

## BERRETT FFR 0609

### INITIAL ALLOTMENT AND PERMIT/LEASE REVIEW and RANGELAND HEALTH ASSESSMENT

*2013 Supplement to the Berrett FFR allotment Initial Allotment Review and Rangeland Health Assessment*

The Initial Allotment Review and Rangeland Health Standards and Guidelines Assessment for the Berrett FFR allotment was drafted in 2006 as a portion of the grazing permit renewal process. Until 2013, no rangeland health determination was completed and the permit authorizing grazing use in this allotment has not been fully processed for renewal. The current document consists of the 2006 RHA, in full, supplemented by new information available since the 2006 document was completed. Portions of this 2013 document that supplement the 2006 document are presented in this two-field table format with the header above, while those portions carried forward unchanged from the 2006 document are outside the two-field tables. The 2013 Supplement to the document includes data compiled between 2006 and 2013, as well as the completion of the 2013 evaluation report and determination consistent with the Livestock Grazing Permit Renewal Desk Guide for Idaho Bureau of Land Management, May 2009. The 2013 determination is found at the end of this document.

Field Office: **Owyhee**

Date: **December 2006**

1. Allotment Name/Number: **Berrett FFR / 0609**
2. Name(s) of Permittee(s)/Preference Code: **Dale L. Berrett / 1101388**
3. Permit Expiration Date(s): **2/28/07**
4. Allotment Acres: Public Land **875**, Private 3,224, State 2,076, Other None
5. Percent public land in the allotment: **14**
6. Is public land large contiguous block(s) of public land, isolated parcel(s) or both?  
**The public lands are separated into nine separate parcels throughout three separate pastures. Seven parcels are not associated with larger blocks of public land.**
7. Is the public land fenced separately from the private land? **No**
8. Is any public land within the allotment identified for exchange/disposal in the land use plan?  
**YES** Percent of Public land? **25** If yes, has two year notification sent? **No**
9. Does BLM have administrative access separate from the grazing permit/lease? **No**
10. Does public have legal access to the allotment? **No**
11. Is the public land physically isolated from the adjoining public land?  
**Yes, by allotment and pasture fences.**
12. What is the livestock grazing management category (M, I, or C)? **M**

13. List all Land Use Plan (LUP) objectives and decisions (consider resource list for No. 14 from objectives and decisions in the LUP), other grazing decisions and other NEPA documents which pertain to the allotment:

**Owyhee RMP, (December 30, 1999), and Proposed Owyhee RMP and EIS (July 1999)  
See Land Use Plan Review.**

**Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management, (August 12, 1997), see guidelines 1-20.**

14. Check the Standards, Guidelines and Resources that are applicable to this allotment. Following ID Team disclosure of information and data (monitoring data, studies, inventories, etc., information from other agencies, local governments, and the public) and the ensuing discussions, briefly describe in the comment section any issues (with supporting information). This information will be used to determine if existing data is adequate, or if more information is needed to determine compliance with the Idaho Standards and Guidelines for Rangeland Health.

| Standard                                  | Applicable | Comments   |
|---|------------|--|
| Watershed (Standard 1)                    | X          | In 2003, three rangeland health evaluations (two in Pasture 1 and one in Pasture 3; no public land is found in pasture 2) were completed on this allotment. One evaluation (RLH1A) in Pasture 1 was placed in the "None to Slight" departure category; and the other (RLH1B) in the "Slight to Moderate". On the second site, this rating was associated with water flow patterns primarily. They were numerous and often were short and connected with distinct cut areas being common. There was moderate historic and active soil loss. There were numerous pedestals and terracettes associated with trailing. The litter amount was moderately reduced. The evaluation in Pasture 3 was placed in the "None to Slight" departure category.  |
| Riparian Areas, Wetland (Standard 2)      | X          | <b>Pole Bridge Creek</b> - One mile of Pole Bridge Creek crosses public land in this allotment. The segment is an isolated 280 acres of public land. Pole Bridge Creek was inventoried in June 2000. The segment was rated as Functional-At-Risk, with no apparent trend. The diversity of vegetation was less than expected. It was noted that riparian vegetation appeared vigorous and healthy. During the 2000 inventory the stubble height was 6-10 inches and shrub use was 25-35 percent. In October 2001, BLM found a spring in the bottom of Pole Bridge Creek and an evaluation completed resulted in a Nonfunctional rating primarily associated with current cattle use.<br><b>Williams Creek</b> - Approximately 0.4 miles of Williams Creek is located on two segments of public land in pastures 1 and 3. The larger segment of approximately 0.3 miles was inventoried in September 2001. The stream was rated as Functional-At Risk/high, with no apparent trend identified. The high Functional-At Risk rating indicated the stream is approaching Proper Functioning Condition but some elements are not appropriate for all portions of the stream. Stubble height and browse monitoring data associated with Williams Creek from 1996 to 2001 has achieved stubble height and browse objectives all but one year in which the stubble height had a median measurement below 4 inches and a browse rating in the heavy category. |
| Stream Channel, Flood Plains (Standard 3) | X          | <b>Pole Bridge Creek</b> - One mile of Pole Bridge Creek crosses public land and is isolated to 280 acres. This segment was inventoried in June of 2000 and was rated as Functional-At-Risk (FAR) with no apparent trend. The riparian vegetation showed high vigor. The soils were high   |

| Standard                                   | Applicable          | Comments  |  |                     |         |  |  |  |                |                    |          |                     |         |           |   |   |   |   |   |           |   |   |   |   |   |
|--|---------------------|---|--|---------------------|---------|--|--|--|----------------|--------------------|----------|---------------------|---------|-----------|---|---|---|---|---|-----------|---|---|---|---|---|
|  |                     | <p>in sand and naturally weak. The stream channel was missing deep binding root vegetation and had excessive bank erosion. The channel was noted as entrench. The sinuosity, with/dept ratio and gradient were not in balance with the landscape setting. The segment had Canada thistle on 5-15 percent of the segment.</p> <p><b>Williams Creek</b> - Approximately 0.4 miles of Williams Creek, comprised of two separate segments, is found on public land in pasture 1. The larger segment of approximately 0.3 miles was inventoried in September 2001. The stream was rated as Functional-At Risk/high, with no apparent trend. Functional-At Risk/high rating indicated that it is approaching Proper Functioning Condition but some elements were not appropriate for all portions of the stream.</p> <p>The stream channel riparian zone vegetation was generally in good condition with appropriate riparian-wetland species. The stream channel had not been entrenching. Stream width/depth ratio, gradient, sinuosity and pool riffle and run frequency were appropriate on portions of the stream and not appropriate in other places. The stream had access to the floodplain in portions and not in others. There was little evidence of excessive soil compaction due to human activities. Streambanks were close to being within an appropriate range of stability. Noxious weeds were present but not known to be increasing.</p>   |  |                     |         |  |  |  |                |                    |          |                     |         |           |   |   |   |   |   |           |   |   |   |   |   |
| Native Plant Communities (Standard 4)      | <b>X</b>            | <p>In 2003, three rangeland health evaluations (two in Pasture 1 and one in Pasture 3) were completed for this allotment. One evaluation (RH1A) in Pasture 1 was placed in the “None to Slight” departure category; the other (RH1B) was placed the “Slight to Moderate” category. Departures on the “Slight to Moderate” site included reduced litter, historic and active soil movement or displacement, plant vigor was fairly good in perennial grasses but seedhead production was lower than expected. Sandberg bluegrass was apparently dominant and the most productive with good vigor and seedhead production. The evaluation site in Pasture 3 (091803-1A) was placed in the “None to Slight” departure category and was near reference conditions. Trace amounts of cheatgrass and more than expected rabbitbrush was found on the allotment.</p> <p><b>Table 1: Rangeland Health Evaluation Worksheet Summary</b></p> <table border="1" data-bbox="678 1352 1422 1577"> <thead> <tr> <th data-bbox="683 1358 889 1486" rowspan="2">Standard 4-<br/>Native Plant<br/>Communities</th> <th colspan="5" data-bbox="889 1358 1417 1394">Degree of Departure</th> </tr> <tr> <th data-bbox="889 1394 980 1486">None to Slight</th> <th data-bbox="980 1394 1097 1486">Slight to Moderate</th> <th data-bbox="1097 1394 1214 1486">Moderate</th> <th data-bbox="1214 1394 1325 1486">Moderate to Extreme</th> <th data-bbox="1325 1394 1417 1486">Extreme</th> </tr> </thead> <tbody> <tr> <td data-bbox="683 1486 889 1528">Pasture 1</td> <td data-bbox="889 1486 980 1528">8</td> <td data-bbox="980 1486 1097 1528">6</td> <td data-bbox="1097 1486 1214 1528">4</td> <td data-bbox="1214 1486 1325 1528">3</td> <td data-bbox="1325 1486 1417 1528">0</td> </tr> <tr> <td data-bbox="683 1528 889 1577">Pasture 3</td> <td data-bbox="889 1528 980 1577">6</td> <td data-bbox="980 1528 1097 1577">3</td> <td data-bbox="1097 1528 1214 1577">0</td> <td data-bbox="1214 1528 1325 1577">0</td> <td data-bbox="1325 1528 1417 1577">0</td> </tr> </tbody> </table> <p><sup>*2</sup> Summarizes: 1 Loamy 13-16” and 2 Shallow Claypan 12-16”, and Mountain Brush 18-22” ecological sites.</p> <p>Six-years of actual use grazing reports exist for years 1990-2006. With exception to 1997 in which 114 AUMs of use was reported, actual use submitted indicates that livestock use has been below permitted use levels since 1990. During 2003 and 2005 the allotment was grazed early, 4/16-5/16 and 6/1-6/15 respectively.</p> <p>Five-years of utilization data are available for the 1975 to 2005 time period. One observation made in 1996, indicated severe (90-100</p> | Standard 4-<br>Native Plant<br>Communities | Degree of Departure |         |  |  |  | None to Slight | Slight to Moderate | Moderate | Moderate to Extreme | Extreme | Pasture 1 | 8 | 6 | 4 | 3 | 0 | Pasture 3 | 6 | 3 | 0 | 0 | 0 |
| Standard 4-<br>Native Plant<br>Communities | Degree of Departure |   |  |                     |         |  |  |  |                |                    |          |                     |         |           |   |   |   |   |   |           |   |   |   |   |   |
|  | None to Slight      | Slight to Moderate  | Moderate                                   | Moderate to Extreme | Extreme |  |  |  |                |                    |          |                     |         |           |   |   |   |   |   |           |   |   |   |   |   |
| Pasture 1                                  | 8                   | 6   | 4  | 3                   | 0       |  |  |  |                |                    |          |                     |         |           |   |   |   |   |   |           |   |   |   |   |   |
| Pasture 3                                  | 6                   | 3   | 0  | 0                   | 0       |  |  |  |                |                    |          |                     |         |           |   |   |   |   |   |           |   |   |   |   |   |

| Standard                                    | Applicable | Comments  |
|---|------------|---|
|   |            | percent) utilization on bottlebrush squirreltail in Pasture 1 was recorded.<br>No trend exists for this allotment.  |
| Rangeland Seedings<br>(Standard 5)          |            | NA  |
| Exotic Plant<br>Communities<br>(Standard 6) |            | NA  |
| Water Quality<br>(Standard 7)               | <b>X</b>   | The allotment has 1 mile of Pole Bridge Creek and 0.4 miles of Williams Creek, both in Pasture 1. These converge shortly after exiting the allotment at the north boundary and are in the same assessment unit. IDEQ has assigned beneficial uses; Cold Water Aquatic Life (CWAL), Primary Contact Recreation (PCR), Agriculture, Industrial Water Supply, Wildlife Habitats, and Aesthetics. CWAL status is fully supported; the other uses have not been assessed. No impairments have been listed. A Beneficial Use Reconnaissance Program inventory was conducted in 2003 on Williams Creek along the north boundary of Pasture 1. Grazing, recreation and roads were noted as activities affecting the reach. The water temperature was 11.3 Celsius. The streambanks are 81 percent covered and stable and 19 percent uncovered and unstable. The BLM sampled the waters of Pole Bridge Creek in 2004, finding the <i>E. coli</i> meeting criteria for PCR and temperature exceeding criteria for CWAL. The riparian assessment on Pole Bridge Creek in 2000 found the condition to be Functional-At Risk with no apparent trend. The riparian assessment on Williams Creek in 2001 found the condition to be high Functional-At Risk with no apparent trend. |

| Standard   | Applicable | Comments  |
|--|------------|---|
| Threatened & Endangered Plant & Animals (Standard 8) | X          | <p>A Beneficial Use Reconnaissance Program (BURP) inventory was conducted in 2003 on Williams Creek (see Standard 7 above). Grazing, recreation and roads were noted as affecting the reach. The water temperature was 11.3 Celsius. The streambanks were 81 % covered and stable and 19 % uncovered and unstable. Water samples from Pole Bridge Creek in 2004, found <i>E. coli</i> levels meeting criteria for PCR and temperature exceeding criteria for CWAL. The riparian assessment on Pole Bridge Creek in 2000 found the condition to be Functional-At Risk with no apparent trend, lacking in structural diversity, composition and vigor of riparian vegetation and generally not providing suitable habitat for these species. They are also lacking adequate hydric vegetation to adequately protect stream banks, leaving them vulnerable to loss of habitat during high flow events. Riparian assessment on Williams Creek in 2001 found the condition to be high Functional-At Risk with no apparent trend and generally providing for the needs of dependant special status species.</p> <p>The assessments on the uplands were variable, ranging from none to moderate departures from the reference areas. RLH sites (pasture 1 – RLH1A and in pasture 3) are likely providing habitat that is adequate for the needs of most dependant special status and other wildlife species. At RH1B in pasture 1, historic grazing, recent drought and juniper tree expansion were factors contributing to the “Slight to Moderate” deviations from reference conditions. The localized lack of large bunchgrasses and increased juniper was limiting cover structure and forage for sage grouse, numerous song birds, and others including a diversity of insects, rodents, birds and others that are critical prey for most raptors including prairie falcons, northern harriers and ferruginous hawks. The one site (RH1B) that included ratings in the “Moderate” category was not providing habitat that is adequate for the needs of most dependant special status and other wildlife species.</p> <p>The allotment has some key habitat for sage grouse and some unclassified habitat that is considered to be unsuitable for sage grouse and some areas of juniper encroachment which are unsuitable. Sage grouse have active leks in the vicinity.</p> <p>This allotment is identified as spring/summer/fall habitat for elk and antelope, in addition to being identified as winter/yearlong habitat for mule deer. It appears that the riparian areas are providing adequate big game habitat and that the uplands are adequate in pasture 3. In pasture 1, one site appears adequate and the other site (RH1B) is providing marginal big game wildlife habitat.</p> <p>Redband trout are known to occupy Williams Creek. Table RIPN-1 of Owyhee RMP identifies 0.26 miles of Williams Creek with unsatisfactory fish habitat. However, it is rated as FAR/high with no apparent trend in functioning condition.</p> <p><b>Botany</b> No federally listed plant species are known to occur in this allotment, although the U.S. Fish and Wildlife Service considers all of Idaho to be within the potential range of Ute ladies’-tresses (<i>Spiranthes diluvialis</i>), a federally threatened orchid species.</p> <p>A BLM special status plant is known to occur within the allotment, One population of least phacelia (<i>Phacelia minutissima</i>) is located on state land, it is a type 3 species and grows on meadows and snowbank areas with aspen and tall forbs.</p> |

**Watershed (Standard 1)**

In 2013, the allotment was reconfigured into 4 pastures. Rangeland health assessment RLH1A, formerly part of pasture 1, now falls into pasture 4.

**Threatened and Endangered Plants and Animals (Standard 8)**

**Botany**

No populations of special status plant (SSP) species are known to occur in this allotment. There is insufficient information to determine site-specific impacts of livestock grazing on any special status plants that may occur in this allotment. Records show no reported special status plants in this allotment, so this standard is not applicable.

**Information sources**

Elemental Occurrences (EOs) for SSP populations is recorded in the Idaho Fish and Wildlife Information System (IFWIS) Species Diversity database (IDFG, 2011). EOs are derived by completion and review of an Idaho rare plant observation report. Other sources that were used to assess and evaluate the composition and condition SSP habitats within the Berrett FFR allotment include RHAs, photographs, field notes, Plants database (USDA NRCS, 2013), literature search, and information summarized above in this document. Records show no reported special status plants in this allotment.

| <b>Guidelines for Livestock Grazing Management</b> |   | <b>Data Adequacy, Comments, Concerns</b>  |
|--|---|---|
| <b>1</b>   | Use grazing management practices and/or facilities to maintain or promote significant progress toward adequate amounts of ground cover to support infiltration, maintain soil moisture storage and stabilize soils.   | Adequate data exists; and current grazing practices appear to be adequate to maintain adequate soil protection, plant vigor, and infiltration at the sites evaluated. |
| <b>2</b>   | Locate livestock management facilities away from riparian areas wherever they conflict with achieving or maintaining riparian-wetland functions   | NA  |
| <b>3</b>   | Use grazing management practices and/or facilities to maintain or promote soil conditions that support water infiltration, plant vigor, and permeability rates and minimize soil compaction appropriate to site potential.  | See Number 1, above   |
| <b>4</b>   | Implement grazing management practices that provide periodic rest or deferment during critical growth stages to allow sufficient regrowth to achieve and maintain healthy, properly functioning conditions, including good plant vigor and adequate vegetative cover appropriate to site potential. | See Number 1, above   |

| <b>Guidelines for Livestock Grazing Management</b> |  | <b>Data Adequacy, Comments, Concerns</b>  |
|--|--|---|
| <b>5</b>   | Maintain or promote grazing management practices that provide sufficient residual vegetation to improve, restore, or maintain healthy riparian-wetland functions and structure for energy dissipation, sediment capture, ground water recharge, streambank stability, and wildlife habitat appropriate to site potential.  | Adequate data exists; and as was stated under Standard 2, it appears that the riparian characteristics are adequate for riparian stability and functionality. |
| <b>6</b>   | The development of springs, seeps or other projects affecting water and associated resources shall be designed to protect the ecological functions, wildlife habitat, and significant cultural and historical/ archaeological/ paleontological values associated with the water source.  | NA  |
| <b>7</b>   | Apply grazing management practices to maintain, promote, or progress toward appropriate stream channel and streambank morphology and functions. Adverse impacts due to livestock grazing will be addressed.  | See Standard 3 and Number 5, above.   |
| <b>8</b>   | Apply grazing management practices that maintain or promote the interaction of the hydrologic cycle, nutrient cycle, and energy flow that will support the appropriate types and amounts of soil organisms, plants and animals appropriate to soil type, climate and landform.   | See Number 1, above   |
| <b>9</b>   | Apply grazing management practices to maintain adequate plant vigor for seed production, seed dispersal, and seedling survival of desired species relative to soil type, climate and landform.   | See Numbers 1, above  |
| <b>10</b>  | Implement grazing management practices and/or facilities that provide for complying with the Idaho Water Quality Standards.  | See Standard 7, above.  |
| <b>11</b>  | Use grazing management practices developed in recovery plans, conservation agreements, and Endangered Species Act, Section 7 consultations to maintain or improve habitat for federally listed threatened, endangered, and sensitive plants and animals.   | See discussions under Standard 8 (above).   |
| <b>12</b>  | Apply grazing management practices and/or facilities that maintain or promote the physical and biological conditions necessary to sustain native plant populations and wildlife habitats in native plant communities.  | See discussions under Standard 8 (above).   |
| <b>13</b>  | On areas seeded predominantly with non-native plants, use grazing management practices to maintain or promote the physical and biological conditions to achieve healthy rangelands.  | NA  |
| <b>14</b>  | Where native communities exist, the conversion to exotic communities after disturbance will be minimized.  | See Number 1, above   |
| <b>15</b>  | Use non-native plant species for rehabilitation only in those situations where: a) native species are not readily available in sufficient quantities, b) native plant species cannot maintain or achieve the standards or c) non-native plant species provide for management and protection of native rangelands<br>Include a diversity of appropriate grasses, forbs, and shrubs in rehabilitation efforts. | NA  |
| <b>16</b>  | On burned areas, allow natural regeneration when it is determined that populations of native perennial shrubs, grasses, and forbs are sufficient to re-vegetated the site. Rest burned or rehabilitated areas to allow recovery or establishment of perennial plant species.   | NA  |
| <b>17</b>  | Carefully consider the effects of new management facilities (e.g., water developments, fences) on healthy and properly functioning rangelands prior to implementation.   | NA  |
| <b>18</b>  | Use grazing management practices, where feasible for wildfire control, and to reduce the spread of targeted undesirable plants (e.g., cheatgrass, medusahead wildrye, and noxious weeds) while enhancing vigor and abundance of desirable native or seeded species.  | NA  |

| Guidelines for Livestock Grazing Management |   | Data Adequacy, Comments, Concerns |
|---|---|-----------------------------------|
| 19  | Employ grazing management practices that promote natural forest regeneration and protect reforestation projects until the Idaho Forest Practices Act requirements for timber stand replacement are met. | NA                                |
| 20  | Design management fences to minimize adverse impacts, such as habitat fragmentation, to maintain habitat integrity and connectivity for native plants and animals.                                      | NA                                |

| Land Use Plan Review   |   |  |
|------------------------|---|--|
| Livestock Grazing      | X | <p>This allotment is identified as a "Maintain" category allotment in the 1999 Owyhee RMP. It is a Fenced Federal Range (FFR) allotment. Generally, these allotments include less than 50% public lands intermingled with unfenced private and State lands. Livestock grazing is generally authorized as season long (3/1 - 2/28) and at the grazing permittee's discretion, as long as grazing management guidelines are adhered to.</p> <p>Permitted use is as follows:<br/>Active Permitted Use – 114</p> <p>LVST 1: Provide for sustained level of livestock use compatible with meeting other resource objectives.<br/>VEGE 1: Improve unsatisfactory and maintain satisfactory vegetation health/condition on all areas.<br/>SOIL 1: Improve unsatisfactory and maintain satisfactory watershed health/condition on all areas.<br/>SOIL 2: Achieve stabilization of current, and prevent the potential for future, localized accelerated soil erosion problems (particularly on streambanks, roads, and trails).</p> |
| Botanical              | X | SSPS1: Manage special status species and habitats to increase or maintain populations at levels where their existence is not longer threatened and there is no need for listing under the Endangered Species Act of 1973, as amended.  |
| Cultural               | X | There are no recorded sites within the allotment boundaries.   |
| Fire, Fuel             |   | NA   |
| Fisheries              | X | Table RIPN- 1 in the 1999 RMP identifies 0.26 miles of Williams Creek with unsatisfactory fish habitat. FISH-1-Improve or maintain perennial stream/riparian areas to attain satisfactory conditions to support native fish.   |
| Forestry               |   | NA   |
| Land                   | X | Under Objective LAND 2 of the Owyhee RMP a portion of these lands are in Zone 3 and may be made available for potential disposal. The remainder of the public lands within this allotment is identified for retention under Zone 1.  |
| Minerals               |   | NA   |
| Recreation             |   | NA   |
| Special Status Species | X | SPSS1: Manage special status species and habitats to increase or maintain populations at levels where their existence is not longer threatened and there is no need for listing under the Endangered Species Act of 1973, as amended.  |
| Wild Horses            |   | NA   |
| Wildlife               | X | WLDF1: Maintain or enhance the condition, abundance, structural stage and distribution of plant communities and special habitat features required to support a high diversity and desired populations of wildlife.   |

|                 |          |   |
|-----------------|----------|---|
| Water Quality   | <b>X</b> | WATR 1-meet or exceed State of Idaho water quality standards  |
| Riparian        | <b>X</b> | RIPN 1-maintain or improve riparian-wetland areas to attain proper functioning and satisfactory conditions. |
| Soils/Watershed | <b>X</b> | SOIL 1-Improve unsatisfactory and maintain satisfactory watershed health/condition on all areas.            |

15. Describe BLM’s ability or inability to manage the allotment by considering the following, as applicable: Whether there is legal access; whether % federal land comprises majority of the allotment; whether the public land acreage is small (less than 640 acres) and surrounded by private land (isolated); whether the federal land is fenced separate from the private land; etc.

**The allotment has only 875 acres of public land. The allotment is 14 percent public land. The public lands are separated into nine separate parcels. Eight are isolated by private or state lands. The largest tract of public land, which contains Pole Bridge Creek, has only 280 acres and is isolated by state and private lands. BLM has no legal access to public lands. Public lands are not fenced separate from private lands.**

**BLM is unable to adequately manage this allotment due to the limited access and lack of separation from private lands. The actions on private and State lands determine how this allotment is used and managed.**

*2013 Supplement to the Berrett FFR Allotment Initial Allotment Review and Rangeland Health Assessment*

Although the total acreage of public land and the percent public land may be minimal in this allotment, public and/or administrative access may be limited, and the absence of high value resources may lead to the categorization of this allotment with a low priority for management attention, the BLM’s obligation is to manage public lands.

**Based on the information above the following is recommended to the field manager: (check the appropriate category)**

1. \_\_\_\_ Review of existing information indicates that there is no livestock grazing or other issue. Available information is adequate to complete the evaluation and determination. (see numbers 5,6,7,8, 11, and 15 above). **This is the RHA. Complete the evaluation/ Determination Form.**
2. **X** Review of available information indicates that grazing or other issues are known to exist. However, the allotment has no or limited potential for management (see numbers 5,6,7,8,11, and 15 above). Available information is adequate to complete the evaluation and determination. **This is the RHA for this allotment. Complete the Evaluation/Determination form and consider the public land for disposal.**
3. \_\_\_\_ Review of existing information indicates the physical characteristics (e.g., slope, rock, location on the landscape, and lack of livestock forage) of the tract deter livestock grazing use on the public land. **Consider not issuing a new livestock grazing permit or lease. Further documentation is not recommended.**

4. \_\_\_\_\_ Review of existing information indicates that an issue(s) may or may not exist. The allotment is considered manageable (see #s 5,6,7,8,11, and 15 above). **Available information is adequate to complete the RHA. Complete RHA and the evaluation/determination.**
5. \_\_\_\_\_ Review of existing information indicates that an issue(s) exists. The allotment is considered manageable (see #s 5,6,7,8,11, and 15 above). More information is needed to determine current conditions. **Gather additional information and data. Complete the RHA and evaluation/determination.**

**List the names and title of the member of the ID team involved with this review:**

| <b>Name</b>           | <b>Title</b>                              |
|-----------------------|---|
| Jake Vialpando        | Supervisory Rangeland Management Spec.    |
| Bruce Zoellick        | Fisheries Biologist                       |
| John Doremus          | Wildlife Biologist                        |
| Kathi Kershaw         | Natural Resource Specialist               |
| Mike Mathis (retired) | Wildlife Biologist                        |
| Dianna Sampson        | GIS Specialist                            |
| Brian McCabe          | Archaeologist                             |
| Kelley Moore          | Lands/Realty                              |
| Zig Napkora           | Hydrologist                               |
| Pam Druliner          | Fisheries                                 |
| Pat Kane              | Weeds/Range                               |
| Ryan Homan            | Recreation Specialist                     |
| Paul Seronko          | Environmental Protection Specialist/Soils |

**Prepared by:** Ecosystem Management Inc., Contractor November 2006

**Modified by:** Jake Vialpando – Team Lead Date: December 18, 2006

**Field Manager’s Finding and Rationale:**

Field visits completed in 2003 indicate that healthy, productive, and diverse plant communities are being maintained as they are appropriate to soil type, climate, and landform to provide for nutrient cycling, hydrologic cycling, and energy flow on public lands in this allotment. Opportunities to manage these small tracts are limited as the public lands are scattered, and represent only 14 percent of the land ownership.

There are two creeks on public land – Pole Bridge (Functional-At Risk) and Williams (Functional-At Risk/high) creeks. Pole Bridge Creek is isolated on a 280 acre tract of public land which is landlocked by private and State lands. It is expected that more intensive grazing management would require fencing these public land parcels from adjoining lands. Based on the monitoring information available, current livestock grazing management in the Berrett FFR Allotment is adequate for maintenance of both upland and riparian resources, however, improvement is unlikely.

This allotment includes only 14% Federal land (875 BLM, 2,076 State, and 3,224 Private) and 100% of these lands are identified for disposal in the 1999 ORMP. Livestock grazing is authorized as season long (3/1-2/28) and at the grazing permittee's discretion, as long as, grazing management guidelines are adhered to.

Therefore, it is my conclusion to: (1) accept the above mentioned recommendation from the ID Team that there are livestock grazing or other issues known to exist. However, the allotment has no or limited potential for management; (2) conclude that the available information is adequate to complete the evaluation and determination; (3) accept this Initial Allotment Review as the Rangeland Health Assessment; and (4), move forward and complete the Evaluation and Determination for this allotment.

**Field Manager**

**Date**

| <i>2013 Supplement to the Berrett FFR Allotment Initial Allotment Review and Rangeland Health Assessment – List of Reviewers</i> |                             |
|--|-----------------------------|
| <b>Name</b>  | <b>Title</b>                |
| Jake Vialpando   | Project Manager             |
| Bonnie Claridge  | Fisheries Biologist         |
| James Priest   | Wildlife Biologist          |
| Jayson Murgoitio   | GIS Specialist              |
| Brian McCabe   | Archaeologist               |
| Carmela Romerio  | Range Management Specialist |
| Ryan Homan   | Recreation Specialist       |
| Gina Rone  | Soils                       |
| Susan Filkins  | Botanist                    |
| Jessica Gottlieb   | Writer-Editor               |

*2013 Supplement to the Berrett FFR Allotment Initial Allotment Review and Rangeland Health Assessment*

**Livestock Grazing Management**

The allotment was previously a three-pasture unit that has been divided into four pastures (pasture 2 is all private; pasture 4 was formerly part of pasture 1. See map RNGE-1). Livestock use in the Berrett FFR allotment is authorized for 114 animal unit months (AUMs) active use annually through a term grazing permit, currently issued to Dale Berrett. The permit authorizes cattle grazing on the Berrett FFR allotment in accordance with mandatory terms and conditions as presented in Table LVST-1.

**Table LVST-1:** Terms and Conditions of Permitted Livestock Use

| <b>Operator Name &amp; No.</b> | <b>Livestock Kind &amp; No.</b> | <b>Season of Use</b> | <b>Public Land</b> | <b>AUMs</b>   |                  |                  |
|--------------------------------|---------------------------------|----------------------|--------------------|---------------|------------------|------------------|
|                                |                                 |                      |                    | <b>Active</b> | <b>Suspended</b> | <b>Permitted</b> |
| Dale Berrett (1101388)         | 112 Cattle                      | 12/1-12/31           | 100 %              | 114           | 0                | 114              |

The permit includes a term and condition allowing the number of cattle and the season of use to

be determined at the permittee's discretion concurrent with grazing management scheduled for the private land fenced in conjunction with public land in the Berrett FFR allotment.

**Actual Use**

Actual use was reported for the whole allotment as one pasture; however, there are currently four pastures. Actual use ranged from 31 to 114 AUMs, with an average use of 98 AUMs from 1998 to 2012 (Table LVST-2).

**Table LVST-2:** Berrett FFR allotment actual use 1998 to 2012

|             | <b>Date</b> | <b>AUMs</b> |
|-------------|-------------|-------------|
| <b>2012</b> | 5/1-10/31   | 109         |
| <b>2011</b> | 5/1-10/31   | 109         |
| <b>2010</b> | 5/1-10/31   | 108         |
| <b>2009</b> | 5/1-10/15   | 110         |
| <b>2008</b> | 5/15-11/1   | 112         |
| <b>2005</b> | 6/1-10/15   | 90          |
| <b>2003</b> | 4/16-5/16   | 31          |
| <b>1998</b> | 1/1-12/31   | 114         |

**Utilization**

Recorded utilization in the Berrett FFR allotment documented 14 percent in 2011 on Sandberg bluegrass.

**Upland Watersheds**

*2013 Field Observations (complete field report available in Project File)*

A field visit to pasture 4 (formerly pasture 1) in 2013 revealed evidence of use during wet conditions, with widespread damage from mechanical hoof shearing and trampling. Extreme pedestaling showed root exposure and heavy grazing impacts on remaining pedestaled grasses that exceeded expected levels for the Loamy 13-16" inclusion in a Shallow Claypan 12-16" ecological site. Some surface gravel is present but does not provide continuous cover or protection from rain splash impacts on the churned and bare soils. Biologic soils crusts were reduced and primarily found under the protection of shrubs.

Medusahead and cheatgrass have formed patchy mats and are otherwise common, along with scattered western juniper. Some of the sagebrush shows elevated insect mortality, and very few forbs were found. These findings differ from the 2003 rangeland health assessment for the nearby site Shallow Claypan 12-16" ecological site RHA1A, which recorded all watershed indicators at a none-to-slight rating.

The interdisciplinary team field observations from 2013 and supportive information on these invasive grasses can be found in the 2012 Sage-grouse Upland Summer Habitat Assessment data (methods section in Appendix A); additional data with photographs can be found in the field report located in the project file (available from the Owyhee Field Office upon request). The ID team also noted rosettes of Scotch thistle throughout this pasture, which is an Idaho noxious weed.

**Riparian Areas and Wetlands – 2011 and 2012 Data**

In addition to the stream assessments on Williams and Pole Bridge Creeks disclosed above, the same reach of William’s Creek that traverses pasture 4 was again rated FAR in 2012. Also, two springs that occur in pastures 1 and 4 were assessed in 2011 and 2012. The unnamed spring in pasture 1 was in proper functioning condition (PFC), but the unnamed spring in pasture 4 was non-functioning (NF) (Table RIPN-1 and Map RNGE-1). The spring had been heavily impacted by livestock with removal of both herbaceous and woody vegetation and trailing and trampling. Only mature and decadent woody species remain with no herbaceous understory and a high percent of bare ground present creating erosion and sedimentation.

Subsequent to the FAR assessment, one MMIM site was established in 2011 on the same reach of Pole Bridge Creek that traverses pasture 1. The median stubble height was 3.6 inches, woody use was 9.7 percent, and streambank alteration was 41 percent. The metrics for stubble height and streambank alteration exceed the Standards appropriate for maintenance of healthy riparian areas and stream channels.

**Table RIPN-1: Riparian information summary**

| Stream Name       | Miles and Rating                |                                   | Assessment Issues/<br>Impacts Identified  | Total Miles |
|-------------------|---------------------------------|-----------------------------------|---|-------------|
|                   | Berrett FFR pasture 1           | Berrett FFR pasture 4             |   |             |
| Williams Creek    |                                 | 0.3 miles (FAR-2001/<br>FAR-2012) | areas with vertical and lateral instability/ areas with over-wide channel and out of balance sinuosity  | 0.8         |
|                   | 0.1 miles (pictures only- 2011) |                                   | not assessed based on proximity of road   | 0.1         |
| Pole Bridge Creek | 1.0 (FAR-2000)                  |                                   | sinuosity and W/D out of balance/ inadequate species and age class present to protect banks/ lack of species with binding roots/ vertical instability | 1.0         |

| Springs Assessed, Condition, & Issues Identified |                         |               |   |
|--|-------------------------|---------------|---|
| Spring Name                                      | Pasture/Assessment Year | PFC Condition | Assessment Issues/ Impacts Identified   |
| 0609-01-07s05w09b(EAST)                          | 4/2012                  | PFC           |   |
| Unnamed Spring 2                                 | 1/2011                  | NF            | mature and decadent woody species only- no herbaceous/ high % of bare ground/ altered flow patterns from trailing and trampling/ excessive sediments and erosion/ heavy livestock use |

| MIM Metrics       |                          |                                |               |                           |                 |                  |
|-------------------|--------------------------|--------------------------------|---------------|---------------------------|-----------------|------------------|
| Stream Name       | Pasture/ Assessment Year | Median Stubble Height (inches) | Woody Use (%) | Streambank Alteration (%) | Stable Bank (%) | Covered Bank (%) |
| Pole Bridge Creek | 1/ 2011                  | 3.6                            | 9.7           | 41                        | 45              | 79               |

## Wildlife

### Upland Habitat

Pastures 1 and 3 in the Berrett FFR allotment are managed as native plant communities. Plant community information in Standard 4 shows a slight to moderate departure in expected plant community composition; in addition, vegetation productivity and diversity were being maintained adequately to meet Rangeland Health Standard 4 (see Standard 4). Sage-grouse assessment information in pasture 3 found conditions to be suitable and supports the summary for Standard 4. As evidenced by the favorable summaries of Standard 4 and sage-grouse assessments, this pasture is providing minimum composition and structure for sagebrush steppe-associated species.

Pasture 4 in the Berrett FFR allotment is managed as a native plant community. Plant community information identifies a reduced composition of deep-rooted native perennial bunchgrasses (e.g., bluebunch wheatgrass and Idaho fescue) from reference site conditions and an increased dominance of annual invasive grass species; therefore, the pasture is not meeting Rangeland Health Standards for Standard 4 (see Standard 4). This summary is supported by sage-grouse habitat assessments that found this pasture to be providing less-than-adequate (marginal) breeding and upland summer habitat conditions.

### Riparian Habitat

Riparian information in Standard 2 and 3 assessments recorded that reaches of Williams Creek and Pole Bridge Creeks were functioning-at-risk and that one unnamed spring was not functioning in this allotment. The spring was experiencing heavy trailing and trampling by livestock, the loss of herbaceous and woody vegetation, and high occurrences of erosion and sedimentation. Livestock grazing was identified as a significant casual factor. Two other unnamed springs were found to be functioning properly (see Standard 2 and 3).

Evaluation of Standard 7 identified that Williams Creek and Pole Bridge Creek are on IDEQ's 303(d) list of impaired steams and that water quality parameters are not being met on these two creeks. The list of beneficial uses includes water quality standards for cold-water aquatic life (see Standard 7).

### Focal Species

#### Sage-grouse

On March 5, 2010, the USFWS (USDI USFWS, 2010) published a finding in the Federal

Register that found listing the greater sage-grouse was warranted but precluded by the need to take action on other species facing more immediate and severe extinction threats. The finding has changed the status of sage-grouse from a BLM Type 2 sensitive species to a candidate species under the ESA.

This allotment lies within the regional Snake River Plain Management Zone for sage-grouse. In 2012, preliminary priority habitat (PPH) and general priority habitat (GPH) were modeled to identify lands in Idaho important to sage-grouse sustainability. PPH includes breeding, late brood-rearing, and winter concentration areas. General priority habitat are lands that may serve as important corridors between PPH and habitat islands within corridors, or occupied habitats characterized by low lek densities (Makela & Major, 2012). The BLM collaborated with respective state wildlife agencies to identify these areas. Modeling results indicate that 76 percent of the Berrett FFR allotment lies within PPH/GPH for sage-grouse (Table WDLF-1, Map WDLF-1). No active leks are known to occur within this allotment. This allotment provides seasonal breeding, upland summer, riparian, and winter habitat for sage-grouse.

**Table WDLF-1:** Acres<sup>1</sup> and portions of preliminary priority and general priority habitat within the Berrett FFR allotment (Map WDLF-1)

| Allotment/Pasture Name | Acres of PPH Sagebrush Habitat in Allotment <sup>2</sup> | Acres of PPH Perennial Grassland in Allotment | Acres of PPH Juniper Encroachment in Allotment | Acres of PGH in Allotment | Portion of Allotment in PPH/PGH |
|------------------------|--|---|--|---------------------------|---------------------------------|
| Pasture 1              | 253 (12%)  | 0   | 1,777 (83%)                                    | 98 (5%)                   | 2,128 (100%)                    |
| Pasture 2              | 0  | 0   | 0  | 327 (100%)                | 327 (100%)                      |
| Pasture 3              | 0  | 0   | 0  | 662 (100%)                | 662 (100%)                      |
| Pasture 4              | 476 (69%)  | 0   | 213 (31%)                                      | 0                         | 689 (100%)                      |
| Allotment Total        | 729 (14%)  | 0   | 1,990 (40%)                                    | 1,087 (22%)               | 3,806 (76%)                     |

<sup>1</sup>PPH/PGH habitat acreage totals include public lands, state lands, and private property.

<sup>2</sup>PPH sagebrush can also include small amounts of perennial grasslands, conifer encroachment, and non-habitat.

### ***Pasture 3***

One sage-grouse upland summer habitat assessment was conducted in pasture 3 on September 9, 2012, on a Loamy 16'+ Mountain big sagebrush / Idaho fescue ecological site. The pasture is managed as a native plant community (Standard 4). Because the elevation of this pasture is above 7,000 feet, this pasture is primarily upland summer habitat for late brood-rearing sage-grouse.

### ***Upland summer Habitat Assessment***

The sagebrush overstory is characterized by a marginal canopy cover (46 percent) and suitable height (63.5 cm). The understory is characterized by a combined suitable canopy cover of perennial grasses and forbs (34 percent) (Table WDLF-2). The number of preferred forbs species counted (7) and their occurrence is suitable. Overall, although the occurrence of sagebrush exceeds the habitat guidelines for sage-grouse, the combination of suitable sagebrush height and

the suitable occurrence of understory perennial grass/forbs indicate that this pasture is providing adequate (suitable) hiding and escape cover for late-brood rearing sage-grouse.

**Table WDLF-2:** Sage-grouse habitat indicators and pasture 1 ratings (Refer to Appendix A for full assessment summaries and habitat indicator value)

| <b>Habitat Indicator</b>                 | <b>Data</b> | <b>Upland Summer</b> |
|--|-------------|----------------------|
| Sagebrush Canopy Cover (%)               | 46          | marginal             |
| Sagebrush Height (cm)                    | 63.5        | suitable             |
| Combined Grass/Forb Canopy Cover (%)     | 13          | suitable             |
| Preferred Forb Availability (#)          | 7           | suitable             |
| <b>Overall Pasture Evaluation Rating</b> |             | <b>suitable</b>      |

***Pasture 4***

Two sage-grouse upland summer habitat assessments were conducted in pasture 1 on August 14, 2012, on a Loamy 13-16” Mountain big sagebrush / bluebunch wheatgrass – Idaho fescue ecological site. The pasture is managed as a native plant community (Standard 4).

***Breeding Habitat Assessment***

This information was collected as part of an upland summer habitat assessment conducted on 8/14/2012. Because the sagebrush community is not expected to change substantially over the course of a few months and the data collection protocols are the same, this information can provide insight into breeding habitat conditions earlier in the spring. Due to the time of year this data was collected, the forb information was not used in this assessment.

The sagebrush overstory is characterized by a marginal canopy cover (45 percent) and marginal height (123.5 cm) with a marginal mixed (spreading/columnar) shape. The understory is characterized by a marginal canopy cover of perennial grasses (5 percent) and suitable canopy of perennial forbs (8 percent) with a combined perennial grass/forb height of (20.8 cm) (Table WDLF-3). Overall, because of the overly abundant occurrence and open growth shape of sagebrush in the overstory combined with the less than desirable occurrence of perennial grasses in the understory, although the height is favorable, this pasture is providing less than adequate (marginal) nesting and hiding cover conditions for breeding sage-grouse.

***Upland Summer Habitat Assessment***

The sagebrush overstory is characterized by a marginal canopy cover (45 percent) and marginal height (123.5 cm). The understory is characterized by a combined marginal canopy cover of perennial grasses and forbs (13 percent) (Table WDLF-3). The number of preferred forbs observed is suitable and they are well represented. Overall, because of the combination of marginal overstory height of the sagebrush and the marginal occurrence of understory perennial grass/forbs, this assessment indicates this pasture is providing less-than-adequate (marginal)

hiding and escape cover for late-brood rearing sage-grouse.

*Winter Habitat Assessment*

This information was collected as part of a breeding habitat assessment conducted on August 14, 2012. Because the sagebrush community is not expected to change substantially over the course of a few months, this information can provide insight into winter habitat conditions later in the year. The sagebrush overstory is characterized by a marginal canopy cover (45 percent) and marginal height (123.5 cm). Overall, sagebrush occurrence and height are providing suitable winter cover and forage conditions for sage-grouse and is not a limiting factor in this pasture (Table WDLF-3).

**Table WDLF-3:** Sage-grouse habitat indicators and pasture 1 ratings (Refer to Appendix A for full assessment summaries and habitat indicator value)

| Habitat Indicator                             | Data  | Breeding        | <sup>1</sup> Upland Summer | <sup>1</sup> Winter |
|---|-------|-----------------|----------------------------|---------------------|
| Sagebrush Canopy Cover (%)                    | 25.0  | marginal        | marginal                   | suitable            |
| Sagebrush Height (cm)                         | 123.5 | marginal        | marginal                   | suitable            |
| Sagebrush Form                                | mixed | marginal        |                            |                     |
| Perennial Grass and Forb Height (cm)          | 20.8  | suitable        |                            |                     |
| <sup>2</sup> Perennial Grass Canopy Cover (%) | 5.0   | marginal        |                            |                     |
| Combined Grass/Forb Canopy Cover (%)          | 13.0  |                 | marginal                   |                     |
| Preferred Forb Availability (#)               | 11    |                 | suitable                   |                     |
| <b>Overall Pasture Evaluation Rating</b>      |       | <b>marginal</b> | <b>marginal</b>            | <b>suitable</b>     |

<sup>1</sup>Breeding and winter habitat ratings extrapolated from breeding habitat assessment information collected on 8/14/2012.

<sup>2</sup>Perennial grass canopy cover does not include Poa species.

*Columbia Redband Trout*

Williams Creek and South Boulder Creek are identified as Columbia redband trout streams and occur within the Berrett FFR allotment. Williams Creek runs through pastures 2 and 4 and South Boulder Creek runs through pasture 3 (Map WDLF-2).

**Evaluation Findings and Determination**

**Standard 1 (Watersheds)**

Watersheds provide for the proper infiltration, retention, and release of water appropriate to soil type, vegetation, climate, and landform to provide for proper nutrient cycling, hydrologic cycling and energy flow.

### **Standard**

- Standard does not apply
- Meeting the Standard
- Not meeting the Standard; Current livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward
- Not Meeting the Standard; Current livestock grazing management practices are not significant factors

### **Guidelines**

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s). 1, 3, 8

### **Rationale for Evaluation Finding and Determination**

Current and past livestock grazing management practices are significant causal factors for not meeting watershed Standard 1 in the Berrett FFR allotment in pastures 1 and 4 (formerly part of pasture 1); pasture 2 is private and pasture 3 is meeting. In pasture 1, relics from historic and active erosional processes are distinct. Abundant trailing has promoted a decline in deep-rooted perennial bunchgrasses and the pasture shows a gradual shift to shallow-rooted species. As a result, increased bare ground and degraded soil structure has promoted soil surface loss and degradation.

In pasture 4, mechanical disturbance from hoof shearing and trampling has led to extensive pedestaling, leaving soils churned and exposed. Vegetative cover and biologic soils crusts are reduced, especially within interspatial areas, and contribute to reduced soil stability and hydrologic function.

The decreased ecological function, impaired soils, and use during the critical growing season in the absence of rest indicate that soil and hydrologic function are compromised. Current and past livestock management are the primary contributing factors for not meeting Standard 1 and ORMP soil management objectives of improving unsatisfactory watershed health/conditions in the Berrett FFR allotment.

### **Standard 2 (Riparian Areas and Wetlands)**

Riparian-wetland areas are in properly functioning condition appropriate to soil type, climate, geology, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

### **Standard**

- Standard does not apply
- Meeting the Standard
- Not meeting the Standard, Current livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward
- Not Meeting the Standard; Current livestock grazing management practices are not

significant factors

### **Guidelines**

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s).

5

### **Rationale for Evaluation Finding and Determination**

Standard 2 is not being met in pastures 1 and 4 of the Berrett FFR allotment. A reach of Williams Creek that traverses pasture 4 was twice assessed FAR because there were areas where the channel was over-wide, the sinuosity was out of balance for the valley type, and some areas had vertical and lateral instability. Another short reach of Williams Creek that occurs in pasture 1 was visited in 2011. Photos were taken and the reach appears to be in PFC. Approximately 1.0 mile of Pole Bridge Creek was assessed FAR in 2000 because the stream's sinuosity and width-to-depth ratios were out of balance for the valley type, there was an inadequate composition and age class of deep-rooted riparian species to protect streambanks, and there was some vertical instability along the reach.

Subsequent to the FAR assessment, one MMIM site was established on the same reach of Pole Bridge Creek in pasture 1. The median stubble height was 3.6 inches, woody use was 9.7 percent, and streambank alteration was 41 percent. The metrics for stubble height and streambank alteration exceed the Standards appropriate for maintenance of healthy riparian areas and stream channels.

One spring that occurs in pasture 1 and one that occurs in pasture 2 were assessed in 2011 and 2012. The unnamed spring in pasture 1 was in PFC, but the unnamed spring in pasture 4 was NF. The spring had been heavily impacted by livestock from removal of both herbaceous and woody vegetation and trailing and trampling. Only mature and decadent woody species remain with no herbaceous understory and a high percent of bare ground present creating erosion and sedimentation.

Current livestock grazing management practices are significant causal factors for not meeting Standard 2. The recent grazing schedule has not provided periodic rest, and sufficient residual vegetation has not been maintained to provide for healthy riparian-wetland areas. Therefore, current livestock grazing management practices are not in conformance with the Idaho Guidelines for Livestock Grazing Management applicable to Standard 2.

### **Standard 3 (Stream Channel/Floodplain)**

Stream channels and floodplains are properly functioning relative to the geomorphology (e.g., gradient, size shape, roughness, confinement, and sinuosity) and climate to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

### **Standard**

- Standard does not apply
- Meeting the Standard

- Not meeting the Standard, Current livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward
- Not Meeting the Standard; Current livestock grazing management practices are not significant factors

**Guidelines**

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s).  
\_7\_

**Rationale for Evaluation Finding and Determination**

Standard 3 is not being met in pastures 1 and 4 of the Berrett FFR allotment. A reach of Williams Creek that traverses pasture 4 was twice assessed FAR (2001 and 2012) because there were areas where the channel was over-wide, the sinuosity was out of balance for the valley type, and some areas had vertical and lateral instability. Another short reach of Williams Creek that occurs in pasture 1 was visited in 2011. Photos were taken and the reach appears to be in PFC. Approximately 1.0 mile of Pole Bridge Creek was assessed FAR in 2000 because the stream’s sinuosity and width –to-depth ratios were out of balance for the valley type, there was an inadequate composition and age class of deep-rooted riparian species to protect streambanks, and there was some vertical instability along the reach.

Subsequent to the FAR assessment, one MMIM site was established on the same reach of Pole Bridge Creek in pasture 1. The median stubble height was 3.6 inches, woody use was 9.7 percent, and streambank alteration was 41 percent. The metrics for stubble height and streambank alteration exceed the Standards appropriate for maintenance of healthy and functioning riparian areas and stream channels.

Current livestock grazing management practices are a significant causal factor for not meeting Standard 3. The recent grazing schedule has not provided periodic rest, and stream channel morphology and function have not been maintained. Therefore, current livestock grazing management practices are not in conformance with the Idaho Guidelines for Livestock Grazing Management applicable to Standard 3.

**Standard 4 (Native Plant Communities)**

Healthy, productive, and diverse native animal habitat and populations of native plants are maintained or promoted as appropriate to soil type, climate, and landform to provide for proper nutrient cycling, hydrologic cycling, and energy flow.

**Standard**

- Standard does not apply
- \_ Meeting the Standard
- Not meeting the Standard, Current livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward
- Not Meeting the Standard; Current livestock grazing management practices are not

significant factors

### **Guidelines**

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s). \_\_\_

### **Rationale for Evaluation Finding and Determination**

Rangeland Health Standard 4 is met in pastures 1 and 3 but is not met in pasture 4 of the four pasture Berrett FFR allotment; pasture 2 is all private. Although soil disturbance and bare ground in pasture 1 (old pasture 1 split into pastures 1 and 4) are at moderate departure on the RHA site, leaving it at risk for future disturbance activities, all other indicators for productive native plants are maintained as appropriate to provide for proper nutrient cycling, hydrologic cycling, and energy flow in pasture 1. Evidence of historic grazing impacts are present throughout pasture 4, with the reduced composition of deep-rooted native perennial bunchgrasses (e.g., bluebunch wheatgrass and Idaho fescue) from reference site conditions; historic grazing and invasive annuals are the causal factors in not meeting Standard 4.

Qualitative rangeland health assessment data indicate that Standard 4 is not met in pasture 4, with moderate departure of reproductive capability of perennial plants and litter amount in the RHAs and increases in annual invasives. This conclusion is supported by current ecological site descriptions and correlation to vegetation inventories.

The Owyhee Resource Management Plan management objective to improve unsatisfactory and maintain satisfactory vegetation health/condition on all areas is also not met in pasture 4. Vegetation communities shifting to dominance of shallow-rooted bunchgrasses and increased invasive annuals lead to a conclusion that the vegetation management objective is not met.

### **Rangeland Seeding**

This standard does not apply in this allotment.

### **Exotic Plant Communities**

This standard does not apply in this allotment.

### **Standard 7 (Water Quality)**

Surface and ground water on public lands comply with the Idaho Water Quality Standards.

#### **Standard**

- Standard does not apply
- Meeting the Standard
- Not meeting the Standard, Current livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward
- Not Meeting the Standard; Current livestock grazing management practices are not

significant factors

**Guidelines**

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s). \_\_\_

**Rationale for Evaluation Finding and Determination**

Idaho Department of Environmental Quality (IDEQ) designates basins, sub-basins, and assessment units in order to manage the States waterways. The 2010 Integrated Report (303(d)/305(b)) uses assessment units within the sub-basin. Assessment units (AUs) are groups of similar streams within a sub-basin that have similar land use practices, ownership, or land management. Assessment units are assessed for pollutants and assigned beneficial uses with associated Water Quality Standards (all IDEQ data and standards mentioned here are available on the IDEQ website <http://www.deq.idaho.gov>).

Current IDEQ information identifies that the BLM portion of the streams within the Berrett FFR allotment contain approximately 1.6 miles that are fully supporting the watershed’s beneficial uses, and 0.25 mile that has not been assessed. The allotment contains portions of two AUs (Table RIPN-2).

Based on the stream’s support status, Standard 7 is being met in pastures 1 and 4, and is not applicable to pasture 3 of the Berrett FFR allotment; the allotment is in conformance with Guideline #10 for Livestock Grazing Management.

**Table RIPN-2: DEQ Water Quality Summary**

| AU #               | AU Name  | Beneficial Use Not Being Met | Pollutant/ Pollution | TMDL |
|--------------------|--|------------------------------|----------------------|------|
| ID17050108SW003_02 | Williams Creek - 1st and 2nd order                         | fully supporting             | NA                   | NA   |
| ID17050108SW006_02 | South Boulder, Indian and Bogus Creeks - 1st and 2nd order | not assessed                 | NA                   | NA   |

**Standard 8 (Threatened and Endangered Plants and Animals)**

Habitats are suitable to maintain viable populations of threatened and endangered, sensitive, and other special status species.

**Standard**

- Standard does not apply
- Meeting the Standard
- Not meeting the Standard, Current livestock grazing management practices are significant factors
- Not Meeting the Standard; Making significant progress toward
- Not Meeting the Standard; Current livestock grazing management practices are not

significant factors

### **Guidelines**

- Conforms with Guidelines for Livestock Grazing Management
- Does not conform with Guidelines for Livestock Grazing Management; Guideline No(s). 5, 7, 8, 11, and 12

### **Rationale for Evaluation Finding and Determination**

#### **Upland Habitat**

Pasture 4 in the Berrett FFR allotment is managed as a native plant community and is determined to be not meeting Standard 4 due to past grazing and the increased dominance of annual invasive grass species (see Standard 4). The plant community is transitioning from a dominance of large perennial grasses such as bluebunch wheatgrass to a community dominated by smaller, more grazing-tolerant species such as annual invasive species. These species do not have the robust growth form or stature such as bluebunch wheatgrass and do not provide the plant composition, structure, and function for sagebrush steppe-dependent species. This allotment therefore is not providing adequate upland habitat conditions for sagebrush steppe species and is not meeting Standard 8 due to historic grazing practices and the increased dominance of annual invasive species.

#### **Riparian Habitat**

Evaluation of Standards 2, 3, and 7 determined that streams and springs within this allotment are not properly functioning and not meeting water quality parameters due to historic and current livestock grazing. Streams, springs, and wetlands that are NF or are FAR are lacking adequate riparian vegetation composition and distribution to provide the structure and function to support productive riparian environments. Because Standards 2, 3, and 7 are not met, this allotment is not providing adequate riparian habitat conditions to support viable aquatic and terrestrial species populations, and therefore is not meeting Standard 8 due to historic and current grazing practices.

#### **Focal Species**

##### *Sage-grouse*

The Berrett FFR allotment is unique in that the pastures are not contiguous and range in elevation from approximately from 5,000 feet to over 7,000 feet. Pasture 1 is providing marginal breeding and upland summer habitat conditions and pasture 3 is providing suitable upper elevation summer habitat conditions.

Pasture 4 is not meeting Standard 8 for sage-grouse because of an overabundance and height of the sagebrush overstory with a mixed (spreading/columnar) shape, combined with a less-than-desirable canopy cover of perennial grasses, although the combined height of perennial grasses and forbs was favorable. These overstory/understory conditions have reduced nesting, hiding, and escape value for sage-grouse during the breeding and late brood-rearing periods. Because cover values are less than adequate, this allotment is therefore not meeting Standard 8 for sage-grouse due to historic and current livestock grazing practices.

##### *Columbia Redband Trout*

Columbia River redband trout are known to occur within the Williams Creek system. Evaluation

of Standards 2 and 3 identified streams and springs within this system that are not properly functioning due to current grazing practices. Redband trout require intact channels with well-developed riparian communities that stabilize banks to minimize erosion and create undercuts, minimize impacts of flood events and filter sediments, provide shade to reduce water temperatures, and contribute woody debris to create channel structure and regulate seasonal flows. Because these in-stream and near-stream habitat characteristics are not fully represented, this allotment is not providing adequate riparian conditions to sustain viable populations of redband trout and is therefore not meeting Standard 8 due to historic and current grazing practices.

### **Filed Manager's Determination**

I have determined that Standards 1, 2, 3, 4 and 8 of the applicable Standards for Rangeland Health are not being met in the Berrett FFR allotment. Standard 7 is being met and Standards 5 and 6 are not applicable to resources present within the allotment. Current livestock grazing management practices are significant factors in not meeting Standards 1, 2, 3 and 8. Livestock management practices do not conform with the applicable Livestock Grazing Management Guidelines 1, 3, 5, 7, 8, 11, and 12.

  
\_\_\_\_\_  
**Field Manager**  
**Owyhee Field Office**

8/22/13  
**Date**

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## APPENDIX A – Sage-grouse Assessment Summaries

Sage-grouse breeding and upland summer habitat assessments were conducted using the BLM Sage-grouse Habitat Assessment Framework, Multi-scale Habitat Assessment Tool (Stiver, Rinkes, & Naugle, 2010). This assessment tool has been going through slight modifications since 2001 to present as information and findings come forward to better capture and characterize sage-grouse habitat indicators.

The sage-grouse assessment information collected in 2012 can be reviewed below. Assessment teams collected breeding habitat and upland summer habitat assessment information during the spring and summer of 2012.

In interpreting the breeding and upland summer habitat information, where it is applicable, because the composition and structure of the sagebrush-steppe community is not expected to change significantly over the course of a few weeks to a couple of months, except in situations affected by wildfire or mechanical manipulation, the information can provide insight into habitat conditions during other times of the year.

For example, the breeding habitat assessment can provide sagebrush canopy cover and height information to assess winter habitat potential and conditions. However, an assessment of upland summer habitat conditions could not be clearly made because the forb information was not representative of the time of year the data was collected; removing the forb information eliminated two critical habitat indicators in making a clear assessment of potential habitat conditions later in the year. Therefore, upland summer habitat was not evaluated using breeding habitat assessment information.

However, because the data collection methods are the same, upland summer habitat assessment information could provide insight into breeding habitat conditions earlier in the year, largely due to the collection of information specific to sagebrush physical shape and perennial grass canopy cover. Consistent with the discussion above, forb information was not used because it did not represent any other assessment except for the time of year it was collected. Upland summer habitat conditions also provided insight into winter habitat conditions. Therefore, upland summer habitat assessment and supplemental information collected in the summer season were used to assess and evaluate breeding and winter conditions earlier and later in the year.

**Figure A-1:** Sage-grouse Assessment Summaries

| Form H-3   |  | Sage-grouse Habitat Suitability Worksheet – BREEDING    |  | R025XY011D  |                  |                                    |                 |
|--|--|---|--|---|------------------|------------------------------------|-----------------|
| Allotment-Pasture Names: Berrett FFR                         |  | Allotment-Pasture Number: 0609-01                       |  | Number of Transects: 2  |                  | Subpopulation: NC NV/ SE OR/ SW ID |                 |
| Ecological Site ID: R025XY011D                               |  | Ecological Site Name: Loamy 13-16 ARTRV/PSPSPS-FEID     |  | Home Range Name: Pleasant Valley                              |                  | Associated Leaks: 20557            |                 |
| Site IDs:  |  | Land Cover Type/s:                                      |  | Area Sampled (ha):  |                  | Date:                              |                 |
| 0609-1-07s05w09a-2012  |  | ARTRV/BRTE-TACA8  |  | 9   |                  | 8/14/2012                          |                 |
| 0609-1-07s05w19b-2012  |  | ARTRV/POSE-BRTE   |  | 7.5   |                  | 8/14/2012                          |                 |
|  |  |   |  |   |                  | Site Info: Mesic                   |                 |
| <b>Habitat Indicator Suitability Range (Primary)</b>         |  |   |  |   |                  |                                    |                 |
| Habitat Indicator  | $\bar{x}$  | Suitable  | ✓  | Marginal  | ✓                | Unsuitable                         | ✓               |
| Sagebrush Canopy Cover (mean)                                | 45.0   | 15-25%  |  | 5-<15% or >25%  | X                | <5%                                |                 |
| Sagebrush Height   |  |   |  |   |                  |                                    |                 |
| Mesic Site (mean)  | 123.5  | 40-80 cm  |  | 20-<40 cm or >80 cm   | X                | <20 cm                             |                 |
| Arid Site (mean)   |  | 30-80 cm  |  | 20-<30 cm or >80 cm   |                  | <20 cm                             |                 |
| Predominant Sagebrush Shape (mode)                           | Mixed  | Spreading   |  | Mix of Spreading and Columnar                                 | X                | Columnar                           |                 |
| Perennial Grass and Forb Height (mean)                       |  | ≥18 cm  |  | 10-18 cm  |                  | <10 cm                             |                 |
| Perennial Grass Canopy Cover                                 |  |   |  |   |                  |                                    |                 |
| Mesic Site (mean)  | 5.0  | ≥15%  |  | 5-<15%  | X                | <5%                                |                 |
| Arid Site (mean)   |  | ≥10%  |  | 5-<10%  |                  | <5%                                |                 |
| Perennial Forb Canopy Cover                                  |  |   |  |   |                  |                                    |                 |
| Mesic Site (mean)  |  | ≥10%  |  | 5-<10%  |                  | <5%                                |                 |
| Arid Site (mean)   |  | ≥5%   |  | 3-<5%   |                  | <3%                                |                 |
| Preferred Forb Availability (relative to site potential)     |  | Preferred forbs are common with several species present |  | Preferred forbs are common but only a few species are present |                  | Preferred forbs are rare           |                 |
| Number of Preferred Forb Species (n)                         |  |   |  |   |                  |                                    |                 |
| <b>Habitat Indicator Suitability Range (Supplemental)</b>    |  |   |  |   |                  |                                    |                 |
| Habitat Indicator  | $\bar{x}$  | Suitability   | Rationale  |   |                  |                                    |                 |
| Other Shrub Canopy Cover (mean)                              | 8.0  | Suitable  | Appropriate for reference site conditions.   |   |                  |                                    |                 |
| Other Shrub Height (mean)                                    | 24.8   | Suitable  | Appropriate for reference site conditions.   |   |                  |                                    |                 |
| Sagebrush and Other Shrub Canopy Cover (mean)                | 53.0   | Marginal  | The combination all shrubs exceeds >25% canopy cover.  |   |                  |                                    |                 |
| Sagebrush and Other Shrub Height (mean)                      | 115.2  | Marginal  | Overall shrub height exceeds 80cm.   |   |                  |                                    |                 |
| Perennial Grass Height (excluding Poa spp.) (mean)           | 27.5   | Suitable  | Perennial grass height >18cm but is made up of only a few plants on this site.   |   |                  |                                    |                 |
| Poa Spp. Canopy Cover (mean)                                 | 9.0  | Suitable  | Poa species is a minor component in this plant community on this site.   |   |                  |                                    |                 |
| Annual Grass Canopy Cover (mean)                             | 41.0   | Unsuitable  | BRTE and TACA8 are understory dominants in this plant community on this site   |   |                  |                                    |                 |
| Annual Forb Canopy Cover (mean)                              |  |   |  |   |                  |                                    |                 |
| Bare Ground Canopy Cover (relative to site potential) (mean) | 19.0   |   | Bareground is low indicative of sites dominated by exotic annual grasses. Suitable would range from 25-45% for a mid-seral reference site. |   |                  |                                    |                 |
| Does ecological site potential limit suitability potential?  |  |   |  | YES   | NO               |                                    |                 |
|  |  |   |  |   | X                |                                    |                 |
| Drought Condition:   | Extreme Drought  | Severe Drought  | Moderate Drought   | Mid-Range   | Moderately Moist | Very Moist                         | Extremely Moist |
|  |  |   | X  |   |                  |                                    |                 |
| Evidence of sage-grouse use?                                 | No   |   |  |   |                  |                                    |                 |
| Evidence of recent livestock use?                            | No   |   |  |   |                  |                                    |                 |
| Rationale for Overall Suitability Rating:                    | Information provided was collected during a scheduled sage-grouse summer riparian habitat assessment. However, the site has applicability for assessing breeding habitat potential as well, however, forb information was not used because of the time of year the information was collected would have influenced the occurrence of forbs. Marginal overstory conditions characterized by >25% canopy cover of sagebrush at >80cm in height with a predominately mixed (spreading/columnar) physical shape. Marginal understory conditions are characterized by 5-15% canopy cover of perennial grasses although height was >18cm. The availability forbs were desirable at >5% forbs and were well represented by 11 different species. The canopy cover of perennial grasses are at the low end of the marginal category and the low bareground value supports the dominance of annual grasses in the interspaces. Overall, because of the overall abundant occurrence and open growth shape of sagebrush in the overstory combined with the less than desirable occurrence, although the height is favorable, of perennial grasses in the understory, this site is rated marginal for sage-grouse breeding conditions. |   |  |   |                  |                                    |                 |
| Site-Scale Suitability                                       | Suitable   |   | Marginal   |   | Unsuitable       |                                    |                 |
|  |  |   | X  |   |                  |                                    |                 |

| Form H-4   |          | Sage-grouse Habitat Suitability Worksheet –  |  | UPLAND SUMMER   | R025XY011ID                  |                          |            |                  |                |       |                       |
|--|----------|--|--|---|------------------------------|--------------------------|------------|------------------|----------------|-------|-----------------------|
| Allotment-Pasture Names                                      |          | Berrett FFR  | Allotment-Pasture Number:  |   | 0609-01                      | Number of Transects:     |            | 2                | Subpopulation: |       | NC NV / SE OR / SW ID |
| Ecological Site ID:  |          | R025XY011ID  | Ecological Site Name:  |   | Loamy 13-16 ARTRV/PSSPS-FEID | Home Range Name:         |            | Pleasant Valley  |                |       |                       |
| Site IDs:  |          | Land Cover Type/s:   |  | Area Sampled (ha):  |                              | Date:                    |            | Associated Leks: |                | 20557 |                       |
| 0609-1-07s05w09a-2012  |          | ARTRV/BRTE-TACA8   |  | 9   |                              | 8/14/2012                |            | Site Info:       |                | Mesic |                       |
| 0609-1-07s05w19b-2012  |          | ARTRV/POSE-BRTE  |  | 7.5   |                              | 8/14/2012                |            |                  |                |       |                       |
| <b>Habitat Indicator Suitability Range (Primary)</b>         |          |  |  |   |                              |                          |            |                  |                |       |                       |
| <b>Habitat Indicator</b>                                     | <b>x</b> | <b>Suitable</b>  | <b>✓</b>   | <b>Marginal</b>   | <b>✓</b>                     | <b>Unsuitable</b>        | <b>✓</b>   |                  |                |       |                       |
| Sagebrush Canopy Cover (mean)                                | 45.0     | 10-25%   |  | 5-<10% or >25%  | X                            | <5%                      |            |                  |                |       |                       |
| Sagebrush Height (mean)                                      | 123.5    | 40-80 cm   |  | 20-<40 cm or >80 cm   | X                            | <20 cm                   |            |                  |                |       |                       |
| Perennial Grass and Forb Canopy Cover (mean)                 | 13.0     | ≥15%   |  | 5-15%   | X                            | <5%                      |            |                  |                |       |                       |
| Preferred Forb Availability (relative to site potential)     |          | Preferred forbs are common with several species present  | X  | Preferred forbs are common but only a few species are present |                              | Preferred forbs are rare |            |                  |                |       |                       |
| Number of Preferred Forb Species (n)                         | 11.0     |  |  |   |                              |                          |            |                  |                |       |                       |
| <b>Habitat Indicator Suitability Range (Supplemental)</b>    |          |  |  |   |                              |                          |            |                  |                |       |                       |
| <b>Habitat Indicator</b>                                     | <b>x</b> | <b>Suitability</b>   | <b>Rationale</b>   |   |                              |                          |            |                  |                |       |                       |
| Predominant Sagebrush Shape (mode)                           | Mixed    | Suitable   | Appropriate for reference site conditions  |   |                              |                          |            |                  |                |       |                       |
| Perennial Grass and Forb Height (mean)                       | 20.8     | Suitable   | Combined height of perennial grasses and forbs >18cm.  |   |                              |                          |            |                  |                |       |                       |
| Perennial Grass Canopy Cover (mean)                          | 5.0      | Marginal   | Perennial grasses between 5-15%  |   |                              |                          |            |                  |                |       |                       |
| Perennial Forb Canopy Cover (mean)                           | 8.0      | Suitable   | Forbs are common and well represented by 11 different species.   |   |                              |                          |            |                  |                |       |                       |
| Other Shrub Canopy Cover (mean)                              | 8.0      | Suitable   | Appropriate for reference site conditions  |   |                              |                          |            |                  |                |       |                       |
| Other Shrub Height (mean)                                    | 24.8     | Suitable   | Appropriate for reference site conditions  |   |                              |                          |            |                  |                |       |                       |
| Sagebrush and Other Shrub Canopy Cover (mean)                | 53.0     | Marginal   | Greater than desirable combined shrub cover.   |   |                              |                          |            |                  |                |       |                       |
| Sagebrush and Other Shrub Height (mean)                      | 115.2    | Marginal   | Greater than desirable combined shrub cover.   |   |                              |                          |            |                  |                |       |                       |
| Perennial Grass Height (excluding Poa spp.) (mean)           | 27.5     | Suitable   | Perennial grass height >18 cm is desirable in the understory.  |   |                              |                          |            |                  |                |       |                       |
| Poa Spp. Canopy Cover (mean)                                 | 9.0      | Suitable   | Appropriate for reference site conditions  |   |                              |                          |            |                  |                |       |                       |
| Annual Grass Canopy Cover (mean)                             | 41.0     | Unsuitable   | BRTE and TACA8 are dominant species in this community.   |   |                              |                          |            |                  |                |       |                       |
| Annual Forb Canopy Cover (mean)                              | 5.0      | Marginal   | Appropriate for reference site conditions  |   |                              |                          |            |                  |                |       |                       |
| Bare Ground Canopy Cover (relative to site potential) (mean) | 19.0     |  | ESD identifies 25-45% bareground appropriate for this soil type. Low bareground suggests a high occurrence of non-desirable herbaceous species (usually associated with occurrence of Poa and invasive species) occupying the interspaces. |   |                              |                          |            |                  |                |       |                       |
| Does ecological site potential limit suitability potential?  |          |  |  |   | YES                          | NO                       |            |                  |                |       |                       |
|  |          |  |  |   |                              | X                        |            |                  |                |       |                       |
| Drought Condition:   |          | Extreme Drought  | Severe Drought   | Moderate Drought  | Mid-Range                    | Moderately Moist         | Very Moist | Extremely Moist  |                |       |                       |
|  |          |  |  | X   |                              |                          |            |                  |                |       |                       |
| Evidence of sage-grouse use?                                 |          | No   |  |   |                              |                          |            |                  |                |       |                       |
| Evidence of recent livestock use?                            |          | Cattle trailing  |  |   |                              |                          |            |                  |                |       |                       |
| Rationale for Overall Suitability Rating:                    |          | Marginal overstory conditions are characterized by >25% canopy cover of sagebrush at >80cm in height with a predominantly mixed (spreading/columnar) physical shape. Marginal understory conditions are characterized by 5-15% canopy cover of perennial grasses and forbs with a combined height >18cm. Canopy cover of forbs is suitable and is well represented by 11 different species. The less than desirable 5% occurrence of perennial grasses and the dominance of annuals (41% canopy cover) such as BRTE and TACA8 suggest that a phasal shift in the plant community may be occurring. The low bareground value also supports the occurrence of annual grasses in the interspaces. Overall, the loamy 13-16 ARTRV/PSSP-FEID sites within this pasture are marginal as summer upland habitat for sage-grouse due to the over abundance and height of the sagebrush overstory and the reduced canopy of perennial grasses in the understory, although the height was favorable along with favorable abundance of forbs . |  |   |                              |                          |            |                  |                |       |                       |
| Site-Scale Suitability                                       |          | Suitable   |  |   | Marginal                     |                          |            | Unsuitable       |                |       |                       |
|  |          |  |  |   | X                            |                          |            |                  |                |       |                       |

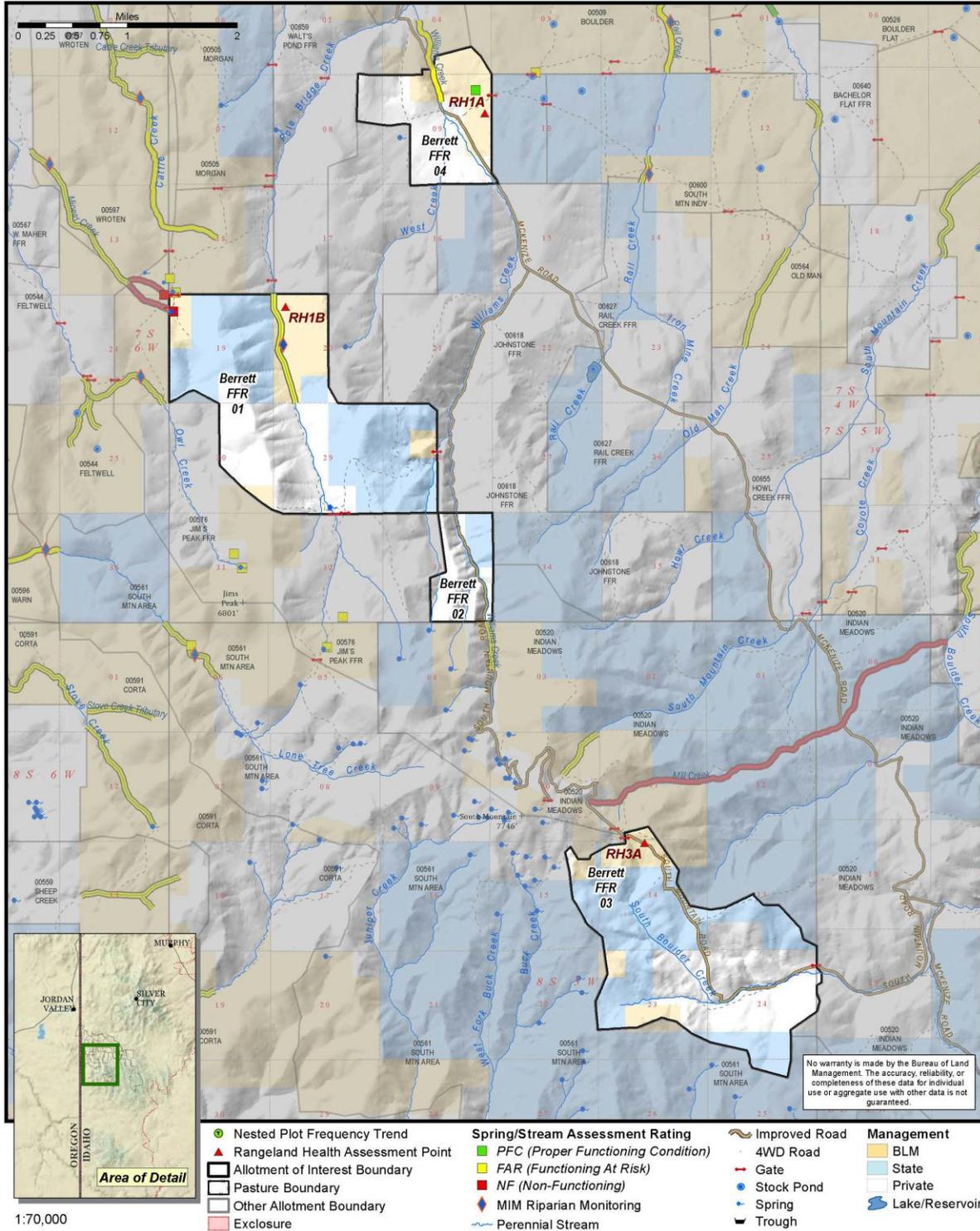
| Form H-6   | Sage-grouse Habitat Suitability Worksheet –  | WINTER                           | R025XY011D   |                             |                  |                         |                     |
|--|--|----------------------------------|--|-----------------------------|------------------|-------------------------|---------------------|
| <b>Allotment-Pasture Names:</b>                                    | Berrett FFR  | <b>Allotment-Pasture Number:</b> | 0609-01  | <b>Number of Transects:</b> | 2                | <b>Subpopulation:</b>   | NC NV/ SE OR/ SW ID |
| <b>Ecological Site ID:</b>   | R025XY011D   | <b>Ecological Site Name:</b>     | Loamy 13-16 ARTRV/PSSPS-FEID                         |                             |                  | <b>Home Range Name:</b> | Pleasant Valley     |
| <b>Site IDs:</b>   | <b>Land Cover Type/s:</b>  | <b>Area Sampled (ha):</b>        | <b>Date:</b>   |                             |                  | <b>Associated Leks:</b> | 20557               |
| 0609-1-07s05w09a-2012  | ARTRV/BRTE-TACA8   | 9                                | 8/14/2012  |                             |                  | <b>Site Info:</b>       | Mesic               |
| 0609-1-07s05w19b-2012  | ARTRV/POSE-BRTE  | 7.5                              | 8/14/2012  |                             |                  |                         |                     |
|  |  |                                  |  |                             |                  |                         |                     |
|  |  |                                  |  |                             |                  |                         |                     |
| <b>Habitat Indicator Suitability Range (Primary)</b>               |  |                                  |  |                             |                  |                         |                     |
| <b>Habitat Indicator</b>   | <b>x</b>   | <b>Suitable</b>                  | <b>✓</b>   | <b>Marginal</b>             | <b>✓</b>         | <b>Unsuitable</b>       | <b>✓</b>            |
| Sagebrush Canopy Cover (mean)                                      | 45.0   | >10%                             | X  | 5-10%                       |                  | <5%                     |                     |
| Sagebrush Height above Snow  |  | >25 cm                           |  | 10-25 cm                    |                  | <10 cm                  |                     |
| 0 cm snow (annual mean)  | 123.5  | >40 cm                           | X  | 25-40 cm                    |                  | <25 cm                  |                     |
| 15 cm snow (annual mean)   |  | >55 cm                           |  | 40-55 cm                    |                  | <40 cm                  |                     |
| 30 cm snow (annual mean)   |  |                                  |  |                             |                  |                         |                     |
| <b>Habitat Indicator Suitability Range (Supplemental)</b>          |  |                                  |  |                             |                  |                         |                     |
| <b>Habitat Indicator</b>   | <b>x</b>   | <b>Suitability</b>               | <b>Rationale</b>                                     |                             |                  |                         |                     |
| Predominant Sagebrush Shape (mode)                                 | Mixed  | Marginal                         | Mixed growth form reduces effective overstory cover. |                             |                  |                         |                     |
| Other Shrub Canopy Cover (mean)                                    | 8.0  | Suitable                         | Appropriate for reference site conditions            |                             |                  |                         |                     |
| Other Shrub Height (mean)  | 24.8   | Suitable                         | Appropriate for reference site conditions            |                             |                  |                         |                     |
| Sagebrush and Other Shrub Canopy Cover (mean)                      | 53.0   | Marginal                         | Greater than desirable combined shrub cover.         |                             |                  |                         |                     |
| Sagebrush and Other Shrub Height (mean)                            | 115.2  | Marginal                         | Greater than desirable combined shrub cover.         |                             |                  |                         |                     |
| <b>Does ecological site potential limit suitability potential?</b> |  |                                  |  | YES                         | NO               |                         |                     |
|  |  |                                  |  |                             | X                |                         |                     |
| <b>Drought Condition:</b>  | Extreme Drought  | Severe Drought                   | Moderate Drought                                     | Mid-Range                   | Moderately Moist | Very Moist              | Extremely Moist     |
|  |  |                                  | X  |                             |                  |                         |                     |
| <b>Evidence of sage-grouse use?</b>                                | No   |                                  |  |                             |                  |                         |                     |
| <b>Evidence of recent livestock use?</b>                           | Cattle Trailing  |                                  |  |                             |                  |                         |                     |
| <b>Rationale for Overall Suitability Rating:</b>                   | Overall the pasture is rated as suitable winter habitat because of the amount of canopy cover and height of sagebrush that would provide forage above persistent snow. |                                  |  |                             |                  |                         |                     |
|  |  |                                  |  |                             |                  |                         |                     |
|  |  |                                  |  |                             |                  |                         |                     |
| <b>Site-Scale Suitability</b>                                      |  | Suitable                         |  | Marginal                    |                  | Unsuitable              |                     |
|  |  | X                                |  |                             |                  |                         |                     |

| Form H-4   | Sage-grouse Habitat Suitability Worksheet –  |   | UPLAND SUMMER 609-03-08505W03-20 Berrett FFR-03   |   |                      |                          |                     |
|--|--|---|---|---|----------------------|--------------------------|---------------------|
| Date:  | 9/20/2012  | County:   | Owyhee  | State:  | Idaho                | Subpopulation:           | NC NV/ SE OR/ SW ID |
| Evaluators:  | Harmon and Jensen  |   | Home Range Name:  |   | Pleasant Valley      |                          |                     |
| Legal Description:   | T08SR05WS05QNEQQNW   |   | Associated Leaks:   |   | none                 |                          |                     |
| Land Cover Type:   | ARTRV/PSSP/SIHY/POSE   |   | Ecological Site:  |   | Loamy 16+ ARTRV/FEID |                          |                     |
| Number of Transects:   | 1  | Area Sampled (ha):                                      | 8.5   | Site Info:  |                      | Mesic                    |                     |
| List UTM Coordinates:  | Starting (NAD83)   |   | 508876E   | 4731029N  |                      |                          |                     |
| Ending (NAD 83)  | 4731000  | 508917  |   |   |                      |                          |                     |
| <b>Habitat Indicator Suitability Range (Primary)</b>         |  |   |   |   |                      |                          |                     |
| Habitat Indicator  | $\bar{x}$  | Suitable  | ✓   | Marginal  | ✓                    | Unsuitable               | ✓                   |
| Sagebrush Canopy Cover (mean)                                | 46.0   | 10-25%  |   | 5-<10% or >25%  | X                    | <5%                      |                     |
| Sagebrush Height (mean)                                      | 63.9   | 40-80 cm  | X   | 20-<40 cm or >80 cm   |                      | <20 cm                   |                     |
| Perennial Grass and Forb Canopy Cover (mean)                 | 34.0   | ≥15%  | X   | 5-15%   |                      | <5%                      |                     |
| Preferred Forb Availability (relative to site potential)     | Common   | Preferred forbs are common with several species present | X   | Preferred forbs are common but only a few species are present |                      | Preferred forbs are rare |                     |
| Number of Preferred Forb Species (n)                         | 7.0  |   |   |   |                      |                          |                     |
| <b>Habitat Indicator Suitability Range (Supplemental)</b>    |  |   |   |   |                      |                          |                     |
| Habitat Indicator  | $\bar{x}$  | Suitability   | Rationale   |   |                      |                          |                     |
| Predominant Sagebrush Shape (mode)                           | Spreading  | Suitable  | Desirable for effective overstory cover.  |   |                      |                          |                     |
| Perennial Grass and Forb Height (mean)                       | 35.3   | Suitable  | >18cm and effective understory cover and screening.   |   |                      |                          |                     |
| Perennial Grass Canopy Cover (mean)                          | 20.0   | Suitable  | Appropriate for reference site conditions.  |   |                      |                          |                     |
| Perennial Forb Canopy Cover (mean)                           | 14.0   | Suitable  | Appropriate for reference site conditions.  |   |                      |                          |                     |
| Other Shrub Canopy Cover (mean)                              | 10.0   | Suitable  | Appropriate for reference site conditions.  |   |                      |                          |                     |
| Other Shrub Height (mean)                                    | 69.0   | Suitable  | Appropriate for reference site conditions.  |   |                      |                          |                     |
| Sagebrush and Other Shrub Canopy Cover (mean)                | 56.0   | Suitable  | Appropriate for reference site conditions.  |   |                      |                          |                     |
| Sagebrush and Other Shrub Height (mean)                      | 64.8   | Marginal  | Appropriate for reference site conditions.  |   |                      |                          |                     |
| Perennial Grass Height (excluding Poa spp.) (mean)           | 38.5   | Suitable  | >18cm and effective understory cover and screening.   |   |                      |                          |                     |
| Poa Spp. Canopy Cover (mean)                                 | 8.0  | Suitable  | Appropriate for reference site conditions.  |   |                      |                          |                     |
| Annual Grass Canopy Cover (mean)                             | 8.0  | Marginal  | Presence of BRTE and BRJA on site; elevation and native species occurrence not favorable for invasive spread. |   |                      |                          |                     |
| Annual Forb Canopy Cover (mean)                              | 0.0  | Suitable  |   |   |                      |                          |                     |
| Bare Ground Canopy Cover (relative to site potential) (mean) | 24.0   | Marginal  | Suitable bareground ranges fro 30-60%   |   |                      |                          |                     |
| Does ecological site potential limit suitability potential?  |  |   |   | YES   | NO                   |                          |                     |
|  |  |   |   |   | X                    |                          |                     |
| Drought Condition:   | Extreme Drought  | Severe Drought  | Moderate Drought  | Mid-Range   | Moderately Moist     | Very Moist               | Extremely Moist     |
|  |  | X   |   |   |                      |                          |                     |
| Evidence of sage-grouse use?                                 | No   |   |   |   |                      |                          |                     |
| Evidence of recent livestock use?                            | No   |   |   |   |                      |                          |                     |
| Rationale for Overall Suitability Rating:                    | The site is characterized by a greater than desirable occurrence of sagebrush although the height and growth form provide favorable overstory cover and concealment. The understory is characterized by an ample occurrence and height of perennial grasses and forbs that provide adequate hiding and screening cover for late-summer sage-grouse. Overall, because the overstory/understory conditions and the availability of preferred forbs, this pasture is overall providing suitable late-summer habitat conditions for sage-grouse. |   |   |   |                      |                          |                     |
| Site-Scale Suitability                                       | Suitable   |   | Marginal  |   | Unsuitable           |                          |                     |
|  |  | X   |   |   |                      |                          |                     |

**APPENDIX B – Maps**



# Range-1: Berrett FFR (00609) Range and Riparian Overview





# WDLF-1: Berrett FFR (00609) Sage-grouse Habitat and Leks

