

Table 3.32. Desired Habitat Conditions for Sage Grouse During the Late Brood Rearing (Upland Summer Habitat) Seasons (July 1 to September 30)

Life Requisite	Attribute	Acceptable (Desired) Habitat Conditions (conditions met on >60% of habitat within the area)
Cover	Sagebrush canopy cover (mean)	10 to 25%
Cover	Sagebrush height (mean)	40 to 80cm
Cover and food	Perennial forb and grass canopy cover (mean)	≥15%
Food	Preferred forbs availability	Preferred forbs are common with several (≥5) species present

Table 3.33. Desired Habitat Conditions for Sage Grouse In Riparian Habitats During Summer Use Period Habitat (July 1 to September 30)

Life Requisite	Attribute	Acceptable (Desired) Habitat Conditions (conditions met on >60% of habitat within the area)
Cover and food	Riparian and wet meadow stability	Majority of areas are in a late seral ecological status
Food	Preferred Forb Availability	Preferred forbs are common with several (≥5) species present
Cover	Proximity of sagebrush cover (mean)	Sagebrush cover is adjacent (<90meters) to brood rearing areas

As was discussed above, the Sherman Allotment is known to provide sage-grouse late-brood rearing habitat (WYNDD 2009); nesting habitat for a limited number of hens is suspected, but not documented. The proposed action (Alternative 2) described in Chapter 2, prescribes a maximum livestock allowable vegetation use standard of 50 percent within upland communities and 50 percent within riparian communities. When these standards are met, desired vegetation conditions within Late brood rearing summer habitat recommended in Table 3.32 and desired vegetation conditions within riparian summer habitat recommended in Table 3.33 should be met. However, vegetation monitoring within sage grouse brood rearing habitats and within sage grouse riparian habitats should be conducted annually after the summer grazing season has ended to ensure sufficient vegetation is being provided for successful brood rearing.

During most years, the Alternative 2 livestock allowable vegetation use standard of 50 percent within upland communities would be less likely to provide cover of perennial grasses and forbs with a mean height exceeding 18 centimeters (cover necessary for adequate nesting habitat recommended in Table 3.31 above). Thus, Alternative 2 may have minor impacts on sage grouse nesting habitat, within the Sherman Allotment. However, as was discussed in the opening paragraphs of this section, although not documented, only limited nesting and early brood rearing opportunities are suspected within the Sherman Allotment.

Cumulative Effects

The cumulative effects analysis area for sage grouse is MZ II (the Wyoming Basin Management Zone) described in the Affected Environment, which includes sage grouse habitat within the Sherman Allotment. The eastern portion of the Sherman Allotment is within mapped, general sage-grouse habitat (see Figure 3.32), but just outside of mapped core sage-grouse habitat on private and BLM lands located approximately one mile east of the Sherman Allotment boundary. Both habitat designations were mapped per guidelines in the Wyoming Executive Order (WGFD 2012). Currently within the state, and within MZ II, there are numerous cumulative actions that are contributing to the decline of the greater sage grouse (Connelly et al. 2000); the most notable past and present actions include loss of sage brush cover due to conversion to croplands and oil and gas development. These actions mainly stem from impacts to ‘core’ sage grouse habitats within MZ II off the Forest and outside the Sherman Allotment.

As was discussed in the Cumulative Effects Analysis section, within the Sherman Allotment, wildfires (Horse Creek and Mule Creek fires) have burned significant portions of the project area, but these fires were restricted to areas within conifer forests; little to no sage-brush and sage grouse habitat burned. With the exception of past livestock grazing and recreation hunting, no other past, present or reasonably foreseeable actions that have or would affect sage grouse or habitat are known within the project area. The Direct and Indirect Effects section for Alternative 2 (above) determined that only minor impacts on sage grouse nesting habitat within the Sherman Allotment would be suspected. Therefore, Alternative 2 would not result in significant additional cumulative effects to sage grouse or their habitats within the Wyoming Basin Management Zone (MZ-II) beyond those already known or suspected.

Determination: *Alternative 2 may impact sage grouse individuals, but would not likely cause a trend to federal listing or loss of viability.*

Western Boreal Toad and the Columbia Spotted Frog – Sensitive Species

Direct and Indirect Effects

Grazing can adversely affect aquatic and terrestrial habitats important to boreal toads and spotted frogs through a large variety of impacts: removal or reduction of herbaceous and shrub cover, stream bank collapse, soil compaction, reduction of beaver and burrowing rodent populations, and water contamination and eutrophication can all result in adverse impacts.

Riparian areas provide critical breeding, foraging, and over wintering habitats for boreal toads and spotted frogs. Riparian zones are used as dispersal corridors for metamorphs (juveniles). Given access to water and typically richer vegetation in riparian areas, these habitats are also preferred areas for livestock grazing. Livestock grazing in wetlands is likely to result in direct impacts such as mortality of toads from trampling. Bartelt (1998 and 2000) observed the demise of many hundreds of boreal toad metamorphs at a breeding site on the Targhee National Forest when a band of sheep was driven through the area. Toad mortality resulted from trampling during the event and from desiccation later. Bartelt noted that because toad reproduction was already greatly constrained by years of drought conditions, this event in 1995 (a rare wet year) probably destroyed half the toad reproduction for the past decade at the breeding area (Bartelt 1998; Bartelt 2000).