**Bear Gulch Allotment 2021 End of Year Report**

**NMFS BO No: WCR-2017-7355**

Wallowa-Whitman National Forest
Wallowa Valley Ranger District

04 March 2022

**Introduction:** The purpose of this report is to satisfy Terms and Conditions set forth in the Biological Opinion from NMFS, WCR-2017-7355. This report answers directly to each Term and Condition.

## Terms and Conditions

I. To implement reasonable and prudent measure RPM 1 (minimize take from livestock grazing), the WWNF shall:

   a. The WWNF and its permittees shall ensure that pastures are monitored midseason and end-of-season at the frequency described in the Proposed Action. For pastures which overlap with ESA-listed fish and where habitat indicators are not meeting objectives, implement a mid-season move trigger of 15 percent streambank alteration.
      - Mid-season monitoring data from the DMA in the Lower Bear Gulch pasture is: Average greenline stubble height was 9", bank alteration 2%, and woody browse use was 13%.
      - End of season monitoring was completed for Deadhorse and Lower Bear Gulch Pastures. The results are shown in Table 1.
      - Effectiveness monitoring was completed in the Lower Bear Gulch Pasture, Bear Gulch stream in 2020. All long-term indicators were measured, except for pool depth and frequency. Table 2 shows the comparison of monitoring results from 2014 and 2020.

Table 1. Bear Gulch Allotment monitoring 2021-End of Season

| Pasture | Greenline Stubble Height | Greenline Stubble Height use limit | Bank Alteration | Bank Alteration use limit | Woody Browse | Wood Browse use limit |
|---|---|---|---|---|---|---|
| Deadhorse (Trigger) | Not measured | > 6 inches | | 20% or less | | 40 % or less |
| Deadhorse (EOS) | 5.2 inches | > 6 inches | 11% | 20% or less | 16% | 40 % or less |
| Lower Bear Gulch | 9.1 inches | > 6 inches | 2% | 20% or less | 13% | 40% or less |

Table 2. Summary for Lower Bear Gulch DMA

| Indicator | 2014 | 2020 | Objective | Trend | Comments |
|---|---|---|---|---|---|
| Average SH for all key species (in) | 7.5 | Not grazed | >6 | | |
| Woody Species Use (%) | 20 | Not grazed | <35 | | |
| Streambank Alteration (%) | 5 | Not grazed | <20 | | |
| Streambank Stability (%) | 71 | 61 | >90 | Negative | Declining, does not meet objective |
| Streambank Cover (%) | 68 | 21 | >90 | Negative | Significant decline in covered stable banks, does not meet objective |
| Greenline Ecological Status Rating | 75 (Late) | 70 (Late) | >52 (Upper Mid) | Static | Improving, meets objective in 2020 |
| Site Wetland Rating | 60 (FAC) | 52±2.1 (FAC) | ≥58 (FAC+) | Static | Slight decline in 2020 |
| Winward Greenline Stability Rating | 6.44 (High) | 5.48 (Mid) | >5.5 (Mid) | Static | Slight decline, does not meet objective |
| Hydric Plants (%) | 25 | 28 | ≥78 | Static | Slight increase in 2020 |
| | Overall Trend | | Static | Slight decline | |

b. The WWNF shall ensure that appropriately trained WWNF staff monitor streambank alteration levels, at the DMAs which the WWNF has proposed for each pasture. If the take surrogate of 20 percent streambank alteration is exceeded, the WWNF shall contact the NMFS Snake Basin Area Office immediately.
   - Bank alteration was monitored in the Deadhorse and Lower Bear Gulch pastures. The results are shown in term Table 1.

c. The WWNF shall ensure all enclosures, fences, and water developments that reduce cattle use adjacent to streams are properly maintained and functioning as intended.
   - Riparian enclosures to distribute cattle away from riparian areas have not been constructed in the Bear Gulch Allotment.
   - The allotment boundary fence with Big Sheep Allotment and Bear Gulch Allotment in the Fulton Creek drainage was not maintained. This resulted in unauthorized use by Big Sheep Allotment cattle in Bear Gulch on the Bear Gulch Allotment.
   - The Big Sheep Allotment Permittee is required to complete the maintenance prior to allowing cattle to graze the Big Sheep Allotment in the next grazing season.

d. The WWNF shall use the Long-Term and Annual Adaptive Management Strategies described in the Proposed Action to adjust grazing management strategies when needed to maintain desired stream habitat conditions and minimize incidental take.
   - Lower Bear Gulch (Table 2) and Deadhorse (Table 3) pastures are not meeting long term objectives. Actions to take may include monitoring to inform pasture moves and management choices, change the season of pasture use or the amount of time cattle graze a pasture.

Table 3. Summary for Deadhorse DMA

| Indicator | No prior history | 2020 | Objective | Trend | Comments |
|---|---|---|---|---|---|
| Average SH for all key species (in) | | No use | >6 | | Not grazed on this date |
| Woody Species Use (%) | | No use | <35 | | |
| Streambank Alteration (%) | | 1 | <20 | | |
| Streambank Stability (%) | | 78 | >90 | | Does not meet objective |
| Streambank Cover (%) | | 53 | >90 | | Does not meet objective |
| Greenline Ecological Status Rating | | 44 ±5.75 Mid | >52 (Upper Mid) | | Does not meet objective |
| Site Wetland Rating | | 45±3 FAC- | ≥58 (FAC+) | | |
| Winward Greenline Stability Rating | | 5.48 ±.16 Mid) | >5.5 (Mid) | | |
| Hydric Plants (%) | | 10 | ≥78 | | |
| | Overall Trend | | | Not Apparent | |

II. The following terms and conditions implement RPM 2 (monitoring and reporting). The WWNF shall:

Submit an annual monitoring report to NMFS by February 1 each year with the following:

a. Overview of proposed action and actual management (e.g., livestock numbers, on-off dates for each pasture, etc.)
   - Table 4 shows the permitted number and season of use for the allotment. Table 5 is the Bear Gulch Allotment grazing schedule.

Table 4. Permitted Livestock Numbers On-Off Dates by Permit

| | Class | Term | Private Land | Season |
|---|---|---|---|---|
| Permittee | c/c | 124 | 19 | 4/16 – 11/10 |

Table 5. Bear Gulch 2021 Grazing Schedule

| Pasture | Hd | Apr | May | Jun | July | Aug | Sep | Oct | Nov |
|---|---|---|---|---|---|---|---|---|---|
| Lower Bear Gulch merge with Clear Lake ridge 6/16 | 143 | | | | | | | 1-- | --10 |
| Upper West Bear | 72 | | | | | 1-- | --30 | | |
| Clear Lake Ridge | 71 | | | | | 1-- | --30 | | |
| Deadhorse | 143 | | 10-- | -- | --31 | | | | |

b. Results from all implementation and monitoring identified as part of the proposed action, including required move-trigger and end-of-season monitoring (i.e., stubble height,

riparian shrub utilization, streambank alteration), seral condition, bank stability, water temperature, sediment, and width-to-depth ration.

- Table 1 shows end of season monitoring of annual use indicators. Tables 2 and 3 show Long -Term monitoring on Lower Bear Gulch DMA and Deadhorse DMA.

c. Discussion of any unauthorized use and/or any maintenance issues related to fences or water developments.
   - The allotment boundary fence with Big Sheep Allotment and Bear Gulch Allotment in the Fulton Creek drainage was not maintained. This resulted in unauthorized use by Big Sheep Allotment cattle in Bear Gulch on the Bear Gulch Allotment.
   - The Big Sheep Allotment Permittee is required to complete the maintenance of this fence prior to allowing cattle to graze the Big Sheep Allotment in the next grazing season.

d. Review of allotment compliance with annual use indicators. For any incidences of non-compliance, describe the WWNF response per the Annual Adaptive Management Strategy in the Proposed Action.
   - The stubble height on the Deadhorse DMA was less than 6 inches. Permittee will be required to trigger monitor in 2022 which may lead to a shorter season of use for the pasture and possibly the allotment.

e. Detailed description of any adaptive management responses taken by the WWNF as part of the Long-Term and Annual Adaptive Management Strategies described in the Proposed Action.
   - The Big Sheep Allotment Permittee is required to complete fence maintenance of the Fulton Creek drainage fence prior to allowing cows to graze the Big Sheep Allotment.
   - Require monitoring by the Permittee and move cows based on use monitoring which may lead to shorter season of use for pastures and the allotment. .

f. Any relevant information that becomes available regarding Snake River Basin steelhead or Snake River spring/summer Chinook salmon habitat trends and /or spawning locations that would modify the assumptions made in this opinion or result in effects not considered.
   - There is no new information to share at this time.
   - Within the Bear Gulch allotment there is only steelhead critical habitat.

g. Any management recommendations for subsequent years.
   Management recommendations for following years would be:
   - Require the Permittee to trigger monitor and move cows based on monitoring results.
   - Monitor annual use indicators at the Deadhorse and Lower Bear Gulch pasture DMAs on Bear Gulch each year.
   - Collect effectiveness data at the DMAs on Bear Gulch each five years (2025, 2030, 2035, …).