

1 **LITTLE SNAKE RMP: DRAFT SIGNIFICANCE CRITERIA AND ASSUMPTIONS**  
2 (Note: *Legal requirements and BLM policy are italicized.*)

3 **General Assumptions For All Resources**

- 4 • *Management actions proposed in the alternatives apply to BLM-administered public*  
5 *lands and mineral estate. However, cumulative impacts analyses must consider past,*  
6 *present and potential actions by individuals or entities other than BLM related to the*  
7 *BLM-administered lands and mineral estate.*
- 8 • *The alternatives would be implemented in accordance with laws, regulations, and*  
9 *policies.*
- 10 • *Mitigation measures would be applied as needed to prevent unavoidable impacts from*  
11 *becoming significant whenever possible.*
- 12 • Where alternatives allow for flexible or adaptive management, the analysis will account  
13 for this.
- 14 • Where assumptions or significance criteria refer to management decisions or actions  
15 affecting a resource or use, it is assumed that these also include cumulative actions. For  
16 example, the significance criterion, “Disturbance and/or loss of plant communities, food  
17 supplies, cover, breeding sites, and other habitat components necessary for population  
18 maintenance used by any species to a degree considered vital to the population” could be  
19 triggered as a result of one major action or several minor actions. Likewise, if cumulative  
20 management actions or mitigation requirements were to render resource development  
21 infeasible, this would be similar to one action which “substantially reduces development”  
22 and therefore will also be disclosed as a significant impact.

23 **Air Quality**

- 24 • Significance Criteria
  - 25 – *A violation of the National Ambient Air Quality Standards (NAAQS) or State*  
26 *Ambient Air Quality Standards, or the further aggravation of an existing air*  
27 *quality violation.*
  - 28 – *Exceedence of Prevention of Significant Deterioration (PSD) increments for*  
29 *Class I or Class II areas.*
  - 30 – *Atmospheric deposition impacts above terrestrial voluntary guidelines (3-5 kg*  
31 *total nitrogen per hectare/year; 5 kg total sulfur per hectare/year) or above*  
32 *aquatic levels of acceptable change (10 percent change in acid neutralizing*  
33 *capacity).*
  - 34 – *Visibility impacts to sensitive areas above the designated 0.5 and 1.0 deciview*  
35 *(dv) change threshold.*
- 36 • Assumptions
  - 37 – Any anticipated population growth would follow growth trends for the State of  
38 Colorado over the past 10 years.

1 **Soil Resources**

- 2 • Significance Criteria
  - 3 – Increased erosion of soils to the point where associated vegetation communities
  - 4 were no longer supported at their current community composition.
- 5 • Assumptions
  - 6 – *Soil resources would be managed to meet Standard 1 of the Colorado Standards*
  - 7 *for Public Land Health.*
  - 8 – Fragile soils would be managed to minimize erosion and maintain soil
  - 9 productivity.

10 **Water Resources**

- 11 • Significance Criteria
  - 12 – *Alteration of the physical characteristic of streams, wetlands or riparian areas*
  - 13 *beyond the designated use of the receiving stream or the water fails to meet*
  - 14 *Federal or State quality standards.*
  - 15 – *Degradation of water quality beyond the designated use of the receiving stream*
  - 16 *or the water fails to meet Federal or State quality standards.*
- 17 • Assumptions
  - 18 – Substantial surface disturbance to soil, including compaction of soil or loss of
  - 19 vegetative cover, would increase water runoff and downstream sediment loads,
  - 20 and lower soil productivity, thereby degrading water quality, altering channel
  - 21 structure, and affecting overall watershed health.
  - 22 – The degree of impact attributed to any one disturbance or series of disturbances
  - 23 would be influenced by several factors, including location within the watershed,
  - 24 time and degree of disturbance, existing vegetation, and precipitation.
  - 25 – An increase of pollutants in surface waters would affect other beneficial uses
  - 26 (e.g., stock-watering, irrigation, and/or drinking water supplies).
  - 27 – Access roads would be properly designed.

28 **Vegetation**

- 29 • Significance Criteria
  - 30 – Reclaimed areas do not attain adequate vegetation ground cover and species
  - 31 composition to stabilize the site from disturbance within 5 to 10 years in
  - 32 sagebrush/grass communities and 15 to 20 years in cold desert communities.
  - 33 – Any action or event that would remove a vegetation community's unique
  - 34 attributes or ability to support other resource values.
  - 35 – *Any unmitigated loss of wetlands or wetland function, or violation of Clean*
  - 36 *Water Act Section 404 permit requirements.*

**BLM Little Snake RMP/EIS**  
**October 24, 2005**

- 1           – *Proper Functioning Condition (PFC) cannot be attained or maintained as a*  
2 *minimum physical state, or if the Colorado Bureau of Land Management (BLM)*  
3 *Standard #2 for Public Land Health was not obtainable.*
- 4           – Management actions or activities that accelerate erosion and runoff and thereby  
5 alter the physical characteristics of wetland and riparian vegetation.
- 6           – Replacement or substantial invasion of native communities with noxious and  
7 invasive weeds to the degree such invasions cannot be successfully controlled.
- 8       • Assumptions
- 9           – Adequate vegetative ground cover and species composition for site stabilization  
10 would typically occur within 5 to 10 years in sagebrush/grass communities and  
11 15 to 20 years in cold desert communities.
- 12          – Sagebrush reestablishment in disturbed areas would create a vegetative landscape  
13 similar to adjacent lands in excess of 20 years.
- 14          – Adequate forage would be available for wildlife and wild horse herd current  
15 population objectives.
- 16          – All plant communities would be managed toward achieving a mix of species  
17 composition, cover, and age classes.
- 18          – Noncommercial woodland communities would increase in age and cover with  
19 reduced composition and cover of understory species.
- 20          – The degree of impact attributed to any one disturbance or series of disturbances  
21 would be influenced by several factors, including location within the watershed,  
22 the type, time and degree of disturbance, existing vegetation, and precipitation.
- 23          – Noxious and invasive weeds would continue to be introduced and spread as a  
24 result of ongoing vehicle traffic in and out of the RMPPA, recreational activities,  
25 wildlife and livestock grazing and their movements, and surface disturbing  
26 activities.
- 27          – Weed and pest control would be carried out in coordination with the appropriate  
28 county weed and pest control district and owners of adjacent property.
- 29          – Climatic fluctuation would continue to influence the health and productivity of  
30 plant communities on an annual basis.
- 31          – *BLM will comply with Colorado Statewide Strategic Plan for Control and*  
32 *Eradication of Noxious and Invasive weeds.*

33 **Fish and Wildlife**

- 34       • Significance Criteria
- 35           – Disturbance and/or loss of plant communities, food supplies, cover, breeding  
36 sites, and other habitat components necessary for population maintenance used  
37 by any species to a degree considered vital to the population.
- 38           – Disturbance and/or loss of seasonally important habitat (e.g., critical for over  
39 wintering or successful breeding) to a degree considered vital to the population.

**BLM Little Snake RMP/EIS**  
**October 24, 2005**

- 1           – Interference with a species movement patterns that decreases a species ability to  
2           breed or over winter successfully to a degree considered vital to the population.
- 3       • Assumptions
- 4           – If monitoring reveals unsuccessful mitigation in precluding significant impacts,  
5           immediate measures to prevent further impacts would be implemented as  
6           appropriate to the species affected.
- 7           – Disturbance of any component of a species habitat would be detrimental, with the  
8           degree of detriment dependent on the importance of the habitat component to the  
9           maintenance of the population.
- 10          – Impacts to nonnative fish and wildlife species would not be considered  
11          significant unless they provide an important component for native species that  
12          would otherwise not be adequately available.
- 13          – Impacts to populations which exceed the current carrying capacity and would not  
14          reduce those populations below the carrying capacity would not be considered  
15          significant.
- 16          – Sufficient habitat exists to maintain current CDOW DAU objectives.
- 17          – Disruptive activities would displace wildlife; but some wildlife adaptation would  
18          occur.

19   **Special Status Species**

- 20       • Significance Criteria
- 21           – *Harm or harassment of any federally listed threatened and endangered species.*
- 22           – *Destruction or deterioration of federally listed threatened and endangered*  
23           *species habitat, migration corridors, breeding areas, or designated critical*  
24           *habitat.*
- 25           – *Decreased population viability or contribution to the federal listing of any*  
26           *federal candidate species or BLM sensitive species.*
- 27           – *The viability of protected plant populations would be jeopardized, with little*  
28           *likelihood of reestablishment after disturbance, or actions resulting in the need*  
29           *to list a species under the Endangered Species Act (ESA).*
- 30           – *Loss of habitat function or habitat value in BLM sensitive species habitats.*
- 31       • Assumptions
- 32           – Ground disturbing activities could lead to modification (positive or negative) of  
33           habitat and/or loss or gain of individuals, depending on the amount of area  
34           disturbed, the species affected, and the location of the disturbance.
- 35           – Changes in air, water, and habitat quality could lead to direct impacts, and could  
36           have cumulative impacts to species survival.
- 37           – Impacts to special status species would be more significant than impacts to  
38           common species.
- 39           – *The FWS would be consulted for any actions that have a potential to affect*  
40           *federally listed species.*

1 **Wild Horses**

- 2 • Significance Criteria
  - 3 – Available habitat components (i.e., forage, water, cover, space) become
  - 4 insufficient to achieve or maintain the AML in the Sand Wash Basin HMA.
  - 5 – *Disturbances and barriers compromise the natural and free-roaming behavior of*
  - 6 *the wild horses.*
  - 7 – Genetic diversity not adequate to provide a self-sustaining population of horses
  - 8 in balance with other uses and the productive capacity of the HMA.
- 9 • Assumptions
  - 10 – The wild horse population would continue to increase through recruitment of
  - 11 foals at approximately 22 percent annually.
  - 12 – Wild horse removals (gathers) would occur approximately every 3 to 5 years.
  - 13 – Maintenance of wild horse populations at AMLs within existing HMAs would be
  - 14 accomplished through removals and selected application of other population
  - 15 control practices.
  - 16 – Wild horse gathers would primarily utilize existing trap locations.

17 **Fire**

- 18 • Significance Criteria
  - 19 – Management actions alter vegetative cover (standing and non-standing) and
  - 20 thereby result in a substantial upward shift in the condition classes of the
  - 21 RMPPA.
  - 22 – Management actions increase the potential for wildfire in areas where it was not
  - 23 desired.
  - 24 – Management actions substantially inhibit an appropriate management response to
  - 25 wildfire or appropriate treatments to prevent wildfire.
- 26 • Assumptions
  - 27 – Fire is an important functional, natural disturbance in many of the ecological
  - 28 systems found in the RMPPA.
  - 29 – A direct relationship exists between the density of human use within the planning
  - 30 area and the frequency of human-caused fires.
  - 31 – A direct relationship exists between fuel loading and potential fire size and
  - 32 intensity.

33 **Cultural and Heritage Resources**

- 34 • Significance Criteria
  - 35 – *Management actions that directly or indirectly result in the inadvertent physical*
  - 36 *alteration, destruction, or loss of cultural resources protected by Federal or state law.*

**BLM Little Snake RMP/EIS**  
**October 24, 2005**

- 1           – *Management actions directly or indirectly result in the physical alteration,*  
2           *destruction, or loss of cultural resources considered important to Native*  
3           *American groups (e.g. Traditional Cultural Properties) or the infringement or*  
4           *preclusion of use of such sites/areas.*
- 5       • Assumptions
- 6           – Conclusions from the prehistoric and historic archaeological sensitivity models  
7           developed in conjunction with the Class I cultural resources inventory are  
8           representative of the potential for cultural resource sites within the RMPPA.
- 9           – Cultural resource inventories would result in the continued identification of  
10          cultural resources.
- 11          – *Impacts to known cultural resource sites from authorized uses would be*  
12          *mitigated after appropriate consultation requirements are met and utilize project*  
13          *avoidance, redesign, and if necessary data recovery.*
- 14          – The number of sites that could be impacted by various actions would be directly  
15          correlated with the degree, nature, and quantity of surface disturbing activities  
16          within the RMPPA and the cultural sensitivity of the area.

17       **Paleontological Resources**

- 18       • Significance Criteria
- 19           – *Substantial direct or indirect damage or destruction to or loss of vertebrate*  
20           *fossils or other scientifically significant fossil resources.*
- 21       • Assumptions
- 22           – Scientifically significant fossils would continue to be discovered throughout the  
23           RMPPA. Most discoveries would occur in Class I and II Paleontological Areas.
- 24           – Inventories prior to surface disturbance in high-probability areas would result in  
25           the identification and evaluation of previously undiscovered resources, which  
26           BLM would then manage accordingly.
- 27           – Unmitigated surface disturbing activities could dislodge or damage  
28           paleontological resources and features that were not visible prior to surface  
29           disturbance.

30       **Wilderness Study Areas**

- 31       • Significance Criteria
- 32           – *Management decisions that “impair the suitability of WSAs for preservation as*  
33           *wilderness”.*
- 34       • Assumptions
- 35           – *WSAs in the RMPPA would continue to be managed under the WSA Interim*  
36           *Management Policy (IMP), H-8550-1 until such time as Congress either*  
37           *designates or releases all or portions of the WSAs from any further*  
38           *consideration.*

1 **Lands With or Likely to Have Wilderness Character**

2 • Significance Criteria

3 – Any degradation of the individual wilderness characteristics (naturalness and  
4 outstanding opportunities for solitude or primitive recreation) to the degree the  
5 value would no longer be present within the specific area.

6 • Assumptions

7 – Lands identified as having or likely to have wilderness character contain  
8 wilderness values such as naturalness and outstanding opportunities for solitude  
9 or primitive recreation.

10 – Some minor land management developments and improvements may be  
11 compatible with lands likely to have wilderness character.

12 **Areas of Critical Environmental Concern**

13 • Significance Criteria

14 – *Management decisions that do not “prevent irreparable damage to important*  
15 *historic, cultural, or scenic values, fish and wildlife resources or other natural*  
16 *systems or processes, or to protect life and safety from natural hazards” in areas*  
17 *designated as ACECs.*

18 • Assumptions

19 – *Although management decisions for most resources and resource uses have field-*  
20 *office-wide application, ACEC management prescriptions apply only to those*  
21 *lands within each specific ACEC, as outlined.*

22 – Activities or developments of state or private inholdings would not be  
23 significantly affected by ACEC management prescriptions, nor would they  
24 significantly affect the criteria necessary to maintain designations.

25 **Wild and Scenic Rivers**

26 • Significance Criteria

27 – *Impairment of the outstandingly remarkable values or the free-flowing nature of*  
28 *the suitable WSR segments to the point that these areas no longer meet criteria*  
29 *for inclusion in the National Wild and Scenic Rivers System.*

30 – *Any action that would change the tentative classification of suitable WSR*  
31 *segments.*

32 **Visual Resources**

33 • Significance Criteria

34 – Actions not meeting the objectives of the designated Visual Resources  
35 Management Class.

36 • Assumptions

**BLM Little Snake RMP/EIS**  
**October 24, 2005**

- 1           – The scenic vistas within the planning area would increase in value over the next  
2           20 years.
- 3           – Access to scenic resources would become increasingly important to residents and  
4           visitors in the area.
- 5           – VRM class objectives apply to all resources. Class objectives would be adhered  
6           to through project design, avoidance, or mitigation.

7   **Energy and Minerals**

- 8           • Significance Criteria
  - 9           – A substantial reduction in federal leasing and development of oil and gas in high  
10           potential areas.
  - 11           – A substantial reduction in federal leasing and development of coal, locatable  
12           minerals, or salable minerals.
  - 13           – A substantial reduction in access to high wind areas or development of other  
14           renewable energy resources.
- 15          • Assumptions
  - 16           – *Oil and gas operations on existing leases would be subject to Conditions of*  
17           *Approval by the authorizing officer.*
  - 18           – *Valid existing leases would be managed under the stipulations in effect when the*  
19           *leases were issued, and new stipulations proposed under this RMP would apply if*  
20           *leases are renewed.*
  - 21           – Leasing and drilling would occur throughout the entire RMPPA, except where  
22           restricted by management actions described in Chapter 2.
  - 23           – Under Alternatives A, B, and C, a total of 3,031 wells could be drilled during the  
24           next 20 years, which could result in a future gross surface disturbance of 49,216  
25           acres and future long-term surface disturbance of 23,030 acres (see Little Snake  
26           RFD).
  - 27           – Under Alternative D, there would be a 25% reduction in number of wells that  
28           could be drilled during the next 20 years because of an increase in closed and  
29           NSO areas (note: Vermillion is closed—50,000 acres high potential, NSO in  
30           prairie dog ACEC—300,000 acres high potential, which is ~25% of 1.7 million  
31           acres).
  - 32           – If an area is leased, it could be developed; but not all leases would be developed  
33           in the life of this plan.
  - 34           – Disturbance associated with future nonproductive wells would typically regain  
35           adequate vegetative ground cover and species composition for site stabilization  
36           within 5 to 10 years in sagebrush/grass communities and 15 to 20 years in cold  
37           desert communities after the well would be plugged and abandoned.
  - 38           – Seismic surveys would result in a temporary surface disturbance of 8,000 acres  
39           before reclamation and 100% of the disturbance would typically regain adequate  
40           vegetative ground cover and species composition for site stabilization within 5 to

*BLM Little Snake RMP/EIS*  
*October 24, 2005*

- 1           10 years in sagebrush/grass communities and 15 to 20 years in cold desert  
2           communities (see Little Snake RFD).
- 3           – As population growth and the demand for energy increases, so will the demand  
4           for locatable and mineral materials and other energy sources.
- 5           – Increased mitigation would generally increase short-term financial cost and risk.
- 6           – The majority (96%) of oil and gas wells would be concentrated in high potential  
7           areas, 3% in moderate potential areas, and 1% in low potential areas (see Little  
8           Snake RFD).

9   **Livestock Grazing**

10    • Significance Criteria

- 11           – A reduction in forage levels that lead to a decrease in AUMs or cumulative  
12           management actions that adversely affect operations to the degree considered  
13           vital to an individual operation.
- 14           – A substantial increase in forage levels that lead to an increase in permitted AUMs  
15           across the RMPPA.
- 16           – RMP management actions that prohibit ability to construct range improvements  
17           (infrastructure and vegetation).

18    • Assumptions

- 19           – *All existing leases and permits would be subject to Terms and Conditions by the*  
20           *authorizing officer.*
- 21           – Livestock grazing would occur throughout the vast majority of the RMPPA.
- 22           – Although some areas are more suitable for different classes of livestock, the  
23           impacts from different classes of livestock would be similar and would not be  
24           discussed separately.
- 25           – Construction of range improvements (e.g., fences, pipeline, water wells, troughs,  
26           and reservoirs) would result in a localized loss of vegetation cover throughout  
27           their useful life.
- 28           – Vegetation would be reestablished along pipelines within 5 to 10 years in  
29           sagebrush/grass communities and 15 to 20 years in cold desert communities,  
30           whereas fences, water wells, troughs, and reservoirs would remain disturbed  
31           during their useful life and would be revegetated upon abandonment.
- 32           – Range improvements would continue to be carried out in the RMPPA, although  
33           over time they would consist of more vegetation treatments than facilities.
- 34           – Range improvements generally lead to better livestock distribution and may  
35           benefit the forage base.
- 36           – Adequate forage will be available for full preference AUMs.
- 37           – Although livestock grazing is not considered a surface disturbing activity,  
38           grazing may impact the surface in areas where livestock concentrate.
- 39           – Livestock grazing on public lands is currently tied to privately-owned open  
40           space.

1   **Recreation**

- 2       • Significance Criteria
  - 3           – Management actions that result in long-term elimination or reduction of
  - 4           recreation opportunities, activities or experience or compromise public health
  - 5           and safety.
  - 6           – Levels of use or development that would be incompatible with the stated
  - 7           objectives of backcountry areas or Special Recreation Management Areas
  - 8           (SRMAs).
- 9       • Assumptions
  - 10           – Substantial increases in recreational activity would create risks to public health
  - 11           and safety.
  - 12           – Traditional recreational uses within the RMPPA would continue, and an
  - 13           anticipated increase would occur in motorized recreation, wildlife viewing,
  - 14           floating, hiking, camping, and new technology-based recreation activities.
  - 15           – The incidence of resource damage and conflicts between OHV users and
  - 16           nonmotorized recreationists would increase with increasing OHV use.
  - 17           – Current demand for Special Recreation Permits (SRPs) would be maintained
  - 18           during the life of the plan.

19   **Lands and Realty**

- 20       • Significance Criteria
  - 21           – Inability to accommodate the demand for ROW corridors, communication sites,
  - 22           and major roads.
  - 23           – *Inability to accommodate land tenure adjustments necessary to meet RMP*
  - 24           *objectives and in the public interest.*
- 25       • Assumptions
  - 26           – *Existing ROWs and communication sites would be managed to protect valid*
  - 27           *existing rights.*
  - 28           – *Existing ROWs may be modified upon their renewal if it were shown such action*
  - 29           *meets the objectives of the RMP.*
  - 30           – ROW holders may maintain their access at their discretion consistent within the
  - 31           terms of their grant.
  - 32           – BLM would continue to process land tenure adjustments.
  - 33           – The demand for communication sites and ROW corridors would increase within
  - 34           the life of this plan.
  - 35           – BLM will use voluntary approaches to increase access to public lands through
  - 36           acquisition land tenure adjustments and other means at their discretion.

37   **Transportation and Access**

*BLM Little Snake RMP/EIS*  
*October 24, 2005*

- 1       • Significance Criteria
- 2           – Substantial limitation to nonmotorized or motorized (including OHV) public
- 3           access to and travel within public lands.
- 4           – Substantial reduction in opportunity for access easement acquisition and major
- 5           road developments.
- 6           – Inability to accommodate access to existing utility corridors and communication
- 7           sites.
- 8           – *Inability of private and state landowners to reasonably access their lands.*
- 9           – Impairment of public access or valid existing rights to public lands.
- 10       • Assumptions
- 11           – BLM would increase the managed transportation system.
- 12           – *BLM has the authority to designate and enforce decisions to close BLM-*
- 13           *administered roads on public lands as necessary to meet the goals and objectives*
- 14           *of all resource programs.*
- 15           – *RS 2477 ROWs may exist across the RMPPA, although adjudication is beyond*
- 16           *the scope of this RMP.*
- 17           – BLM would coordinate with local counties and the State of Colorado in
- 18           development, maintenance, and management of BLM system, state, and county
- 19           roads on public lands in the RMPPA.
- 20           – The demand for OHV opportunities in the RMPPA would grow at a rate equal to
- 21           or greater than rates for the State of Colorado.