

## CHAP. 2 — DESCRIPTIONS AND COMPARISONS OF ALTERNATIVES

### Watershed

#### Treatment Measures.

Watershed treatment measures would be implemented to increase forage production on 6,400 acres in 4 allotments. About 320 detention-retention dams would be built; however, their locations are not currently known. Refer to Figure 2-6 for the location of severe and critical erosion condition areas.

Seeding detention-retention dams and utilizing runoff diversion structures and retention ponds wherever mineral developments disturb the surface, would minimize adverse impacts to soils.

#### Land Tenure Adjustment

The approximately 16,000 acres available for disposal (Figure 2-7) would be small, isolated tracts, surrounded by State and private lands. *These lands meet the basic FLPMA requirements for disposal. They have been identified in this document so they can be considered in potential land exchanges or sales. Exchanges would be the preferred method of disposal. Site specific analysis would be required prior to any exchange or disposal effort.* Approximately 10,000 acres of land would be acquired if opportunities become available. These lands contain oil shale and oil and gas and would most likely be acquired through an exchange with the State of Utah. The locations of lands to be acquired or disposed of under this alternative are displayed in Figures 2-7 and 2-22.

## BALANCED USE ALTERNATIVE

### Leaseable Minerals

#### Oil and Gas.

*Implementation of this alternative provides for consideration of both mineral and renewable resource values.*

*Areas in Categories one, two, and three would be administered according to standard laws and regulations (see Appendix 4).*

*Special mitigating measures would be required for various renewable resource values. Wildlife values include: Deer fawning and elk calving areas, the Monument Ridge Deer Migration Corridor, crucial winter elk habitat such as oil chainings and burns, and sage grouse leks. Watershed values include: Floodplains, severe and critical erosion areas, perennial streams, and public water reserves. Recreation values include VRM Class II areas, three scenic travel corridors. The Green River Corridor, from the boundary of the Dinosaur National Monument to Ouray, and the White River*

*Corridor, upstream from the proposed damsite, would receive special mitigation to protect important wildlife, watershed, and recreation values. Total area affected would be approximately 460,000 acres.*

*Surface occupancy would not be allowed on approximately 16,000 acres. No surface occupancy would provide full protection for wildlife, watershed, and recreation values along the Green River Corridor, adjacent to the Dinosaur Monument, from Ouray to Tabyago canyon, and the White River Corridor, downstream from the proposed damsite. In addition, two scenic overlooks, five campsites, two geological features, the Boulevard Ridge Watershed Study Area, and the Book Cliffs Natural Area would be fully protected.*

*Leases would not be issued within the Naval Oil Shale Reserve.*

#### Oil Shale.

Approximately 42,000 acres would be made available for underground mining and 6,000 acres, for in situ development (Figure 2-24). Two to four oil shale tracts consisting of 10,500 to 21,000 acres could be leased within these areas after implementation of the RMP. Additional exploratory drilling would be required on approximately 9,500 acres which are outside of Known Oil Shale Lease Areas before a competitive leasing program would occur. Scheduling for tract delineation and size of potential tracts would be determined prior to any leasing.

Mitigation would be the same as under the Resource Protection Alternative.

#### Tar Sand.

*Both mineral and renewable resource values would be considered when making land use allocations.*

*Areas in Category one and two (Figure 2-25) would be administered according to standard laws and regulations (refer to Appendix 4 for more discussion).*

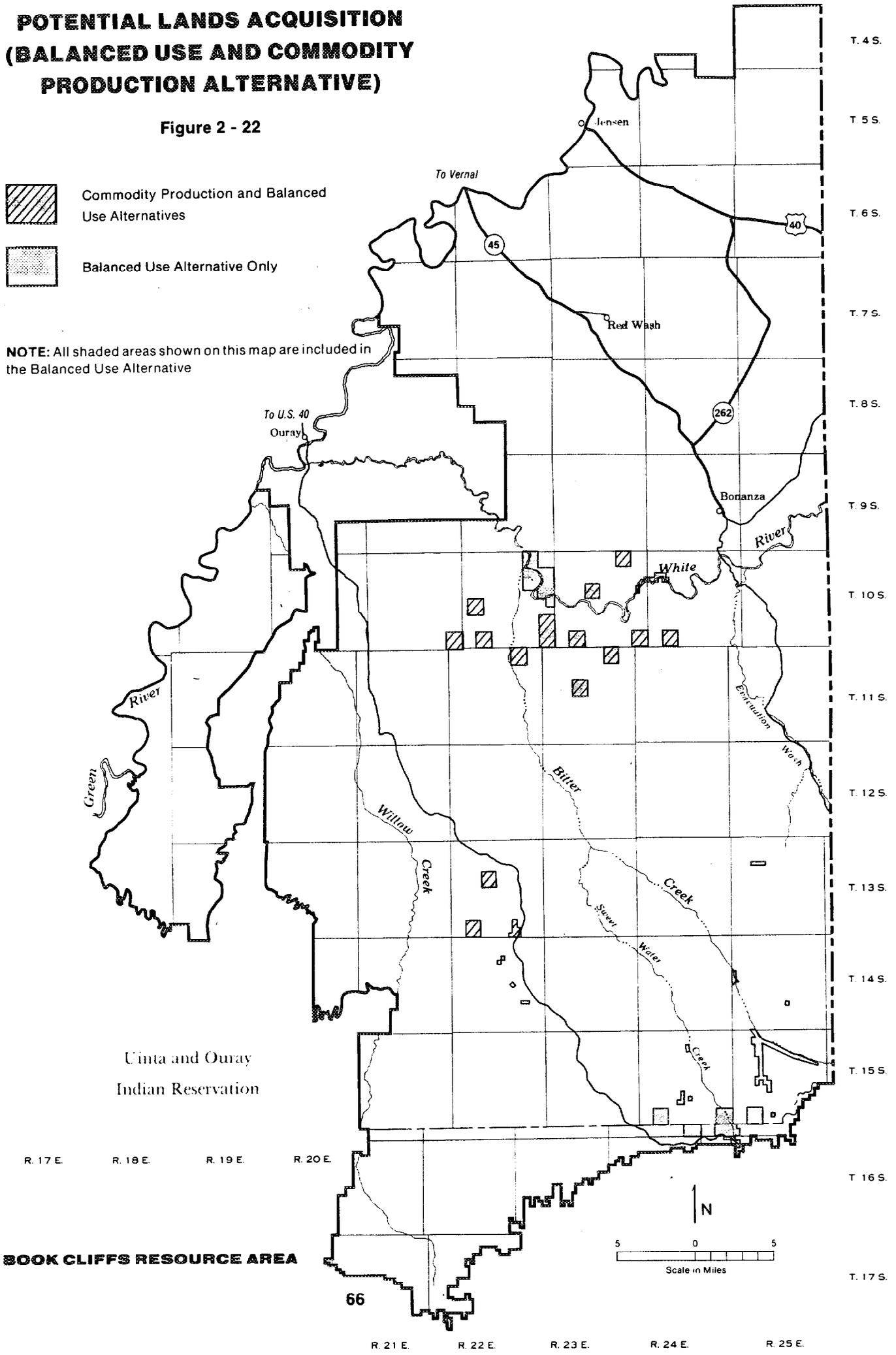
*Additional special mitigation would be required for various resource values. Wildlife values include: Deer fawning and elk calving areas, the Monument Ridge Deer Migration Corridor, and crucial winter elk habitat such as old burns and chainings. Watershed resources would include severe and critical erosion areas and perennial streams. Recreation values would include VRM class II areas that are within moderate potential areas for tar sand development. Mitigation would be developed during an environmental analysis of a proposed mining project. Mitigation could include such things as*

# POTENTIAL LANDS ACQUISITION (BALANCED USE AND COMMODITY PRODUCTION ALTERNATIVE)

Figure 2 - 22

-  Commodity Production and Balanced Use Alternatives
-  Balanced Use Alternative Only

NOTE: All shaded areas shown on this map are included in the Balanced Use Alternative

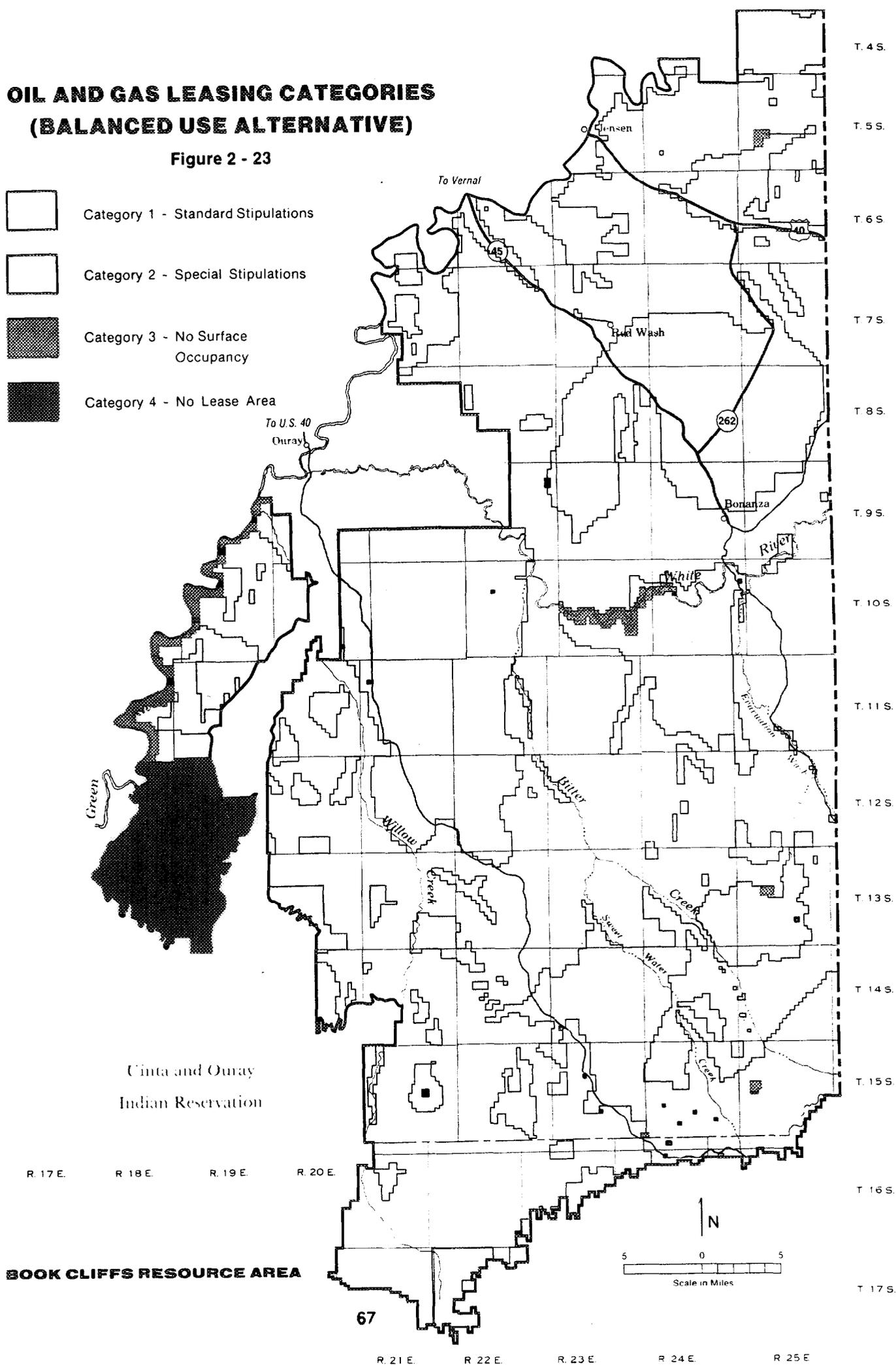


**BOOK CLIFFS RESOURCE AREA**

# OIL AND GAS LEASING CATEGORIES (BALANCED USE ALTERNATIVE)

Figure 2 - 23

-  Category 1 - Standard Stipulations
-  Category 2 - Special Stipulations
-  Category 3 - No Surface Occupancy
-  Category 4 - No Lease Area



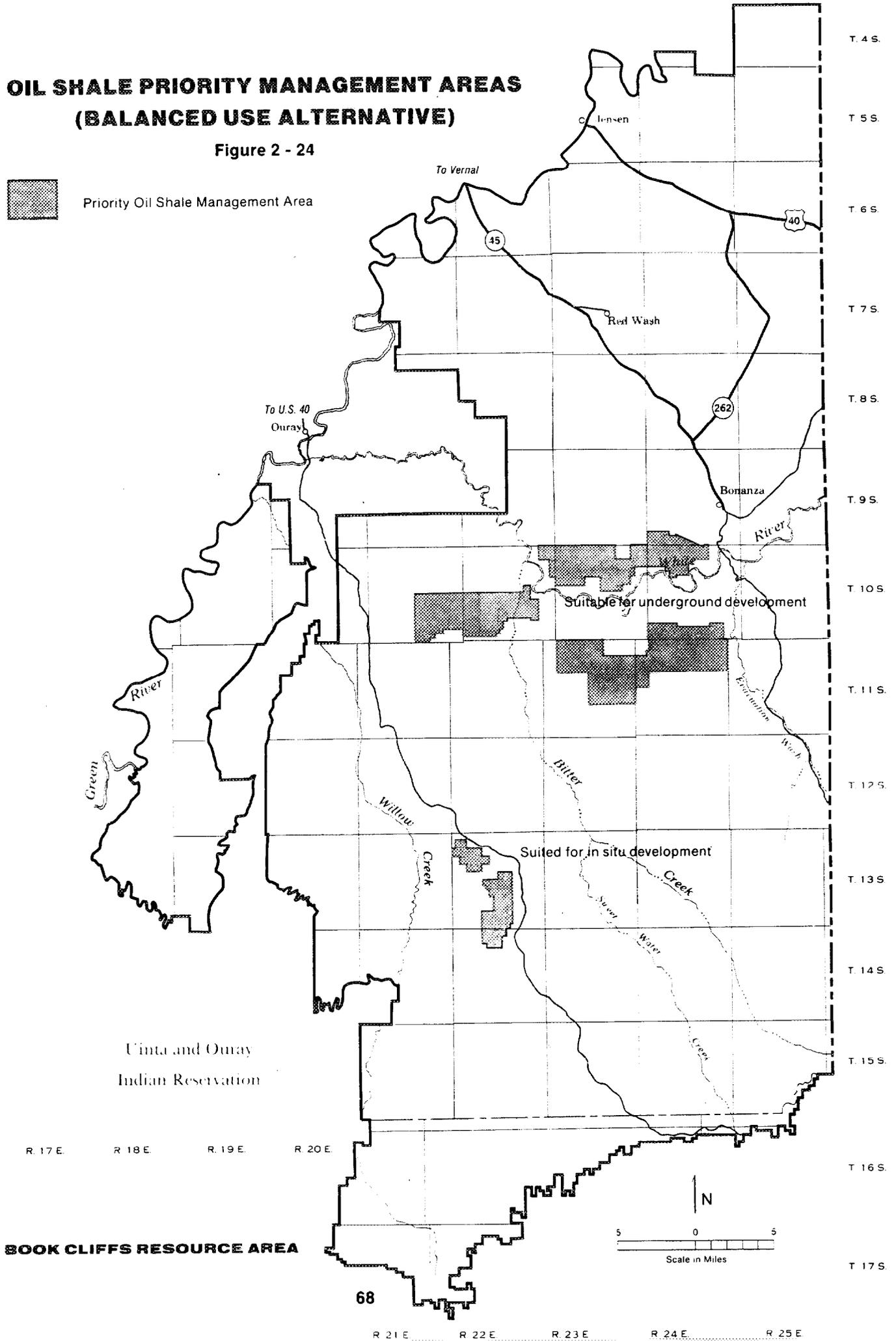
**BOOK CLIFFS RESOURCE AREA**

# OIL SHALE PRIORITY MANAGEMENT AREAS (BALANCED USE ALTERNATIVE)

Figure 2 - 24



Priority Oil Shale Management Area

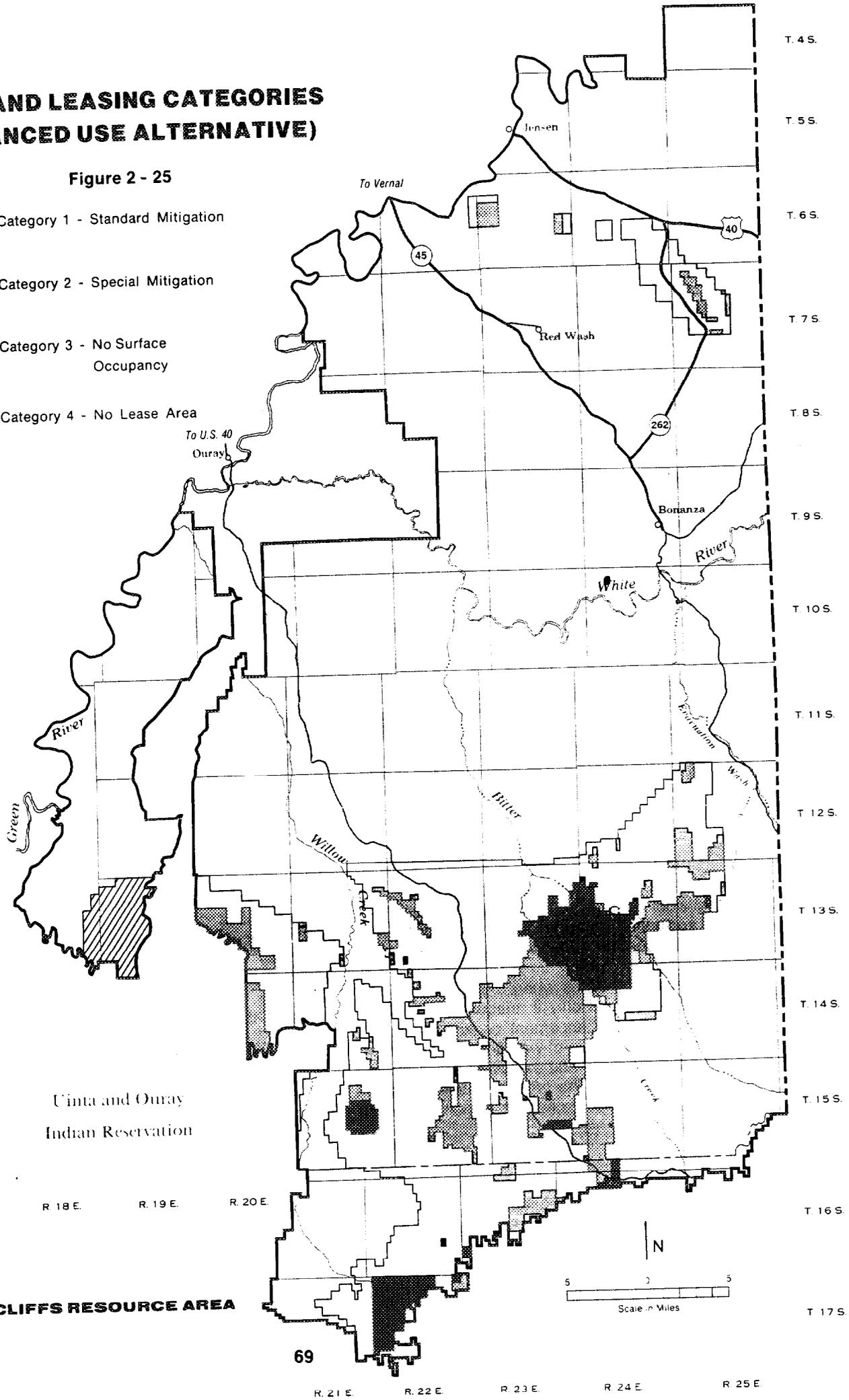


BOOK CLIFFS RESOURCE AREA

# TAR SAND LEASING CATEGORIES (BALANCED USE ALTERNATIVE)

Figure 2 - 25

-  Category 1 - Standard Mitigation
-  Category 2 - Special Mitigation
-  Category 3 - No Surface Occupancy
-  Category 4 - No Lease Area



Uinta and Ouray  
Indian Reservation

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*habitat development prior to project initiation. These areas would total approximately 72,000 acres.*

*Surface occupancy would not be allowed in some areas because of conflicts with certain renewable resource values (Category 3). This designation would preclude tar sand development although conventional oil and gas may still be developed. Wildlife habitat would include McCook Ridge winter deer and elk habitat and sage grouse leks. Public water reserves, four campsites, and the Book Cliffs Divide Scenic Corridor would also be closed to occupancy. VRM Class II areas that are within low potential tar sand areas and the Boulevard Ridge Watershed Study Area, would not be available for development.*

*The area involved totals 27,000 acres.*

### Salable Minerals

#### Sand and Gravel.

Sales would be conducted within designated areas or on a case-by-case basis outside of the identified areas (Figure 2-3).

#### Building Stone.

Current collection areas would be retained while protecting or mitigating other resource values. Approximately 21,500 acres of land currently identified as the Buck Canyon, Johnson Draw, and Nutters Hole collection areas would be designated as building stone collection areas (Figure 2-4).

### Right-of-Way Corridors

Approximately 235 miles of corridors consisting of 93,000 acres would be designated under this alternative. To give additional protection to wildlife habitat, severe and critical erosion areas, visual resources, and productive woodlands, 23,000 acres of land would be designated as exclusion areas where rights-of-way and corridors would be allowed only if adequate mitigation, reclamation, or habitat enhancement could be accomplished. Applications for rights-of-way and corridors outside of designated corridors and exclusion areas would be considered individually. The proposed corridors and exclusion areas for this alternative are shown in Figure 2-26.

### Forage

Forage related actions for this alternative are outlined by allotment in Appendix 5 (Forage Actions by Alternative) and are shown by location in Figure 2-27.

### Grazing Practices.

Under this alternative, grazing systems would be designed to benefit key plants for livestock, wildlife, watershed, etc. Season of use would be adjusted using the balanced use concept. Existing AMPs would be revised to be consistent with balanced use. New AMPs would be developed on most of the "I" allotments. Current management would continue on all "M" and "C" allotments without existing AMPs. Fewer high potential forage areas would be disturbed by energy mineral developments under this alternative than under the Commodity Production Alternative. Fewer restrictions on livestock production would be required under this alternative than under the Resource Protection Alternative.

### Livestock Adjustments.

"*Livestock Use Levels*" as outlined in Appendix 5 (Forage Actions by Alternative) would be used as a basic guide in setting stocking levels. The difference in AUMs between average use and grazing preference would be sufficient to satisfy other use demands for wildlife, wild horses, minerals, etc.

The number of AUMs authorized for livestock would be **81,316**. This is **21,599** AUMs less than active preference.

### Range Treatments.

Under this alternative, range improvements would be developed to improve the availability of unutilized forage and to develop additional new forage where a potential exists to benefit livestock, wildlife, and wild horses. Prescribed burns or chemical treatment would be used in the canyon bottoms and upland bench sites with dense decadent stands of sagebrush. This method would also be used in areas with over mature stands of browse and in previously chained areas to prevent reinvasion of pinyon and juniper. Clear cuts would be used on sites dominated by closed stands of pinyon and juniper. Mitigating measures for the proposed treatments as part of the proposed action are described in Appendix 8 (Mitigating Measures for Land Treatments).

### Implementation Schedule.

The implementation schedule would be the same as under the Resource Protection Alternative.

### Riparian Habitat, Floodplains, and Crucial Wildlife Habitat

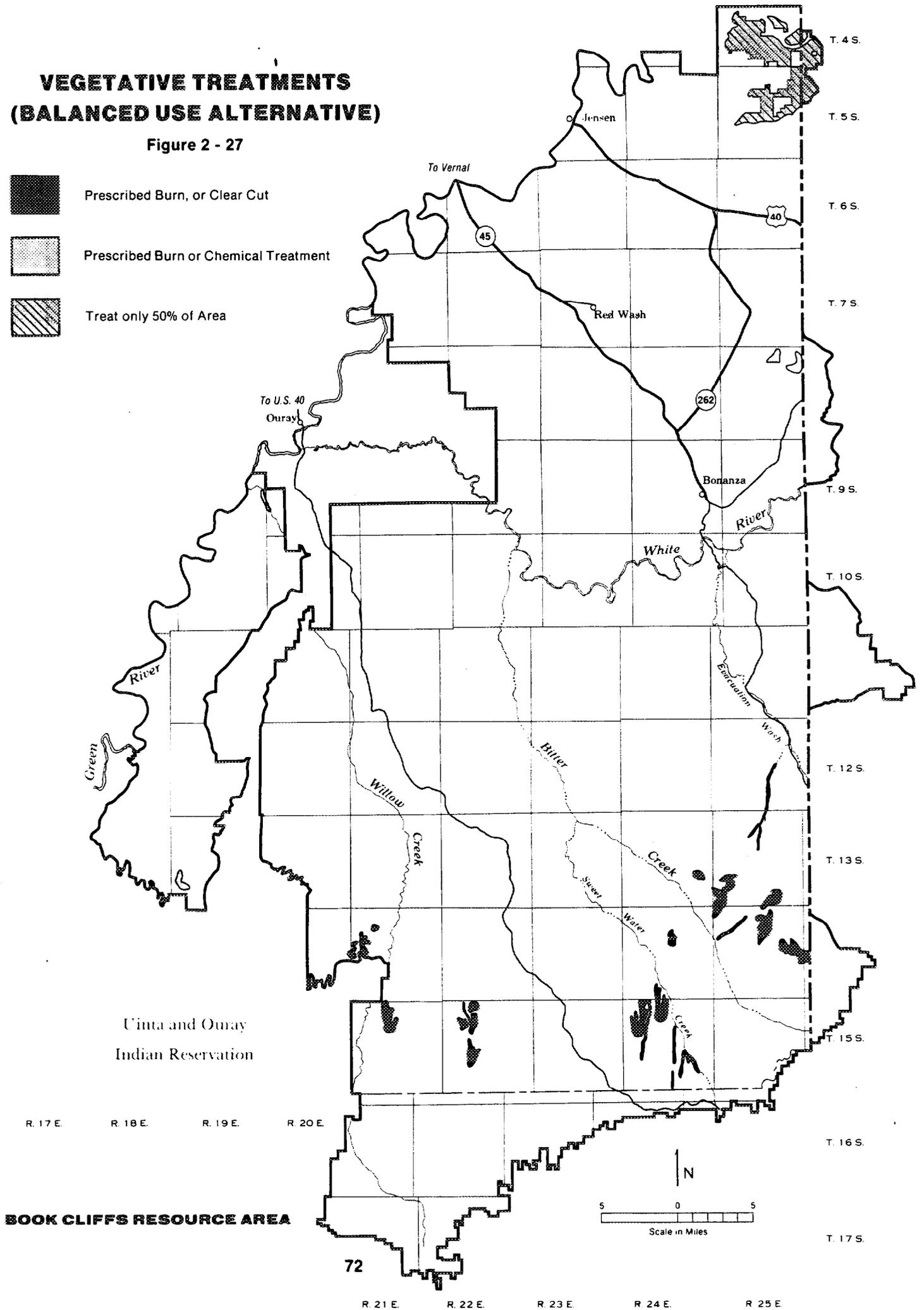
Approximately 210 acres in the Sweetwater allotment and 260 acres in the Green River AMP would be protected from livestock grazing to improve riparian habitat and floodplains. To restrict the livestock, BLM would build and maintain approximately 10 miles of fence.



# VEGETATIVE TREATMENTS (BALANCED USE ALTERNATIVE)

Figure 2 - 27

-  Prescribed Burn, or Clear Cut
-  Prescribed Burn or Chemical Treatment
-  Treat only 50% of Area



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### Costs.

Approximately **\$992,000** to **\$1,090,000** would be used for new livestock improvements funded by BLM. This does not include cooperative projects, reconstruction or maintenance. The costs for this alternative are higher only because more projects would be accomplished to improve forage.

### Wildlife and Wild Horses

The approximately 9,000 acres of prescribed burns would concentrate on mature sagebrush canyon bottoms, mature browse stands and old chainings and burns that are becoming overgrown. Two thousand acres of pinyon/juniper would be chained or clearcut to improve deer and elk forage in crucial winter habitats. Natural regeneration, mechanical reseeding and/or tubeling transplants could be used to reestablish vegetation.

Four habitat management plans, as specified in the Resource Protection Alternative, would be prepared. A wild horse management plan would be prepared for the Hill Creek herd.

Seasonal restrictions on mineral development would be the same as described in the Resource Protection Alternative with the exception that acreages afforded protection under this alternative would be slightly less.

Surface-disturbing activities associated with mineral exploration and development, woodland harvest, etc. would require reclamation. Disturbed wildlife habitat would be required to be returned to a state comparable to that which existed prior to development.

### Woodlands

Public utilization of woodlands would be encouraged in preference to chainings or prescribed burns to improve forage for livestock or wildlife.

Allowable annual cut from managed pinyon-juniper stands would be 3,115 cords per year; from cottonwood stands along the Green River, 70 cords; from Douglas fir, 265 cords; and 820 cords from old chainings, burns, and unproductive woodlands for a total of 4,270 cords per year.

### Recreation

**Up to 554,000 acres would be designated as limited or closed to ORV use.** Closed areas would include the Boulevard Ridge Watershed Study Area, the Book Cliffs Natural Area, and the White River Corridor from the proposed dam site to the Indian Reservation. Critical wild horse and **most crucial** wildlife areas, recreational and **important and accessible** cultural sites, critical and severe erosion areas, **sage grouse leks,**

and three scenic corridors would be included in the limited category. Lands next to the Uintah and Ouray Indian Reservation would be designated as limited for ORV use (Figure 2-28).

Existing recreation sites that have the highest potential for development would be retained including five camp sites (320 acres), **two** scenic overlooks (**330** acres), and one geologic feature (60 acres). Additional areas for future protection would be: 1) one geologic feature, Duck Rock (10 acres), and 2) the size of the scenic overlook, Point of Pines, would be increased from 320 to 480 acres (Table 2-2).

A corridor would be established along the Green River extending 0.5 miles or line of sight, whichever is closer, from the center of the river. Within this corridor from Tabyago Canyon to Ouray (9,150 acres) and the first four miles of river below Dinosaur National Monument (320 acres), the placement of structures, developments, or surface disturbance that would degrade scenic quality or recreation values of the river corridor would not be permitted. Developments outside this corridor that would be visible from the river would be designed to minimize impacts to the visual quality standard for that area. The remaining river segment between Ouray and to within four miles of Dinosaur National Monument (4,930 acres) would be afforded partial protection. All developments or surface disturbance would be designed to minimize impacts to visual quality standards.

### Watershed

#### Treatment Measures.

Watershed treatment measures would be implemented on 12,300 acres in severe erosion condition and 66,600 acres in critical erosion condition. Acreages are located on 23 allotments with more than 10 percent of their area in severe or critical erosion condition. Approximately 3,900 detention-retention dams would be constructed; however, the exact number and location of structures are not currently known. Refer to Figure 2-6 for the location of severe and critical erosion condition areas.

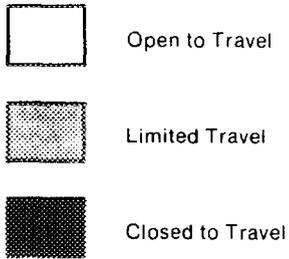
Mitigation would be the same as under the Resource Protection Alternative.

### Land Tenure Adjustment

**Approximately 16,570 acres of land would be available for disposal. These lands** would be small, isolated tracts, surrounded by State and private lands (Figure 2-7). **These lands meet the basic FLPMA requirements for disposal. They have been identified within this document so they may be considered in future land exchanges or sales. Exchanges would be**

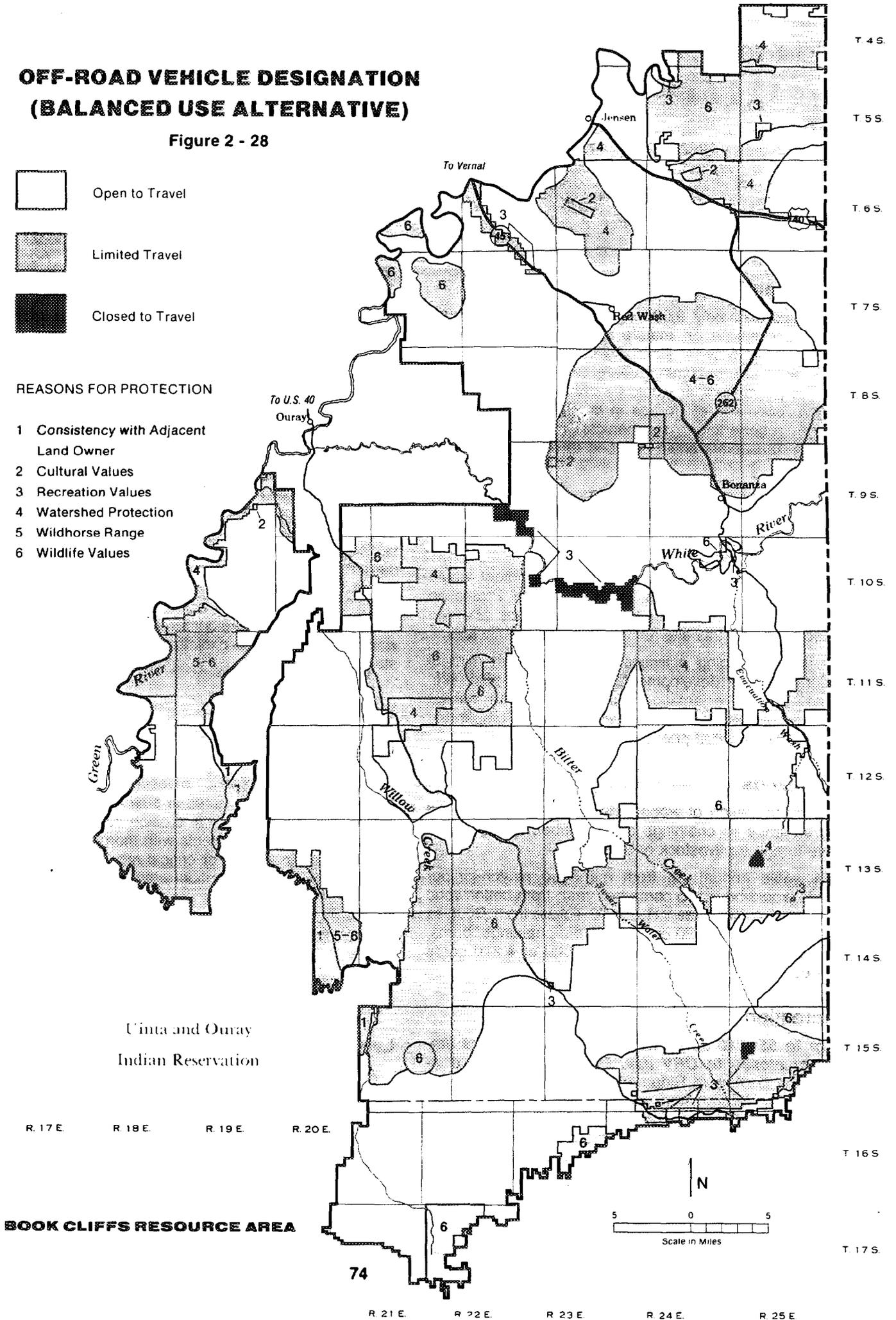
# OFF-ROAD VEHICLE DESIGNATION (BALANCED USE ALTERNATIVE)

Figure 2 - 28



## REASONS FOR PROTECTION

- 1 Consistency with Adjacent Land Owner
- 2 Cultural Values
- 3 Recreation Values
- 4 Watershed Protection
- 5 Wildhorse Range
- 6 Wildlife Values



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*the preferred method of disposal. Site specific analysis would be required prior to any exchange or disposal effort.*

*Approximately 18,700 acres of land would be acquired to facilitate various aspects of public land management should opportunities become available (Figure 2-22).*

### MANAGEMENT GUIDANCE COMMON TO ALL ALTERNATIVES

The following section provides, by program, the management guidance common to all alternatives and thus constitutes a part of each alternative. It includes past management decisions that would continue, proposed management decisions that would be implemented in all alternatives, and procedures and policy common to all alternatives. It is provided here to avoid repetition in Table 2-1.

#### Minerals

##### Leasable Minerals

##### Oil and Gas

Administrative and technical capabilities for oil and gas operations have been established in the Vernal District. The following procedures would be continued under the RMP.

Preliminary environmental reviews and notices of staking would be processed at the district and area levels. Onsite inspections, processing of needed rights-of-way, and field activities for other requests or permits would be administered at the area level.

Applications for permits to drill (APD), sundry notices, other applications to perform work, and compliance reports would be processed at both the district and area levels. Onsite inspections, environmental review, determinations, conditions of approval, and other aspects of the processing of APDs and sundry notices would be handled at the district and area levels.

Drainage determinations and delineation of KGSs would be handled at the state and district levels.

Future oil and gas activities would continue to be subject to further environmental review. Special stipulations for protection of renewable resource values would be developed through an activity plan and attached to future oil and gas leases.

##### Tar Sand

Administrative and technical capabilities for managing tar sand operations are presently at the Utah State Of-

fice although these responsibilities could be delegated in the future to the Vernal District.

Tar sand development would be managed in accordance with the 43 CFR 3140 regulations which would require a detailed development plan as outlined in 43 CFR 3570. These regulations promote orderly prospecting, exploration, testing, development, mining and processing operations and require operating procedures which would avoid, minimize, or correct damage to the environment.

Combined hydrocarbon leases could be obtained in two possible ways. Prior to November 16, 1983, existing oil and gas leases in Special Tar Sand Areas (STSA) could be converted to a combined hydrocarbon lease (CHL). An approved CHL would provide the leaseholder the opportunity to develop either oil and gas and/or the tar sand resource. Applications to convert existing oil and gas leases to CHL's within the BCRA totalled approximately 35,000 acres within PR Spring STSA, 4,000 acres within Hill Creek STSA, and 800 acres within Raven Ridge-Rim Rock STSA. A second method would be through a competitive leasing program. No schedule to offer tracts for competitive lease has been developed.

Site specific environmental documents would be prepared prior to any development.

Combined hydrocarbon leases would be issued using one category system. Oil and gas categories have been separated from tar sand categories in this document to clarify which type of energy mineral resource development may result in the final constraints placed upon lease development (Appendix 4, Specialized Mineral Terminology).

##### Oil Shale

Lease administration of U-a and U-b (White River Shale) including all technical review and compliance would be handled through the BLM Oil Shale Office in Grand Junction, Colorado. These responsibilities could be delegated in the future to the Vernal District Office.

The oil shale program for future leasing is currently being developed with environmental, industry, and governmental input. The procedures and policies would probably involve tract delineation; environmental review; a competitive lease program, including local and state government input; and a lessee's submittal of a detailed development plan (43 CFR 3570). These plans would provide detailed information concerning all aspects of mining and development along with detailed measures for protection of the environment. They would be subject to BLM approval.

##### Gilsonite

Gilsonite leases would be handled through the Utah