators or limits on annual grazing uses within ecological and monitoring constraints associated with the specific indicator.
3. Monitoring of both annual and long-term indicators related to the defined objectives and identified desired conditions. Monitoring of annual and long-term indicators generally should be conducted at the same monitoring location. The location should be chosen to determine the effects of and response to livestock grazing use and management. If possible, locations should be chosen that isolate grazing response vs. other resource uses and impacts. (Note: In some instances, long-term monitoring data may not be available for use in the adaptive management process. In this case, a field review of the resource conditions in question where annual indicators are not met should be conducted to determine if adaptive management changes are appropriate. This assessment should be conducted with the permittee and/or other parties to

evaluate the current condition of the resource relative to management actions. Long-term monitoring should be implemented to provide more definitive data for adaptive management decisions over time.)

Adaptive management actions may be implemented as long as they are consistent with existing NEPA decisions and/or the administrative authority of the Forest Service. The administrative authority of the Forest Service is described in Title 36 of the Code of Federal Regulations, part 222; and in Forest Service Manuals and Handbooks. Additional NEPA analysis would not be required. Adaptive management actions may be implemented singly or as a set of management actions. Short-term actions will be implemented through the AOI. Modifications to the AMP and/or term grazing permit should be considered where monitoring shows that these actions need to be continued in the long-term or are implemented repeatedly or consistently over time.

Adaptive Management Actions should be applied where:

- Monitoring shows management objectives have not been achieved or that trend towards achieving desired conditions is not improving or improving at an adequate rate.
- Annual indicators of grazing use or grazing standards are not met.
- Climatic events, fire, flood or uses and activities detrimentally impact resource conditions and a modification of grazing use is needed to provide for recovery of the site.

### **III. LIVESTOCK GRAZING SYSTEM**

The existing Term Grazing Permit is for 620 cow/calf pairs (2283 HMs) for the June 20<sup>th</sup> to October 9<sup>th</sup> season of use. Although the permit reads 2283 HMs, it has been decided that actual HMs will be kept near 1500 for 4-5 years to assess the allotment's livestock carrying capacity. Once this firming up period is past, there should be enough monitoring information to permanently adjust the permitted season or numbers in line with livestock carrying capacity. Permitted numbers of livestock or season of use may be adjusted during the next 4-5 grazing seasons as long as the 1500 HMs level is not exceeded. If this reduced level of grazing exceeds the allowable use standard and the desired Forest Plan conditions cannot be maintained, then the Forest Service will recommend an additional decrease in permitted numbers or length of season. The cattle will be grazed in a 5-pasture semi-deferred rotation system, starting most years in the south facing Stovepipe pasture. Possible variations like occasionally reversing the pasture counter clockwise rotation to benefit the mid-season pastures or adjusting the allotment entry date every third or fourth year to rest the early entry Stovepipe pasture can also be considered. Use of the main Carrie Creek drainage including King of the West and Tyrannis Creeks will be limited to a ten-day graze-through period. During this time, cattle will be moved on a daily basis to insure riparian areas are not over used.

Entry dates for pastures will be approximate and depend on annual precipitation, forage production and utilization, and permittee needs. Compliance with S&Gs will require riders to keep track of and move cattle before standards are exceeded. Re-growth of riparian vegetation is less likely to occur after mid August so cattle moves after this time should be started before reaching the 4-inch stubble height move trigger. Shorter days and cooler temperatures during the dry season decrease the likelihood of re-growth to meet the end of season riparian stubble height standard.

**Table 2 - Deferred Rotation Grazing System:**

Year	North/South				
	Beef Pasture	Carrie/Stovepipe	Grindstone/Worswick	Williams/Rosetta/Red Rock	
2008	First/Last	Second	Third	Fourth	Fifth
2009	Last/First	Fifth	Fourth	Third	Second
2010	First/Last	Second	Third	Fourth	Fifth
2011	First/Last	Second	Third	Fourth	Fifth
2012	Last/First	Fourth	Third	Second	Second

Every third year the grazing system rotation will switch from counter clockwise to clockwise. This allows the Carrie/Stovepipe and Grindstone/Worswick pastures to receive the deferment benefit one out of every three grazing seasons.

#### **IV. RANGELAND DEVELOPMENTS**

There are numerous range structures scattered throughout the allotment, including about 14 miles of barbed wire letdown fence and about eighty water developments. Refer to the following table of itemized developments.

##### **Permittee Condition for Maintenance of Structural Range Improvements:**

The grazing fee computation formula is partially based on the assumption that permittees will maintain the range improvements within their allotment boundary. Consequently, unless exempted, permittees are responsible for maintenance of all the structural range improvements located on the Gooding C&H grazing allotment. Maintenance means the timely repair or winterizing of management fences, stock water developments, corrals or other livestock facilities to a condition adequate to perpetuate the life of the facility and to make it fully functional. The Forest Service will normally provide materials for proposed developments if the permittee agrees to provide labor for construction.

Maintenance of the Worswick watershed protection fence will remain the responsibility of the Forest Service. The Forest Service responsibility is only for the initial maintenance prior to the arrival of cattle and for dropping wires after the grazing season. The permittee is required to maintain the fence during the grazing period and keep livestock out of the protected area. Maintenance of all other range structures will remain the responsibility of the grazing permittee. Some of the allotment boundary fences and the Gooding corrals are shared with permittees of adjacent allotments; therefore some of that maintenance responsibility is also shared. Facility maintenance must occur before livestock are allowed onto the allotment or before they are moved to the succeeding pasture. If this doesn't happen, permit non-compliance action will be considered by the District Ranger.

The following table exhibits the structural improvements on the Gooding C&H Allotment. This table will be updated periodically to reflect change.

**Table 3 - Gooding C&H - Structural Range Improvements**

**Fences:**

# Sections	T.	R.	Fence Name	Length	Condition
1. NW 1	2N	14E	Red Rock Drift	0.8 mi.	F
SE 35	3N	14E			
2. SE 1,12,13	2N	14E	Red Rock BP Division	3.0 mi.	G
3. SW 12, NE 13	2N	14E	Beef Pasture Interior	1.0 mi.	G
4. NE 13	2N	14E	Gooding Corral*		F
5. 6,7	2N	15E	Stovepipe BP Division	1.3	F
6. 5,7,8	2N	15E	Little Smoky/Stovepipe	2.3 mi.	F
32	3N	15E	Division		
7. SW 27	3N	14E	Belle Draw Drift	0.3 mi.	P
8. NE 26	3N	14E	Carrie Creek Drift	0.4 mi.	G
9. SE 27	3N	14E	Grindstone Drift	0.3 mi.	P
10. 28	3N	14E	Worswick Protection**	2.3 mi.	F
11. SW 27, SE 28		3N 14E	Williams Creek Drift	1.0 mi.	F
12. NW 35		3N 14E	Rosetta Drift	0.3	F
13. N2 35		3N 14E	Carrie Creek/Little Smoky	0.5 mi.	P
14. NESE 31		3N 15E	Blackhorse Trail Drift	0.1 mi.	G

Unlisted range improvements remain your maintenance responsibility.

\* Shared maintenance with adjacent allotment permittees.

\*\* Shared maintenance with the Forest Service.

**Water Development**

#	Location	Sec.	T.	R.	Development	WL Ramp	Type & Capacity	Shape	Style	Size
<b><u>Worswick/Grindstone Unit:</u></b>										
1.	NE NW	10	3N	14E	WFk Grindstone	Y	Rnd.	RM		300g
2.	SE NE	9	3N	14E	WFk Grindstone	Y	Rnd.	RM		300g
3.	SW NW	10	3N	14E	WFk Grindstone	Y	Rnd.	RM		300g
4.	NE NE	17	3N	14E	Worswick	NA	undeveloped spring			
5.	SW SW	9	3N	14E	Worswick	Y	Rnd.	RM		300g
6.	SW SE	9	3N	14N	Worswick	Y	oval	RM		150g
7.	NW SW	15	3N	14E	Worswick	Y	10x2	FG		225g
8.	NE SW	15	3N	14E	WFk Grindstone		oval	MT		90g
9.	SE SW	15	3N	14E	WFk Grindstone	Y	8X3	FG		170g
10.	SW SW	15	3N	14E	Worswick	Y	8X3	FG		170g
11.	NW NE	20	3N	14E	Worswick	NA	undeveloped spring			
12.	NE NW	21	3N	14E	Worswick	Y	oval	MT		90g
13.	NE NW	21	3N	14E	Worswick	Y	10x2	FG		225g
14.	SW NW	22	3N	14E	Belle Draw	Y	Rnd.	MT		160g
15.	NE SW	22	3N	14E	Belle Draw	Y	oval	RM		150g
16.	SW NE	23	3N	14E	Grindstone	Y	Rnd.	RM		300g
17.	NW SE	23	3N	14E	Grindstone	Y	Rnd.	RM		300g
18.	NE NW	26	3N	14E	Grindstone	Y				

19.	SE NW	26	3N 14E	Grindstone	NA	undeveloped spring			
20.	NE NW	27	3N 14E	E. Belle Draw	Y	oval	RM	90g	
21.	NE NW	27	3N 14E	E. Belle Draw	Y	10x2	FG	225g	
22.	NE SW	22	3N 14E	Belle Draw	Y	oval	RM	150g	
23.	NE NE	29	3N 14E	Worswick	Y	Rnd.	RM	300g	
24.	NW NW	7	3N 15E	Carrie Creek	Y	8X3	FG	225g	
25.	NE SW	10	3N 14E	Wfk Grindstone		oval	MT	90g	
26.	NE NE	12	3N 14E	Grindstone		oval	MT	90g	
27.	NW NW	14	3N 14E	Grindstone		oval	MT	90g	
28.	NE SE	14	3N 14E	Grindstone		oval	MT	90g	
29.	NE SW	15	3N 14E	Worswick	Y	oval	MT	90g	
30.	NE NW	16	3N 14E	Worswick		oval	MT	90g	
31.	NE NE	17	3N 14E	Worswick		10x2	FG	225g	
32.	NW NE	20	3N 14E	Worswick		oval	MT	90g	
33.	SW SE	23	3N 14E	Grindstone		oval	MT	90g	
34.	SE SE	23	3N 14E	Grindstone		oval	MT	90g	
35.	NW NW	26	3N 14E	Grindstone		oval	MT	90g	
Water Development					WL	Type & Capacity			
#	Location	Sec.	T.	R.	Development	Ramp	Shape	Style	Size

**Stovepipe Unit:**

1.	SE SE	26	3N 14E	Bear Gulch	Y	4x3	FG	150g
2.	NE SE	23	3N 14E	Carrie Creek	Y	oval	RM	150g
3.	SW NW	18	3N 15E	Mormon Gulch	Y	10x2	FG	225g
4.	SE NW	19	3N 15E	Tyrannis	Y	Rnd.	RM	300g
5.	NW SE	25	3N 14E	West Bear Gulch	Y	Rnd.	FG	225g
6.	SE NE	25	3N 14E	Bear Gulch	Y	oval	RM	150g
7.	NW NW	30	3N 15E	Bear Gulch	Y	Rnd.	RM	300g
8.	NE NW	30	3N 15E	Bear Gulch	Y	Rnd.	RM	300g
9.	SW NE	30	3N 15E	Blackhorse	Y	Rnd.	FG	240g
10.	SW SE	36	3N 14E	East Bear Gulch	Y	10x2	FG	225g
11.	NW NW	6	2N 15E	Stovepipe	NA	NA	WH	---
12.	NWNW	6	2N 15N	Stovepipe Cr.	Y	6X3	FG	225g
13.	NW NE	6	2N 15E	Stovepipe Cr.	Y	10x2	FG	225g
14.	NE NE	6	2N 15E	Stovepipe Cr.	Y	10X2	FG	225g
15.	NW SE	6	2N 15E	Stovepipe Creek	Y	10x2	FG	225g
17.	SW NE	7	2N 15E	Little Smoky	NA	NA	WH	---
18.	NE NE	7	2N 15E	Basalt Bridge Draw	Y	10x2	FG	225g
19.	NW NW	8	2N 15E	Little Smoky	NA	NA	WH	---
20.	NE NW	6	2N 15E	Stovepipe	NA	NA	WH	---
21.	SW SW	25	3N 14E	Bear Gulch		oval	RM	150g
22.	SE SW	25	3N 14E	Bear Gulch		oval	RM	150g
23.	SE NE	12	3N 14E	Carrie Creek		oval	MT	90g
24.	SW SE	36	3N 14E	Blackhorse		oval	RM	150g
25.	SE NE	36	3N 14E	Blackhorse		oval	RM	150g
26.	SW NW	30	3N 15E	Bear Gulch		oval	RM	150g

**Beef Pasture Unit**

1.	SW SE	11	2N 14E	Corral Draw	Y	Rnd.	RM	300g
2.	NW SW	12	2N 14E	Basalt Creek	NA	NA	WH	---
3.	SE NW	12	2N 14E	Gooding Beef Past.	NA	NA	WH	---
						Rnd.	RM	300g
4.	SE SW	1	2N 14E	Little Smoky	Y	8X3	FG	240
5.	NE NE	12	2N 14E	Gooding Beef Past.		NA	WH	
6.	SW NW	7	2N 15E	Gooding Beef Past.	Y	oval	RM	150g
7.	NE SE	12	2N 14E	Basalt Creek	NA	NA	WH	---
8.	SW NE	13	2N 14E	Basalt Creek	NA	NA	WH	---
9.	NE SE	12	2N 14E	Gooding Beef Past.		oval	MT	90g
10.	SW NE	12	2N 14E	Gooding Beef Past.		10x2	FG	225g
11.	NW SE	12	2N 14E	Gooding Beef Past.		oval	MT	90g
12.	NE NW	12	2N 14E	Beef Pasture		oval	MT	90g
13.	NE NW	12	2N 14E	Beef Pasture		oval	MT	90g
14.	SW SW	6	2N 14E	Gooding Beef Past.		oval	MT	90g

RM=Rubbermaid plastic, MT=Metal, FG-Fiberglass, RT-Tire, WH=Waterhole

**Water Development**

#	Location	Sec.	T.	R.	Development	WL Ramp	Type & Capacity Shape Style	Size
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**Red Rock Unit**

1.	NW SE	11	2N 14E	Red Rock	Y	Rnd.	FG	240g
2.	NE SW	11	2N 14E	Red Rock	Y	oval	RM	150g
3.	NW SW	11	2N 14E	Red Rock	Y	oval	RM	150g
4.	NW SW	11	2N 14E	Red Rock	Y	Rnd.	MT	160g
5.	SE NE	12	2N 14E	Red Rock	Y	oval	RM	100g
6.	NE NE	11	2N 14E	Red Rock	Y	oval	RM	150g
7.	NW NW	12	2N 14E	Red Rock	Y	Rnd.	FG	240g
8.	SW NE	10	2N 14E	Red Rock		oval	RM	150g
9.	SW NW	12	2N 14E	Red Rock		oval	RM	150g

**Structural Range Improvement Maintenance Responsibility**

**Stock water Developments -- Troughs, Pipelines and Stock Ponds:**

1. Maintain fences around springs to the Forest Service standards described for fences and corrals.
2. Keep head box covers in place, and if missing or broken, replace them to prevent dirt, rodents, or forest litter from clogging water supply lines.
3. Repair pipeline leaks or replace damaged sections with similar material used in the original construction.
4. Fill worn areas around troughs that become too elevated for calves to get a drink.
5. Reset and level troughs that become uneven due to settling.
6. Water should not be allowed to overflow the trough sides. Keep the overflow inlet pipe clear of debris. Bury the over flow pipe 4-6" deep and cover the outlet with rocks to protect it from being squashed. Direct the overflow water an adequate distance away from the trough vicinity.
7. Protect the inlet pipe by anchoring the downhill end to the trough structure and bury the line at least 4 inches.

8. Install and maintain wildlife escape ramps in operating condition to keep small animals from drowning.
9. Drain and periodically clean troughs and storage tanks to prevent moss and sediment buildup.
10. When no further need exists during the current grazing season, drain troughs and pipelines that are prone to freezing damage.
11. As needed, maintain, repair or replace poles, posts and trough framing with similar material used in the original construction.
12. Keep stock water ponds clear of debris, floating logs, dead animals, etc. Maintain spillways and overflow structures to prevent dams from washing out. If rodent activity threatens the integrity of the dam, their presence should be reported to the Forest Service.

#### Range Fences and Corrals:

1. Splice and repair all broken wires in such a manner that fence tension can be maintained. Wire splices will be made with 12 gauge tie wire or with the type of wire used in the original construction. As needed, replace broken or rotten sections of log and pole fences.
2. Replace broken or rotten posts and braces if needed to maintain fence integrity.
3. Replacement posts must be treated with wood preservative.
4. Straighten or replace bent or broken metal posts and connect wire onto posts with the appropriate type of fastener.
5. Maintain fences to meet big game standards (bottom wire 16-18" above ground, top wire 40-42" above ground) on all fences initially constructed to this standard.
6. Re-stretch wires when needed.
7. Replace broken stays and missing staples.
8. Avoid driving staples so deep they nick the wire and create a weak point that will eventually break.
9. Close all gates before livestock enter a pasture and tie road gates open after livestock leave the pasture.
10. Gate wire tension must be sufficient to prevent the gate from sagging. Use wood stays instead of metal stays and attach a "Please Close Gate" sign supplied by the Forest Service. Make gate loops from smooth, not barbed wire.
11. Completely remove trees that fall on fences and repair the resulting damage.
12. Keep corrals clean of trash, in good repair, and in useful condition.

## **V. MONITORING AND EVALUATION**

Monitoring is a key aspect of adaptive management. This section identifies specific monitoring protocols used to determine the need for management adaptation. If monitoring indicates the need for management changes (e.g., Forest Plan standards and guidelines aren't being met; resource conditions are deteriorating or are not making adequate progress towards achieving Forest Plan desired conditions and objectives; unacceptable user conflicts persist or are increasing, etc.), management will be adapted as appropriate and may result in the eventual modification of the term grazing permit. Likewise, if significant progress is realized in meeting AMP objectives and is confirmed by monitoring results, increased grazing use would be considered. If monitoring protocols, etc. described in this section do not provide information appropriate to determining achievement of management direction, or use conflicts occur which need to be evaluated with other protocols than those described, this section may be modified as part of adaptive management without additional NEPA analysis.

Existing key area monitoring will continue and additional key areas for monitoring will be established as needed. Monitoring of uplands has occurred in the form of nested frequency transects and re-reading of range analysis transects that were originally established in the late 1960s. Monitoring within key riparian areas occurs at designated monitoring sites and/or stubble height measuring stations.

Most key riparian areas have previously been identified and annual grazing use indicators are currently being monitored. Monitoring related to these areas will be expanded to determine needed condition and trend information. So new key areas, especially within King of the West or Tyrannis Creek drainages will be established as appropriate.

Implementation monitoring is used to determine if plans, projects, actions, and activities are implemented as designed. This includes short term and annual monitoring such as unit inspections, measurements of residual stubble height, browsing of woody species, and streambank disturbance, estimating forage use (professional judgment), performing unit inspections and checking for permit, AMP, and AOI compliance.

Effectiveness monitoring is used to determine if grazing management is effective in meeting the intent of the stated goals, objectives, standards, and guidelines. This includes condition/trend monitoring of uplands (e.g. nested frequency) and monitoring of streambanks and riparian vegetation (combination of greenline vegetation composition, greenline to greenline width, streambank stability, woody species regeneration, and photo-points). Monitoring results will be used to determine if management practices need to be adapted.

### **Desired Future Condition for Riparian Plant Communities**

The Sawtooth National Forest Land and Resource Management Plan (Forest Plan) identifies the need to define site-specific desired conditions for non-forest riparian vegetation in Appendix A, p.16. It further states that desired conditions may be defined at any scale from the designated monitoring area (DMA) to the 5<sup>th</sup> hydrologic unit (HU), depending on the vegetation component of interest. For allotment management planning, the activity area for determining whether desired future conditions are attainable will most likely be at the allotment level.

Riparian systems are dynamic in nature and are often in a process of change (Winward, 2000). River and stream channels move about within the valley floor and lakes and ponds gradually fill with sediments. These changes alone can result in a continual readjustment in successional processes. Even under “natural conditions”, stable plant communities such as those found on upland settings can be short-lived. Long-term, self-perpetuating plant communities on a specific area are achieved only on a few specifically armored settings where bedrock or large cobbles or boulders keep the stream channel intact or where low-gradient meadows have stable enough environments for the community types to reach a long-term balance within their environment (Winward, 2000). As the Forest Plan states, “desired conditions are not something that every acre of the Forest at every point in time will possess – there will always vary in location and time (spatial and temporal variability). However, achievement of desired conditions, well-distributed across the planning unit, is a long-term goal of Forest management.” (p.A-1)



Evaluation of the vegetation on the greenline area provides a good indication of a streambank’s ability to buffer the hydrologic forces of moving water. Since the greenline is located where the forces of water are greatest, a greenline measurement can provide an indication of health of the total watershed above the point of sampling. In Winward 2000, a list of riparian community types of the Intermountain Region is found in Appendix B (p. 35-39). Each community type has been assigned an “L” if it is known to occur in a mid to late successional stage along the greenline or an “E” if it occurs in earlier stages of succession along the greenline. Each community type has also been assigned a greenline stability class ranking, ranging from 1 (least) to 10 (greatest), rating its ability to buffer forces of moving water. An evaluation of the vegetation composition on the greenline can provide a valuable indication of the general health of a riparian area (successional status) as well as the current strength of the streambanks in buffering the forces of water (streambank stability).

By using the percent composition of each community type or dominant riparian species from greenline measurements, both successional status and bank stability ratings can be calculated (see Winward 2000 for complete explanation).

**Table 4 - Ecological status and greenline bank stability ratings.**

Greenline Successional Status Rating		Greenline Bank Stability Rating	
0-15	Very Early	1-2	Very Low
16-40	Early	3-4	Low
41-60	Mid	5-6	Mid
61-85	Late	7-8	High
86+	PNC	9-10	Excellent

Potential natural community (PNC) is described as the biotic community that would become established if all successional sequences were completed without human interference, under the present environmental conditions (Winward, 2000). Successional status ratings of late, mid, early and very early represent the present state of vegetation on an area in relation to the potential natural community that could occur on that area.

Other than grazing, there are many other factors affecting the resources within the Gooding C&H Allotment; such as wood cutting, poorly located or designed roads, off-road OHV use, dispersed camping, etc. These factors can cause localized soil compaction, loss of riparian vegetation, reduced wood recruitment to stream channels, increased sediment issues, and streambank erosion.

Because of these other use activities that occur on the Gooding C&H Allotment, including livestock grazing and its associated development, it is unrealistic to expect that PNC or, in some locations, that a late seral greenline status can be achieved on every riparian systems throughout the allotment. These activities along with periodic natural storm and run off events limit the ability of successional sequences to be completed without interference. However, proper management of grazing and other activities, as directed by the Forest Plan should allow for the attainment of a mid to late seral greenline successional status condition at the allotment scale.

The interdisciplinary (ID) team for the environmental analysis has been charged with the task of recommending a desired condition for riparian vegetation on the Gooding C&H Allotment. It is the

recommendation of the ID team that an attainable DFC for streambank riparian vegetation at the allotment scale be a greenline successional status rating of 51 (upper-mid seral) or greater and a greenline bank stability rating of 6 (upper-mid) or greater.

Different attainable desired conditions may be established for specific monitoring sites, stream reaches or pastures that vary from the allotment-wide values based on inherent ability of those monitoring sites.

Riparian areas are generally considered the weak link due to livestock preference. If riparian areas are managed properly, generally uplands are also managed properly. The gathering of riparian use data will be used to determine if grazing use is being managed within acceptable levels in riparian areas on the allotment. Note: The Forest Plan sets the indicator value for use of riparian hydric grasslike species in terms of percent use or residual stubble height. Additional or other indicators are identified to help achieve stated desired conditions. These indicator values may also be identified as proper use levels. The following riparian studies will be re-read every 3-5 years. (See Map)

**Table 5 - 2006 & 2007 MULTIPLE INDICATOR MONITORING**

			Stable	Covered	Woody Vegetation			Ecological	Site	Hydric		
DATE	Stream DMA		Bank	Bank	Saplings	Mature	Dead	Hydric	Status	Rating	Woody	Herbaceous
		<b>Stovepipe 1</b>	%	%	%	%	%	%			%	%
8/21	2006	* End of pasture use	-	-	-	-	-	-	-	-	-	-
	Carex	End of growing season										
8/28	2007	* End of pasture use	-	-	-	-	-	-	-	-	-	-
<b>10/16</b>		End of growing season										
		<b>Stovepipe 2</b>										
	2006	* End of pasture use	-	-	-	-	-	-	-	-	-	-
	Carex	End of growing season										
8/1 & 8/28	2007	* End of pasture use	<b>94</b>	<b>100</b>	<b>63</b>	<b>36</b>	<b>1</b>	<b>88</b>	<b>101</b>	<b>90</b>	<b>43</b>	<b>57</b>
<b>10/16</b>		End of growing season							PNC	Very Good		
		<b>Blackhorse</b>										
	2006	* End of pasture use	-	-	-	-	-	-	-	-	-	-
	Carex	End of growing season										
6/20 & 8/30	2007	* End of pasture use	<b>97</b>	<b>100</b>	<b>54</b>	<b>44</b>	<b>1</b>	<b>89</b>	<b>97</b>	<b>90</b>	<b>59</b>	<b>51</b>
<b>10/18</b>		End of growing season							PNC	Very Good		
		<b>Carrie Creek</b>										
7/11	2006	* End of pasture use	77	89	20	80	0	71	75	82	71	25
	Carex	End of growing season							Late	Good		
9/18	2007	* End of pasture use	-	-	-	-	-	-	-	-	-	-
<b>10/16</b>		End of growing season										
		<b>Tyrannis</b>										
7/3	2006	* End of pasture use	88	92	0	100	0	54	69	68	18	48
	Carex								Late	Good		
9/18	2007	* End of pasture use	-	-	-	-	-	-	-	-	-	-

<b>10/16</b>		**	End of growing season										
<b>10/3</b>	2006	*	<b>W fk. Grindstone</b> End of growing season	-	-	-	-	-	-	-	-	-	
	Carex												
9/15	2007		* End of pasture use	-	-	-	-	-	-	-	-	-	
9/17	2006		<b>Grindstone 1</b> * End of pasture use	90	92	41	53	6	52	62	72	49	37
	Carex									Late	Good		
9/14	2007		* End of pasture use	-	-	-	-	-	-	-	-	-	-
	2006		<b>Grindstone 2</b> * End of pasture use	-	-	-	-	-	-	-	-	-	-
8/2 & 9/14	Carex	**	End of growing season										
	2007		* End of pasture use	<b>90</b>	<b>90</b>	<b>91</b>	<b>9</b>	<b>0</b>	<b>65</b>	<b>70</b>	<b>85</b>	<b>43</b>	<b>46</b>
<b>10/16</b>		**	End of growing season							Late	Good		
6/28	2006		<b>Worswick</b> * End of pasture use	%	%	%	%	%	%			%	%
	Carex	**	End of growing season	96	84	52	42	6	72	99	71	56	50
9/17	2007		* End of pasture use	-	-	-	-	-	-	PNC	Good	-	-
<b>10/15</b>		**	End of growing season										
<b>10/7</b>	2006	*	<b>Williams</b> End of growing season	-	-	-	-	-	-	-	-	-	-
	Carex	**	End of growing season										
9/19	2007		* End of pasture use	-	-	-	-	-	-	-	-	-	-
<b>10/15</b>		**	End of growing season										
<b>10/4</b>	2006	*	<b>Rosetta</b> End of growing season	82	80	34	61	5	47	58	66	60	25
	POPR	**	End of growing season							Mid	Good		
<b>10/12</b>	2007	*	End of growing season	-	-	-	-	-	-	-	-	-	-

<b>10/15</b>		**	End of growing season										
<b>10/4</b>	2006	*	<b>Red Rock</b> End of growing season	91	96	31	69	0	88	93	87	75	51
	Carex	**	End of growing season							PNC	Very Good		
<b>10/12</b>	2007	*	End of growing season	-	-	-	-	-	-	-	-	-	-
<b>10/16</b>		**	End of growing season										
			<b>Little Smoky Beef A</b>	%	%	%	%	%	%			%	%
8/17	2006		* End of pasture use	81	89	59	41	0	73	83	69	69	34
	Carex	**	End of growing season							Late	Good		
<b>10/10</b>	2007	*	End of growing season	-	-	-	-	-	-	-	-	-	-
<b>10/16</b>		**	End of growing season										
			<b>Meadow Ck Beef B</b>										
<b>10/7</b>	2006	*	End of growing season	-	-	-	-	-	-	-	-	-	-
	Carex	**	End of growing season										
<b>10/10</b>	2007	*	End of growing season	-	-	-	-	-	-	-	-	-	-
<b>10/16</b>		**	End of growing season										

\*\*Stubble height data estimated by Farm Bureau Federation range consultant

\*\*\*Stubble height data measured by Farm Bureau Federation range consultant and/or FS

The 2008 monitoring results will be posted at a later date.

Stubble height measurements taken by the FS in October are considered "**End of Growing Season**".

FS & Farm Bureau sites are often not co-located although they may be named the same.

The above referenced Interagency Technical Bulletin, version 5.0/April 2008, containing monitoring protocols is available at the Fairfield Ranger District.

### General Unit Exams – Short term monitoring

Unit exams are allotment inspections where the observation and documentation of certain allotment information will be used to adjust Annual Operating Instructions (AOI), determine and adjust proper carrying capacity, and to document compliance with terms and conditions of the grazing permit. At a minimum, the following types of allotment inspections will be conducted on an annual basis:

Type of Inspection	Frequency
Livestock distribution	Periodic inspections will be conducted throughout the grazing season.
Range improvement maintenance	Inspections for improvement maintenance will be conducted in conjunction with other inspections.
Annual Operating Instructions compliance	Inspections for AOI compliance will occur at least twice during the grazing season.
Upland Use ARTRV (50% use of Agsp,Feid)	Periodic inspections will be conducted throughout the grazing season.
Aspen (25% use of annual leader growth)	To be determined = TBD by wildlife biologist

Actual livestock grazing use will be documented annually in the 2210 allotment file. The dates and number livestock enter and leave each unit are part of the permittee reporting requirement.

### Upland Monitoring

Upland sites *may or may not need to be monitored* if riparian areas area managed properly. Upland condition and trend studies are forms of long term monitoring and help answer the following questions: Is compliance with proper use criteria and other management requirements effective in maintaining or improving upland and riparian ecological conditions? Is there a need to change in management to become effective? The following studies *may* be used to help answer these questions:

Unit	Benchmark Location	Study Type & Year	*Trend	**Re-read
Stovepipe	NW ¼, SE ¼, Sec 6, T2N, R15E	Nested Frequency 1983 & 1991	Meeting*	TBD
Grindstone	NE ¼, NW ¼, Sec 35, T3N, R14E	Nested Frequency 1984 & 1991	Meeting*	TBD
Worswick	NE ¼, NW ¼, Sec 35, T3N, R14E	Nested Frequency 1992	Meeting*	TBD
Williams	SW ¼, SW ¼, Sec 27, T3N, R14E	Nested Frequency 1984 & 1991	Meeting*	TBD
Red Rock	SW ¼, NW ¼, Sec 1, T2N, R15E	Nested Frequency 1986 & 1991	Meeting*	TBD
Beef Pasture	SE ¼, SE ¼, Sec 12, T2N, R14E	Nested Frequency 1986 & 1991	Meeting*	TBD

\* Trend is defined as the directional change in kind, proportion and/or amount of plant species, or soil characteristics. The direction of trend is based on whether the changes in vegetation and soil conditions are desirable or undesirable for specified management objectives. Trend in desired vegetation conditions is described as “meeting”, “moving toward” or “not meeting”. \*\* TBD = To Be Determined if needed in addition to riparian monitoring

Long-term information on uplands has also been acquired by re-reading the following 2004 Range Environmental Analysis studies. Refer to the Dixie and Fishlake National Forests June 2001 Rangeland Ecological Sustainability & Trend Range Site analyses Monitoring Guidelines. This procedure will be performed if determined to be needed in addition to riparian monitoring.

**Table 8 – Updated REA Data**

REA #	Veg Type	REA #	Veg Type	REA #	Veg Type	REA #	Veg Type
N-10	2D	H-12	10	B-5	4	B-1A	4
BS-1	2D	H-1	6	B-15	4	N-11	4
N-13	10	L-4	6	S-4	4	S-13	4
P-3	10	N-12	5	S-1	4	B-3	1
B-12	10	H-2	5	P-1	4	N-9	1
S-3	10	L-6	5	B-1	4	P-5	1
P-2	10	H-4	4	BC-1	4		

Veg Types: 1=Grassland, 2D=Dry Meadow, 4=Sagebrush, 5=Mtn. Brush, 6=Conifers, 10=Aspen

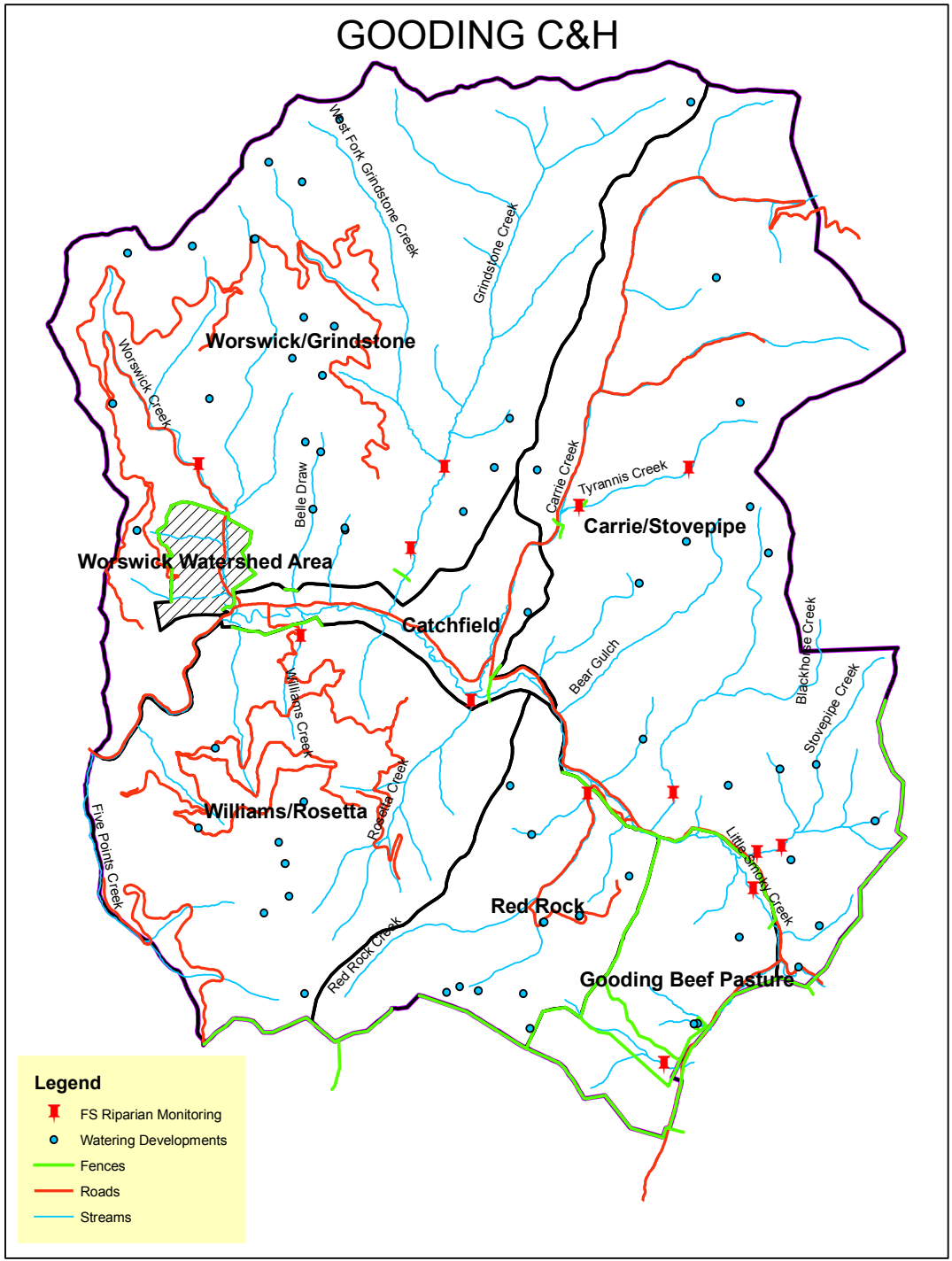
**Noxious Weed Monitoring:**

Noxious weed infestations are currently limited to a few small localized areas. Infestations will be treated annually until they are eradicated. Past treatment, such as pulling or spraying, will be evaluated for effectiveness each year at the time weeds are actually treated. Treatment will be documented in the annual noxious weed report.

The following areas will be inspected and treated if needed on an annual basis:

- Areas adjacent to known infestations
- High use dispersed recreation sites
- Worswick hot springs area
- Material borrow sites
- Trail heads
- Vicinity of the Gooding shipping corral and snow machine warming hut

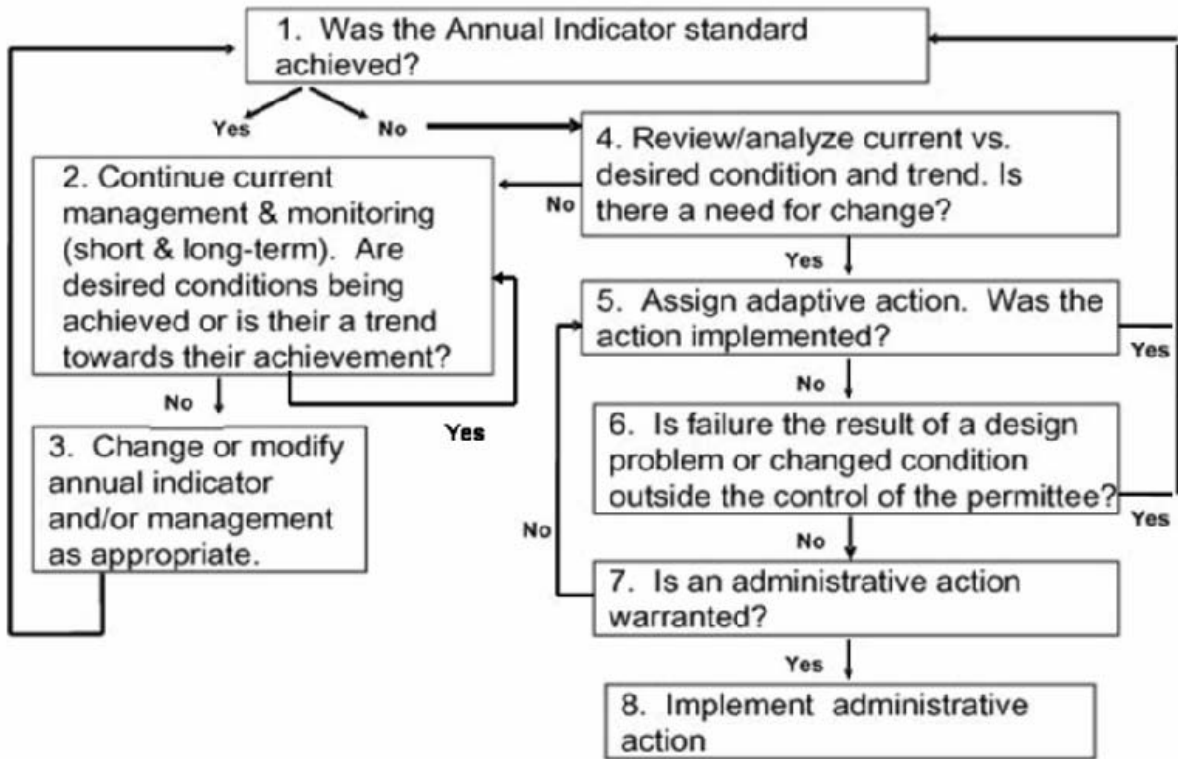
Map: Allotment Boundary, MIM Monitoring Sites (DMAs), Pastures, Water Developments





## Appendix A: Adaptive Management Decision Process

### Adaptive Management Decision Tree:



- A. In Block 1, the grazing permittee(s) and/or land manager evaluates whether the annual grazing use indicator or standard was met. This assumes that the correct indicator and value was being used. This may be subject to re-evaluation later in the process.
- B. Annual Indicator or Standard is Met: If the annual grazing use indicator is met, current management will continue, including short- and long-term monitoring as indicated in Block 2.
- B1. Continue Current Management and Monitoring (Block 2): Long-term monitoring indicators are used to assess whether management objectives for resource conditions and values are being achieved. This data will be used over time to determine the effectiveness of annual grazing use indicators or standards in achieving the desired conditions.
- B2. Modify the Annual Indicator and/or Management as Appropriate (Block 3): If the desired condition objective is not being achieved, there is a need to change management and/or modify either the type or value of annual grazing use indicator being used.

If the desired condition objective is achieved, it may be possible to modify either the value or type of annual grazing use indicator and still maintain the desired condition. An example would be

relaxing the numerical value (i.e., 4-inch versus 6-inch stubble height) or changing the type of annual grazing use indicator being used (i.e., change indicator from herbaceous utilization to woody utilization).

- C. Annual Grazing Use Indicator or Standard Is Not Met: If the grazing use exceeds the annual grazing use indicator or standard, proceed to the evaluation steps in Block 4.
- C1. Analysis and Determination of the Need for an Adaptive Management Adjustment (Block 4): If the grazing use exceeds the established annual grazing use indicator or standard, the resource manager, in consultation with the permittee(s) and others as appropriate, evaluates: 1) the potential cause for exceeding the standard, and 2) the significance of the excessive grazing use relative to its impact on the achievement of the desired resource conditions.

The resource manager, in consultation with the permittee(s), should determine whether the failure to meet the annual grazing use indicator is an infrequent occurrence or whether there is routine difficulty in meeting annual grazing use standards. A one-time occurrence due to some unique variable may not be significant and may not require further evaluation or adaptive management adjustments. Routine difficulty in meeting the annual grazing use indicator may indicate further evaluation and the need for adaptive management adjustments.

If further evaluation is warranted, comparison of the current condition with the desired condition should be made. If there is a large departure between current conditions and desired resource conditions, it may be fairly obvious that the need to achieve the annual use indicator is significant and that adaptive management actions are needed to provide for the achievement of the annual use indicator and meet long-term objectives.

While the evaluation of current versus desired conditions should be made with the use of long-term monitoring data, this information may not be available. In that case, utilize the best available information or complete a simple and rapid qualitative analysis to compare current conditions with desired conditions. While long-term trend and condition information is preferred, the lack of such information should not delay the evaluation of the current rangeland condition and needed adaptive management adjustments. Adaptive management adjustments should be temporary modifications until quantitative long-term condition and trend information is available to support permanent changes.

If the resource manager's evaluation concludes that current conditions are close to desired resource conditions, then failure to achieve the annual grazing use indicator during that grazing season may not be significant in terms of achieving long-term objectives. In this case, adaptive management adjustments may not be necessary. Existing management and monitoring to achieve desired conditions would continue (blocks 2 and 3). The exception to this situation may be where available information indicates that the long-term trend is negative, and adaptive management adjustments are needed.

If the resource manager's evaluation concludes that there is a significant gap between current and desired conditions and there is no indication of a positive trend, then the need for adaptive management adjustments are indicated.

C2. Development and Implementation of Adaptive Management Adjustments (Block 5): If adaptive management adjustments are warranted, the resource manager develops these actions in collaboration with the permittee(s) and others, as appropriate. The adaptive actions are implemented through annual authorizations or operating instructions issued by the resource manager. These actions typically include, implementation of additional or more restrictive annual use criteria; change in season, timing, or duration of grazing; changes in numbers of livestock; changes herding or routing practices; changes in grazing rotations; closures or resting areas from grazing; changes in salting and watering practices, and changes in other livestock management practices and requirements.

Once adaptive management adjustments are developed and assigned, the resource manager, in collaboration with permittee(s) and others, as appropriate, must assess whether the adaptive management adjustments were implemented as designed during the following grazing period.

If adaptive management adjustments were implemented by the permittee(s), then a determination as to whether these adjustments achieved the annual grazing use indicator would be made the following grazing period (Block 1). If the adaptive management adjustments were effective in achieving the annual grazing use indicator, then management and monitoring would continue as planned (Blocks 2 and 3). If they were not effective, then the resource manager, in collaboration with permittee(s) and others, as appropriate, must determine what additional adaptive management actions are needed (return to Block 5).

C3. Adaptive Management Adjustment Not Implemented (Block 6): If the adaptive management adjustments were not implemented, the resource manager must determine if the failure results from a design problem or changed condition, outside the control of the permittee(s). If there were problems with the design or ability to implement the adaptive management adjustments outside the control of the permittee(s), the resource manager and/or permittee(s) would revisit the design or selection of the adaptive management adjustment (return to Block 5).

C4. Determination of Non-compliance (Block 7): If failure to implement the adaptive management adjustment is not related to the design or inability to implement the adaptive action by the permittee(s), the resource manager would assess the need for an administrative action. If the resource manager determines that an administrative action is not warranted, additional changes or adaptive management direction should be considered (return to Block 5).

C5. Issue Notice of Non-compliance (Block 8): If failure to implement adaptive management adjustments is an issue of permittee(s) performance and compliance or is repetitive, then take appropriate action under the grazing regulations (36 CFR Part 222.4), Forest Service Manual direction (FSM 2231.6), and Forest Service Handbook direction (FSH 2209.13 sec.16 & R4 FSH 2209.13 sec. 16).

The following table and list describe the probable actions that will be considered and implemented under adaptive management. However, it is not intended to exclude other actions which may be authorized by the grazing permit or under authority of 36 CFR 222, FS Manuals and Handbooks, and other laws and regulations as they exist or may be enacted.

**Table 9: Potential Adaptive Management Actions**

Possible Action	Authority
Modify the terms and conditions of a permit to conform to current situations brought about by changes in law, regulation, executive order, development or revision of an allotment management plan, or other management needs.	36 CFR 222.4
Modify the seasons of use, numbers, kind, or class of livestock allowed on the allotment to be grazed under the permit, because of resource condition, or permittee request.	36 CFR 222.4
Adjustments to livestock numbers and seasons of use.	EA p.15-16
Implement periods of rest for the allotment or areas within the allotment.	EA p.15-16
Closure of grazing areas within the allotment.	EA p.15-16
Implementation of additional grazing restrictions, including annual grazing use indicators, and salting, herding, and other management practices.	EA p.15-16; FP p. III 44-47
Alteration of the pasture rotation; timing, duration and grazing intensity; and other factors included in the management system.	EA p.15-16; FP p. III 44-47
Adjust grazing to address conflicts with other resource uses.	EA p.15-16; FP, p. III 44-47
Adjust grazing to provide for maintenance or restoration of aquatic and riparian processes, functions, and beneficial uses.	EA p.15-16; FP, p. III 44-47
Coordinate grazing with timber harvest and forest regeneration activities.	FP, p. III 44-47
Construction of structural range improvements and handling facilities such as water developments, fences, permanent corrals, etc.	Requires additional NEPA
Implement vegetation treatments (prescribed fire, brush control, seeding, etc.) to achieve management objectives and desired conditions.	Requires additional NEPA

Alteration of Grazing Rotation and Management System Alteration of the sequence of pasture use within a grazing season or over a sequential period of years, the timing or season of use, the period or length of use, grazing intensity within a pasture, rest from grazing use, etc. In the short-term, this will be implemented through the AOI. For long-term or multi-year adjustments, modify the AMP.

Closure of Areas: Close areas within allotments where monitoring shows that desired conditions cannot be met while sustaining any grazing use. This may include a identification of specific areas within an allotment where livestock grazing will not be allowed. Modify the AMP and term grazing permit to identify area that will be avoided.

Grazing Restrictions – Modification of Indicators of Annual Grazing Use: Annual grazing use indicators generally consist of measures of allowable grazing use including: forage utilization limits, woody species utilization limits, streambank disturbance limits, soil disturbance limits, herding practices, use limits around corrals, duration of uses, etc. Levels of acceptable use are set for some of these practices in the Forest Plan and/or the Allotment NEPA decision. These levels or indicators of livestock use may be modified or other indicators identified as needed to facilitate achievement of objectives and desired conditions. Modification and/or implementation of these annual use indicators

will be consistent with the direction established in the December 19, 2005, Forest Plan Grazing Implementation Guide.

Grazing Restrictions – Modification of Management Practices: This includes a range of management and herding practices that vary according to conditions and use that are found on individual grazing allotments. Modification of grazing use may be appropriate to prevent or manage conflicts with other uses such as dispersed recreation, coordinate with other management activities such as timber harvest and forest regeneration, or mitigate conflicts or impacts to other resources. Examples include management of impacts to roads and trails, herding practices around developed recreation sites, use of grazing as a tool for noxious weed management and site preparation for reforestation, management of line camps, fire and noxious weed prevention, etc.

Modify Season of Use: Adjust the season of use for the allotment or areas within an allotment to reduce grazing impacts through changing the length or duration of use; reduce or eliminate grazing impacts during periods where plants or other resources are most susceptible to damage, or avoid conflicts with other uses such as during periods of high recreation use. Adjust the season of use to avoid grazing impacts or conflicts with critical resource needs of TES species and other wildlife. Adjust the season of use at the request of the permittee to provide a better fit to his/her ranch operation. Adjust the season of use to take advantage of the availability of additional forage through extending the grazing season. Adjust the grazing season in response to seasonal variations in climate and productivity. Adjustments to stocking and season of use may be considered jointly or separately as appropriate.

Modify Stocking: Adjust authorized or permitted livestock numbers during all or a portion of the grazing season to match grazing use to resource conditions and productivity. Adjustments to stocking and season of use may be considered jointly or separately as appropriate.

Range Improvements – Structural and Nonstructural: Actions include construction of water developments, fences, corrals and other permanent livestock handling facilities, trails, bridges, prescribed fire, noxious weed treatment, seeding, aspen stand treatments, sagebrush manipulation, etc. These actions may be proposed as adaptive management actions. Additional NEPA analysis will be required for these activities unless they are currently covered under existing NEPA analyses such as noxious weed management.

Rest (i.e., closure to grazing for a full year): Rest the allotment or areas within the allotment for a specific period of years or on periodic rotation where monitoring shows that trend towards achieving desired conditions are not stable, improving, or improving at an adequate rate. This may also be implemented where fire, flood, etc; detrimentally impact resource conditions or where treatment activities require a period of rest to provide for recovery of the site. Where this occurs, specific recovery criteria for allowing grazing should be specified.