

Chapter 3

The Federal Coal Management Program

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The Federal coal management program was developed in the legislative context of statutes that specifically address the leasing of federally owned coal as well as those related to public land management and environmental protection in general. These include the Federal Coal Leasing Amendments Act of 1976 (FCLAA), the Federal Land Policy and Management Act of 1976 (FLPMA), the Surface Mining Control and Reclamation Act of 1977 (SMCRA), the National Environmental Policy Act of 1969 (NEPA), the Clean Air and Water Acts, and numerous other “environmental” laws.

In 1979, consensus was reached among the participants in the leasing program debate on the elements of an environmentally (and economically) sound program. The Department of the Interior (DOI) incorporated these elements in regulations implementing FCLAA and FLPMA in July and August 1979. In 1982 and 1983, these regulations were revised to reflect a shift in departmental policy toward making more coal available for lease, to eliminate duplicative requirements and those DOI felt were not well understood, and to streamline the process in order to facilitate

lease sales. While the basic program structure described below is essentially the same under both the 1979 and 1982 programs, some of the 1982 changes were sufficiently different from the 1979 rules as to severely weaken the earlier consensus.

This chapter describes the legal and regulatory context for planning and environmental assessment in the Federal coal management program. The chapter reviews the applicable statutes and regulations, describes the basic program elements, outlines the major differences between the 1979 and 1982 programs, and analyzes the implications of those differences for the leasing program’s ability to assure the development of leases in an environmentally compatible manner. The following chapter discusses specific issues that have arisen about the implementation of the environmental protection aspects of the leasing program, in five Western coal regions (see fig. 1 in ch. 1). While this chapter focuses on **leasing**, it also briefly describes the basic elements of the broader coal management program, especially the surface mine permitting requirements.

THE COAL LEASING PROGRAM

Between 1920 and 1970, Federal coal was leased on demand; i.e., wherever and whenever anyone requested a lease sale or permit. In 1970, a Bureau of Land Management (BLM) study found that although the amount of Federal coal under lease had increased dramatically during the 1960’s, production from Federal leases had declined significantly (1). That study ultimately led to a moratorium on further leasing of Federal coal, and DOI began developing an improved long-term coal leasing program (see ch. 1).

Congressional hearings, public debate, and several lawsuits in the 1970’s focused on whether Federal coal leases were being held for specula-

tion, and whether enforcement of lease conditions of diligent development and continued operation was effective. Other aspects of the debate surrounding the elements of a new leasing program involved its compatibility with planning for public land management and with environmental laws and regulations (see ch. 1).

These efforts culminated, in 1976, with enactment of the FCLAA and the FLPMA. FCLAA repealed the noncompetitive preference right leasing system (see below) and required that all new leases be issued competitively; provided that no bid can be accepted for less than the fair market value of the lease; facilitated the consolidation

of leases into logical mining units for maximum economic recovery; and required diligent development and continuous operation on each lease.

Of particular relevance to environmental protection is section 3(a) of FCLAA, which requires that lands considered for leasing shall have been included in a comprehensive land use plan and that lease sales be compatible with that plan. The comprehensive land use planning procedures developed by DOI to implement section 3(a) of FCLAA are based on the mandates in FLPMA.

In FLPMA, Congress established national policy requiring a multidisciplinary and comprehensive land use planning process that maintains an up-to-date inventory of public land resources, giving priority to the designation and protection of areas of critical environmental concern; projects **all** potential future uses of public lands and resources (not just coal development); and identifies opportunities for the development or conservation of particular resources, considering the relative scarcity of the resource values involved and the availability of alternative means for realization of those values. This land use planning is to be guided by the principles of multiple use of lands and resources, sustained yield of renewable resources, and conservation of depletable resources. In addition, FLPMA requires public land management to protect the quality of scientific, scenic, historical, environmental, air, and water, and archaeological values, including "areas of critical environmental concern"; to preserve certain lands in their natural condition; to provide food and habitat for fish and wildlife and domestic animals; and to provide for outdoor recreation and human occupancy and use (43 USC 1701 **(a)(8)**). **Planning activities must be** coordinated with those of other Federal, State, and local agencies; and must afford the public adequate opportunity to comment upon the management of public lands.

Based on these general planning mandates, the Federal coal leasing program was structured around an initial comprehensive land use planning process which applies to all Federal lands and all resources on those lands, followed by "activity" planning for the development of federally owned coal resources. Figures 6 and 7 il-

lustrate the leasing process under the 1979 and 1982 programs, respectively. The leasing program applies to new production tracts, bypass tracts (a lease needed to prevent leaving "islands" of unmined coal), and maintenance tracts (needed to continue operations at an existing mine). In addition, some aspects of the program apply to leases issued before 1976 and to leases issued under the noncompetitive preference right leasing system (see below).

A decision to offer a tract for lease is made in the context of a "tiered" system of planning and analysis, in which the level of analytical detail increases over time, while the area being evaluated decreases (see fig. 2 inch. 2). Thus, early in the process when few data are available, large land areas are classified according to their relative value for development of the full range of resources. Lands that are identified as potentially suitable for coal leasing at this stage are then subjected to increasingly detailed analyses as the lands move closer to actual coal development.

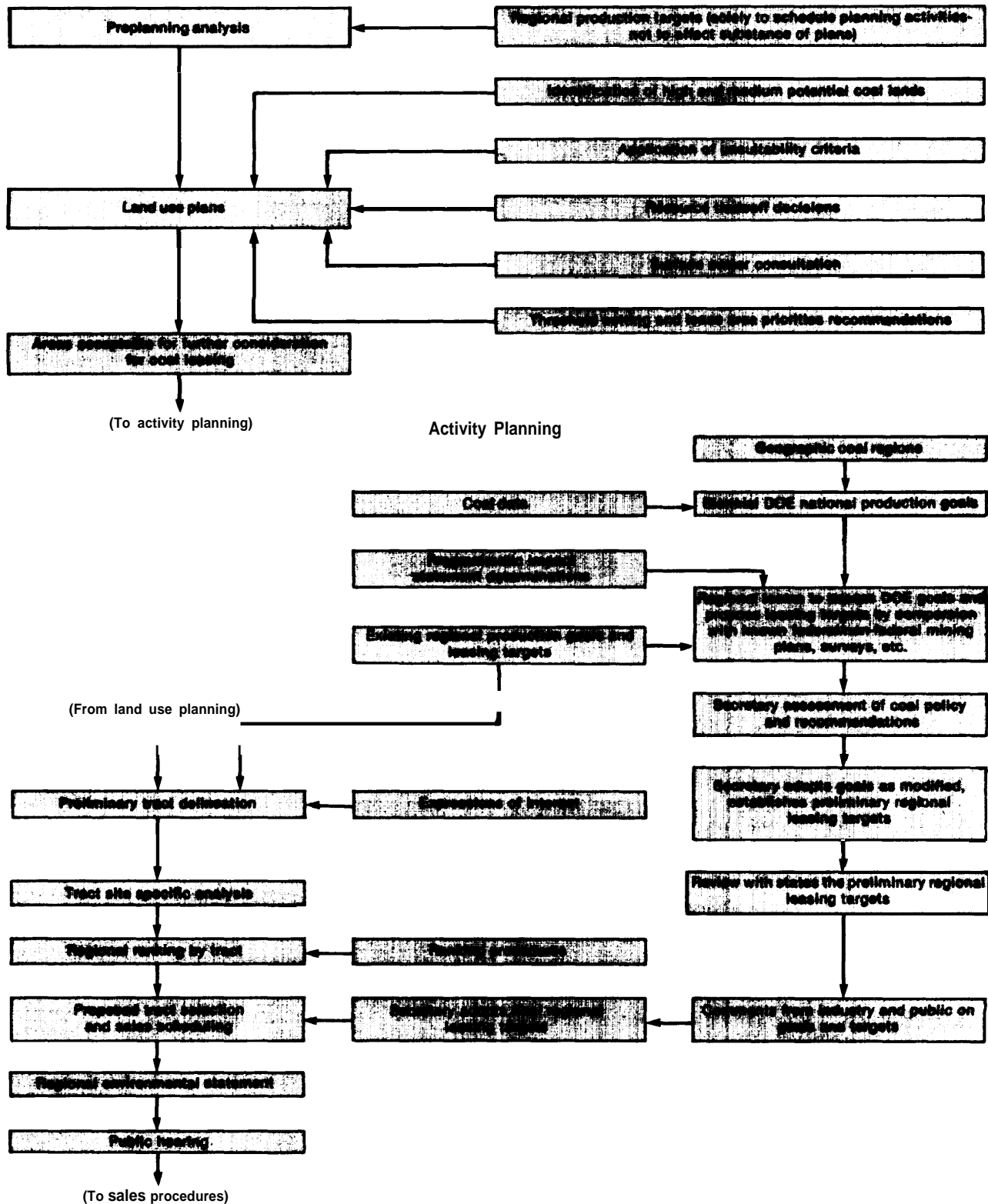
The most detailed analysis prior to mine development occurs **after** a lease has been issued, when the lessee files an application for a surface mining permit, supported by an exhaustive proposed mining and reclamation plan. This final stage in the tiered system reflects the limited Federal agency resources by placing the burden for the most detailed data collection and analysis requirements on the lessee. Environmental protection measures after a mine is opened include inspection and enforcement to ensure that mining and reclamation are in compliance with the permit and approved plan.

Land Use Planning

The principal objective of the land use planning process is to establish a multiple resource use management strategy for each of the "planning units" set up by DOI for the administration of public lands. * This is accomplished through

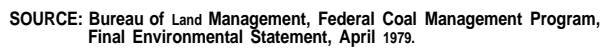
***It should be noted that many of the land use planning requirements described below also apply to other agencies who manage Federal lands overlying coal deposits (e.g., the U.S. Forest Service). The land use planning schedules and priorities within these agencies need to be coordinated closely with BLM's planning for lease sales.**

Figure 6.—1979 Coal Leasing Program



(From activity planning)

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SOURCE: Bureau of Land Management, Federal Coal Management Program, Final Environmental Statement, April 1979.

Figure 7.—Current Coal Leasing Process

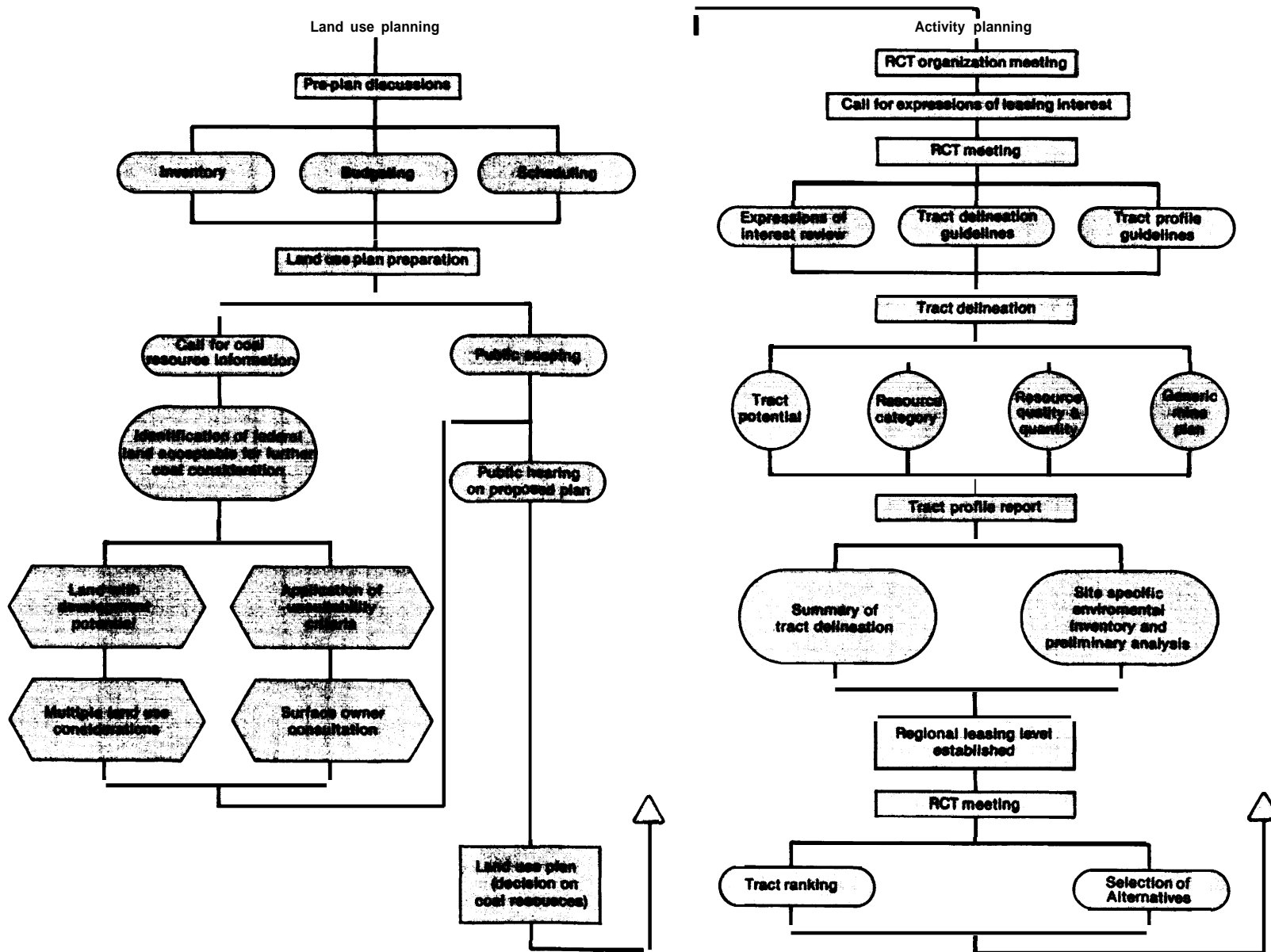


Figure 7.—Current Coal Leasing Process-Continued

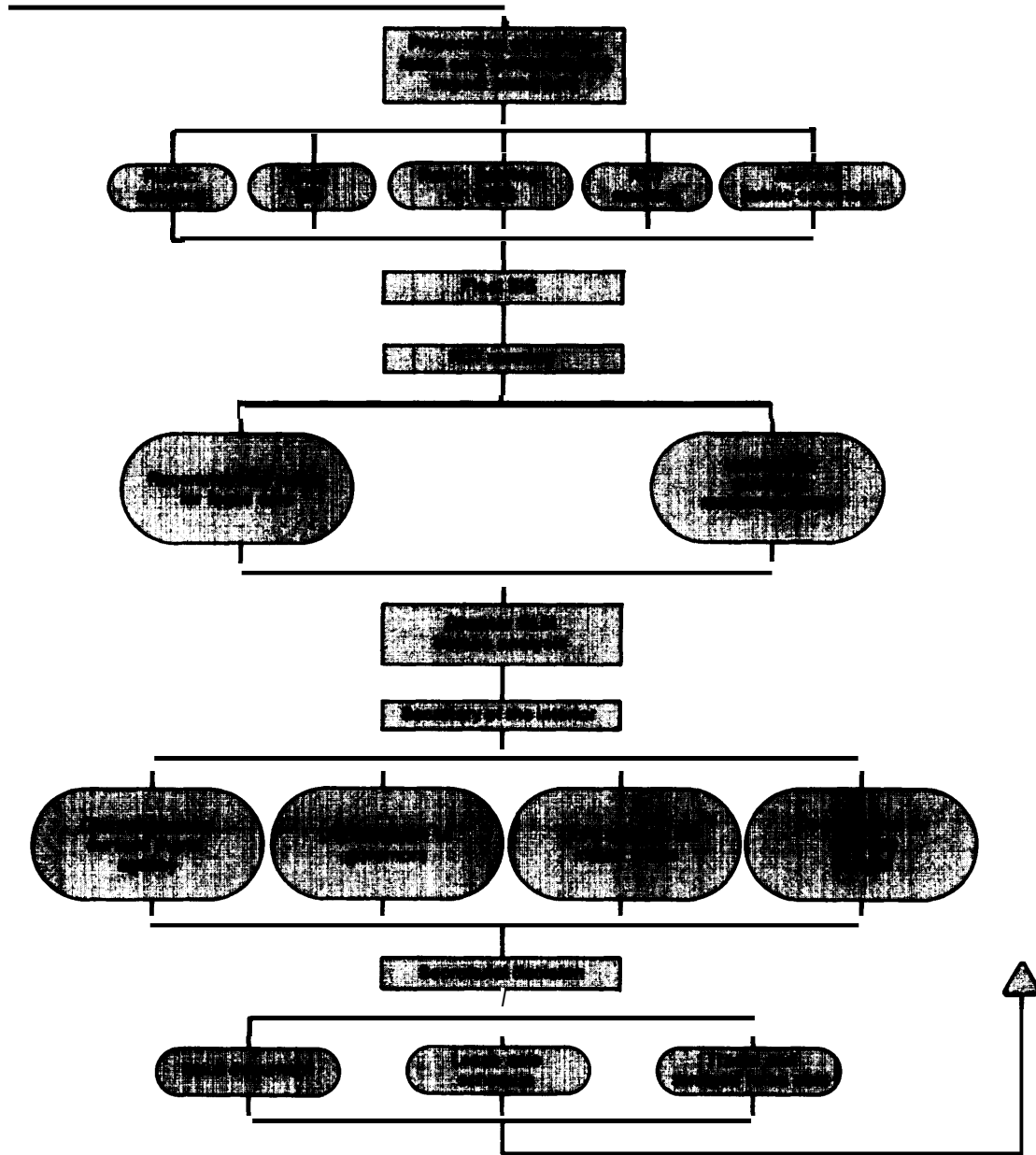
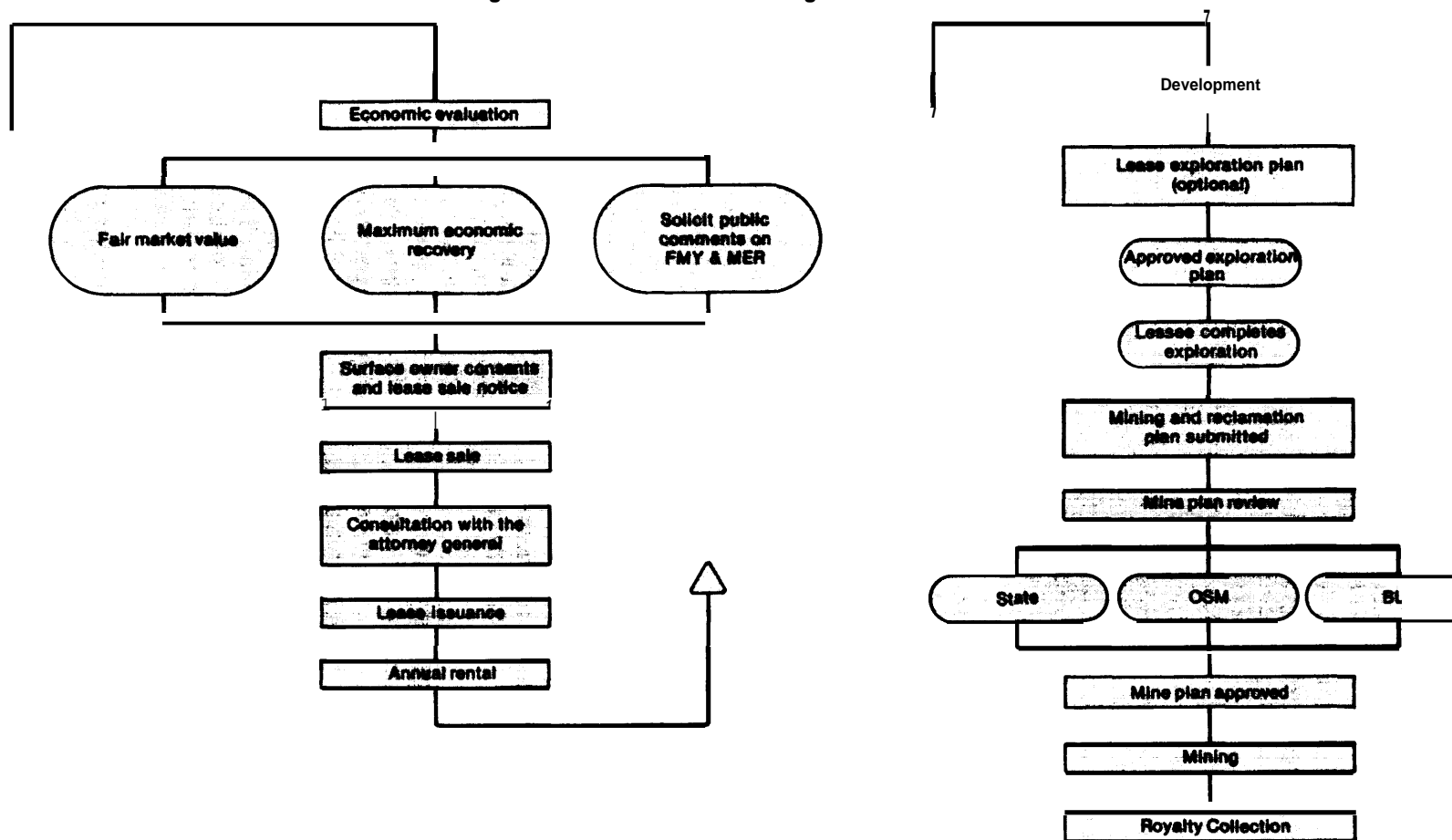


Figure 7.—Current Coal Leasing Process-Continued



SOURCE: Bureau of Land Management.

identification of **all** potential land uses and of opportunities for the development of particular resources based on their relative values (see fig. 7). Coal development is one possible land use, and, during land use planning, four screens are used to identify the acceptability of public lands for further consideration for coal leasing. These screens focus on coal development potential, the environmental acceptability of lands for mining, multiple use management, and surface owner preferences about mining (where BLM does not own the surface). Based on the results of the application of these four initial screens, lands determined to be acceptable for further consideration for coal development are carried forward into activity planning for leasing.

Land use planning is preceded by a certain amount of in-house planning by BLM staff, who review basic procedures; identify issues and estimate their relative significance; perform literature searches and organize data available in-house; make initial contacts with other affected agencies and organizations; analyze a range of possible regional coal production targets; etc. Based on these and other tasks, BLM field personnel estimate the time needed to complete land use and activity planning and prepare for a lease sale. The field staff's recommendations on scheduling are reviewed and passed on to the Secretary, who establishes a lease sale target schedule. All BLM personnel and other affected agencies are expected to adhere to this schedule throughout the leasing process (see discussion of "Regional Leasing Rates" in ch. 4).

The coal development screen begins with an announcement to the coal industry, the public, other Federal agencies, State and local governments, and Indian Tribes, calling for information identifying major issues related to resource use and protection within a BLM planning unit. This initial, general call for information is supplemented by a formal solicitation (through a Call for Coal Resource Information) of industry "indications of interest" in leasing coal and industry information on coal resource development potential (43 CFR 3420.1-2(a)). Based on the responses to these requests for information, lands are categorized according to their coal development potential (based on such factors as quality

of coal, depth of seam, thickness of overburden, etc.) and lands with no such potential are not considered further for leasing (43 CFR 3420.1-4 (e)(l)).

This screening procedure has been criticized because the 1982 regulations allow lands with a "low" coal development potential to be carried forward along with those having moderate to high potential. Low development potential lands would have been screened out under the 1979 regulations. Including such lands in later analyses expands BLM's workload because more land would then have to be analyzed in subsequent stages of land use and activity planning. Furthermore, if lands with low coal development potential are **leased**, it could result in inefficient mining and increase the risk of adverse environmental impacts in some areas because more surface acres would have to be disturbed per ton of coal extracted. Under other circumstances, however, lands with low development potential could be favorably located with regard to transportation or could be needed to complete a logical mining unit. The inclusion of low coal development potential lands also could promote flexibility to adjust to changing market conditions and mining technologies. Where these factors are present, carrying such lands forward for further analysis seems reasonable.

The acceptability of lands for mining is assessed based on 20 criteria described in the program regulations. Several of these criteria were mandated or suggested in SMCRA, several embody requirements under other Federal statutes which DOI chose to enforce through the unsuitability criteria review process (e.g., the Endangered Species Act), and some DOI selected on the basis of its judgment of their merits. Each of the criteria is applied to all coal lands identified in the land use analysis as having development potential. If one or more criteria are found to apply in a particular area, exceptions and exemptions to the applicable criteria are analyzed to see if they pertain. If they do not, the land either will be considered unsuitable for further consideration for leasing, or other mitigation requirements will be imposed through proposed lease stipulations (see "Mitigation Requirements" in ch. 4).

The 20 unsuitability criteria are:

1. lands in the Federal land preservation system (e.g., National Parks, Wildlife Refuges, Trails, Wild and Scenic Rivers, Recreation Areas, Wilderness Areas);
2. lands within rights-of-way or easements;
3. lands within 100 ft of cemeteries and rights-of-way for public roads, or within 300 ft of public and residential buildings;
4. wilderness study areas, while under review for wilderness designation;
5. Class I scenic areas;
6. lands used for scientific studies involving food or fiber production, natural resources, or technology demonstrations and experiments;
7. publicly owned places on Federal lands which are listed on the National Register of Historic Places;
8. lands designated as natural areas or as National Natural Landmarks;
9. federally designated critical or essential habitat for threatened or endangered plant and animal species;
10. lands containing habitat considered critical or essential for State-designated threatened or endangered plant and animal species;
11. bald or golden eagle nests or sites, including appropriate buffer zones that consider habitat for prey species;
12. bald and golden eagle roost and concentration areas used during migration and wintering;
13. falcon cliff nesting sites and appropriate buffer zones that consider prey species' habitat;
14. high priority habitat for migratory bird species of high Federal interest on a regional or national basis;
15. essential habitat for resident fish and wildlife species of high interest to the State (e.g., active dancing and strutting grounds for sage grouse, sharp-tailed grouse, and prairie chicken; critical winter ranges for deer, antelope, and elk; and migration corridors for elk);
16. lands in riverine, coastal and special flood plains (100-year recurrence);
17. lands committed by the surface management agency to use as municipal watersheds;
18. natural resource waters identified in State water quality management plans and a buffer zone of one-quarter mile from the outer edge of the far banks of the waters;
19. alluvial valley floors (AVFs) considered important for agriculture, or land outside an AVF if mining would materially damage surface or underground water systems that supply the AVF; and
20. lands deemed unsuitable by criteria proposed by a State and adopted by the Secretary of the Interior in rulemaking.

These criteria apply primarily to lands evaluated for leasing for surface mining since 1976 (i.e., after passage of FLPMA and FCLAA), subject to the exemptions and/or exceptions described below. In addition, the unsuitability criteria are applied to preference right lease applications (PRLAs), either during land use planning (if the PRLA is included in a comprehensive land use plan) or during environmental analysis (43 CFR 3430.3-1). The unsuitability criteria also are applied to lands that will be mined by underground methods, but the criteria cannot be used to declare such lands unsuitable for mining unless surface operations and impacts will affect Federal lands to which a criterion pertains (43 CFR 3461 .2).

In the 1979 regulations, the criteria also were applied to tracts leased before 1976 but not yet being mined, either as part of the normal land-use planning process or during mine plan review. This requirement was eliminated in the 1982 regulations, and such lands now are reviewed for suitability only under the mandatory suitability provisions of SMCRA (43 CFR 3461 .4-2). The Department argues that this change merely eliminated a duplicative set of requirements and is in accord with current policy to interfere as little as possible with "valid existing rights" and to expedite the planning for new lease sales (4). However, the change is being contested in court because the suitability review required under SMCRA for mine plan review may not be as rigorous as under the 20 criteria, possibly resulting

in inadequate consideration of the multiple resource use implications of coal development in land use plans (see discussion of "Unsuitability Criteria" in ch. 4).

The unsuitability criteria also are subject to exemptions and/or specific exceptions. General exemptions applicable to several criteria include: lands subject to valid existing rights (criteria #1, #3, #4 (limited)); lands to which the operator made substantial legal and financial commitments prior to January 4, 1977 (all except criteria #3, #4, and #19); surface coal mining operations existing on August 3, 1977 (all except criterion #4 and #7); and lands for which a mining permit has been issued (all but #3, #4, and #7). All criteria except #4, #5, #6, #15, #16 and #19 also are subject to one or more specific exceptions. For example, the exceptions to criterion #1 state that a lease may be issued if stipulations can ensure that eagles are not disturbed during the breeding season, or if the Fish and Wildlife Service determines that the nest(s) can be moved; and the size of a buffer zone can be decreased if active eagle nests will not be affected adversely (see discussion of "Mitigation Requirements" in ch. 4).

In the 1982 regulations, additional exemptions were added to seven of the unsuitability criteria. Furthermore, the general applicability of the exceptions was expanded. The 1979 regulations specified that exceptions should only be considered for areas where there is **only one** unsuitability condition. The 1982 regulations expanded this to areas where **one or more** unsuitability conditions exist (43 CFR 3461.3-1 (a)(1)). The combined effect of these expansions is to make it less likely that an area will be excluded from further consideration for leasing based on the unsuitability criteria.

A recent (December 1983) change in criterion #7 also has been the target of much criticism. Criterion #7 formerly applied to **all** sites on Federal lands that were included **or eligible for listing** in the National Register. This criterion is now limited to **publicly owned** sites on Federal lands that **are** listed. Thus, privately owned sites are no longer protected, yet protection of such sites was one rationale for establishing the National Register.

It should be noted that neither the 1979 nor the 1982 regulations include an unsuitability criterion based on the reclaimability of coal-bearing lands. Such a criterion was considered early in the development of the 1979 leasing program, but was dropped because there is an affirmative legal burden (under SMCRA; 30 U.S.C. 1260(b)(2)) on an applicant for a mining and reclamation permit to demonstrate that reclamation is technologically and economically feasible, (2). Thus, the regulations implementing the leasing program assume that this requirement will be met during review of the permit application by the Office of Surface Mining or the State permitting agency (see ch. 4).

The multiple resource use screen is intended to eliminate lands from further consideration for coal leasing if other resources on those lands are determined by BLM to be locally important or unique. In general, a multiple-use tradeoff is appropriate when one land use (e.g., mining) would absolutely preclude other valuable resource uses which are not covered by the 20 unsuitability criteria (43 CFR 3420.1-4(e)(3)). BLM only infrequently uses the multiple-use screen to eliminate lands from further consideration for leasing. According to the Bureau, this is because lands that might be subject to a multiple-use tradeoff usually already will have been eliminated for other reasons (e.g., determination of no coal potential, application of an unsuitability criterion) (4). However, where multiple-use tradeoffs might be appropriate, critics of the leasing program contend that BLM generally tends to assign coal development a higher priority than competing land/resource uses.

The surface owner preference screen requires that coal resources underlying privately owned surface not be considered for surface mining if a significant number of the surface owners object to leasing during the initial consultation with BLM. If underground mining is technically or economically infeasible, the land could still be considered for leasing, but it must be assigned a low priority in ranking compared to lands without surface owner conflicts (43 CFR 3420.1-4(e)(4)). Final surface owner consents are not obtained until the end of activity planning.

Two additional concerns have arisen about the current land use planning process: the timing of the application of the four screening procedures, and the elimination of a discretionary fifth screening procedure based on a “threshold” analysis of cumulative impacts (compare the land use planning portions of figs. 6 and 7). The 1979 regulations specified that the four screens be applied **sequentially**, in the order listed above. Sequential application of the screens was consistent with the concept of a tiered system of analyzing lands, in which increasingly stringent environmental tests would be applied at each step of the leasing process. The 1982 regulations allow these four screening procedures to be applied **simultaneously**. Although the screens still are applied, there is concern that scarce BLM time and staff resources will be diluted evaluating (for example) surface owner preferences over a larger land area than might have been necessary if the other three screens had been applied first and in sequence.

The 1979 regulations also included a fifth, discretionary, screen that employed critical threshold levels of cumulative impacts from the development of more than one mine within an area. If threshold levels were set, and if it was determined during land use planning that mining on all potential tracts would mean that such a level would be reached, BLM was **required** to halt, suspend, or condition further consideration of the affected area for leasing. This screen was dropped in the 1982 regulations because it had never been used (4). The BLM District Managers may still include critical threshold levels as one factor to be considered in the formulation of the land use alternatives that will be analyzed during land use planning (43 CFR **1601 .5-4(a) (9)**). However, threshold levels of cumulative impacts relative to coal development are not required to be considered until the lease sale EIS is prepared (see below).

The threshold concept had long been a source of confusion and had “not proven practical for land use managers” (4). The threshold concept could be a valuable tool in both land use planning and tract ranking if it were reinstated in the regulations for these stages of planning and assessment. In doing so, BLM should make every

effort to understand the concept and how it could be expressed in regulations in a workable and enforceable manner. Issues related to threshold analyses are discussed further in the “Data and Analysis” section of chapter 4.

The product of land use planning under FLPMA is a document called a “resource management plan” (RMP), which is to be distinguished from the “management framework plans” (MFPs) developed before enactment of FCLAA and FLPMA. RMPs are required, under FCLAA/FLPMA, to identify and protect Areas of Critical Environmental Concern (ACECs); include sufficient opportunities for public participation; incorporate the inventorying of public land resources; evaluate resources from local, regional and national perspectives; identify conflicts in resource values and uses; and develop and analyze alternative land/resource use proposals that resolve conflicts through decisions on multiple-use tradeoffs. To fulfill the latter requirement, in particular, RMPs include a full EIS on resource management alternatives, and the NEPA process thus is built into land use planning decisions from the start, rather than coming only at the end of activity planning (the second stage in the leasing process) (43 CFR 1601 .7-3).

Preparation of new comprehensive RMPs is a lengthy process, and a key issue raised by the leasing program is the continued reliance on amended MFPs, as a basis for land use and activity planning for coal leasing while new RMPs are developed. Due to DOI’s concerns about the old MFPs’ compliance with FCLAA/FLPMA and their ability to support planning to match current and anticipated resource demands, the 1979 regulations set a deadline of December 31, 1984, on the use of old MFPs in land use planning for new Federal coal lease sales (43 Fed. Reg. 58764). Prior to that date, those regulations allowed leasing based on an MFP only if it had been amended or updated to comply with the land use planning standards established in FCLAA/FLPMA.

The deadline for the completion of new RMPs as comprehensive land use plans to guide leasing decisions was eliminated in the 1982 regulations, due to BLM’s need to allocate time, staff, and funds to implementing the leasing program.

BLM currently is working on RMPs in some planning areas, but RMPs for coal leasing areas were not completed in time to support first round lease sales, and may not be available to support the planning for sales that will occur within the next couple of years, even though the legislation mandating their preparation was approved over 7 years ago.

Moreover, as discussed in chapter 4, detailed regulatory guidelines for judging the acceptability of an amended or updated MFP for new competitive leasing (including those requirements listed above) were deleted and replaced with a general policy statement that BLM could continue to rely on amended or updated MFPs as long as they are "in compliance with the principle of multiple use and sustained yield and shall have been developed with public participation and governmental coordination, but not necessarily precisely as prescribed by §§ 1601.3 and 1601.4 of [43 CFR]" (43 **CFR** 1601 .8(b)(l)). According to DOI this change was part of the overall effort to eliminate duplicative regulatory requirements and reduce administrative costs (4). However, this change in the program also contributed to public uncertainty about the program's ability to ensure environmental compatibility.

Several studies, including a 1981 General Accounting Office report, entitled **Minerals Management at the Department of Interior Needs Coordination and Organization**, have found many MFPs to be deficient with regard to compliance with current land use planning laws. An exhaustive analysis of the **legal** adequacy of updated and amended MFPs to support planning for coal leasing was beyond the scope of this project. However, regardless of whether updating or amending MFPs brings them within the specific regulatory requirements, it is OTA's judgment that such amended plans cannot provide the sort of comprehensive "fresh-start" planning envisioned by the legislation, especially areawide **resource management** planning based on the evaluation of alternatives in an EIS (as opposed to the current program, in which an EIS is prepared only during activity planning). On the other hand, where updated or amended MFPs are legally adequate, replacing them with RMPs would leave BLM open to charges of "planning for planning's

sake" —something the Bureau frequently has been accused of in the past.

Activity Planning and Lease Sales

After general resource planning for a management area is complete, subsequent planning focuses on a specific activity—in this case coal leasing. Like land use planning, activity planning is predicated on a tiered system of increasingly detailed reviews of smaller and smaller groups of tracts. As shown in figure 7, activity planning for a region culminates in a Secretarial decision on the tracts and tonnages to be offered for lease and the schedule for lease sales in that region.

Information from land use planning about areas' acceptability for mining, plus formal industry expressions of interest in particular areas, are used to develop initial draft leasing levels and to delineate tracts. States and the public also may suggest coal land they deem particularly acceptable or unsuitable for leasing. When proposed tracts have been delineated, BLM field staff conduct a site-specific analysis (SSA) of the full range of environmental, social, economic, and other resource values on each tract. The SSAs provide the basis for detailed tract profiles, which are used to select combinations of tracts for analysis in the EIS (see below). DOI may establish the final regional leasing level at any time after the call for industry expressions of interest but before the selection of EIS alternatives (43 CFR 3420.3 et seq.).

The SSA generates the greatest level of detail of information about a tract available to DOI before a lease sale. According to the programmatic EIS for leasing, "the information . . . must be sufficiently detailed so that the Department would be reasonably certain that the lease would be economically and environmentally acceptable, but in less detail than would be required of a lessee at the time a mining plan would be approved" (2). For example, the hydrologic analysis in a tract profile could be based on field sampling pursuant to a scaled indexing system; the cultural resource assessment could incorporate a comprehensive literature search for known resources (or a 10 to 25 percent field survey in areas about which no data are avail-

able). In practice, however, time, staff, and budget constraints have meant that these levels of data have not always been achieved on tracts analyzed for recent lease sales (see discussion of “Data and Analysis” in ch. 4).

Following preparation of the tract profiles, the Regional Coal Team (RCT)* ranks tracts according to their acceptability **for leasing after considering factors** such as coal economics, impacts on the natural environment, and socioeconomic impacts (43 CFR 3420.3-4). Tract rankings and SSAs do not necessarily affect tract delineation, although tract boundaries can be adjusted as the results of SSAs or tract rankings, or tracts may be dropped altogether at this stage.

The RCT uses these rankings to select at least one combination of tracts that approximates the regional leasing level, plus tract combinations representing alternative leasing levels. These must include a “preferred alternative” that optimizes the economic and resource benefits of leasing and minimizes the social and environmental costs. The RCT may adjust the tract ranking and select tracts to reflect a variety of considerations, including the compatibility of coal quality, coal type, and market needs (including industry expressions of interest); environmental and socioeconomic impacts; the compatibility of reserve size and demand distribution for tracts; public opinion; avoidance of future emergency lease situations; and special leasing opportunity requirements (43 CFR 3420.3-4(b)(2)). (Although the revised leasing regulations only require the RCT to select one combination of tracts that meets the regional leasing level, NEPA mandates the consideration of alternatives to a proposed action, and, in practice, the RCTs usually select several combinations of tracts.) As discussed in chapter 4, some opportunities for public and interest group participation are afforded throughout tract ranking, the selection of alternatives, and the development of leasing levels.

*The Regional Coal Team is a DOI/State organization made up of a representative of the Governor from each State in the region and the BLM State Director from each State involved. Each RCT is chaired by a BLM State Director from a nonaffected State (see ch. 4 for a detailed discussion of the role of RCTs).

The environmental impacts of the leasing alternatives, including the preferred alternative, are then assessed in detail in an EIS (see discussion of environmental protection, below). A draft EIS is published, and after public comment and inter-agency review, is revised and issued as a final EIS. As a part of the tiered system, the data and analyses needed to prepare the EIS expand on the information in the SSAs and tract profiles, but focus on particular combinations of tracts. Lease stipulations to protect environmentally sensitive areas may be proposed in the EIS (see “Mitigation Requirements” in ch. 4).

Following publication of the final EIS, written surface owner consent is confirmed, and the Secretary begins formal consultations with the affected State Governors and the surface management agency prior to approving a combination of tracts and tonnages to meet a regional leasing level and establishing final dates for maintenance, bypass, and new production tract lease sales. Then DOI issues a notice of lease sale, performs the economic evaluation, and holds the sale.

The major issues posed by the activity planning for recent lease sales are the lease sale rates—or the ratio of regional leasing levels and lease sale schedules—and the ability of the tract rankings and selection of alternatives to reflect data inadequacies and cumulative impacts. These issues are discussed in detail in chapter 4.

Post-Leasing

After a lease is issued, but before coal mining may begin, lessees must submit a detailed permit application, including a mining and reclamation plan, either to the State permitting agency (in States with approved programs under SMCRA) or to the Office of Surface Mining, or, where the mine would involve Federal lands, to both. Preparation and review of the mine plan and permit application is the last step in the tiered system of environmental assessment in the Federal coal management program. At this stage, extensive tract-specific data and analyses are provided by the permit applicant and the proposed methods of mining and reclamation, the potential environmental impacts, and the recommended impact

mitigation techniques are described in detail. For instance, tract-specific cultural resource analyses in support of a mine plan might be based on a 100 percent inventory in areas where such resources are considered important (e.g., the San Juan River Region). Recommended techniques to mitigate the potential adverse environmental impacts of mining are derived from these extensive data bases and analyses and, if not already covered by lease stipulations, are included in the mine plan or in permit conditions (see "Mitigation Requirements" in ch. 4). If the potential impacts of issuing a permit are considered significantly different from those projected when the lease was issued, an EIS also is supposed to be prepared at this stage.

Once a mine plan and permit application are approved, construction of a coal mine may begin. The permitting agency has the authority to refuse to issue a permit for environmental or other reasons, but in practice, decisions at this stage are

intended primarily to accommodate mining, and no tract has ever been denied a permit, although portions of tracts have been excluded from mining, and in a few instances permit applications have had to be submitted more than once before being approved. Following the onset of mine development, compliance with the terms of leases and permits is monitored through inspection and enforcement programs.

As noted previously, analysis of the adequacy of environmental protection measures after a lease is issued was beyond the scope of this assessment. However, several recent reports have been critical of the ability of permitting and enforcement programs to ensure adequate environmental protection. Such criticism reflects on the adequacy of the leasing program due to the extent to which final decisions on impact mitigation are deferred from the leasing program to the permit stage and beyond (see "Deferral of Decision-making" in ch. 4).

PREFERENCE RIGHT LEASE APPLICATIONS

The Mineral Leasing Act of 1920 originally established two leasing mechanisms: competitive bidding for lands **known** to have commercially valuable coal deposits, and preference right leasing for **unexplored** areas. Under the preference right leasing system, exclusive prospecting permits could be converted to leases if commercial quantities of coal were discovered. FCLAA ended the preference right leasing system (except for lease applications and prospecting permits that were in effect on passage of the act) on the basis that it did not grant the public a "fair return" on coal. Most of the preference right lease applications (PRLAs) were not processed during the leasing moratorium of the 1970's. The 1979 and 1982 program regulations set a deadline of December 1984 for their final disposition. Currently, about 133 PRLAs are still pending—many since the late 1960's.

The PRLA system was effective in encouraging exploration of undeveloped Federal coal lands at industry's expense. Prospecting permits allowed the applicant, **at his own expense**, to con-

duct exploratory drilling to determine if the permitted lands contained "commercial quantities" of coal. Thus, the PRLA system not only enabled the Federal Government to determine the "existence" or "workability" of Federal Western coal deposits, it also served the interests of industry by guaranteeing a lease to a company or prospector who discovered commercial quantities of coal in the permit area. However, as noted above, the system was criticized for not providing a fair return on Federal coal leases and was abolished in 1976, subject to valid existing rights.

Before a PRLA can be converted into a lease, the applicant must first successfully complete an "initial showing" providing basic information about the nature, existence, and environmental setting of coal deposits discovered during the 2- or 4-year period covered by the prospecting permit (43 CFR 3430.2-1). BLM then analyzes the application in detail, and prepares either an environmental assessment (EA) or a full EIS. The second or "final showing" is to demonstrate that the tract contains commercial quantities of recov-

erable coal. In determining the potential for profitable mining, BLM must consider comprehensive information on estimated revenues and all costs, including those related to compliance with environmental laws, in addition to mining and transportation costs (43 CFR 3430.4). If the standard of commercial quantities (and other requirements of the Mineral Leasing Act) is met, the courts have held, in *NRDC v. Berklund*, that a lease **must** be issued (6). The Court added, however, that the costs of meeting environmental protection requirements should be considered when applying the commercial quantities test and that preference right lease issuance procedures must comply fully with NEPA, including the preparation of EAs or EISs.

Under the current DOI program for environmental analysis of PRLAs, they are not necessarily subject to all of the four screens applied to potential competitive leases during land use planning. The unsuitability criteria must be applied to PRLAs either during the normal course of land use planning (if the PRLA can be processed on the same schedule as a comprehensive land use plan) or during environmental analysis. The multiple-use screen only is applied if the PRLA can be processed during the normal cycle of land use planning (43 CFR 3430.3-1).

The combined effect of the *Berklund* decision and the DOI procedures for processing PRLAs means that environmental protection in the development of mines on PRLA tracts must be obtained through mitigation requirements in lease stipulations and/or permit conditions (see ch. 4). As with a lease issued competitively, approval of a PRLA does not constitute a right to mine, and the lessee still must obtain a surface mining permit based on a mining and reclamation plan.

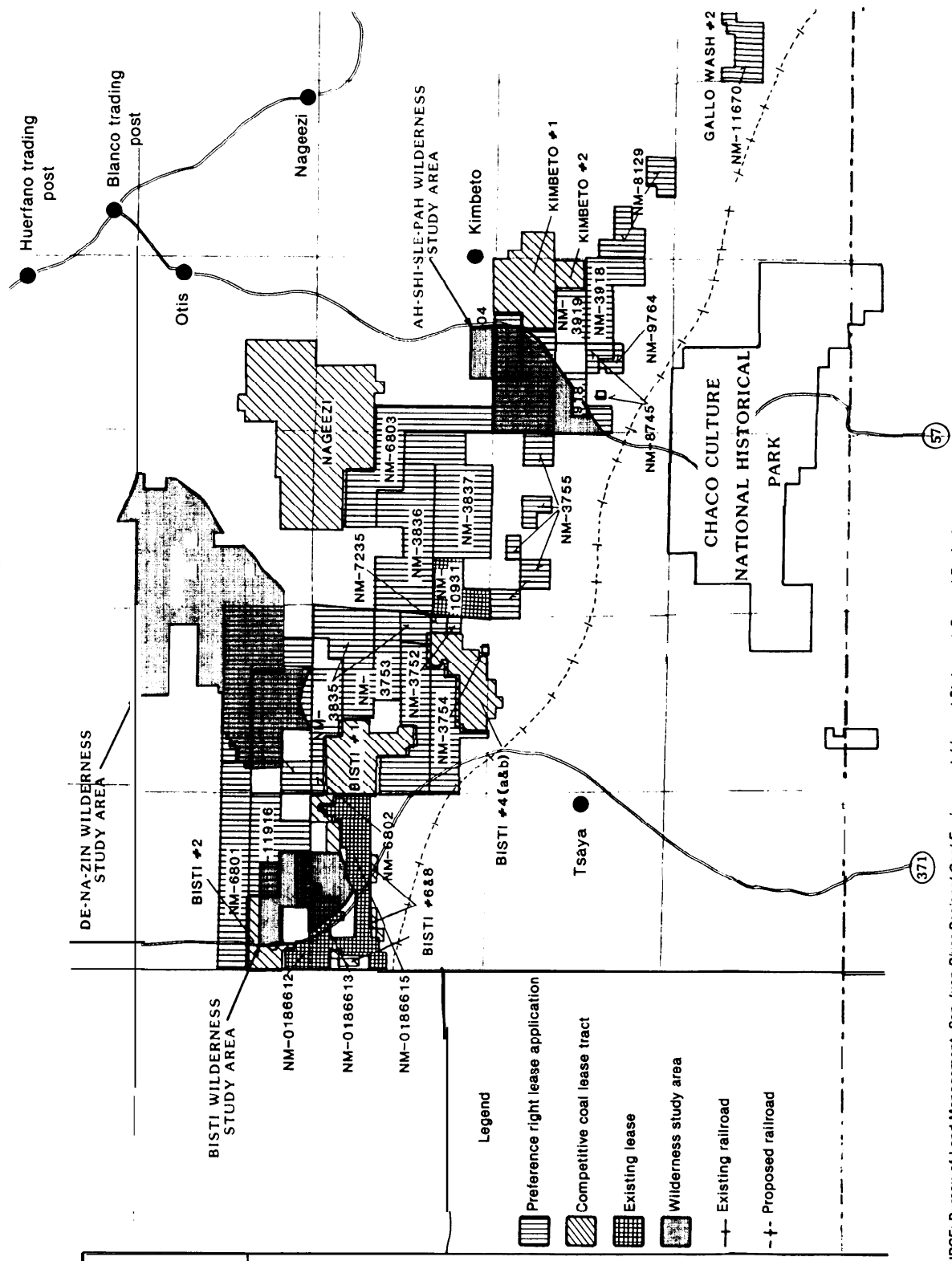
The stipulations imposed on a PRLA can have a significant impact on its development potential. Final showings must reflect the effects that proposed lease stipulations are expected to have on the "commercial quantities" test. In San Juan, the first lease stipulations for PRLAs were developed as a result of the draft Environmental Assessment for Coal Preference Right Leasing in spring 1981. More stipulations were developed and the earlier ones refined when PRLAs were incorpo-

rated in the second regional draft EIS in fall 1983 (5). As a result of these stipulations, industry has been required to revise its proposed mine designs and the "final showings" based on them. Consequently, all showings submitted to date may be considered preliminary, and BLM may request new "final showings" based on the current stipulations (3). Further revisions could be possible as additional data on environmental compatibility are collected within the region (which has not yet held a first round lease sale). BLM has determined that approximately 45 percent of the area covered by the 26 PRLAs pending in San Juan is acceptable for surface mining (5), but controversy surrounds the six PRLAs that underlie Wilderness Study Areas (WSAs) (see fig. 8).

While many legal, administrative, and procedural issues related to the PRLAs have been addressed by DOI and the courts, a number of new questions are likely to arise as the applications are processed. It is clear that the amount of annual coal production from PRLAs could be substantial. However, in recent years, environmental assessment and planning for PRLAs has engendered a considerable amount of controversy. Much of the debate focuses on what critics perceive as the failure of the present PRLA processing system to give full consideration to environmental values. Because there was no comprehensive land use planning mandate when PRLAs were issued, they would only be analyzed in the context of such plans if they are included in current planning efforts. Yet the program regulations (both the 1979 and 1982 versions) allow BLM to process PRLAs outside the cycle of ongoing comprehensive land use plans if including them in a plan would mean delaying their processing beyond December 1, 1984.

This land use planning exemption, coupled with the lack of pre-lease screening procedures (except for the unsuitability criteria), raises doubts about the ability of the PRLA program to minimize the environmental risk of issuing preference right leases. As in other instances where final decisions on environmental protection and impact mitigation are deferred to the mine plan stage, considerable doubt surrounds the willingness of regulatory agencies to deny a permit rather than accommodate mining decisions.

Figure 8.—Relation Between Wilderness Study Areas and Coal Tracts in the Northern Portion of the San Juan River Region



SOURCE: Bureau of Land Management, San Juan River Regional Coal Environmental Impact Statement, Second Draft (October 1983).

A second source of controversy is the differences in specificity between the 1979 and 1982 regulations about the contents of environmental reviews required to comply with the *Berklund* decision. The 1979 regulations required applicants, as part of their "initial showing," to provide a brief description of existing land uses on and adjacent to the PRLA; known geologic, visual, cultural, or archaeological features on the tract; and known wildlife habitat and habitats of threatened or endangered plant and animal species that may be affected by mining operations. Moreover, the 1979 program required an initial showing to include a brief description of planned measures to prevent or control fire; to mitigate or prevent soil erosion, ground and surface water pollution, damage to wildlife or its habitat, air and noise pollution, hazards to public health and safety, and impacts to the social and infrastructure systems of local communities; as well as a description of any plans the applicant might wish to submit pertaining to proposed reclamation procedures. All of these requirements were eliminated in 1982, and replaced with a blanket statement authorizing the Department to request or the applicant to submit any "information necessary to conduct an environmental analysis of the proposed mining operation, formulate mitigating measures and lease terms and determine commercial quantities" (34 CFR 343 C).2-I (d)).

The 1979 PRLA regulations also specified the contents of EAs or EISs on PRLAs:

1. an evaluation of direct and indirect potential impacts including cumulative impacts on the physical and socioeconomic environment;
2. an evaluation of the technical and **natural** potential for reclamation;
3. an evaluation of reasonable alternatives to leasing, including exchange possibilities;
4. recommended lease terms and special lease stipulations to prevent unacceptable environmental or social impacts; and
5. specific environmental protection or mitigation procedures.

In 1982, DOI eliminated these regulations, noting that such standards would be dealt with through internal agency memoranda and directives. To

date, three instruction memoranda concerning PRLA processing and compliance with NEPA have been issued. Although some BLM officials feel that the requirements listed above are still met during EA/EIS preparation, some field personnel argue that the departmental procedures do not provide sufficient guidance.

The elimination of the guidelines for environmental showings and analyses during the processing of PRLAs has captured the attention of environmental groups, who have threatened to reopen the *Berklund* case. These groups contend that environmental analyses to date have been inadequate with regard to discussion of reclamation, water resources protection, and the impact of leasing on wilderness areas. Furthermore, environmental groups argue that those analyses do not include sufficient detail on mitigation techniques to assure environmental compatibility, do not define specific lease stipulations, and fail to investigate alternatives to leasing such as exchanges. Proponents of the current (1982) PRLA program contend that the requirements for application of the 20 unsuitability criteria to all PRLAs, preparation of an EIS or EA for all PRLAs, and inclusion of mitigation requirements in a final showing provide adequate environmental protection prior to leasing—especially given the detailed analysis at mine plan review.

An additional concern about PRLAs is their significance to regional leasing levels. For example, in the San Juan coal region, PRLAs are estimated to contain one-half to two-thirds of the surface minable coal (5). In part because it was assumed that the regional leasing level in the San Juan Basin would reflect the large capacity of PRLAs, BLM's planning for competitive leasing in the region focused on a relatively limited area. The unexpectedly high regional leasing level then required an accelerated regional planning effort. This situation was compounded by BLM's decision to include processing the PRLAs only as a "no action" alternative in the first draft regional lease sale EIS. That decision was criticized widely, and partly as a result, a second draft EIS had to be prepared which included issuance of the PRLAs **in the action alternatives considered. However, the recently issued draft** EIS on the Powder

River Round Two lease sale also included processing 67 PRLAs in the “no action” alternative.

Since mid-1983, BLM has been reviewing its PRLA processing procedures, in part in response to the issues discussed above, but no additional changes have been made to the regulations. Unless concerns about the adequacy of environmental assessment of PRLAs are resolved to the reasonable satisfaction of all parties, PRLA processing probably will be stalled by its critics. This may involve the preparation of EISs for **all** PRLAs. Under the present discretionary provisions of the regulations, BLM had planned to prepare EAs (rather than EISs) in processing most PRLAs.

Among environmental groups, this was a cause for concern because of the diminished scope, preparation requirements, and public involvement required for EAs as compared with EISs. This position has now changed, and the Bureau reports it is preparing EISs for “most” PRLAs (4). Further, it may be necessary to require that **all** PRLAs be incorporated in land use and activity planning in order to ensure adequate environmental protection, even though the courts have ruled that this is not necessary under present laws and regulations. Consequently, congressional action may be required if further stalling of the processing of PRLAs is to be avoided.

ENVIRONMENTAL PROTECTION

In addition to the specific requirements of FCLAA and FLPMA related to planning and environmental assessment, a wide range of other laws **provide the context against which environmental compatibility is judged. Some of these laws are incorporated in the leasing process directly** (e.g., unsuitability criteria derived from the Surface Mining Act, or the Endangered Species Act), while others are addressed primarily during mine plan review (e.g., Clean Air Act). These are listed below. A more detailed discussion of the Surface Mining Control and Reclamation Act, the National Environmental Policy Act, and the Clean Air and Water Acts, and how they affect the Federal coal leasing program may be found in appendix A.

- **Act of September 28, 1976:** Provides for the regulation of mining activity within, and to repeal the application of mining laws to, areas of the National Park System.
- **Antiquities Act of 1906:** Regulates antiquities excavation and collection (including fossil remains).
- **Archaeological and Historical Preservation Act of 1974; Archaeological Salvage Act:** Provides for recovery of data from areas to be affected by Federal actions; provides for preservation of data (including relics and specimens) at every Federal construction project.

- **Bald Eagle Protection Act of 1969:** Protects bald and golden eagles.
- **Clean Air Act:** Establishes air quality standards; sets requirements for areas failing to meet standards; provides for prevention of significant deterioration of air quality in clean air areas; may require a Federal permit.
- **Clean Water Act:** Establishes water quality goals and requires States to set standards for meeting those goals; imposes effluent limitations on discharges from point sources; requires permits for discharges.
- **Endangered Species Act of 1973:** Protects endangered and threatened species and critical habitat affected by Federal actions; requires prior consultation with Fish and Wildlife Service.
- **Fish and wildlife Coordination Act of 1934:** Requires consultation about water resource development actions that might affect fish or associated wildlife resources.
- **Historic Preservation Act of 1966 (as amended):** Establishes systems of classifying properties on or eligible for inclusion on National Register of Historic Places; mandates Federal agency consultation with Advisory Council and State historic preservation officers.

- **Migratory Bird Treaty Act of 1918:** Requires enhancement and prevention of loss of migratory bird habitats.
- **Multiple Use-Sustained yield Act of 1960:** Requires management of National Forests under principles of multiple use so as to produce a sustained yield of products and services.
- **National Environmental Policy Act of 1969:** Makes environmental protection part of the mandate of every Federal agency; requires detailed environmental impact statements for major Federal actions significantly affecting the quality of the human environment.
- **National Forests Management Act of 1976:** Provides for a comprehensive system of land and resource management planning for National Forest System lands.
- **Noise Control Act of 1972:** Requires publication of information on limits of noise required to protect public health and welfare; preempts local control of railroad equipment and yard noise emissions.
- **Resource Conservation and Recovery Act:** Establishes guidelines for collection, transport, separation, recovery, and disposal of solid waste.
- **Safe Drinking Water Act of 1977:** Establishes mechanism for National Primary Drinking Water Standards.
- **Soil and Water Resources Conservation Act of 1977:** Requires appraisal by Secretary of Agriculture of information and expertise on conservation and use of soils, plants, woodlands, etc.
- **Surface Mining Control and Reclamation Act of 1977:** Establishes performance standards for environmental protection in surface mining operations; mandates State permit programs to ensure performance standards can be met; allows States to have primary enforcement responsibility under approved programs; requires States to establish procedures for designating areas unsuitable for mining; requires surface owner consent on split estate lands.
- **Wild and Scenic Rivers Act:** Provides for preservation of certain rivers or portions thereof in their natural state.
- **Wilderness Act of 1964:** Provides for establishment of wilderness reserves; requires preservation of wilderness areas in an unimpaired condition.

CHAPTER 3 REFERENCES

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