

Threat-Based Land Management: Field Documentation Form

Updated 6/26/2019

General information	Observer	Date	Previous precipitation (past year)	Allotment	Pasture
			<input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> Avg. <input type="checkbox"/> Unknown		
Ecological threats ¹ and state	Potential or expressed threat(s) (circle)		Ecological state (circle)		
	IAG ²	Dual	Juniper	A	B C D E Other_____
	GIS datasets used to map ecological state polygon described on this form. (Check all that apply and specify source)				
	<input type="checkbox"/> ESD	<input type="checkbox"/> NAIP imagery	<input type="checkbox"/> Resistance and resilience	<input type="checkbox"/> Fire perimeters	<input type="checkbox"/> GRSG seasonal habitat
<input type="checkbox"/> Conifer cover	<input type="checkbox"/> Sagebrush cover	<input type="checkbox"/> Invasive plants	<input type="checkbox"/> Soils	<input type="checkbox"/> Other	
Habitat acreage within polygon	Priority habitat management area		Priority areas for conservation		
	General habitat management area		Other		
Random meander track / photo point location(s)	Random meander GPS track file ³				
	Photo 1 (coordinates)		Photo 4 (coordinates)		
	Photo 2 (coordinates)		Photo 5 (coordinates)		
	Photo 3 (coordinates)		Photo 6 (coordinates)		
Vegetation	Vegetation type ⁴				
	Dominant plant species				
	Grasses	Forbs	Shrubs	Trees	
	Estimated average density of mature, large perennial bunchgrasses			individuals/m ²	
		No	Yes	If, yes	
	Sagebrush present?			Species	
				Estimated sagebrush cover	
	Juniper present?			Estimated juniper cover	
				Encroachment phase ⁵	
Invasive annual grass present?			Species		
			Invasion phase ⁶		
Infestations mapped?			Date mapped		
Other weeds present?			Species		
Infestations mapped?			Date mapped		
Key area(s) ⁷ identified in ecological state stratum?			Coordinates		
Potential threats ⁸ (check all that apply)	<input type="checkbox"/> Fragmentation	<input type="checkbox"/> Juniper encroachment	<input type="checkbox"/> Lack of fire	<input type="checkbox"/> Recreation	<input type="checkbox"/> Feral horses
	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Livestock grazing management	<input type="checkbox"/> Drought	<input type="checkbox"/> Predation	<input type="checkbox"/> Insecticide
	<input type="checkbox"/> Vegetation treatment	<input type="checkbox"/> Invasive vegetation	<input type="checkbox"/> Flooding	<input type="checkbox"/> West Nile virus	<input type="checkbox"/> Other

Footnotes

¹ Ecological threats are based on the predominant threats posed at the site: invasive annual grasses, both invasive annual grasses and juniper expansion, or primarily juniper expansion.

² IAG = Invasive annual grass.

³ If used, the GPS track of the random meander should be permanently archived for assessment repeatability.

⁴ Write a brief description of vegetation. For example, "mountain big sagebrush Idaho fescue plant community."

⁵ See Miller, R.F., Bates, J.D., Svejcar, T.J., Pierson, F.B., and Eddleman, L.E., 2007, Western Juniper Field Guide: Asking the Right Questions to Select Appropriate Management Actions: U.S. Geological Survey Circular 1321, 61 p.

⁶ **Phase I:** 90% or more of interspaces are primarily bare ground, and multiple bunchgrass age classes are represented; generally associated with ecological states A & B. **Phase II:** Up to 50% of interspaces are occupied by invasive annual grasses, and multiple bunchgrass age classes represented; generally associated with IAG and dual states A & B that are at risk of conversion to IAG States C & D or dual state E, respectively. **Phase III:** More than 50% of interspaces are occupied by invasive annual grasses, and only 1 bunchgrass age class or none at all is represented; generally associated with IAG states C & D and dual states D & E.

Estimate of apparent trend	Factors to consider⁹:							
	For IAG and dual threats: If shrubs are present, what is the dominant vegetation in the shrub interspaces? ⁹	Primarily occupied bare ground					<input type="checkbox"/> Stable <input type="checkbox"/> Increasing	
		Invasive annual grasses					<input type="checkbox"/> Decreasing	
	For IAG and dual threats: If shrubs are largely absent, what occupies the interspaces between perennial bunchgrasses? ¹⁰	Bare ground, litter, desired forbs					<input type="checkbox"/> Stable <input type="checkbox"/> Increasing	
		Invasive annual grasses					<input type="checkbox"/> Decreasing	
	For dual and juniper threats: Are juniper seedlings, leader growth ¹¹ , or both, common?	Yes					<input type="checkbox"/> Decreasing	
		No					<input type="checkbox"/> Stable <input type="checkbox"/> Increasing	
	Is there evidence of recruitment of desired plants (i.e. multiple age classes or functional groups present) or is all interspace filled with desired plants?	Yes					<input type="checkbox"/> Stable <input type="checkbox"/> Increasing	
		No					<input type="checkbox"/> Decreasing	
	How would the plant community most likely respond after wildfire?	Perennial bunchgrasses are primarily located under shrub canopies and thus are more susceptible to mortality during a fire event.					<input type="checkbox"/> Decreasing	
Perennial bunchgrasses are located within the shrub interspaces and thus more likely to survive a fire event.					<input type="checkbox"/> Stable <input type="checkbox"/> Increasing			
Will current grazing management (including wild horses) maintain or promote desirable vegetation?	Yes Rest/recovery is planned during periods when desirable vegetation is actively growing. Forage demand is in balance with forage supply.					<input type="checkbox"/> Stable <input type="checkbox"/> Increasing		
	No Continuous (every year) use during the period when desirable vegetation is actively growing. Forage demand consistently exceeds supply.					<input type="checkbox"/> Decreasing		
Observed apparent trend (circle)	Upward		Stable		Downward		Not apparent ¹²	
Rationale for ecological state determination and trend¹³								
Other relevant data (legacy or collected concurrently)	<input type="checkbox"/> AIM	<input type="checkbox"/> HAF	<input type="checkbox"/> Rangeland health	<input type="checkbox"/> Utilization	<input type="checkbox"/> ESD	<input type="checkbox"/> Trend	<input type="checkbox"/> Other	
	<input type="checkbox"/> Legacy	<input type="checkbox"/> Legacy	<input type="checkbox"/> Legacy	<input type="checkbox"/> Legacy	<input type="checkbox"/> Legacy	<input type="checkbox"/> Legacy	<input type="checkbox"/> Legacy	
	<input type="checkbox"/> Concurrent	<input type="checkbox"/> Concurrent	<input type="checkbox"/> Concurrent	<input type="checkbox"/> Concurrent	<input type="checkbox"/> Concurrent	<input type="checkbox"/> Concurrent	<input type="checkbox"/> Concurrent	
Additional notes								

Footnotes, continued

⁷ A “key area” is a representative area in the pasture pertaining to a specific management question.

⁸ Potential threats are those that either currently exist or pose an imminent threat in the foreseeable future.

⁹ See Figure 11 (page 19) for guidance on developing rationale for observed apparent trend.

¹⁰ IAG (or its seed) is present in most sagebrush/bunchgrass plant communities. Be aware that, some years, climatic conditions are ideal for expression of invasive annuals, which can skew your assessments of plant community dominance and apparent trend. In your observations, focus instead on the density of perennial bunchgrasses because it fluctuates much less than the relative abundance of invasive annual grasses. Rule of thumb: if you can easily step from one perennial bunchgrass to another, their density is likely adequate to suggest an apparent stable or upward trend. Conversely, if you must leap from one bunchgrass to another, that suggests a downward trend, particularly if invasive annuals fill the spaces between bunchgrasses.

¹¹ Leader growth = new growth on the ends of branches or top of tree.

¹² Overall trend is “not apparent” if “increasing” and “decreasing” are indicated for an equal number of the individual factors considered to determine the overall trend.

¹³ Explain the ecological state and apparent trend determination. List any factors considered in addition to those listed on the first page of this form.