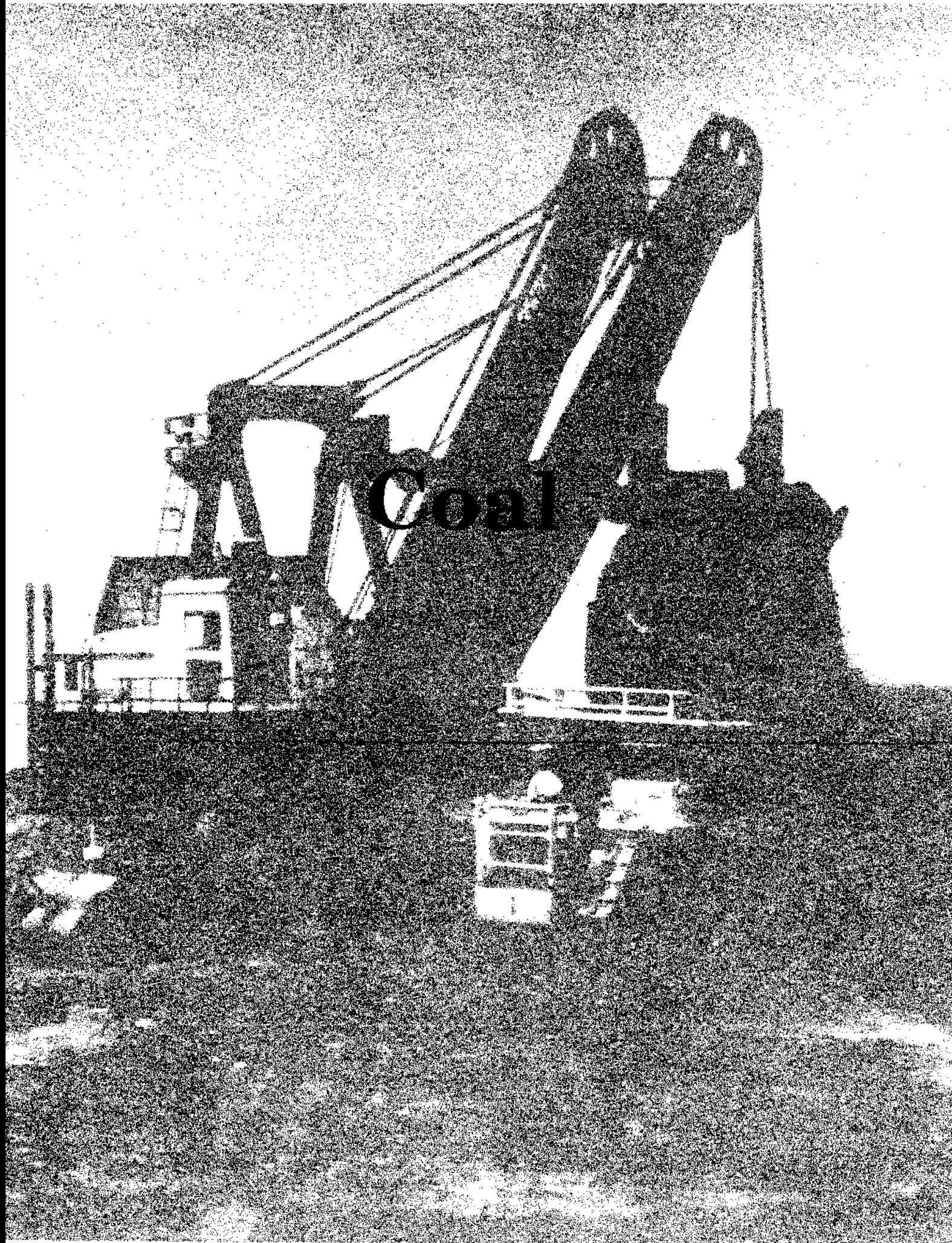


# Coal



## Coal

The scenario of two coal mines (150,000 tons/yr and 300,000 tons/yr) as described in Appendix 2.3 is projected for this action.

### Resource Objectives and Planned Actions

There are 9,360 acres of Federal coal in the Bull Mountains found acceptable for further consideration for leasing, pending further study (see Figures 2.1 and 2.2). These areas overlie Federal coal which is of high or moderate development potential, based upon a 20:1 (overburden to coal) stripping ratio. See Table 2.3 for a breakdown of the acreages and tonnages dropped and carried forward for further consideration for leasing pending further study.

**TABLE 2.3  
RESULTS OF SURFACE OWNER CONSULTATION  
AND APPLICATION OF COAL UNSUITABILITY CRITERIA**

**High/Moderate Potential Federal Strippable Coal**

	22,880 acres	326 MM tons
<b>I. SURFACE OWNER CONSULTATION</b>	<b>UNACCEPTABLE COAL</b>	
Surface owners opposed to leasing for surface mining	10,920 acres	174.3 MM tons
Federal lands within established subdivisions	2,480 acres	36 MM tons
Federal coal acceptable for further consideration	9,480 acres	116.7 MM tons
<b>II. UNSUITABILITY CRITERIA APPLICATION</b>	<b>UNSUITABLE COAL</b>	
Criterion #3: roads	0 acres	0 tons
dwellings	24 acres	350,000 tons
Criterion #16: floodplains	96 acres	1,500,000 tons
Criterion #19: possible AVF	298 acres	0 tons *
Federal coal suitable for further consideration pending application of Criteria #7 and #9-15	9,360 acres **	114.85 MM tons **

\*Final determination of alluvial valley floors has not been made; acreage will not be eliminated until final determination by OSM.

\*\*These acreages and tonnage totals consider the overlap of Criteria Nos. 5, 3, 16, and 19.

Source: BLM 1982.

Current industry standards for coal recovery average 150 feet of overburden or a 6:1 stripping ratio, whichever is less. In the Bull Mountains, average thickness of the combined Mammoth-Rehder bed is 11 feet and the McCleary bed is 8 feet. Disregarding the interburden which separates the coalbeds, surface mining to a depth of 114 feet would be the current economic limit. This fact would greatly constrict mineable acreage of the area found acceptable for further consideration pending further study. During the Coal Activity Planning Process, the Regional Coal Team (RCT) must give strong consideration to surface mining only of the high potential coal (coal within the 10:1 stripping ratio

Figure 2.1: Mammoth Rehder Coal Bed — Application of Planning Screens. (20:1 ratio)

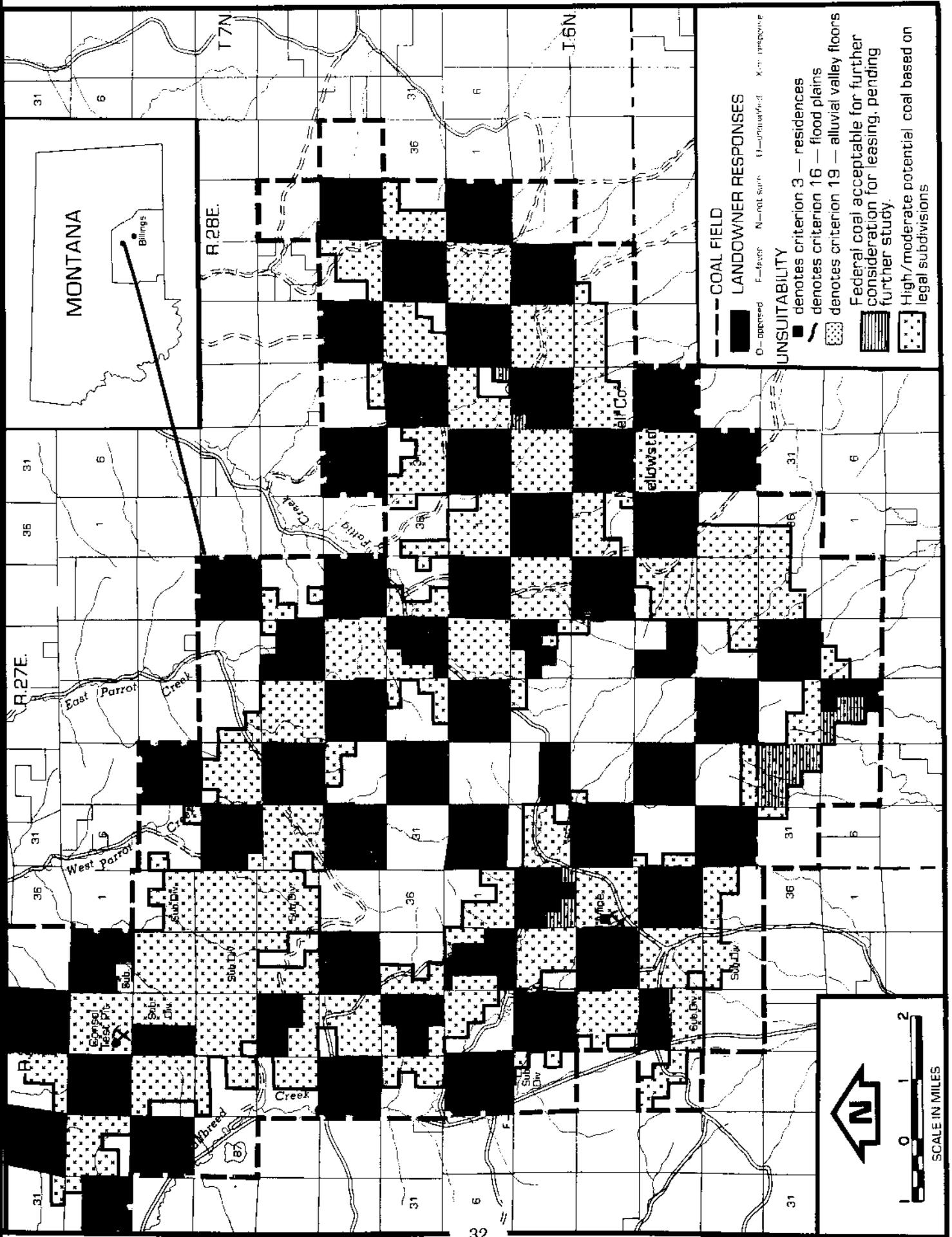
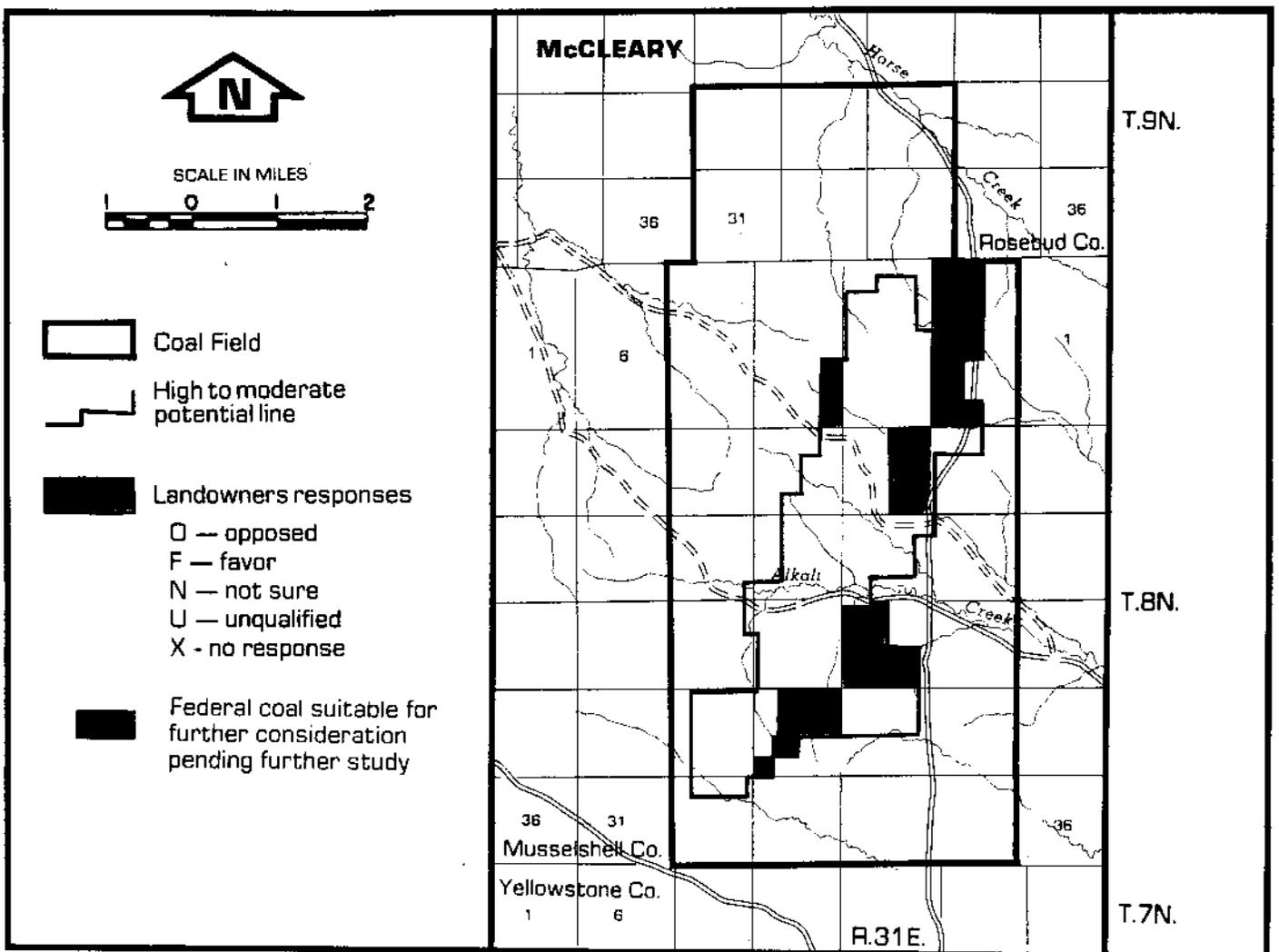


Figure 2.2: McCleary Coal Bed — Application of Planning Screens.



line) if the coal from the Bull Mountains is to be economically competitive. This would tend to discourage large surface mining operations, yet support the smaller operations described in the mining scenario (see Appendix 2.3). It is reasonable to assume that the deeper coal resource would be developed through underground mining methods. The overall effect of this recommendation will be a reduction of the area found acceptable for further consideration pending further study, from 9,360 acres (20:1 ratio) to 4,704 acres (10:1 ratio). Appendices 2.4, 2.5 and 2.6 show the effects this change will have on the unsuitability criteria. More specific information concerning the surface owner consultation process is included in the Billings Resource Area management situation analysis which is available for inspection in the Billings Resource Area Office.

All the Federal coal which is mineable by underground methods is suitable for further consideration for leasing or exchange pending further study. The BLM will not apply coal unsuitability criteria to these areas until a site-specific mine plan is filed, detailing the proposed location of surface facilities.

This decision also eliminates from further consideration for leasing (Federal coal which is potentially surface mineable) the following acreages in the Bull Mountains:

- 10,920 acres eliminated because of surface owner opposition
- 2,480 acres eliminated because lands are subdivided
- 418 acres eliminated as a result of the unsuitability application

This action specifically seeks to encourage underground mining at the expense of other mining methods in the Bull Mountains. Large scale surface mining of Federal coal in the Bull Mountains will be specifically discouraged and this will be the recommendation made later in activity planning before the Regional Coal Team.

Federal coal exchanges will be considered on a case-by-case basis.

Production from the small surface lease (M-052647) in the Bull Mountains will be maintained through emergency leasing.

### **Rationale**

This action was selected because it will allow the BLM to comply with the multiple use mandates established by FLPMA and the 43 CFR 1600 regulations governing multiple use planning. Furthermore, it will allow the BLM to comply fully with the Surface Mining Coal Reclamation Act (SMCRA) and the 43 CFR 3400 regulations established to govern the Federal coal management program. The coal area found suitable for further consideration for leasing pending further study will have criteria 7 and 9 through 15 fully applied prior to leasing. Where overriding multiple use values not previously identified are found to exist, the affected coal will be removed from further consideration for coal leasing. Due to the economic feasibility of mining coal at depths greater than 100 feet (the moderate potential coal) and the larger surface acreage disturbed, it will be recommended to the Regional Coal Team during the Coal Activity Planning Process, to allow surface mining only within the 10:1 stripping ratio (high potential coal). Underground mining will be encouraged, because it is less environmentally disruptive.

### **Monitoring**

Continue monitoring groundwater wells in the Bull Mountains established by the Montana Bureau of Mines and Geology.

### **Implementation Priorities**

Those 9,360 acres of Federal coal found acceptable for further consideration for leasing pending further study in the Bull Mountains will enter the activity planning stage. Prior to asking for industry expressions of interest, the applications of unsuitability criteria 7 and 9 through 15 will be completed. Any areas of overriding multiple use values not previously identified will also be deleted. As part of the multiple use considerations, recommend to the Regional Coal Team that surface mining only be allowed in areas of 10:1 or less stripping ratios. Also recommend that only small surface operations and underground operations be allowed in the Bull Mountains. After expressions of interest are received, tracts will be delineated and ranked by the RCT. A regional EIS will be prepared for all tracts identified in the Powder River Coal Production Region, with the RCT then making a recommendation on tract leasing to the Secretary of the Interior. The Secretary will make the final decision on lease tracts and sale schedule.

In those areas outside the coal production region, process lease applications on a case-by-case basis. Process proposed Federal coal exchanges on a case-by-case basis to determine if the public interest would be served in carrying out the exchange.

**Support**

Carry out a two season wildlife inventory (winter, spring) to update the existing wildlife study done in the Bull Mountains to apply unsuitability criteria 9 through 15. Conduct a Class III cultural survey in the Bull Mountains to apply criterion No. 7.