ENCLOSURE 1

PROPOSED ACTION
The Forest Service proposes to continue to authorize livestock grazing on the Labarge Creek C&H allotment utilizing an adjusted grazing management strategy which incorporates adaptive management. This adjusted grazing management strategy is expected to ensure livestock grazing continues to result in desired conditions being met or trended to. The livestock grazing authorization would include the following:

- Maximum head months (HMs) would be up to 2,656 annually.
- Maximum number of livestock would be up to 878 annually.
- Maximum operating season would be June 20th to October 10. Normal Operating Season would be July 1st to September 30th.
- Livestock would be managed under a rotational grazing system.
- Construction of wildlife friendly exclosure around Shafer Creek Cabin (a cultural resource site); and improvement of a wildlife friendly exclosure around Labarge Creek cabin (an administrative site) would occur.

To address resource management issues identified through resource monitoring, adaptive management would be implemented. Adaptive management actions to be used where resource management issues have been identified are shown in Table 3. In addition, to adaptive management actions identified, the full suite of administrative adjustments allowed under the authority of the Term Grazing Permit would be utilized. Administrative adjustments would be considered those items associated with timing, intensity, frequency, and duration of livestock grazing. Examples include but are not limited to:

- Adjusting the grazing system (e.g. rotation schedule, days grazed within a unit; the development of additional units/riparian pastures, rest of a unit, etc.).
- Adjusting the overall season of use within the maximum season analyzed under NEPA and as described in the term grazing permit.
- Altering the number of livestock not to exceed the maximum HMs analyzed under NEPA and as described in the term grazing permit.
- Altering the class of livestock (e.g. yearling cows vs cow/calf pairs).
- Any combination thereof.

These administrative actions would be utilized to 1) address unwanted effects resulting from livestock use; 2) to respond to changes in resource conditions; and 3) ensure desired conditions continue to be met and/or trended to. They would be implemented under the authority of the term grazing permit and would not require additional NEPA decision.

DESIRED CONDITIONS; EXISTING CONDITIONS; AND RESOURCE MANAGEMENT NEEDS
Desired conditions are shown in Table 1. These desired conditions were taken from the Bridger-Teton National Forest Land and Resource Management Plan (LRMP) and/or developed at the project scale. Desired conditions developed at the project scale are consistent with the LRMP desired conditions.
GRAZING MANAGEMENT STRATEGY
The proposed grazing management strategy is designed to ensure satisfactory conditions are maintained throughout the allotment. This strategy consists of annual (implementation) and long-term (effectiveness) monitoring.

Assessment of Grazing Management Strategy: The effectiveness of the Grazing Management Strategy will be periodically assessed. Data collected would be the driving force in determining whether or not changes to livestock management would occur. Assessment of the Grazing Management Strategy would occur as described below.

- **Step 1 - Determine Existing Conditions through Monitoring**
- **Step 2 – Compare Existing Conditions to Desired Conditions**
- **Step 3 – Determine if Desired Conditions are being Achieved**
  - If desired conditions are being achieved, continue management as is while allowing for necessary administrative adjustments. Proceed back to Step 1 and continue monitoring.
  - If desired conditions are not being achieved proceed to Step 4.
- **Step 4 – Determine if (1) current livestock grazing practices are a limiting factor and (2) the trend of the resource in question.**
  - If current livestock grazing practices are not a limiting factor or satisfactory conditions are being achieved, continue livestock grazing as prescribed. Monitor to ensure satisfactory conditions continue to be met. Proceed back to Step 1.
  - If current livestock grazing practices are a limiting factor and unsatisfactory conditions are present, change grazing management as directed in Desired Conditions Table 1. Proceed to Step 5.
- **Step 5**
  - If unsatisfactory conditions persist and livestock remain a limiting factor, further reduce use. Complete removal of livestock from the area may be required.
  - If changes result in satisfactory conditions being achieved and/or livestock practices not being a limiting factor, continue livestock grazing with prescribed changes. Continue to implement prescribed changes until desired conditions have been achieved for at least 3 years. At this time change annual benchmark to match those shown in Desired Conditions Table 1 for areas in satisfactory condition.

Annual Benchmarks: The grazing management strategy incorporates several annual benchmarks. These benchmarks would be used as a tool to maintain and/or move to desired conditions. Monitoring of annual benchmarks would generally occur at key areas and/or concern areas where data from long-term studies have been collected. The ecological setting of the site as well as whether or not the site is in satisfactory condition would determine the appropriate level of use (see Desired Conditions Table 1 – Related Annual Benchmarks).
<table>
<thead>
<tr>
<th>Resource Area</th>
<th>LRMP future desired conditions, Project Specific Desired Conditions including Long-Term Benchmarks and related Annual Benchmarks</th>
</tr>
</thead>
</table>
| Rangelands including upland and riparian areas; Soils; and Watershed.       | • Native and selected non-native species of a moderate to high value for watershed protection will be ≥60% of the relative cover in all vegetation types grazed by livestock⁴.  
• Effective ground cover at or near potential. Grazing management activities that will result in ≤85% of potential effective ground cover for each plant community type grazed by livestock not to be allowed². |
| Watershed including water quality                                            | • LRMP Water Quality Standard (USDA, 1990 pg. 136) – Forest Service or permitted activity or project will, at a minimum, adhere to state rules and regulations concerning surface and ground water quality (i.e. temperature, sediment sampling, etc.)³. |
| Rangelands including upland and riparian areas; and Wildlife                | • A variety of plant community types existing within the project area which have variations in species composition, codominant vegetation, shrub cover, herbaceous cover, and stand structure which meet seasonal requirements for food, cover, and nesting of TES, MIS, and other species of interest.  

Wet Meadow Communities (excludes willow communities)  
• Desirable species of preference ≥80% of relative graminoids species composition as measured by canopy cover at ≥ 80% of these sites⁴.  
• Total herbaceous canopy cover ≥80% at ≥ 80% of these sites. Standing litter to be counted as herbaceous cover.  

Willow Communities  
• Desirable species of preference ≥80% of relative graminoids species composition as measured by canopy cover at ≥ 60% of these sites⁴.  
• Total herbaceous canopy cover ≥80% at ≥ 60% of these sites. Willow canopy cover to count towards herbaceous canopy cover. Standing litter to be counted as herbaceous cover.  

Moist Meadows including grass, silver sagebrush, and shrubby cinquefoil communities  
• Desirable species of preference ≥80% of relative graminoids species composition as measured by canopy cover at ≥ 60% of these sites⁴.  
• Total herbaceous canopy cover ≥80% at ≥ 60% of these sites. Silver sagebrush and shrubby cinquefoil canopy cover to count towards herbaceous canopy cover. Standing litter to be counted as herbaceous cover.  

Mountain big sagebrush; Snowfield sagebrush; and other mountain shrubland communities  
• Desirable species of preference ≥80% of relative graminoids species composition as measured by canopy cover at ≥ 60% of these sites⁴.  
• Total herbaceous canopy cover of mountain big sagebrush/snowfield communities ≥40% at ≥60%of these sites when canopy cover of sagebrush is ≤35%. Excludes shallow well drained soils including those sites located on warm aspects. Total herbaceous canopy cover of other mountain shrubland communities ≥15% at ≥40% of these sites⁵. Standing litter to be counted as herbaceous cover.  

Aspen                                                                 | • Grazing in aspen stands managed to ensure sprouting and sprout survival sufficient to perpetuate the long-term sustainability of aspen clones. ≥40% canopy cover at 7 years post-disturbance with an average sprout height of equal to or greater than 10 ft. to be used as an indicator of sustainability⁶. |
<table>
<thead>
<tr>
<th>Resource Area</th>
<th>LRMP future desired conditions, Project Specific Desired Conditions including Long-Term Benchmarks and related Annual Benchmarks</th>
</tr>
</thead>
</table>
| Aquatics including Fisheries; Rangelands including Riparian & Wetlands; Watershed including water quality | • LRMP Fish Habitat Management Guideline (USDA, 1990 pg. 126); LRMP Streambank Stability Guideline (USDA, 1990 pg. 126); 2005 Errata Sheet to the Forest Plan (USDA, 2005a) meet project level desired conditions.  
  ✓ Fish Habitat Management Guideline (USDA, 1990 pg.126): For fish habitat providing a fishery at or near its potential, fish populations should be maintained at existing levels. For habitat below its natural potential, habitat should be improved and maintained to at least 90 percent of its natural potential. First priority for improvement should be streams supporting Colorado River and Bonneville cutthroat trout which are Sensitive species.  
  ✓ Grazing managed to maintain ≥ 90% of the natural range of streambank stability.  
  ✓ Grazing managed to maintain a greenline composition ≥ 80% of its potential natural condition. |
| Recreation, Visuals | • Previously described Project Specific Desired Conditions; LRMP Forest-Wide Resource Management Prescriptions, Standards, and Guidelines; and DFC Resource Management Prescriptions, Standards, and Guidelines including Amendments 2 & 11 meet project level desired conditions. |
| Cultural Resources | • Current laws and regulations, previously described Project Specific Desired Conditions; LRMP Forest-Wide Resource Management Prescriptions, Standards, and Guidelines, and DFC Resource Management Prescriptions, Standards, and Guidelines meet project level desired conditions. |
| Resource Area | Related Annual Benchmarks³ |
| Fisheries; Rangelands including riparian and uplands; Watershed including Water Quality | ▪ **Greenline Communities in Satisfactory Condition**: Greenline Stubble Height no less than 5”; 4” and <50% use on key species for Class I, Class II, and Class III streams respectively.  
  ▪ **Greenline Communities in Unsatisfactory Condition**: Greenline stubble height no less than 6” on key species for Class I and II, and <30% for Class III streams. |
| Rangelands including uplands and riparian; Wildlife | ▪ **Rangelands or Plant Communities in Satisfactory Condition**: Maximum forage utilization 50% of use at key areas on key species on uplands, aspen, and riparian areas away from the greenline. 50% use by key species equates to approximately to 25-30% utilization of total forage use (USDA, 1981). Use will be limited to 50% of the total forage cover for perennial forb communities.  
  ▪ **Rangelands or Plant Communities in Unsatisfactory Condition**: Maximum forage utilization 30% use at key areas on key species on uplands, aspen, and riparian areas away from the greenline. 30% use by key species equates to approximately to 13-17% utilization of total forage use (USDA, 1981). Use will be limited to 25% of the total forage cover for perennial forb communities not at satisfactory condition. |
<p>| Rangeland, Soils | ▪ Maximum forage utilization limited to 25% of total forage cover where effective ground cover is less than 60% as a result of burrowing rodent activity. |</p>
<table>
<thead>
<tr>
<th>Vegetation Type</th>
<th>Potential Ground Cover</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver Sagebrush <em>(Artemisia cana)</em></td>
<td>89 – 96 (85%=76-82)</td>
<td>Ashley N.F.</td>
</tr>
<tr>
<td>Mountain/Subalpine Big Sagebrush <em>(Artemisia tridentata</em> ssp. <em>vaseyana)</em></td>
<td>81 – 96 (85%=69-82)</td>
<td>Ashley N.F.</td>
</tr>
<tr>
<td>Snowberry <em>(Symphoricarpos oreophilus)</em></td>
<td>92 (85%=78)</td>
<td>U-W-C N.F.-Salt Lake Ranger District-Big Cottonwood Canyon</td>
</tr>
<tr>
<td>Birchleaf Mt Mahogany <em>(Cercocarpus montanus)</em></td>
<td>82 – 95 (85%=70-81)</td>
<td>Ashley N.F.</td>
</tr>
<tr>
<td>Curlleaf Mt Mahogany <em>(Cercocarpus ledifolius)</em></td>
<td>70 – 82 (85%=60-70)</td>
<td>U-W-C N.F.-Mollens Hollow Research Natural Area and Big Cottonwood Canyon – with Oak</td>
</tr>
<tr>
<td>Aspen, <em>Populus tremuloides</em></td>
<td>90 – 98 (85%=77-83)</td>
<td>Ashley N.F.-Brush Creek Allotment</td>
</tr>
<tr>
<td>Alpine Grassland</td>
<td>97 – 100 (85 %= 82-85)</td>
<td>An Alpine Plant Community Classification for the Uinta Mountains, Utah (Brown, 2006); U-W-C N.F.-Uinta Mountains</td>
</tr>
<tr>
<td>Alpine upland turf and meadow communities</td>
<td>80 – 100 (85% = 68-85)</td>
<td>An Alpine Plant Community Classification for the Uinta Mountains, Utah (Brown, 2006); U-W-C N.F.-Uinta Mountains</td>
</tr>
<tr>
<td>Alpine snowbed communities</td>
<td>48 – 98 (85% =41-83)</td>
<td>An Alpine Plant Community Classification for the Uinta Mountains, Utah (Brown, 2006); U-W-C N.F.-Uinta Mountains</td>
</tr>
<tr>
<td>Alpine erosional surface (including talus) communities</td>
<td>33 – 85 (85% =28-72)</td>
<td>An Alpine Plant Community Classification for the Uinta Mountains, Utah (Brown, 2006); U-W-C N.F.-Uinta Mountains</td>
</tr>
<tr>
<td>Subalpine Tall Forb</td>
<td>75 – 94 (85% = 64-80)</td>
<td>U-W-C N.F. Hoyt Peak, Albion basin, and Grand Teton National Park</td>
</tr>
<tr>
<td>Location</td>
<td>Desired Condition</td>
<td>Existing Condition/Trend</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Labarge Creek at Labarge Pond</td>
<td>Streambank stability at ≥ 90% of potential; Streambank vegetation ≥ 80% of potential.</td>
<td>Apparent upward trend with a streambank stability of 7.5 having 71% late seral species. Represents approximately 1,200 ft. of stream length. Primary cause is trailing of livestock along Labarge Creek when heading to pond. Secondary cause is drift of livestock back into the unit after initial removal of livestock.</td>
</tr>
<tr>
<td>Nameless Creek at exclosures</td>
<td>Streambank stability at ≥ 90% of potential; Streambank vegetation ≥ 80% of potential.</td>
<td>No apparent trend. Streambank stability and streambank vegetation appearing to be less than desired condition. Represents approximately 1,200 ft. of stream length. Primary cause is drift of livestock back into the area after initial removal of livestock from the unit.</td>
</tr>
</tbody>
</table>
Diagram 1 - Implementation of Grazing Management Strategy (Long-Term)

1. Determine Existing Conditions

2. Compare Existing Conditions to Desired Conditions

3. Desired Conditions are being met?
   - Yes
     - 4a. Continue Mgt. as Prescribed - Allow for annual administrative adjustments to ensure annual benchmarks are met.
   - No
     - 4b. Are Livestock a Limiting Factor (annual benchmarks are not being met or are ineffective) and the trend is not upward.

4b. Are Livestock a Limiting Factor (annual benchmarks are not being met or are ineffective) and the trend is not upward.
   - No
     - 5a. Reduce use in the area through administrative adjustments in management. Continue monitoring to determine efficacy of change
   - Yes

5a. Reduce use in the area through administrative adjustments in management. Continue monitoring to determine efficacy of change
Diagram 2 - Implementation of Grazing Management Strategy (Annual)

1. Determine the Annual Benchmark to be Used.

2. Annual Benchmark Achieved and Appropriate?
   - Yes
   - No

   3b. Annual utilization benchmark was not met
   - No
       - Yes

3a. Continue current mgt. and annual and long-term monitoring to ensure desired conditions continue to be met and/or trended to.

4. Change or modify annual benchmark

5. Immediately address issue. Assign action for upcoming grazing season in annual permittee meeting. Was the action implemented the next grazing season?
   - No
       - Yes

6. Failure is the result of a design problem or changed condition outside the control of the permittee.
   - No
       - Yes

7. Is an administrative action warranted?
   - No
       - Yes

8. Implement Administrative Action
APPENDIX A – MAP OF THE PROPOSED PROJECT AREA
APPENDIX B – ALLOTMENT-WIDE MONITORING PLAN – LABARGE CREEK ALLOTMENT

This allotment-wide monitoring plan was developed as part of the updated Grazing Management Strategy. The primary intent of this plan is to allow for management decisions which would ensure areas at desired conditions remain at desired conditions, while those areas not at desired conditions trend to desired conditions. It will also aid in ensuring compliance to the LRMP and enable the Forest Service to better work with the permittee on the allotment in addressing any concerns that may arise.

Monitoring studies would be divided into priority and non-priority studies. Any study not located in Table 4 would be considered a non-priority study.

- **Long-Term Monitoring:** Priority studies would be revisited with evaluations of desired conditions in Table 1 occurring every five to ten years or as needed. Non-priority studies would be monitored when additional information is needed regarding a particular desired condition and/or other National Forest resource. Assessments of existing condition would occur according to Forest Service protocols.

- **Annual Monitoring/Inspections:** Allotment inspections such as annual estimates of forage utilization by livestock and residual stubble heights along the greenline would be completed once every other year at a minimum or when necessary funding dependent. Assessments of annual utilization would be primarily occur using Forest Service protocols.
<table>
<thead>
<tr>
<th>General Area</th>
<th>Study</th>
<th>Annual Benchmark (Implementation)</th>
<th>Desired Condition to be Evaluated (Effectiveness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Fall Creek</td>
<td>14-8B&amp;C</td>
<td>Greenline Stubble Height</td>
<td>Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status</td>
</tr>
<tr>
<td></td>
<td>14-18R2&amp;R3</td>
<td>Greenline Stubble Height</td>
<td>Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status</td>
</tr>
</tbody>
</table>
| Labarge Creek at a Mountain big sagebrush/grass community | 10-12       | % Use of Key species at Key Areas | - Plants of a moderate to high value for watershed protection  
|                                                 | NA          |                                   | - Effective ground cover  
|                                                 |             |                                   | - Desirable species of preference  |
| Labarge Creek at 2012 Fontenelle Fire           | 10-25E2     | NA                                | ≥40% canopy cover at 7 years post-disturbance with an average sprout height of equal to or greater than 10 ft. |
| Indian Creek/Little Indian Creek                | 10-13A&B    | Greenline Stubble Height          | Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status |
| South Indian Creek                              | 10-14A&B    | Greenline Stubble Height          | Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status |
| South Indian Creek at Mountain Big sagebrush/grass community | 10-5A       | % Use of Key species at Key Areas | - Plants of a moderate to high value for watershed protection  
|                                                 |             |                                   | - Effective ground cover  
|                                                 |             |                                   | - Desirable species of preference  |
| Shafer Creek                                    | 10-18G1&G2  | Greenline Stubble Height          | Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status |
|                                                 | and/or 10-35B|                                   |                                                  |
| S. Labarge Creek                                | 10-9S1&S2   | Greenline Stubble Height          | Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status |
| Nameless Creek at 2012 Fontenelle burn          | 10-34S      | NA                                | ≥40% canopy cover at 7 years post-disturbance with an average sprout height of equal to or greater than 10 ft. |
|                                                 | 10-34R      | NA                                | ≥40% canopy cover at 7 years post-disturbance with an average sprout height of equal to or greater than 10 ft. |
| Witherspoon Creek                               | 10-1K1&K2   | Greenline Stubble Height          | Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status |
| Little Clear Creek                              | 9-21A&B     | Greenline Stubble Height          | Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status |
|                                                 | and/or 9/21D1&D2 |                                   |                                                  |
| Little Clear Creek at Mountain big sagebrush/graminoid community | 9-25        | % Use of Key species at Key Areas | - Plants of a moderate to high value for watershed protection  
|                                                 |             |                                   | - Effective ground cover  
|                                                 |             |                                   | - Desirable species of preference  |
| Crystal Creek                                   | 4-27C1&C2   | Greenline Stubble Height          | Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status |
| Corral Creek                                    | 4-33B1&B2   | Greenline Stubble Height          | Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status |
| Poison Meadows                                  | 4-17K and/or 4-17E | % Use of Key species at Key Areas | - Plants of a moderate to high value for watershed protection  
|                                                 |             |                                   | - Effective ground cover  
<p>|                                                 |             |                                   | - Desirable species of preference  |
| Big Greys River                                 | 4-40A       | Greenline Stubble Height          | Streambank Stability Guideline (USDA, 1990) including streambank stability and greenline seral status |</p>
<table>
<thead>
<tr>
<th>General Area</th>
<th>Study</th>
<th>Annual Benchmark (Implementation)</th>
<th>Desired Condition to be Evaluated (Effectiveness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labarge Meadows</td>
<td>4-12A</td>
<td>% of the Total Forage Cover for Perennial Forb Community</td>
<td>-Plants of a moderate to high value for watershed protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Effective ground cover</td>
</tr>
<tr>
<td></td>
<td>4-25A</td>
<td>% of the Total Forage Cover for Perennial Forb Community</td>
<td>-Plants of a moderate to high value for watershed protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Effective ground cover</td>
</tr>
<tr>
<td></td>
<td>4-33C</td>
<td>% Use of Key species at Key Areas</td>
<td>-Plants of a moderate to high value for watershed protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Effective ground cover</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Desirable species of preference</td>
</tr>
<tr>
<td>Fontenelle Lakes &amp; Creek</td>
<td>10-28A</td>
<td>% Use of Key species at Key Areas</td>
<td>-Plants of a moderate to high value for watershed protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Effective ground cover</td>
</tr>
<tr>
<td></td>
<td>9-26A</td>
<td>% of the Total Forage Cover for Perennial Forb Community</td>
<td>-Plants of a moderate to high value for watershed protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-Effective ground cover</td>
</tr>
</tbody>
</table>
Figure 2 Priority Monitoring Studies – Labarge Creek Allotment
APPENDIX C – GLOSSARY OF TERMS

**Adaptive Management** – The process of making use of monitoring information to determine if management changes are needed and, if so, what changes and to what degree (USDA, 2016b)

**Administrative Adjustments** – Changes to livestock management in a way so as to not exceed the maximum allowable use or impact on a resource. They are generally related to timing, intensity, frequency, and duration of livestock grazing (USDA, 2016b)

**Animal Unit Month** – The amount of oven-dry forage (forage demand) required by one animal unit for a standardized period of 30 animal-unit-days. Not synonymous with animal month. Abbr. AUM. The term AUM is commonly used in three ways: (a) stocking rate, as in “X acres per AUM”; (b) forage allocations, as in “X AUMs in Allotment A”; (c) utilization, as in “X AUMs taken from Unit B (SRM, 2005).

**Annual Benchmark** – For purposes of the proposed project, an indicator which tells when it is time to move livestock from one unit to the next or if within the last unit to be grazed to be removed from National Forest lands. Annual benchmarks include residual stubble height on the greenline and % utilization of key species at key areas. Achievement of an annual benchmark or lack thereof to be determined through implementation monitoring.

**Area(s) of Concern** – For purposes of this project, these are locations for which a specific interest regarding a particular resource or resources and its condition exist (e.g. soil, vegetation, wildlife, fisheries, etc.). An area of concern may or may not be a key area. Is synonymous with Concern Area.

**Canopy Cover** – The percentage of ground covered by a vertical projection of the outermost perimeter of the natural spread by foliage of plants. Canopy cover may be measured along a line intercept transect. Small openings within the canopy are included. The sum of canopy cover of several species may exceed 100 percent. Synonymous with Crown Cover (USDA, 2003).

**Composition** – See Species Composition (USDA, 2003).

**Concern Area** – See Area(s) of Concern.

**Critical Area** – An area which must be treated with special consideration because of inherent site factors, size, location, condition, values, or significant potential conflicts among uses. (SRM, 2005)

**Crown Cover** – See Canopy Cover (USDA, 2003).

**Desirable Plant Species** – Species which contribute to management objectives (USDA, 2003).

**Desired Condition** – The specific condition of National Forest resources that meets management objectives as identified in the Forest Plan and Rangeland Project Decision. Desired condition of National Forest Resources may be expressed in terms of: species composition, diversity of habitats, or age classes of species; desired soil protection. In riparian areas it includes conditions of streambank and channel stability, stream habitat, streamside vegetation, stream sedimentation, and water quality. Adapted from FHS 2209.21 (USDA, 2003).
**Desired Future Condition** – A future land or resource condition that achieves a set of compatible multi-
resource goals and objectives (UDSA, 1990). Term is derived from the Bridger-Teton National Forest
LRMP.

**Disturbance-Induced Variants** – A term used in Youngblood *et. al.* (1985) but not specifically defined
within this publication. This term describes various community types that are believed by Youngblood
*et. al.* (1985) and others to be a result of a past disturbance such as grazing. Relevant to the proposed
action are the Silver sagebrush (*Artemisia cana*)/Kentucky bluegrass (*Poa pratensis*) and the more mesic
Mountain big sagebrush (*Artemisia tridentata var. vaseyana*)/Kentucky bluegrass (*Poa pratensis*)
community types.

**Effective Ground Cover** – The percentage of material, other than bare ground and erosion pavement,
covering the land surface. It may include live vegetation, standing dead vegetation, litter, cryptograms,
and rock over ¾ inch. It also includes canopy cover deemed sufficient to disperse raindrop-splash
impact and subsequent erosion events. These would include various forbs located within the forb
communities as well as the various shrubs located within the shubland communities. Adapted from FSH
2209.21 (USDA, 2003).

**Effectiveness Monitoring** – Generally related to long-term monitoring. For purposes of the proposed
project completed to determine existing conditions and then subsequently compare these existing
conditions to desired conditions.

**Guideline** – A set of land, resource, or human-use values or parameters mean to generally constrain
organizational actions or define resource conditions and usually stated as flexible and, occasionally,
optional limits in the LRMP using the terms “should be” or “may be” (USDA, 1990). Term is most often
associated with the LRMP.

**Head Month** – A month’s use and occupancy of a range by one weaned or adult cow with or without
calf, bull, steer, heifer, burro, or mule, or 5 sheep or goats (USDA, 2005b).

**Implementation Monitoring** – Generally related to annual monitoring. Completed to determine
whether or not an annual benchmark has been achieved.

**Key Area** – A relatively small portion of a range selected because of its location, use or grazing value as a
monitoring point for grazing use. It is assumed that key areas, if properly selected, will reflect the overall
acceptability of current grazing management over the range. (SRM, 2005). For purposes of the
proposed project, they are also those areas within the allotment most preferred by livestock and are
typically grazed first and receive the most concentrated use.

**Key Species** -1) Forage species whose use serves as in indicator to the degree of use of associated
species; 2) Those species which must, because of their importance, be considered in the management
program (USDA, 2011). For purposes of the proposed project and as they relate to key areas, also to
include those species considered most palatable to livestock.

**Limiting Factor** – A non-anthropogenic or anthropogenic action/process resulting in a desired condition
not being achieved. To be determined by data collected through monitoring.

**Maximum Operating Season** – the operating season showing the earliest possible on date and the latest
possible off date. For purposes of the proposed project, the maximum operating season is from June
20th to October 10th. To occur solely at the Forest Service’s discretion.
**Maximum Total Head Months** – the maximum amount of head months which would be permitted under any grazing season. For purposes of the proposed project, 2,656 head months will be considered the maximum total head months.

**Normal Operating Season** – the operating season one would reasonably expect to occur during any given season holding all other factors equal. For purposes of the proposed project, the normal operating season is from July 1st to September 30th.

**Project-Specific Desired Conditions** – Desired conditions developed at the project scale through the interdisciplinary process as directed in FSH 2209.13.11 – Identification of Desired Conditions.

**Proper User Criteria** – The limiting factor or factors which will be measured on a particular site to determine if the site has been properly used. It could be residual forage, impact on other resources or uses, or any other measureable factor on a particular site (USDA, 2011).

**Resource Management Needs** – Are those areas where there is a “gap” between existing condition(s) and desired condition(s) (USDA, 2003).

**Satisfactory Condition** – At desired condition(s) or trending towards desired condition(s).

**Species Composition** – The proportions of various plant species in relation to the total on a given area. It may be expressed in terms of cover, density, or weight.

**Standard** – A land, resource or human-use value against which organizational actions or resource conditions can be measured and limited, and usually stated as requirements within the LRMP using terms “will be” (USDA, 1990). Term is most often associated with the LRMP.

**Trend** – The direction of change in a plant community or a measured attribute of that plant community as observed over time. The change in direction could be vegetation, ground cover, or noxious plants, non-invasive plant species features over time, etc. Most of the time trend should be described as “meeting”, “moving toward”, or “not meeting” a desired plant community (USDA, 2003). For purposes of the proposed project, trend also relates to LRMP future desired conditions as well as project specific desired conditions.

**Threshold of Concern** – An indicator that tells when to implement a specific adaptive management action or group of actions

**Threshold for Positive Change** – Identifies where a certain condition has been met therefore a different grazing strategy may be implemented.

**Unsatisfactory Condition** – not at desired condition(s) and no trending to desired condition(s).
APPENDIX D – DESIRABLE SPECIES OF PREFERENCE BY COMMUNITY TYPE

**Wet Meadow Communities:** Desirable species of preference within wet meadow communities generally include those identified in Youngblood et al. (1985) as well as the several species identified in RMRS-GTR-47 expected for these areas. These species may include beaked sedge (*Carex utriculata*); water sedge (*Carex aquatilis*); and Nebraska sedge (*Carex nebrascensis*). To a lesser degree, Baltic rush (*Juncus balticus*) may also be present, but where present it is limited in size and extent and much less prevalent than other desirable species of preference and not increasing as a result of livestock grazing.

**Willow Dominated Communities:** Desirable species of preference of overstory plants within willow dominated communities generally include Booth willow (*Salix boothii*); Drummond’s willow (*Salix drummondiana*); Geyer’s willow (*Salix geyeriana*); plain-leaf willow (*Salix planifolia*); and wolf willow (*Salix wolfii*). Bebb willow (*Salix bebbiana*), while not generally present within the project area in large amounts, may also be considered a desirable species of preference in the overstory of willow communities. Desirable species of preference of understory plants within willow dominated communities generally include those shown for moist meadows, including grass, silver sagebrush, and shrubby cinquefoil communities.

**Moist Meadows including Grass, Silversagebrush, and Shrubby Cinquefoil Communities:** Desirable species of preference within moist meadows including grass, silver sagebrush, and shrubby cinquefoil communities generally include those shown in Youngblood et al., (1985) and which are not considered a disturbance-induced variant. Youngblood et al. (1985) disturbance-induced variants, also considered acceptable where sufficient evidence exists that a threshold has been crossed. In such an event, not increasing as a result of livestock grazing management activities. Examples of desirable species of preference include water sedge (*Carex aquatilis*); beaked sedge (*Carex utriculata*); Sierra rush (*Juncus nevadensis*); tufted hair grass (*Deschampsia caespitosa*); small wing sedge (*Carex microptera*); alpine timothy (*Phleum alpinum*); timber danthonia (*Danthonia intermedia*); woolly sedge (*Carex pellita*); bluejoint reedgrass (*Calamagrostis canadensis*); different-nerved sedge (*Carex heteroneura*); Raynold’s sedge (*Carex raynoldsii*); Ebony sedge (*Carex ebenea*); Hood’s sedge (*Carex hoodii*); California oatgrass (*Danthonia californica*); and Colorado rush (*Juncus confusus*). Within more mesic riparian areas, slender wheatgrass (*Elymus trachycaulus*); basin wildrye (*Elymus cinereus*); mountain brome (*Bromus marginatus*); Idaho fescue (*Festuca idahoensis*); Columbia needlegrass (*Stipa nelsonii*); onion grass (*Melica bulbosa*); purple onion grass (*Melica spectabilis*); Liddon-sedge (*Carex petasata*); and valley sedge (*Carex vallicola*). Marsh bluegrass (*Poa leptocoma*) also expected within snowfield sagebrush sites. Sandberg bluegrass; Letterman’s needlesgrass (*Stipa lettermanii*) and June grass (*Koeleria macrantha*) are also present. However, where present they are not increasing as a result of livestock grazing.

**Mountain Big Sagebrush/Snowfield Sagebrush and Other Mountain Shrubland Communities:** Desirable species of preference within mountain big sagebrush/snowfield sagebrush and other mountain shrubland communities generally include: mutton grass (*Poa fendleriana*); sheep fescue (*Festuca ovina*); Idaho fescue (*Festuca idahoensis*); bluebunch wheatgrass (*Elymus spicatus*); slender wheatgrass (*Elymus trachycaulus*); mountain brome (*Bromus marginatus*); thickspike wheatgrass (*Elymus lanceolatus*); spike fescue (*Leucopoa kingii*); Columbia needlegrass (*Stipa nelsonii*); onion grass (*Melica bulbosa*); purple onion grass (*Melica spectabilis*); Liddon-sedge (*Carex petasata*); and valley sedge (*Carex vallicola*). Marsh bluegrass (*Poa leptocoma*) also expected within snowfield sagebrush sites. Sandberg bluegrass; Letterman’s needlesgrass (*Stipa lettermanii*) and June grass (*Koeleria macrantha*) are also present. However, where present they are not increasing as a result of livestock grazing. Disturbance-induced variants, also considered acceptable where sufficient evidence exists that a threshold has been crossed.
APPENDIX E – FOOTNOTES FOR TABLES, FIGURES, AND DIAGRAMS

1 Selected non-native species are those included in plantings in the past based on their erosion control and other desired values. Includes both woody and herbaceous species. Examples of plants of a moderate to high value for watershed protection are found within the 1993 Region 4 Range Management Resource Value Rating Guide – FSH 2209.21.27.4 Ex. 02.

2 Table 2 will be used in determining potential for ground cover. This table will periodically be updated.

3 National Best Management Practices for Water Quality Management on National Forest System Lands (FS-990a) will be followed. Project specific BMPs include the desired conditions previously shown as they relate to plants of a moderate to high value for watershed protection and ground cover as well as annual benchmarks subsequently shown in this table as they relate to residual stubble height and % utilization of key species.

4 Desirable species of preference by community type to be present in any number and frequency. Not all desirable species of preference by community type expected at all sites. Lists of desirable species of preference by community type are shown in Appendix D. This list will be updated as additional literature becomes available and/or monitoring warrants. This desired condition does not apply to ecotones where one vegetation type blends into another. Other processes inherent to the landscape including those associated with fossorial rodents to be considered in all assessments completed.

5 Little sagebrush communities (Artemisia arbuscula including spp. longiloba) excluded from this desired condition.

6 Excludes those sites where inherent ecological features limit growth of aspen to less than 10 ft. These sites would be considered marginal aspen sites.¹

7 Ongoing Best Available science to continually be used to determine natural potential. Habitat parameters to be evaluated include stream temperature and sediment substrate embeddedness. Local baseline values to be established, compared to expected values using the best available science, and evaluated for change over time. Inherent processes associated within areas monitored including those related to beaver will be included in assessments and in any recommendations for changes made.

8 A wide range of natural bank stability and streambank vegetation conditions exist in natural conditions (Overton, 1995; Rosgen, 1996; Winward, 2000). As a result of these natural ranges of variability and for purposes of this project 85% or greater streambank stability and 85% or greater late seral species on the greenline to be considered consistent with natural conditions unless long-term monitoring provides adequate evidence to modify this value. All assessments to include those processes inherent to stream processes including those associated with beavers. Streambank vegetation will be evaluated using RMRS-GTR-47 which defines potential natural community ecological status.

9 Annual benchmarks to be used as a trigger to move livestock from one unit to the next or to be removed from National Forest lands when applicable.

10 Ground cover potential based on percent vegetation, litter, moss, and rock cover as measured using a minimum of 200 sample points per site. Table will periodically be updated when new information becomes available and/or as necessary.
In addition to the proposed action and subsequent adaptive Management strategy to be applied, the full suite of administrative adjustments would be considered. Permittee would also be encouraged to cull any problem livestock from their herd. Emphasis would continue to be placed on clean unit moves and daily herding of livestock.

Diagram 2 describes the assessment process which would be used for the annual benchmarks strategy.

Administrative adjustments would initially reduce use in an area. If use can’t be reduced and livestock continue to be the limiting factor removing livestock from the area may be necessary.

Adapted from BLM Instruction Memorandum No. ID-2005-074 and the accompanying Forest Service R4 Memorandum dated July 6, 2005.

An inappropriate indicator is one that does not most accurately identify the weak link or first attribute that would indicate excessive livestock impacts. Changing the indicator to a more accurate measure will better achieve the desired outcome given the specific objectives of the area.

Grazing strategies for meeting annual benchmarks and moving towards desired condition primarily involve those related to administrative adjustments.

Table may be updated with studies being added and/or omitted based upon the effectiveness of the monitoring site, parameter to be evaluated and/or new National Forest Resource concerns. New studies selected will be the ones which best match the definition of a key area and/or that are located within an area of concern. Emphasis will continue to be placed on discerning between livestock impacts and conditions inherent to the area including activities related to fossorial rodents, beaver, and other mammals.
LITERATURE CITED


