Summary of Ground Cover Issue, from Standpoint of Wildlife
02-26-2019, Don DeLong

The biggest implication of implementing the proposed desired ground cover levels, in combination with the way ground cover is measured under the Proposed Action, is that it will allow reduced ground cover levels to persist across large portions of allotments, which contrasts with incremental progress that otherwise would be made toward meeting desired ground cover levels outlined in FSH 2209.21 and GTR-104.

This is illustrated in the following example (using results of two line point intercept transects):

Comparison of assessments based on (A) the current way of assessing range condition in Wyethia-dominated areas, and (B) the proposed new way of assessing range condition in these areas, relative to ground cover.

	A. Percent Ground Cover (*w/ basal veg.*)				**B. Percent Ground Cover (*w/ canopy counted*)**			
	Existing (Measured)	**Threshold in FSH 2209.21**	**Threshold in GTR-104**	**Assessment**	**Existing (Measured)**	**Threshold in Table 3 of Proposed Action**	**Threshold based on Gregory (1983)**	**Assessment**
Transect 1	60	≥80	≥80	Functioning-at-Risk	76	≥64	≥75	At Potential / Functioning
Transect 2	63	≥80	≥80	Functioning-at-Risk	77	≥64	≥75	At Potential / Functioning
		This is the way it has been done on the BTNF for the last 20 years or more.				This is the proposed way it would be done on K-17 and other allotments on D1 & D3.		

Key:
<60% = non-functioning
60-79% = functioning-at-risk
90-100% = functioning

An upshot of this table is that many Wyethia-dominated areas are deemed to be functioning-at-risk or non-functioning under the current way of assessing range condition could very well be deemed to be functioning under the proposed new way of assessing range condition.

Very little information has been put forth (1) showing that a change in minimum thresholds is needed and (2) supporting this change in how desired conditions are defined.

And the potential consequences to wildlife (as well as to watershed functioning and range health) are large.

A. If we Continue with Approach Used on the BTNF		**B. If we Change to New Thresholds & New Methods**	
…and if this is Correct	**…but if this is Wrong (and 'B' is Correct)**	**…and if this is Correct**	**…but if this is Wrong (and 'A' is Correct)**
Range health and wildlife diversity & abundance will increase, substantially in many places.	Range health will improve somewhat, and wildlife diversity & abundance will mostly remain as it is.	⇨ Same	Range health and wildlife diversity & abundance will remain well below their potential; i.e., major impacts.
Sheep #s or season-of-use could be reduced, but this would be justified.	Sheep #s or season-of-use could be reduced, but this will have been unnecessary.	Likely no reduction in sheep #s or season-of-use, and this would be justified.	Making no more than minor changes to sheep grazing mgt. will have been done in error.

What does management direction say about which approach to take if there is a question about the science both ways? Consider Organic Act's purpose of protecting water flow above all other uses (except timber), and DFC 10 emphasis of providing "…long-term and short-term habitat to meet the needs of wildlife managed in balance with… grazing…" Ground cover is integral to proving for long-term habitat.

Affected wildlife include mule deer, moose, a few bat species (including those reliant on moths), a range of migratory bird species (including raptors), pollinators, and numerous other invertebrate species.

Approach on the BTNF During For 15+ Years

Ground cover thresholds in FSH 2209.21 and GTR-104 (O'Brien et al. 2003) have been used in all Range decisions and other agency documents during the last 15 years or more:

- USFS (2004a) — *Greys River Landscape Scale Assessment*
- USFS (2004b) — *Final Environmental Impact Statement for Wyoming Range Allotment Complex*
- USFS (2005b) — *Decision Memo for Continuation of Forage Reserve Allotment Status on Three Forage Reserve Allotments*
- USFS (2007a) — *Comprehensive Evaluation Report (draft) for Tall Forb Communities* (prepared for the Forest Plan Revision effort)
- USFS (2007a) — *Decision Memo to Authorize Continued Livestock Grazing on the Three Forks, Corral Creek, and Mink Creek Allotments*
- USFS (2008) — *Allotment management plan for the Triple Peak forage reserve, Big Piney and Greys River Ranger Districts*
- USFS (2009a) — *Updated Assessment of the Condition of Management Indicator Species Habitat with Respect to Livestock Grazing Use on the Bridger-Teton National Forest*
- USFS (2009b) — *Decision Notice & Finding of No Significant Impact Reauthorization of Livestock Grazing and Allotment Management Plan Review & Revision for the Bear Creek, Virginia Peak, North Salt, and South Salt Sheep & Goat Allotments*
- USFS (2019) — *Final EIS for the Upper Green River Area Rangeland Project Final Environmental Impact Statement* (decision forthcoming)

Other Considerations

Persistence of reduced ground cover will allow functioning-at-risk and non-functioning conditions will perpetuate implications to wildlife habitat far into the future.

1. The low-end thresholds in 2209.21 represent the "…minimum ground cover needed for proper functioning sustainable ecosystems…"
2. When ground cover on a site drops below levels identified in O'Brien et al. (2003:2), the site "…would begin to lose basic functionality defined by increased soil erosion and loss of site sustainability," and more specifically that "ground cover levels below these minimum thresholds were determined to be functioning at risk for basic watershed protection."