

## CHAP. 2 — DESCRIPTIONS AND COMPARISONS OF ALTERNATIVES

### Land Tenure Adjustment

Lands proposed for acquisition are shown in Figure 2-14.

## COMMODITY PRODUCTION ALTERNATIVE

### Leaseable Minerals

#### Oil and Gas.

Approximately 35,000 acres would require special mitigation (Category 2) for sage grouse leks, floodplains and wetlands, public water reserves, perennial streams, the Green River from Dinosaur National Monument to Sand Wash, the White River *Corridor, four campgrounds, one scenic overlook, and two geologic features (refer to Appendix 4)*. Approximately 3,000 acres of key recreation areas including the Green River from Sand Wash to Tabyago would be protected from surface occupancy (Category 3). Refer to Figure 2-15. The remaining lands, 989,000 acres, would be available for lease under Category 1. No land would be withheld from leasing *except for the Naval Oil Shale Reserve*.

#### Oil Shale.

Approximately 84,000 acres would be available for lease for underground mining and 14,000 acres, for in situ development (Figure 2-16). Four tracts consisting of approximately 21,000 acres could be located within these areas after implementation of the RMP. Scheduling for tract delineation and size of potential tracts would be the same under this alternative as are discussed in the Resource Protection Alternative.

Additional exploration drilling data on approximately 33,000 acres outside known oil shale lease areas would be required before a competitive leasing program would be developed.

#### Tar Sand.

*Areas in Category one and two (Figure 2-17) would be administered according to standard laws and regulations (refer to Appendix 4 for more discussion).*

*Additional special mitigation would be required for public water reserves, perennial streams, sage grouse leks, and three campsites.*

*Such mitigation would be developed during an environmental analysis of a specific proposed mining project. Mitigation could include such things as substitute habitat replacement prior to project initi-*

*ation. These areas would total approximately 4,000 acres.*

*Surface occupancy would not be precluded for any areas.*

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

### Salable Minerals

#### Sand and Gravel.

Sales could be conducted to meet demand on areas having sand and gravel deposits (Figure 2-18). Where application is made for sand and gravel disposal outside the identified areas, sales would be conducted on a case-by-case basis. Approximately 12,500 acres of land would be designated as potential sand and gravel disposal sites along the Green and White Rivers and south of Blue Mountain.

Mitigation would be the same as for the Current Management Alternative.

#### Building Stone.

Collection and use of the stone in the in situ oil shale area could be accomplished prior to oil shale development construction through permit stipulations.

### Right-of-Way Corridors

The 330 miles of corridors consisting of 174,000 acres proposed for this alternative have been identified after considering industry's needs and other resource values. The proposed corridors for this alternative are shown in Figure 2-19. Applications for rights-of-way and corridors outside of designated corridors would be considered individually.

### Forage

Forage related actions for this alternative are outlined by allotment in Appendix 5 (Forage Actions by Alternative) and Figure 2-20.

### Grazing Practices.

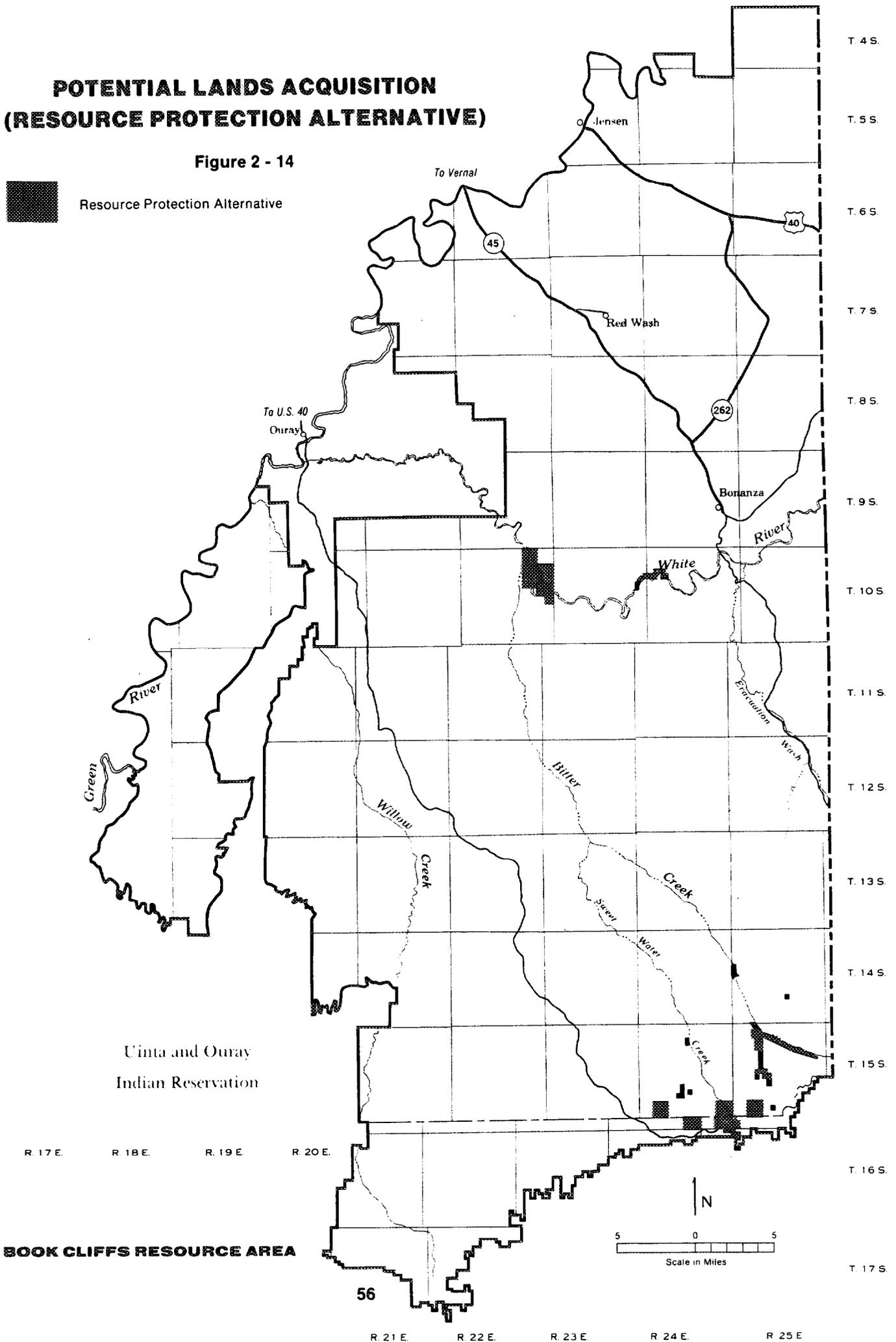
Under this alternative, emphasis would be placed on maximizing livestock production. It would be achieved through revision and implementation of existing AMPs and development and implementation of new AMPs or grazing systems. The new AMPs would be developed primarily on "I" allotments. Current management practices would be continued on a number of "M" allotments i.e., allotments where conditions are satisfactory, the potential for improvement is minimal and significant conflicts would not occur.

# POTENTIAL LANDS ACQUISITION (RESOURCE PROTECTION ALTERNATIVE)

Figure 2 - 14



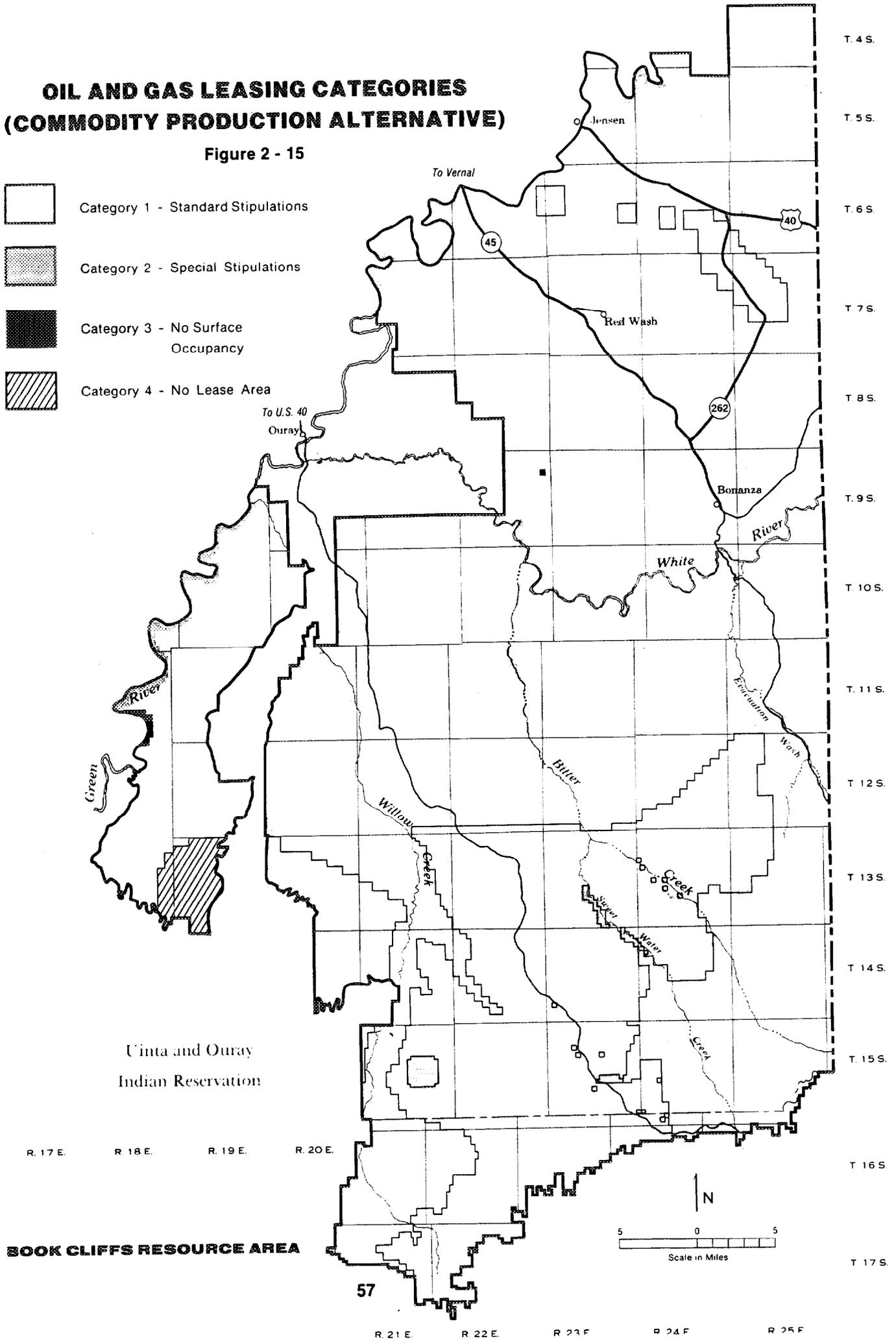
Resource Protection Alternative



# OIL AND GAS LEASING CATEGORIES (COMMODITY PRODUCTION ALTERNATIVE)

Figure 2 - 15

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



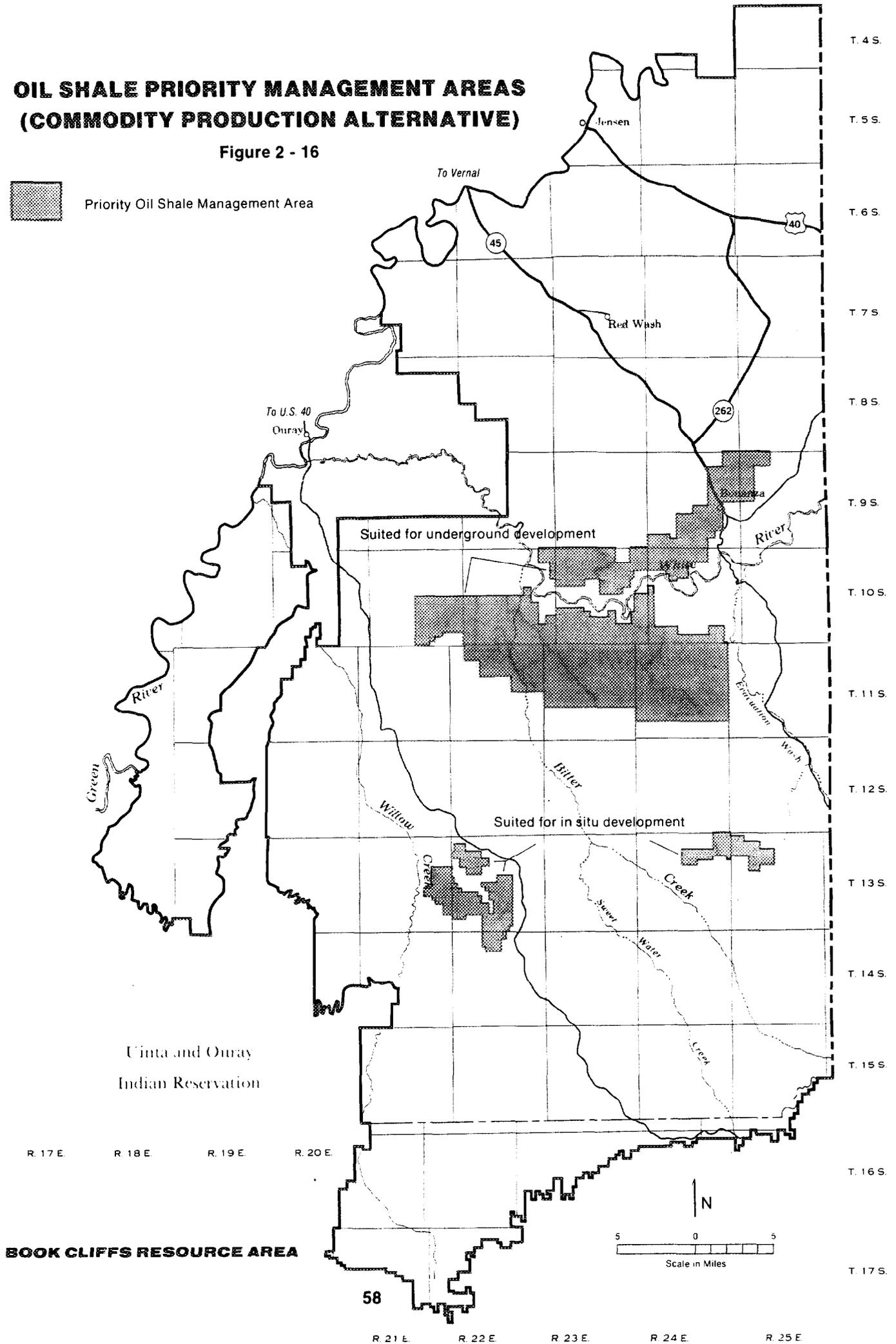
**BOOK CLIFFS RESOURCE AREA**

# OIL SHALE PRIORITY MANAGEMENT AREAS (COMMODITY PRODUCTION ALTERNATIVE)

Figure 2 - 16



Priority Oil Shale Management Area

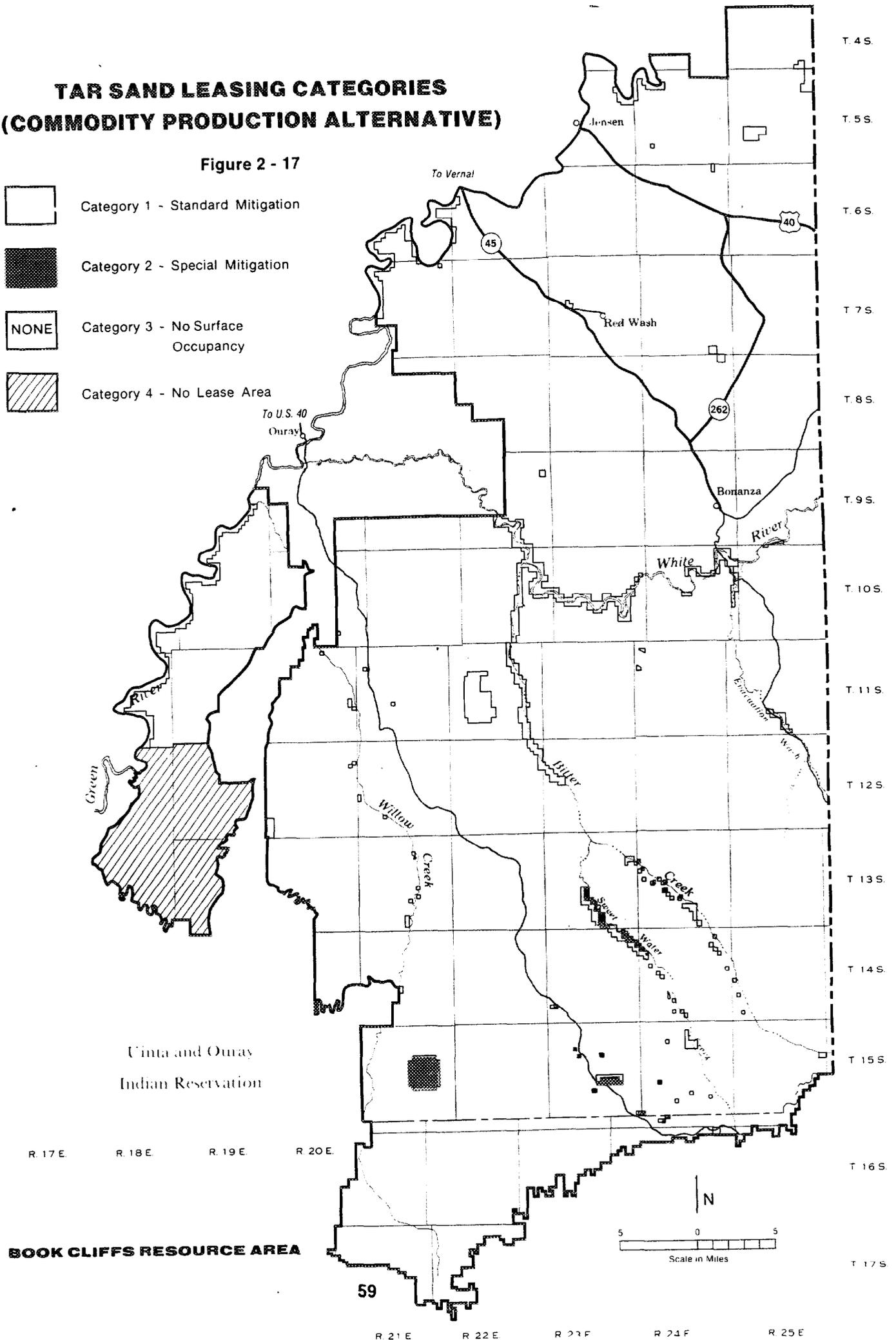


**BOOK CLIFFS RESOURCE AREA**

# TAR SAND LEASING CATEGORIES (COMMODITY PRODUCTION ALTERNATIVE)

Figure 2 - 17

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



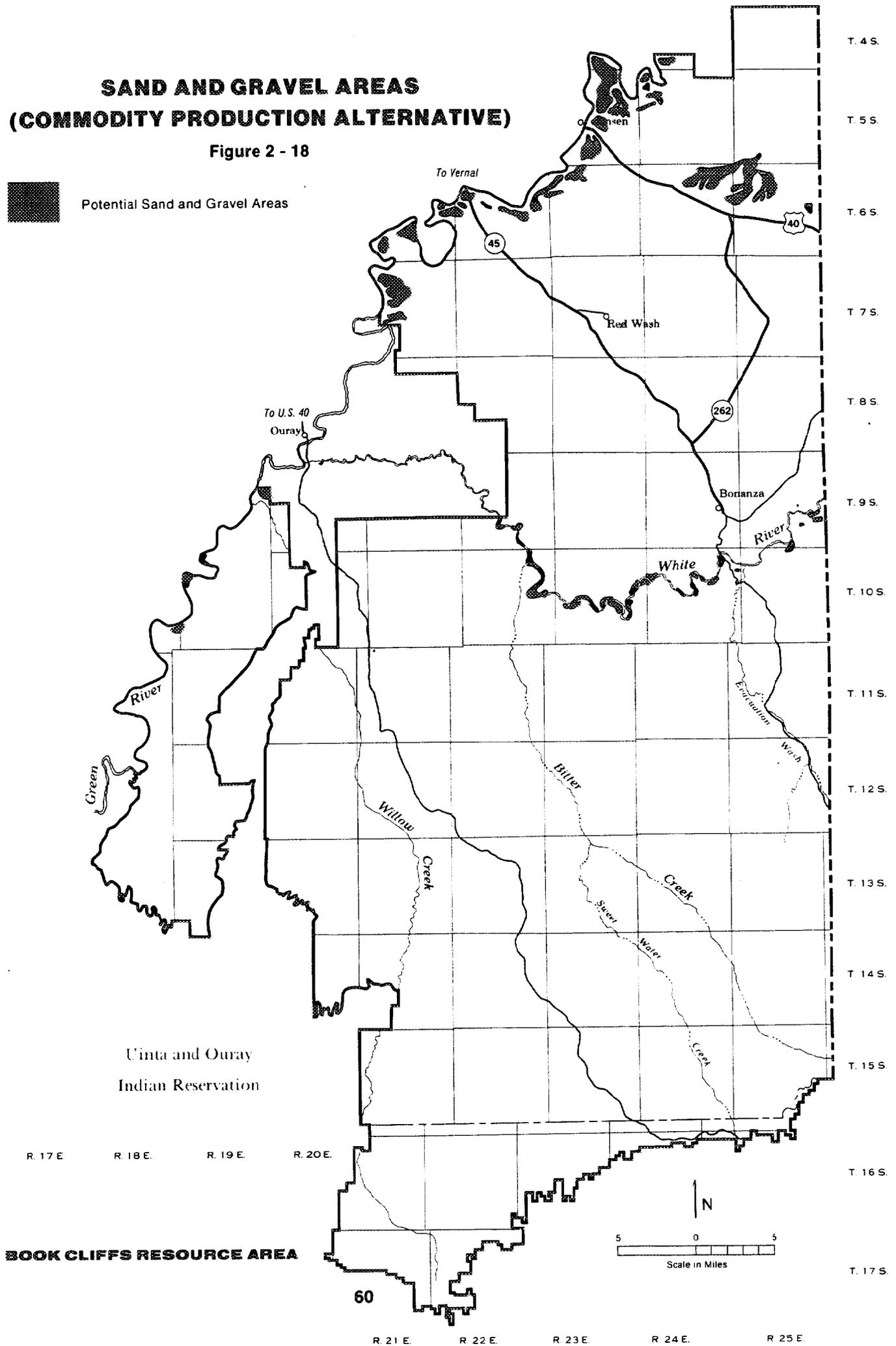
**BOOK CLIFFS RESOURCE AREA**

# SAND AND GRAVEL AREAS (COMMODITY PRODUCTION ALTERNATIVE)

Figure 2 - 18



Potential Sand and Gravel Areas



Uinta and Ouray  
Indian Reservation

R. 17 E. R. 18 E. R. 19 E. R. 20 E.

BOOK CLIFFS RESOURCE AREA

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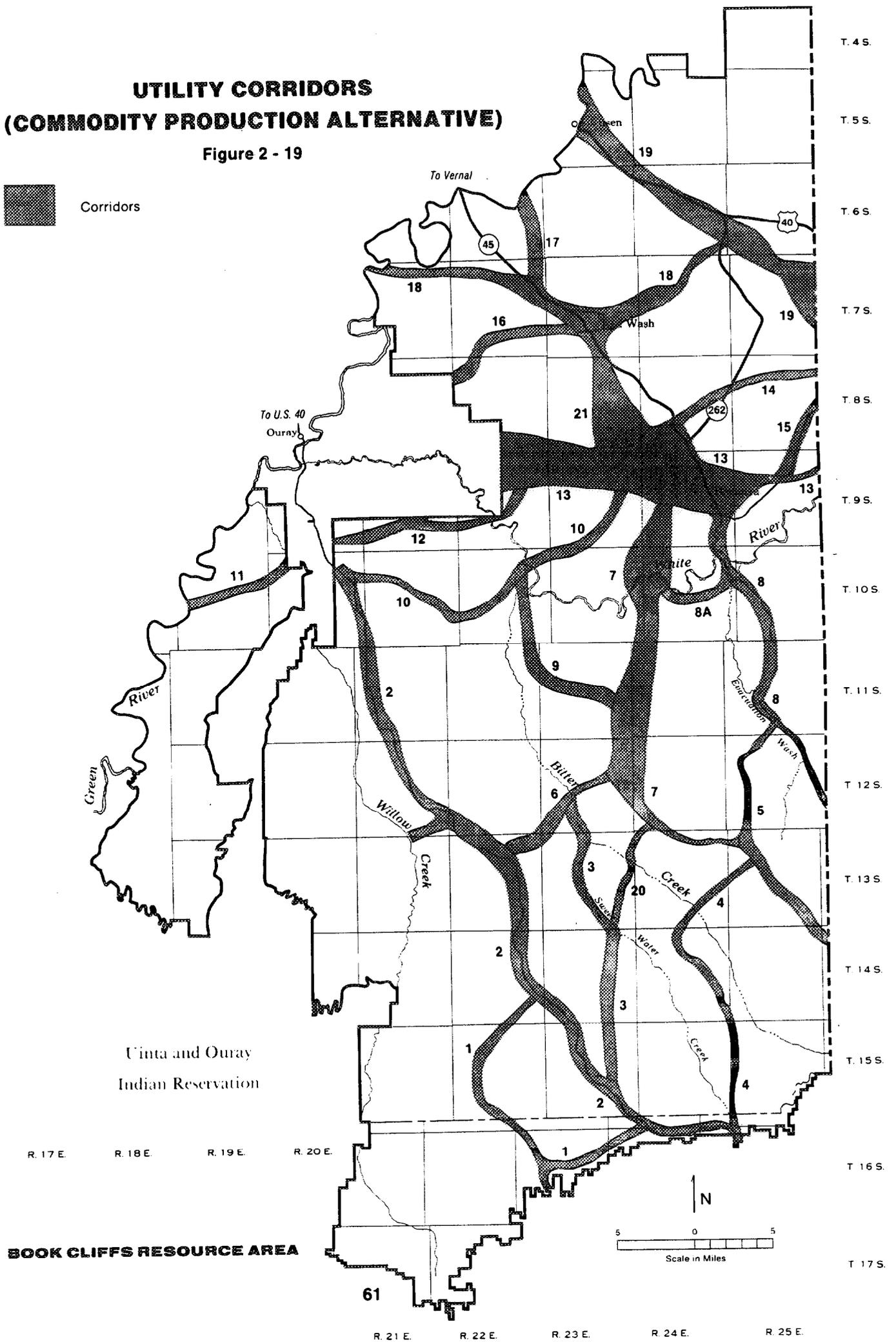
R. 21 E. R. 22 E. R. 23 E. R. 24 E. R. 25 E.

# UTILITY CORRIDORS (COMMODITY PRODUCTION ALTERNATIVE)

Figure 2 - 19



Corridors



Uinta and Ouray  
Indian Reservation

R. 17 E. R. 18 E. R. 19 E. R. 20 E.

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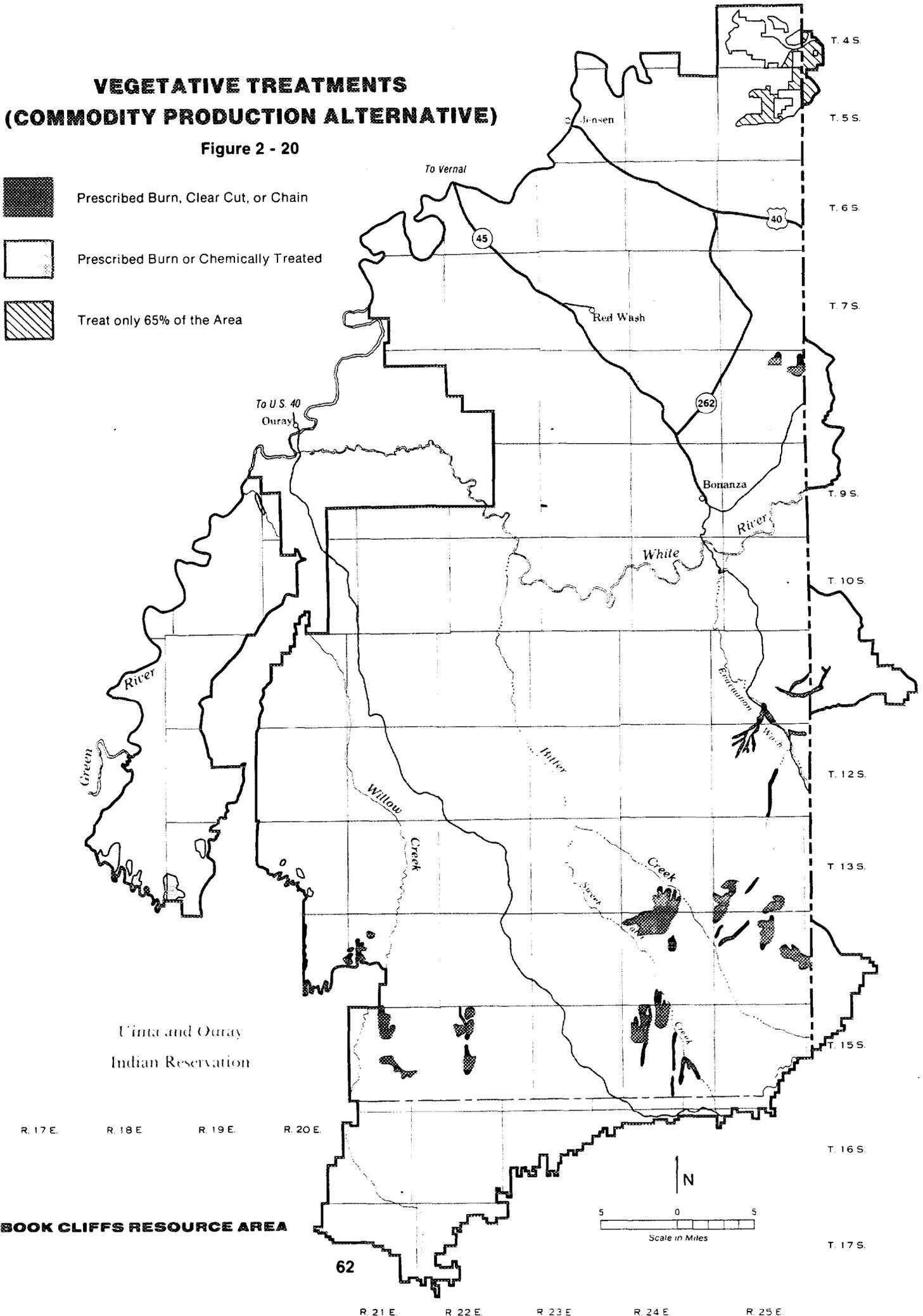
R. 21 E. R. 22 E. R. 23 E. R. 24 E. R. 25 E.

T. 4 S.  
T. 5 S.  
T. 6 S.  
T. 7 S.  
T. 8 S.  
T. 9 S.  
T. 10 S.  
T. 11 S.  
T. 12 S.  
T. 13 S.  
T. 14 S.  
T. 15 S.  
T. 16 S.  
T. 17 S.

# VEGETATIVE TREATMENTS (COMMODITY PRODUCTION ALTERNATIVE)

Figure 2 - 20

-  Prescribed Burn, Clear Cut, or Chain
-  Prescribed Burn or Chemically Treated
-  Treat only 65% of the Area



**BOOK CLIFFS RESOURCE AREA**

## CHAP. 2 — DESCRIPTIONS AND COMPARISONS OF ALTERNATIVES

### Livestock Adjustments.

Full grazing preference (active preference plus suspended nonuse) would be the objective for authorized use under this alternative. This would be attained provided that the forage potential exists in an allotment and that minerals development operations would not impose decreases in livestock use. Full grazing preference would meet full livestock use demand for the area and would be consistent with this alternative's emphasis on domestic forage production. Data from the ecological site, condition, and soils inventory (BLM 1982a) indicates that on a general basis, full grazing preference would be within the scope of site potential for most allotments. However, on the lower elevation sites (desert and semi-desert), full preference might not be attained. On the higher elevation sites (upland and mountain), there may be potential to exceed full preference provided it is not limited by other resource uses.

The number of AUMs authorized for livestock would be 109,485. This is 6,570 AUMs more than active preference and 42,505 AUMs more than current average use.

### Range Improvements.

Under this alternative, range improvements would be developed to improve the availability of unutilized forage and to develop new forage where a potential exists to benefit livestock. Prescribed burns or chemical treatment would be used in the canyon bottoms and on upland bench sites with dense decadent stands of sagebrush (Figure 2-20). 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, chemical treatment, or chaining would be used on sites dominated by closed stands of pinyon and juniper. Mitigating measures for the proposed treatments 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

Actions would be the same as for the Current Management Alternative.

### Costs.

Approximately \$813,000 to \$870,000 would be used for new livestock improvements funded by BLM. This does not include cooperative projects, reconstruction or maintenance.

### Wildlife and Wild Horses

Up to 20 water projects would be developed for wildlife over the next 10 years, primarily as mitigation for losses of habitat and water sources through mineral development.

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.

Under this alternative, seasonal and no-surface-occupancy restrictions would not be applied to big game and wild horse habitat in the BCRA.

### Woodlands

Allowable annual cut from managed pinyon-juniper stands would be 2,300 cords; from Douglas fir and cottonwood stands, 610 cords; and 820 cords from old chainings, burns and non-productive woodlands, for a total of 3,730 cords per year.

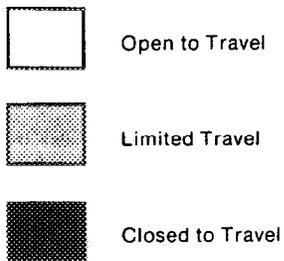
### Recreation

Up to 148,160 acres would be closed or limited to ORV use. Areas closed would include the Boulevard Ridge Watershed Study Area, the Book Cliffs Natural Area, and two scenic geologic areas. Vehicle use would be limited in *significant* cultural and recreational sites, critical and severe erosion areas, and *sage grouse leks*. Crucial wildlife and wild horse areas, *the White River Canyon*, the area contiguous to the Uintah and Ouray Indian Reservation, and all other areas would remain open (Figure 2-21).

Existing recreation sites that have the highest potential for development would be retained, including 4 camp sites (280 acres), one overlook (320 acres), and one geologic feature (60 acres). The U.S. Highway 40 scenic corridor would be dropped and no new corridors would be established (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 Sand Wash (1,900 acres), the placement of structures, surface disturbance, or other types of visible developments would be prohibited. In the remaining area (12,500 acres), along the river between Sand Wash and Dinosaur National Monument, structures, developments, and surface disturbance would be designed to minimize impacts to visual quality standards.

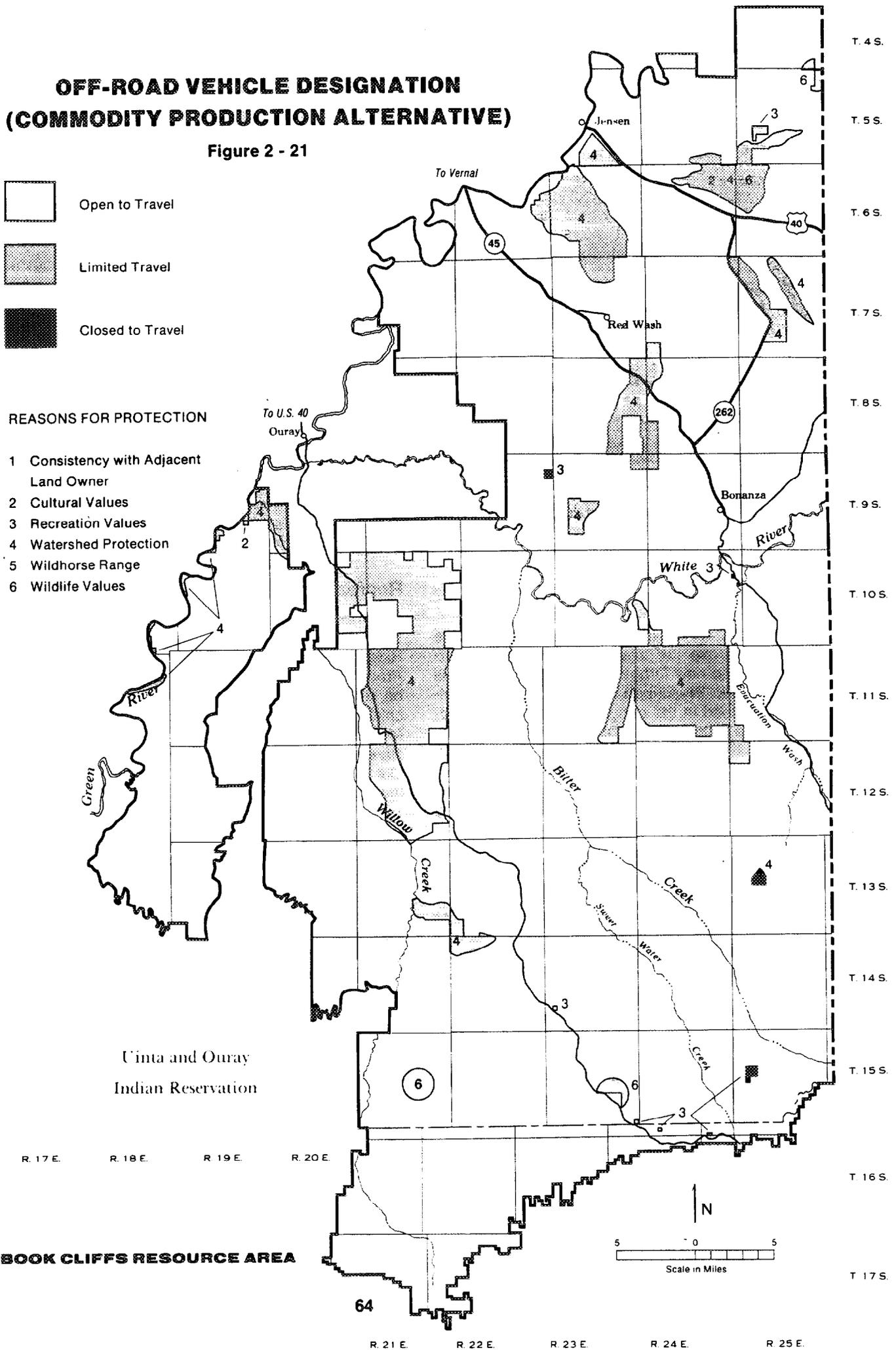
# OFF-ROAD VEHICLE DESIGNATION (COMMODITY PRODUCTION ALTERNATIVE)

Figure 2 - 21



**REASONS FOR PROTECTION**

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



**BOOK CLIFFS RESOURCE AREA**

## 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*