

Applicability of R4 Watershed-protection Species

Two recent proposed actions (Project Initiation Letter of July 20, 2015 for the LaBarge cattle allotment and scoping letter / proposed action of June 22, 2017 for K-17 sheep allotments) outlined the following desired condition for plant species composition (quoted paragraph below). The first proposal was modified for the June 29, 2016 scoping letter / proposed action for the LaBarge cattle allotment based on the February 21, 2016 version of this report; the proposed desired plant species composition was modified to reflect wildlife needs. However, this was not carried through into the June 22, 2017 proposed action for K-17 sheep allotments.

The proposed desired conditions for plant species composition being put forward is as follows:

“Native and selected non-native species of moderate to high value for watershed protection (1993 Region 4 Range Management Resource Value Rating Guide, FSH 2209.21.27.4, Ex. 02,) will be equal to or greater than 60% of the relative cover in all vegetation types grazed by livestock. Selected non-native species are those including in plantings in the past based on their erosion control and other desired values. Includes both woody and herbaceous species.”

This has been put forth without any support, and it conflicts with guidance in Chapter 20 of FSH 2209. Section 22.1.4 of FSH 2209.21, which states that “the Range Inventory Standardization Committee Report (1983) suggests that a value of 75 percent similar or greater [with respect to potential natural community, or PNC] may be used to differentiate between meeting and not meeting management objectives.” A minimum 75% similarity to potential natural community was adopted in a Record of Decision for managing livestock grazing in the Wyoming Range Allotment Complex (USFS 2004b).

Also, the proposed desired conditions for plant species composition does not address wildlife needs, will perpetuate substantial negative impacts to wildlife (since it would allow for wildlife habitat that is considerably below than suitable conditions to be maintained as such), and has potential to cause additional impact on wildlife. Therefore, the desired condition quoted in the inserted paragraph above is in no way appropriate for the wildlife resource, especially in DFC 3, 10, and 12 areas, but also on DFC 1B, 2A, and 3B areas. Many riparian areas, rangelands, and aspen understories that currently provide unsuitable habitat for wildlife due to highly-altered plant species composition would be allowed to persist in deteriorated condition. Riparian areas, rangelands, and aspen understories that currently provide suitable habitat for wildlife would be permitted to deteriorate.

The proposed desired condition, as quoted above, is not an appropriate desired condition for wildlife on cattle and sheep allotments of the Greys River and Kemmerer Ranger Districts for the following reasons:

1. How desired plant species composition gets defined depends on Forest Plan objectives and other management direction in light of Desired Future Conditions for the DFCs in the allotment:
 - a. “The interpretation of desired species and amounts will change when goals change for specific purposes, like watershed sustainability, forage production, sage grouse habitat, low risk wildfire community, or a pleasing wildflower setting in a sagebrush community” (section 22.1.4 of FSH 2209.13.21-2005-1).
 - b. The Forest Plan acknowledges conflict between some of the objectives in the plan, and explains that, where conflicts between objectives arise, “The conflicts are resolved by application of Desired Future Conditions to different areas of the National Forest” (pg. 93).
 - c. A majority of acres of most allotments are in DFC 10 and 12 areas. The management theme of DFC 10 areas is “An area managed to allow for some resource development and roads while having no adverse and some beneficial effects on wildlife,” and the management emphasis is “...to provide long-term and short-term habitat to meet the needs of wildlife managed in

balance with... grazing..." The management theme of DFC 12 areas is "An area managed for high-quality wildlife habitat and escape cover, big-game hunting opportunities, and dispersed recreation activities." The management emphasis is on big game.

Large portions of some allotments are in DFC 3 areas, a management emphasis of which is to ensure these areas "...are protected from activities that could diminish or change the free-flowing characteristic, water quality, or the scenic, recreational, fish and wildlife, and other values which make the river eligible for designation."

Given the emphasis on wildlife in DFC 10 and 12 areas, the following objectives, standards, and prescriptions must receive a high degree of emphasis in defining desired conditions:

- Objective 2.1(a) — Provide suitable and adequate habitat to support the game and fish population objectives established by the WGFD.
- Objective 3.3(a) — Protect [Region 4] sensitive plant and animal species and provide suitable and adequate amounts of habitat to ensure that activities do not cause: (1) long-term or further decline in population numbers or habitats supporting these populations; and, (2) trends toward federal listing.
- Fisheries and Wildlife Prescription (BTNF-wide) — The BTNF provides habitat adequate to meet the needs of dependent fish and wildlife populations, including those of threatened, endangered, and sensitive species.
- Sensitive Species Management Standard (BTNF-wide) — ...Crucial habitats of priority I, II, and III species as listed by WGFD and R4's sensitive species list will be protected and maintained...
- Vegetation: Range Prescription (BTNF-wide) — Forage is provided on a sustained-yield basis that protects rangeland values, wildlife habitat, and meets other resource needs and, for DFC 12 areas, particularly big game.

2. Watershed value ratings in Exhibit 02 of FSH 2209.21.27.4, as a whole, provide a poor indicator of the suitability of plant species composition for wildlife. As examples:

- a. Of a total of 323 grasses, sedges, rushes, and forbs that were rated as moderate or high for watershed value, an average of 96 (30%) were rated as low for mule deer and elk. For forbs, 101 of 323 (41%) were rated as low for elk.
- b. Of a total of 235 grasses, sedges, rushes, and forbs that were rated as low for watershed value, 90 were rated low for mule deer (38%) and 145 (62%) were rated moderate or high for mule deer.
- c. Of a total of 233 grasses, sedges, rushes, and forbs that were rated as low for watershed value, 117 were rated low for elk (50%) and 116 (50%) were rated moderate or high for elk.
- d. Several non-native species are designated as having high value for watershed protection (e.g., Kentucky bluegrass, smooth brome) or moderate value for watershed protection (e.g., Canada bluegrass, redtop, meadow foxtail), and dominance of plant communities by these species signal deteriorated habitat conditions for wildlife communities. Where these species comprise a large proportion of the canopy cover, herbaceous species composition is typically reduced, height is reduced (e.g., Kentucky bluegrass), and herbaceous vegetation density and biomass (Kentucky bluegrass, smooth brome) are reduced, meaning that habitat conditions are poor for wildlife despite meeting the draft benchmark.
- e. Several native species having moderate value for watershed protection (e.g., mule ears, black coneflower, cutleaf balsamroot, woodland strawberry, Louisiana sagewort) typically indicate, when at a high percent canopy cover, altered species composition due to elevated grazing use.

Therefore, the draft benchmark could be met while providing far less-than-suitable habitat for native wildlife.

- f. Numerous native herbaceous species important to vertebrate and invertebrate wildlife are not designated as moderate to high value for watershed protection in the table. Presence or prominence of these species, according to Exhibit 02 of FSH 2209.21.27.4, would contribute to a conclusion that a site is below desired conditions. See Appendix A for more detail.)
 - Numerous forb species and a portion of grass species with low watershed values provide seeds for many migratory bird and small mammal species.
 - Roughly half the plant species used by broad-tailed hummingbirds as a nectar source have low watershed value and the other half have moderate watershed value.
 - Numerous forb species and a portion of grass species with low watershed values provide leafy forage for insects which in turn are important to many migratory bird, bat, and shrew species.
 - A high proportion of forb species with low watershed value are important for pollinators (e.g., butterflies, moths, bees).
3. The draft benchmark only addresses plant species composition to a small degree, and the handbook (FSH 2209.21.22.1) identifies plant species composition as one of four rangeland health criteria that need to be considered in determining the functionality of upland rangelands. The functionality of rangelands is cornerstone to providing suitable wildlife habitat.

Under *Species Composition*, the handbook explains that “A general evaluation may be conducted using a basic species composition list...” The draft benchmark does not meet this most basic approach because it does not address species richness beyond the presence/absence of certain species as a group. According to the draft benchmark, a site can have only one species having a moderate or high rating and still be deemed to meet this desired condition.

Also, the draft benchmark not having any measure of the ‘amount’ of each species, the other half of species composition, or the ‘amount’ of herbaceous vegetation as a whole. According to the draft benchmark, a site can have a total herbaceous canopy cover of, say, 5% and still be deemed to meet this desired condition.

These factors compound the problems for dependent wildlife identified in no. 2, above.