

Bill Barrett Corp. (BBC) McAfee 3H-19-38-16 Wildlife Best Management Practices (BMPs):

1. The operator shall use the wildlife appropriate seed mix for reclamation as defined below. The suggested “% of mix and PLS” below is intended as a guide and may be adjusted by the operator/landowner to address the availability of individual seed types, provided that the operator notifies CDOW of the necessary changes. The operator shall consult with CDOW and the surface owner prior to adding a new

Name	Scientific Name	Percentage of Mix	FRPLS*	PLS rate/acre
Bluebunch wheatgrass	<i>Pseudoroegneria spicata</i>	15%	10	1.5
Green needlegrass	<i>Nassella viridula</i>	15%	8	1.2
Indian ricegrass	<i>Achnatherum hymenoides</i>	10%	6	0.6
Slender wheatgrass	<i>Elymus trachycaulus</i>	15%	6	0.9
Thickspike wheatgrass	<i>Elymus lanceolatus</i>	15%	10	1.5
Mountain brome	<i>Bromus marginatus</i>	10%	20	2
Basin wildrye	<i>Leymus cinereus</i>	10%	10	1
Canada wildrye	<i>Elymus canadensis</i>	10%	11	1.1
Forbs				
Alfalfa	<i>Medicago sativa</i>	15%	5	0.75
Lewis Flax	<i>Linum lewisii</i>	15%	3	0.45
Palmer penstemon	<i>Penstemon palmeri</i>	15%	2	0.3
Sanfoin	<i>Onobrychis viciifolia</i>	15%	35	5.25
Small burnet	<i>Sanguisorba minor</i>	15%	15	2.25
Western yarrow	<i>Achillea millefolium</i>	15%	30	4.5
Shrubs				
Sagebrush/rabbitbrush		minimum of 0.25 lbs/acre		

species or eliminating a listed species from the mix, or if an environmental conditions at the site have changed prior to reclamation to the extent that a new seed mix is warranted.

*based on drill seeding; 2x if broadcasting

2. To the extent practical, operator shall make reasonable efforts to conduct human activities associated with construction, drilling, and completions (does not include production or workover/emergency activities) outside of the December 1 to April 15 time period to minimize disturbance to wintering elk.
3. Minimize surface disturbance and fragmentation of elk winter concentration area habitat to the extent practicable through use of the smallest facility footprints possible, cluster roads and pipelines, and use the lowest possible density of surface facilities.
4. Follow and stay within existing road ROWs for the surface water line from the Canal to the well sites. In coordination with DOW, identify areas along the route that may pose barriers to wildlife (small mammals, Columbian sharp-tailed grouse chicks, reptiles, amphibians), and construct small dirt ramps to allow wildlife movement.
5. Install a cone or other means on the VOC combustion stacks to deter perching and reduce the risk of mortalities of raptors, birds, and migratory birds.

Mary E. McAfee
Surface Owner