

APPENDIX C

LANDS FOUND UNSUITABLE

The following is a summary of results obtained by application of each unsuitability criteria along with corresponding exceptions and exemptions. In general, criteria 1, 2, 3 and 6 refer to land status; criteria 4, 5, and 8 refer to recreational and natural values; criterion 7 refers to cultural resources; criteria 9 through 15 refer to wildlife; criteria 16 through 19 refer to watershed; and criterion 20 refers to issues proposed by the State. Acres dropped from further consideration due to coal unsuitability criteria in Alternative A are summarized in Table C-1. The summary for Alternative B, C, and D is presented in Table C-2. The following discussion applies to Alternatives B, C, and D.

Criterion 1 – Federal Land System

Tracts totalling 13,939 acres were identified within the CSAs as unsuitable without exception. These lands included wetland easements, wildlife refuges, waterfowl production areas, and incorporated cities and towns.

Criterion 2 – Rights-of-Way Easements

No areas were identified as unsuitable under this criterion.

Criterion 3 – Buffer Zones along Road Rights-of-Way and Adjacent to Communities, Public Schools, Occupied Dwellings, Churches, Public Parks, and Cemeteries.

A total of 43,383 acres of road rights-of-way and buffers; lands under occupied dwellings; and areas containing cemeteries, schools, churches, parks, communities, or institutional buildings was identified as unsuitable for mining. It is expected that the exception to this criterion would often apply. Application of the exception requires site-specific data and, in some cases, additional public input.

Criterion 4 – Wilderness Study Areas

There are no wilderness study areas located within the CSAs.

Criterion 5 – Scenic Areas

No areas were identified as unsuitable under this criterion. There are no Class I visual quality lands identified within the CSAs.

Criterion 6 – Land Used for Scientific Study

No areas were identified as unsuitable under this criterion.

Criterion 7 – Historic Lands and Sites

No areas were identified as unsuitable under this criterion. There are no publicly owned places within the CSAs which are on the NRHP.

Criterion 8 – Natural Areas

There are no designated natural areas or National Natural Landmarks within the CSAs.

Criterion 9 – Federally Designated Critical Habitat For Threatened and Endangered Species

No areas were identified as unsuitable under this criterion.

Criterion 10 – State Listed Endangered Species

No areas were identified as unsuitable under this criterion. There are no state-listed endangered species.

Criterion 11 – Bald and Golden Eagle Nest Sites

Twenty-one golden eagle nests and buffer zones, totalling 16,239 acres, were identified as unsuitable. No bald eagle nest sites are known within the CSAs.

Criterion 12 – Bald and Golden Eagle Roost and Concentration Areas

No areas were identified as unsuitable under this criterion. There are no Bald and Golden Eagle roost and concentration areas within the CSAs.

Criterion 13 – Falcon Cliff Nesting Sites

One prairie falcon cliff nest site and appropriate buffer zone, totalling 98 acres, was identified in conjunction with USFWS as unsuitable under this criterion. No other falcon cliff nest sites have been identified within the CSAs.

Criterion 14 – Migratory Birds of High Federal Interest

High priority habitat and appropriate buffer zones for ferruginous hawks and canvasbacks, totalling 23,943 acres, were identified in conjunction with the USFWS.

Criterion 15 – State Resident Fish and Wildlife

A total of 107,765 acres of essential habitat for species of high interest to the State of North Dakota were identified as unsuitable. The habitat consisted mainly of year-round and winter ranges for big game populations.

Criterion 16 – Floodplains

Criterion 16 applied to 15,515 acres of floodplains on which mining would pose a substantial threat of loss of life or property. Only the floodplains of major streams and tributaries were deleted. Floodplains of lesser streams were not deleted because mining was not identified as posing a substantial threat of loss of life or property.

Criterion 17 – Municipal Watersheds

No areas were identified as unsuitable under this criterion. There have been no municipal watersheds designated by the Surface Management Agency within the CSAs.

Criterion 18 – Natural Resource Waters

No areas were identified as unsuitable under this criterion. There are no natural resource waters within the CSAs.

Criterion 19 – Alluvial Valley Floors

A total of 32,009 acres within the CSAs were identified as preliminary AVFs based on geologic maps, color infrared air photo interpretation, and comparison with 1:100,000 scale reconnaissance maps of AVFs in West-Central North Dakota, prepared in 1983 for the Office of Surface Mining. These areas have been included in all figures, maps, and tables as unsuitable within the CSA.

Criterion 20 – State Proposed Criteria

The State of North Dakota has proposed no unsuitability criteria.

TABLE C-1
ALTERNATIVE A
ACRES EXCLUDED FROM FURTHER CONSIDERATION DUE TO COAL UNSUITABILITY CRITERIA

CSA	UNSUITABILITY CRITERIA									Gross Total ²	Net Total ³
	1	3	7 ¹	11	13	14	15	16	19		
Antelope	0	1,217	0	0	0	0	0	0	0	1,217	1,217
Arnegard	0	0	0	0	0	0	0	0	0	0	0
Beulah-Zap	0	851	0	0	0	0	0	100	0	951	943
Bowman-Gascoyne	320	0	0	0	0	0	0	0	0	320	320
Center-Stanton	0	1,060	0	0	0	0	140	0	0	1,200	1,200
Dickinson	0	5,511	0	0	0	0	0	1,215	26,130	32,856	26,469
Dunn Center	0	2,187	2,897	0	0	0	0	560	14,342	19,986	14,342
Elgin-New Leipzig	0	0	0	0	0	0	0	160	1,240	1,400	1,400
Garrison	1,351	640	0	0	0	0	0	0	0	1,991	1,991
Golden Valley	0	182	10	0	0	0	0	109	0	301	291
Hanks	560	0	0	0	0	1,701	0	0	0	2,261	2,261
Mott	0	0	0	0	0	790	0	0	0	790	790
New England	0	0	0	0	0	0	0	1,560	18,280	19,840	18,280
Sand Creek	200	0	0	0	0	0	0	0	0	200	200
Tobacco Garden	0	0	0	945	0	0	17,294	0	10,240	28,479	25,892
Underwood	280	132	0	0	0	0	0	0	0	412	400
Washburn	0	52	0	0	0	0	0	0	0	52	52
Williston	40	0	0	5,200	0	0	50,270	0	18,160	73,670	55,510
TOTAL	2,751	11,832	2,907	6,145	0	2,491	67,704	3,704	88,392	185,926	151,568

¹Would no longer apply due to a 1983 regulation change.

²No consideration given to overlap among unsuitability criteria.

³Overlap among unsuitability criteria subtracted from gross total.

TABLE C-2
ALTERNATIVES B, C, D
ACRES EXCLUDED FROM FURTHER CONSIDERATION DUE TO COAL UNSUITABILITY CRITERIA

CSA	UNSUITABILITY CRITERION									Gross Total ²	Net Total ³
	1	3 ¹	7	11	13	14	15	16	19		
Antelope	40	1,156	0	0	0	25	0	444	571	1,080	910
Arnegard	0	296	0	0	0	0	0	105	0	105	105
Beulah-Zap	0	468	0	0	0	913	8,979	600	1,801	12,293	10,274
Bowman-Gascoyne	320	368	0	0	0	0	0	189	0	509	231
Center-Stanton	0	664	0	0	0	0	0	226	1,018	1,244	1,197
Dickinson	40	2,411	0	1,057	0	1,024	0	3,939	2,984	9,044	6,842
Divide	347	66	0	0	0	37	0	80	80	544	461
Dunn Center	285	1,472	0	0	0	695	0	3,897	3,489	8,366	5,196
Elgin-New Leipzig	0	287	0	0	0	0	0	201	167	368	325
Elkhorn	0	460	0	310	0	0	0	0	0	310	267
Fortuna	4,690	412	0	0	0	3,908	0	0	0	8,598	8,539
Garrison	1,960	452	0	0	0	1,874	0	569	753	5,156	4,067
Golden Valley	640	745	0	0	0	0	0	211	211	1,062	850
Hanks	95	4,337	0	0	0	1,701	0	436	1,144	3,376	2,917
Keene	0	2,323	0	702	98	900	11,805	516	1,549	15,570	14,600
Mott	0	2,340	0	0	0	790	0	9	0	799	806
New England	0	10,700	0	0	0	0	0	2,225	5,533	7,758	5,569
Niobe	0	11	0	0	0	0	0	0	0	0	0
Sand Creek	60	4,261	0	0	0	0	0	943	1,320	2,323	1,761
Tobacco Garden	0	1,242	0	8,970	0	0	36,711	384	5,440	51,505	50,385
Underwood	303	79	0	0	0	657	0	0	0	960	995
Velva	5,159	644	0	0	0	11,419	0	0	0	16,578	16,122
Washburn	0	29	0	0	0	0	0	100	17	117	85
Williston	0	8,160	0	5,200	0	0	50,270	441	5,932	61,843	60,878
TOTAL	13,939	43,383	0	16,239	98	23,943	107,765	15,515	32,009	209,508	193,382

¹Criterion 3 acreages not included in gross or net totals because overlap with other criteria is unknown.

²No consideration given to overlap among unsuitability criteria.

³Overlap among unsuitability criteria subtracted from gross total.