



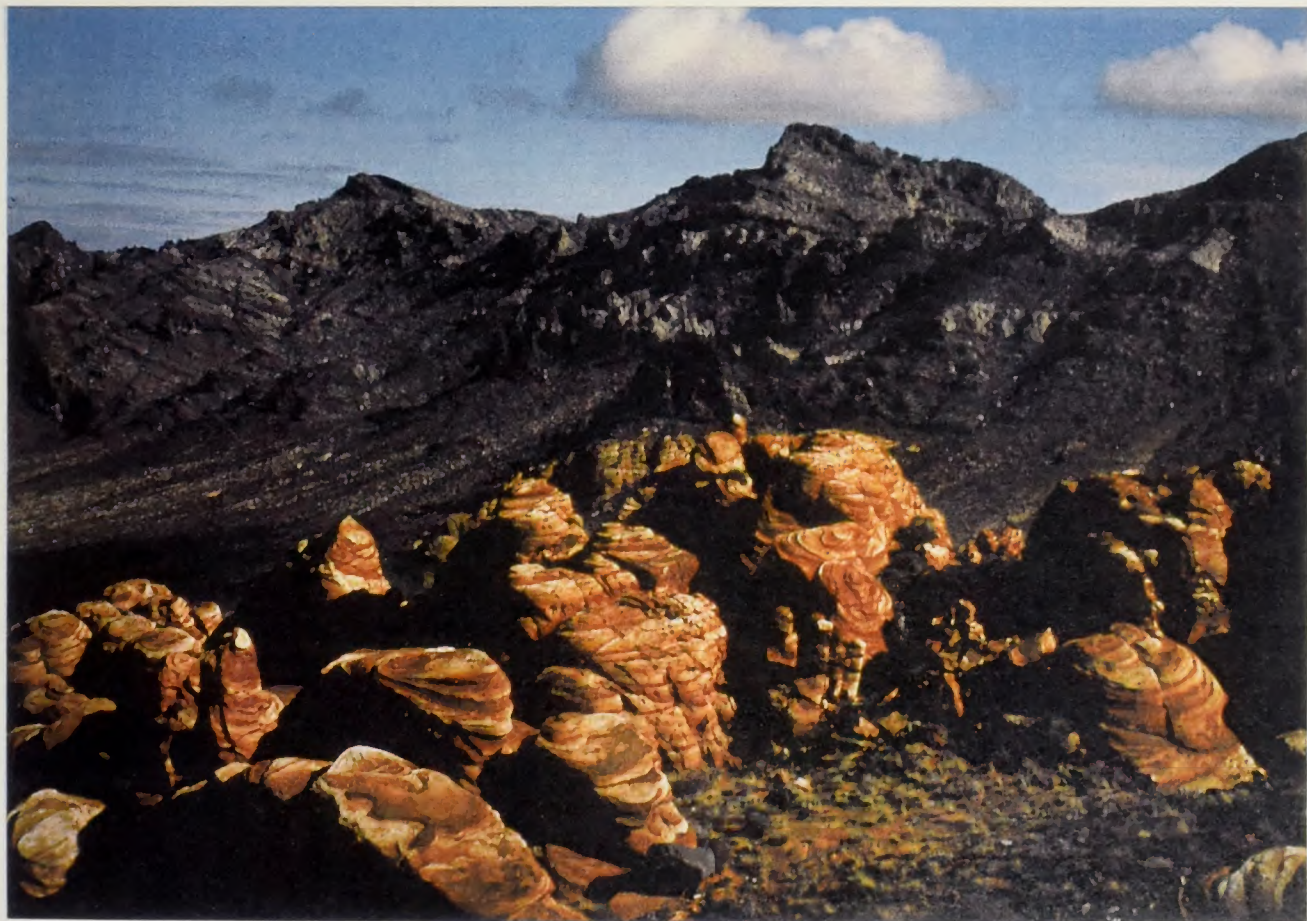
United States Department of the Interior
Bureau of Land Management



Las Vegas Field Office
Las Vegas, Nevada

March 2001

NEVADA WILDERNESS STUDY AREA NOTEBOOK



MISSION STATEMENT

The Bureau of Land Management is responsible for stewardship of our public lands. The BLM is committed to manage, protect and improve these lands in a manner to serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield of our nation's resources within a framework of environmental responsibility and scientific technology. These resources include recreation, rangelands, timber, minerals, watershed, fish and wildlife habitat, wilderness, air and scenic quality, as well as scientific and cultural values.

INTRODUCTION

BACKGROUND:

On April 2, 1997 the Nevada State BLM Director approved and signed the **Nevada Wilderness Action Plan**. This Plan provides a framework of critical action items which must be accomplished before the passage of a Nevada BLM Wilderness bill. These action items, when completed, will ensure that the Nevada BLM is ready for the challenge and responsibility of protecting and managing future BLM additions to the National Wilderness Preservation System.

One of the action items in the **Nevada Wilderness Action Plan**, Action Item I.C., required that Wilderness Study Area (WSA) notebooks be prepared for all BLM WSAs in Nevada. The notebooks provide BLM management with "desk reference guides" to WSAs within the State, and may ultimately be used by members of Congress and the general public as enhanced versions of the **NEVADA BLM STATEWIDE WILDERNESS REPORT**.

Printed notebooks have been prepared for the respective jurisdictions of each of the six Nevada BLM Field Offices and for the Nevada portions of the California BLM's Eagle Lake and Surprise Field Offices. Each notebook consists of two parts for each WSA. The first part contains a one to three page narrative, which is simply a condensation of the WSA narrative contained in the **NEVADA BLM STATEWIDE WILDERNESS REPORT**. The elements described in the WSA narratives are as follows:

- * The name, number, and acreage of the WSA
- * A general location and boundary description
- * A characterization of the wilderness values
- * A discussion of the wilderness recommendation and rationale
- * A summary of energy and mineral resource values
- * A summation of issues and public interest in the WSA

The second part of each notebook incorporates a series of six maps for each WSA which display the following Geographic Information System (GIS) themes: 1) contours, 2) counties, 3) geographic names and features, 4) land ownership, 5) public land survey system, 6) roads, 7) water features, 8) BLM WSA, recommended "suitable," and "non-suitable" boundaries, 9) developments and disturbances, 10) rights-of-way, 11) grazing allotments, 12) herd management areas, 13) federally-listed threatened and endangered species, 14) mining claim density, 15) mining operation locations, 16) mineral potential, 17) special-use air space, and 18) military aircraft training routes.

QUALIFICATIONS:

The information displayed on the subsequent maps is intended to give the reader an overview of the most significant physical, cultural, and resource management data available within and immediately outside WSA boundaries. Because resource data is constantly changing and is frequently modified, accuracy of the data only applies to this publication.

Further, the data presented is limited to that which can be characterized at the scale utilized for this project, as it is impossible to portray all available GIS data in an 8 1/2" by 11" format. For example, not all mineral potential is shown for each WSA. In many cases, only the highest mineral potential for the most valuable mineral is indicated for a given WSA, as it would be spatially and graphically untenable, and visually discordant to attempt to exhibit all mineral potential for all minerals present within a WSA. Consequently, many medium and low mineral potentials for the least valuable minerals have not been depicted on the WSA maps. Refer to the "Definitions and Explanations" section which follows for more specific information regarding mineral potential.

Similarly, only observations of federally listed threatened and endangered species are exhibited on the WSA maps. Proposed and candidate special status species are not shown, nor are State of Nevada listed species.

The physical and resource management data arrayed on these maps has been collected from U.S. Geological Survey 1:100,000 Digital Line Graph files and were digitized from 7 1/2 minute (1:24,000) U.S. Geological Survey quadrangle maps. In some cases, if no WSA boundary exists on a 7 1/2 minute map, linear data may be incomplete for that file or map. Some linear data, such as utility rights-of-way, or livestock water systems or utility lines, may abruptly end on the map without extending all the way to the map frame line.

The physical and resource management data depicted on these WSA maps portrays the most accurate data available at the time of map preparation. Base data has been extracted from various scale base maps and some of the data has not been field-checked or ground-proofed. As more accurate inventory and resource management information becomes available, WSA maps will be amended or revised.

For a comprehensive depiction of mineral potential, special status species, or for complete information regarding any other GIS theme, please address mail to the GIS Coordinator, BLM Nevada State Office, P.O. Box 12000, Reno, Nevada 89520-0006. You may visit the GIS Coordinator at 1340 Financial Boulevard, or you may call the Coordinator at 775-861-6400.

For information regarding a specific resource inventory or database that is not GIS related, please contact appropriate Field Office or Field Station resource specialists. Field Offices and Field Stations in Nevada are located in Elko, Winnemucca, Carson City, Ely, Las Vegas, Battle Mountain, Tonopah, and Caliente. Portions of the northwest section of the State are managed by the Eagle Lake Field Office in Susanville, California and the Surprise Field Office in Cedarville, California.

DEFINITIONS AND EXPLANATIONS

ALLOTMENT -- An area of land designated and managed for the grazing of livestock.

CHERRY-STEMMED ROAD -- A road that is completely enclosed on both sides by a Wilderness Study Area boundary. The Wilderness Study Area boundary is the edge of the right-of-way if a right-of-way has been granted, or the edge of disturbance if no right-of-way has been issued. Cherry-stemmed roads appear as red and black dashed lines within WSA boundaries on the "WSA Boundaries and Land Ownership" maps. Cherry-stemmed ways, trails, and washes appear as black dashed lines within WSA boundaries on the "WSA Boundaries and Land Ownership" maps. In some instances, these black dashed lines may appear to be a solid line at the page size scale.

DEVELOPMENT -- For purposes of this document, any structure, facility, or enhancement constructed and located on public lands. These include but are not limited to, developed springs, fences, wildlife guzzlers, stock ponds, gabions.

DISTURBANCE -- For purposes of this document, a disruption of the soil or vegetation within a Wilderness Study Area necessitating recontouring of the topography, replacement of topsoil, and/or restoration of native plant cover. These include but are not limited to, mines, material sites, ditches, roads, excavated trash dumps.

HERD MANAGEMENT AREA (HMA) -- A geographic area identified as having been used by a herd as its habitat on the date of passage of the Wild Horse and Burro Act of 1971 that has been established for the maintenance of wild horse and burro herds.

INSTANT STUDY AREA (ISA) -- Any of eleven natural areas formally identified by the Nevada BLM through a final action published in the Federal Register before November 1, 1975. The Federal Land Policy and Management Act of 1976 (FLPMA, Public Law 94-579, 90 Stat. 2743, 43 USC 1701) required an accelerated wilderness review of these areas which, for all intents and purposes, are Wilderness Study Areas.

MILITARY TRAINING ROUTE -- A route established to accommodate low-altitude military training operations of aircraft that permits speeds in excess of 250 knots indicated air speed below 10,000 feet mean sea level (MSL). Some segments may extend above 10,000 feet MSL due to terrain or other requirements.

MINERAL POTENTIAL -- A prediction of the likelihood of the occurrence of a solid, liquid, or gaseous mineral resource within a Wilderness Study Area expressed in terms of "high," "medium," or "low" potential.

The mineral potential information portrayed on the WSA maps is taken from U.S. Geological Survey (USGS) Bulletins prepared in conjunction with the U.S. Bureau of Mines to study the mineral potential of Wilderness Study Areas in Nevada. The USGS and Bureau of Mines conducted mineral surveys on areas approximating recommended "suitable" portions of WSAs to determine the mineral values, if any, that may be present. The recommended "unsuitable" portions of WSAs within WSAs containing recommended "suitable" portions were not surveyed, nor were literature searches conducted on the "unsuitable" portions of these WSAs. The mineral potential for WSAs that were wholly recommended "unsuitable" was not studied by the USGS and Bureau of Mines. However, wholly recommended "unsuitable" WSAs were assessed based on a literature search and, where applicable, on discussions with private industry.

Some inconsistencies may be noted between the discussion of mineral potential in the WSA narratives and the mineral potential displayed on the WSA maps. These inconsistencies are attributable to the fact that the BLM's Geology, Energy, and Minerals (GEM) Reports, which were prepared in the early 1980s, were the primary source of mineral information for the WSA narratives. The GEM Reports predated the Bureau of Mines and U.S. Geological Survey Bulletins, which were prepared as late as 1990, and were the only sources of data utilized in the preparation of WSA maps. Thus, due to the availability of new mineral information, advances in technology, and the refinement of predictive models between 1980 and 1990, some differences may be noted between the WSA narratives and the WSA maps.

The Bureau of Mines and USGS Bulletins were prepared utilizing the best information available. The "best information available" was characterized in the Survey Bulletins as "Levels of Certainty" which ranged from "Available information (A - is not adequate for determination of) (B - only suggests) (C - gives a good indication of) (D - clearly defines) the level of mineral resource potential." "Levels of Certainty" are not displayed on the WSA maps for the minerals present within each WSA due to spatial and graphic limitations.

In some cases, the boundaries of the mineral potential do not coincide precisely with the boundaries of the Wilderness Study Areas because Bureau of Mines and USGS report boundaries were digitized at a different scale compared with the WSA boundaries, and WSA boundaries had not been finalized at the time the mineral reports were published. Furthermore, in some areas of the state where WSAs are clustered and two or more WSAs are separated only by a road, a reader interested in a given WSA may have to refer to the "Mineral Potential" maps of adjacent WSAs for a more comprehensive display of the mineral potential within the WSA of interest. That is to say, larger mineral groupings identified on the "Mineral Potential" maps of adjoining WSAs may extend into the WSA of interest but may not be exhibited in the legend of the WSA of interest.

MINING CLAIM -- The mining claims identified on the "Mining Claim Density and Operations" WSA map are the total number of "active" mining claims and sites within and adjacent to each WSA as of the date specified on the WSA map. "Active" mining claims and sites are defined as "claims and sites for which all required fees and filings have been timely submitted in accordance with applicable laws and regulations." The mining claim density symbol depicted on the WSA map gives a representation of the number of claims and sites within a section of land. It does not necessarily indicate that mining claims and sites are located wholly within WSA boundaries.

MINING OPERATION -- A mining claim activity for which a 3809 Mining Notice or Plan of Operation or a 3802 Plan of Operation has been filed with the Bureau of Land Management.

Mining operations shown on the "Mining Claim Density and Operations" WSA map, which have no corresponding mining claim beneath them, can be attributed to one or more reasons. First, the information came from two separate and distinct databases that may not have been completely reconciled, one with the other. Second, mining law states that a description of location need only be sufficient for a person to find a claim on the ground. Sometimes the description of location is only the "best guess" of the claimant or the operator as to where the claim is actually located rather than a legally described location. Third, discrepancies may be due to data entry errors.

It is not always necessary to possess a mining claim in order to conduct a mining operation. For example, failure to pay necessary fees and filings in a timely manner will result in mining claim termination. However, the associated mining operation may not terminate with the claim.

RECOMMENDED NON-SUITABLE -- All or a portion of a Wilderness Study Area that the President has recommended to the United States Congress as not appropriate and not acceptable for preservation and designation as wilderness based on an analysis of the existing and potential uses of the land.

RECOMMENDED SUITABLE -- All or a portion of a Wilderness Study Area that the President has recommended to the United States Congress as appropriate and acceptable for preservation and designation as wilderness based on an analysis of the existing and potential uses of the land.

RIGHT-OF-WAY -- An authorization to use or occupy public lands pursuant to the issuance of a right-of-way grant. A right-of-way grant authorizes use over, upon, under or through public lands for construction, operation, maintenance and termination of a project. Right-of-way grants may be issued for, but are not limited to, such uses as roads, trails, reservoirs, canals, ditches, pipelines, transmission lines, railroads, and communication sites. These more common types of right-of-way grants are specifically identified on the "Rights-of-Way" WSA map. Less common types of right-of-way grants, for such uses as weather stations, stock driveways, etc.,

have not been shown on the WSA maps.

ROAD -- For purposes of the wilderness review program, a route that has been improved and maintained by mechanical means to ensure relatively regular and continuous use. "Improved and maintained" means physical actions taken by man to keep the road open to vehicular traffic. "Improved" does not necessarily mean formal construction. "Maintained" does not necessarily mean annual maintenance. "Mechanical means" is the use of hand or power machinery or tools. "Relatively regular and continuous use" means vehicular use which has occurred and will continue to occur on a relatively regular basis.

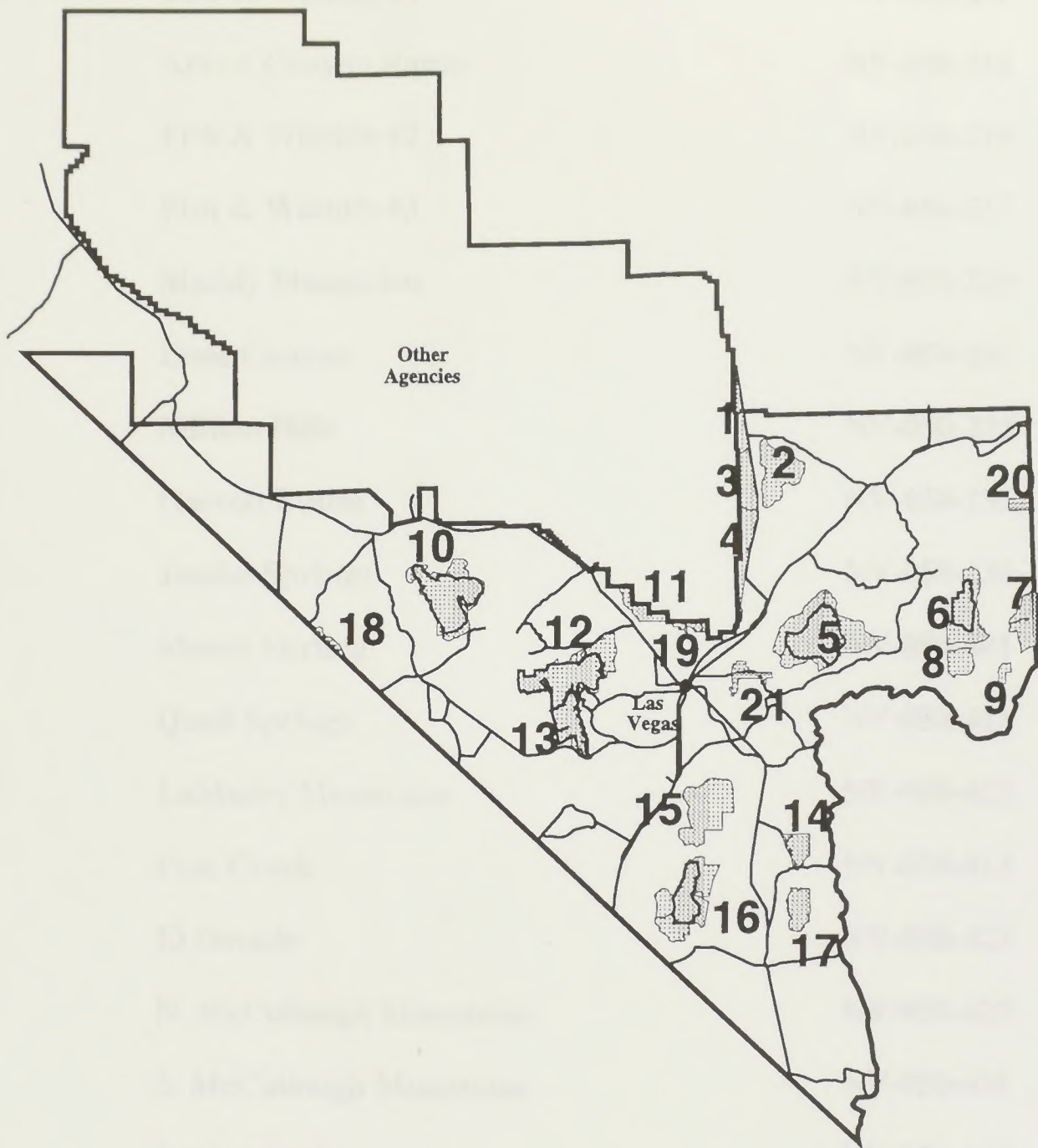
SPECIAL USE AIRSPACE -- Consists of airspace wherein activity must be confined because of its nature and/or wherein limitation may be imposed upon aircraft operations. The purpose of a special use airspace is to identify for other airspace users where military activity occurs, segregate that activity from other users to enhance safety, and allow charting to keep airspace users informed of activity within the special use airspace.

THREATENED AND ENDANGERED (T&E) -- The words "threatened" and "endangered" are used in this document to describe Federal listings authorized by the Endangered Species Act of 1973 as amended. "Threatened" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. "Endangered" means any species which is in danger of extinction throughout all or a significant portion of its range. Only Federally listed threatened and endangered species are shown on the WSA maps. Points on the map represent observation records or museum collections only and do not indicate extent of habitat or species distribution.

TRAIL -- A pathway usually created and maintained by human foot traffic, beasts-of-burden, livestock, or wildlife. Trails are not shown on WSA maps but are mentioned in some WSA narrative texts.

WAY -- A track or route within a Wilderness Study Area maintained solely by the passage of vehicles which has not been improved and/or maintained by mechanical means to ensure relatively regular and continuous use. Ways were identified during the intensive inventory phase of the Wilderness Review Process. Although mentioned in some WSA narrative texts, ways are not shown on WSA maps.

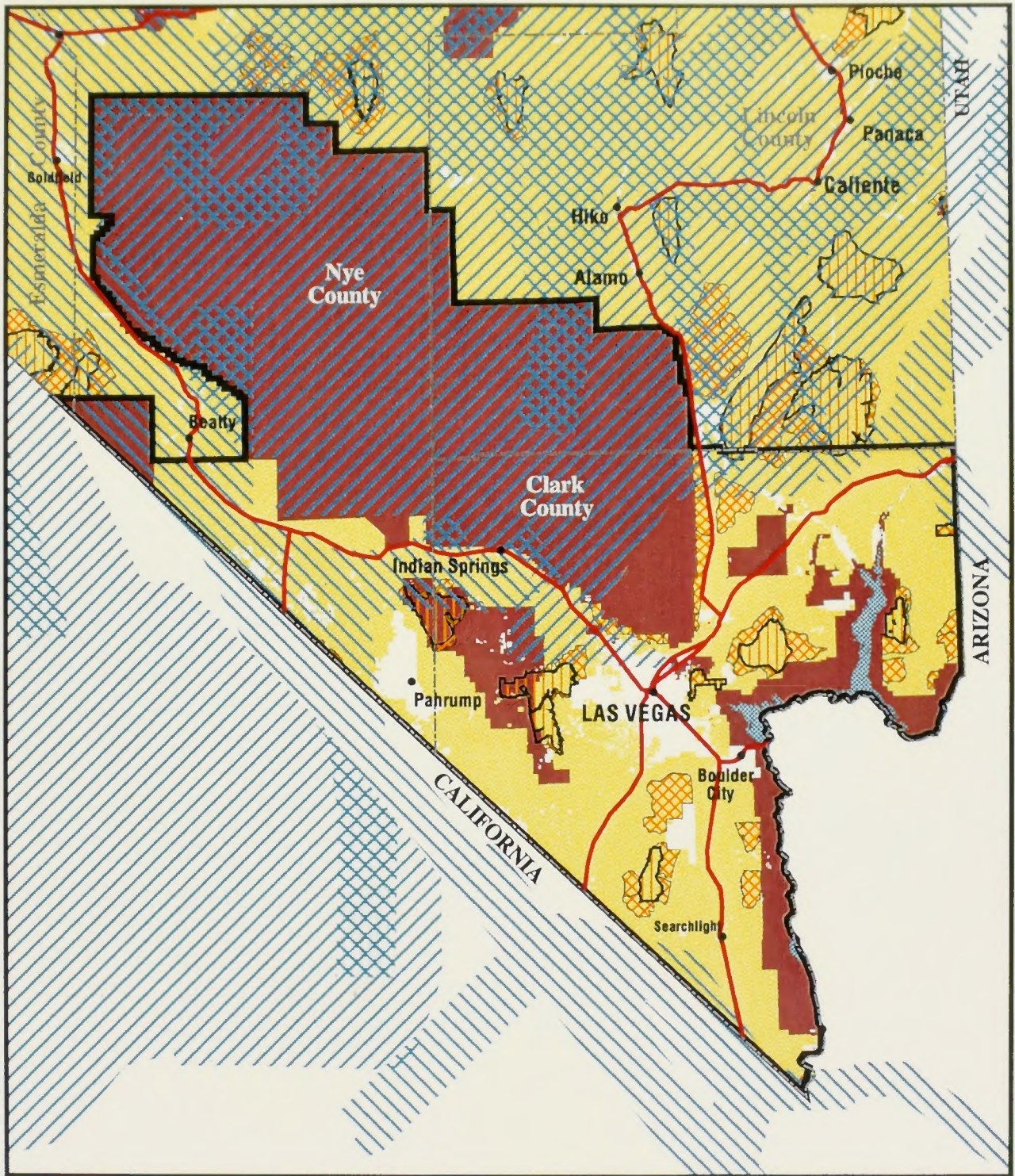
WILDERNESS STUDY AREA (WSA) -- A roadless area or island that has been inventoried and found to possess wilderness characteristics as described in Section 603 of the Federal Land Policy and Management Act and Section 2(c) of the Wilderness Act of 1964. Private and other agency inholdings within Wilderness Study Area boundaries are officially, legally, and technically not part of the Wilderness Study Area. Some private and other agency inholdings are not shown with the Wilderness Study Area boundary symbol around them.



LAS VEGAS
Wilderness Study Areas
INDEX

MAP INDEX NUMBER	STUDY AREA NAME	ID NUMBER
1	Fish & Wildlife #1	NV-050-201
2	Arrow Canyon Range	NV-050-215
3	Fish & Wildlife #2	NV-050-216
4	Fish & Wildlife #3	NV-050-217
5	Muddy Mountains	NV-050-229
6	Lime Canyon	NV-050-231
7	Million Hills	NV-050-233
8	Garrett Buttes	NV-050-235
9	Jumbo Springs	NV-050-236
10	Mount Stirling	NV-050-401
11	Quail Springs	NV-050-411
12	LaMadre Mountains	NV-050-412
13	Pine Creek	NV-050-414
14	El Dorado	NV-050-423
15	N. McCullough Mountains	NV-050-425
16	S. McCullough Mountains	NV-050-435
17	Ireteba Peaks	NV-050-438
18	Resting Springs	NV-050-460
19	Nellis A B C	NV-050-4R-15
20	Virgin Mountain ISA	
21	Sunrise Mountain ISA	

Las Vegas Wilderness Study Areas MILITARY AIRSPACE



— Road

10 0 10 20 Miles

- BLM
- Private Land
- Other Agency

- Special Use Airspace
- Military Training Route

- Instant Study Area
- Recommended Non-Suitable
- Recommended Suitable



LAS VEGAS

FISH & WILDLIFE NO. 1, 2 and 3 WILDERNESS STUDY AREAS

1. THE STUDY AREA - 50,334 acres

Fish & Wildlife #1, #2 and #3 WSAs (NV-050-201, 216, and 217) are located in northern Clark and southern Lincoln Counties, approximately 35 miles north of Las Vegas, Nevada. The WSAs are of a long, narrow configuration running north-south, approximately 45 miles long and about three miles wide at their broadest point. The study area is divided into three individual WSAs by two heavily traveled, well defined roads. For the purpose of this report, they are being considered as one unit. Fish and Wildlife #1 contains 11,090 acres, #2 contains 17,242 acres and #3 contains 22,002 acres, totalling 50,334 acres of public land. The WSAs are sandwiched between the Desert National Wildlife Range (DNWR) on the west and U.S. Highway 93 to the east.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 50,334 acres recommended for nonwilderness

The recommendation is to not designate these WSAs as wilderness, but to release them for uses other than wilderness because of conflicts with other potential resource uses and manageability concerns.

Quality of wilderness values was a key consideration in the recommendation. Although the WSAs have wilderness values, these values are not considered to be of high enough quality, in comparison to similar WSAs in the Las Vegas area, to merit the area's inclusion in the National Wilderness Preservation System.

All three WSAs generally appear natural but there are several signs of man, primarily vehicle trails due to off-highway vehicle (OHV) travel and a Nevada Department of Transportation (NDOT) materials pit right-of-way, located in the northern WSA. Most of the WSAs are easily accessible to vehicles from Highway 93 and the two roads that separate the three WSAs. Scattered vehicle tracks occur a short distance into the WSAs from Highway 93. Approximately 13 miles of ways are in the three WSAs. Topography in the WSAs primarily consists of an open bajada that is readily accessible to vehicles.

Solitude opportunities available in the WSAs are similar to those afforded by thousands of other acres of BLM administered land in Clark County. These opportunities are due to topography, remoteness and lack of human activity in the area and are not due to any intrinsic values unique to the area. Opportunities to find solitude are extremely limited due to minimal topographic screening and the proximity and influence of outside sights and sounds associated with utility corridors, abandoned sand and gravel operations, and Highway 93.

Desert tortoise is a special feature within all three WSAs. Desert tortoise habitat occurs in approximately 41,909 acres (83 percent) of the 50,334 acres encompassed by the WSAs.

Fish and Wildlife #1, #2, and #3 WSAs have minimal potential for mineral development. However, the edge of the WSAs along Highway 93 has high favorability for salable quantities of sand and gravel. Several rights-of way, within the WSAs, have been issued to NDOT for sand and gravel material sites. These rights-of way have been issued in perpetuity and the total physical impacts would be 300 acres.

At present, there is little threat to existing naturalness of the area. A utility corridor route extending the entire length of the three WSAs, has been identified by potential users. It is projected that five 500 KV transmission lines and one access road could be built within the designated utility corridor. Industry has recommended a one mile wide utility corridor that would extend west of Highway 93 across all three WSAs.

Construction of projected utilities and removal of sand and gravel would physically disturb an estimated

1,919 acres within the WSAs. Western portions of the WSAs are protected due to topography and other physical and administrative constraints. Therefore, even without wilderness designation, the quality and level of values now found in the WSA are not expected to significantly change.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: All three WSAs are primarily natural with few man-made intrusions. Topography consists mainly of flat, gently sloping bajadas extending from the west to the eastern boundary. The only mountain range, the Las Vegas Range, occurs in the central portion of Fish and Wildlife No.2.

Nine ways extend into the area from the eastern and southern boundaries. The majority of these ways (12.9 miles) occur in the Fish and Wildlife #3 WSA. Two wells, which have been abandoned, are in Fish and Wildlife #1 and Fish and Wildlife #3 WSAs. They are substantially unnoticeable in the area as a whole. In Fish and Wildlife #1, there are two existing material site rights-of-way and one material site right-of-way within Fish and Wildlife #3, issued to NDOT for sand and gravel.

B. Solitude: Individually each WSA provides limited opportunities for solitude. Combined, the three units provide areas of outstanding opportunities for solitude. Opportunities are somewhat limited due to the configuration of the units, and are primarily found in the central core area, in the low mountains of the Las Vegas Range, away from Highway 93 and the ways found in the southern end. Throughout most of the WSA topography and vegetation provide for minimal screening.

C. Primitive and Unconfined Recreation: Recreational opportunities in the study areas are fair for such activities as horseback riding, hiking, camping, nature study and sightseeing. All areas provide easy access for these activities, however, there are limited areas of interest or destination points within the WSAs. The Las Vegas Range in Fish and Wildlife #2 would provide the greatest opportunity for primitive and unconfined recreation. Other visits would most likely be transitory in nature, passing through the area to reach the DNWR. Areas of interest to visitors for hiking and sightseeing would be the shelter caves found in Fish and Wildlife #2 and #3 and the bighorn sheep habitat in the Hidden Valley area. Primitive recreational use of the combined study areas is estimated to be 60 visits annually.

D. Special Features: Fish and Wildlife #2 and #3 support a small herd of bighorn sheep in the Las Vegas Range and Hidden Valley. Approximately 80-90 sheep inhabitant these locations.

The desert tortoise (Gopherus agassizii), listed by the U.S. Fish and Wildlife Service as a threatened species on April 2, 1990, has been identified within the WSA. A total of 41,909 acres within the three study areas have been identified as tortoise habitat.

A sensitive plant species, penstemon (Penstemon bicolor ssp. roseus), currently on the "Federal Register of Threatened and Endangered Species" has been identified within the WSAs.

Cultural resources, include several sites consisting of lithic scatters, a rock alignment, some points and flakes and midden, are located in the WSAs. The most important of the sites, Flaherty Shelter Cave in Fish and Wildlife #3, has been dated back to 10 B.C. None of these areas are currently listed on the National Register and there are no plans to list them in the near future.

4. MANAGEABILITY

Fish and Wildlife #1, #2, and #3 WSAs are capable of being managed as wilderness however, there would be manageability concerns associated with the material sites and associated rights-of-way. There would also be management concerns with regard to the narrowness of the study areas and the unfettered accessibility for OHVs.

5. ENERGY AND MINERAL RESOURCE VALUES

Fish and Wildlife Nos. #1 and #2 have moderate nonmetallic mineral potential through the entire WSAs for sand and gravel. The remainder of this area has low potential for nonmetallic minerals. Favorable locations of sand and gravel closer to the Las Vegas market has not created sufficient demand, for materials within the WSAs, to make these deposits economic value for commercial exploitation. All three WSAs have low potential for metallic minerals, even though there are four post FLPMA mining claims in the southern portion of Fish and Wildlife #1. The claims have never been developed.

All of Fish and Wildlife #1 and #2 have moderate potential for oil and gas. There are no leases present.

6. SUMMARY OF WSA SPECIFIC COMMENTS

Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. One of the oral comments supported the preferred alternative (no wilderness) for the study area. The other comments did not mention these WSAs.

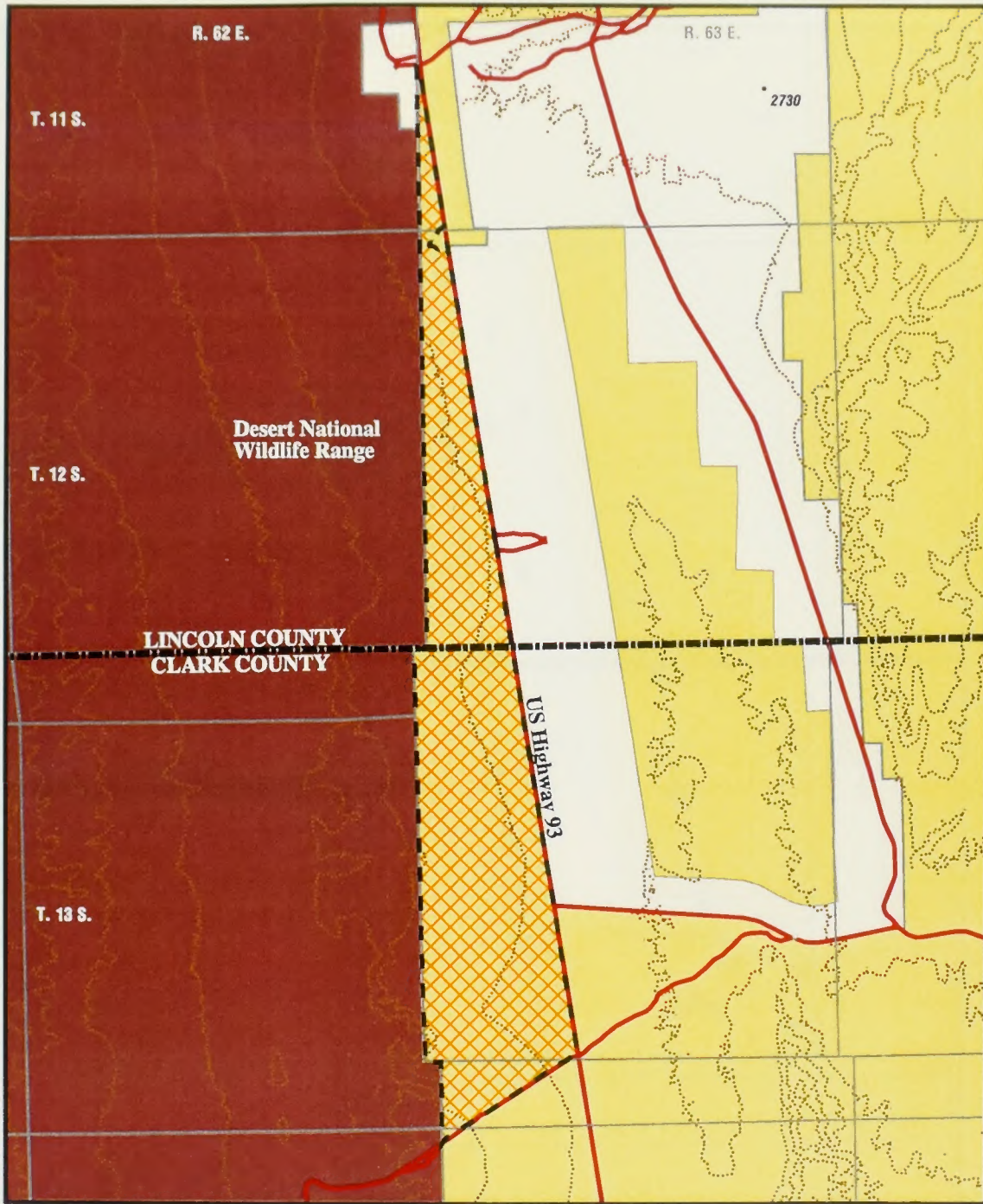
Of 36 written comments, four supported the preferred alternative and five proposed all wilderness. The subjects of the comments were mineral potential, race courses and excessively easy accessibility, the use of a buffer area between the DNWR and the highway, potential wilderness in the DNWR, an endangered plant, solitude and the placing of a transitional zone between the Mojave Desert and the Great Basin Desert into the National Wilderness Preservation System.

No comments were received from Clark or Lincoln Counties.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS.

Fish and Wildlife #1 Wilderness Study Area

WSA BOUNDARIES AND LAND OWNERSHIP



— Road

1 0 1 Miles

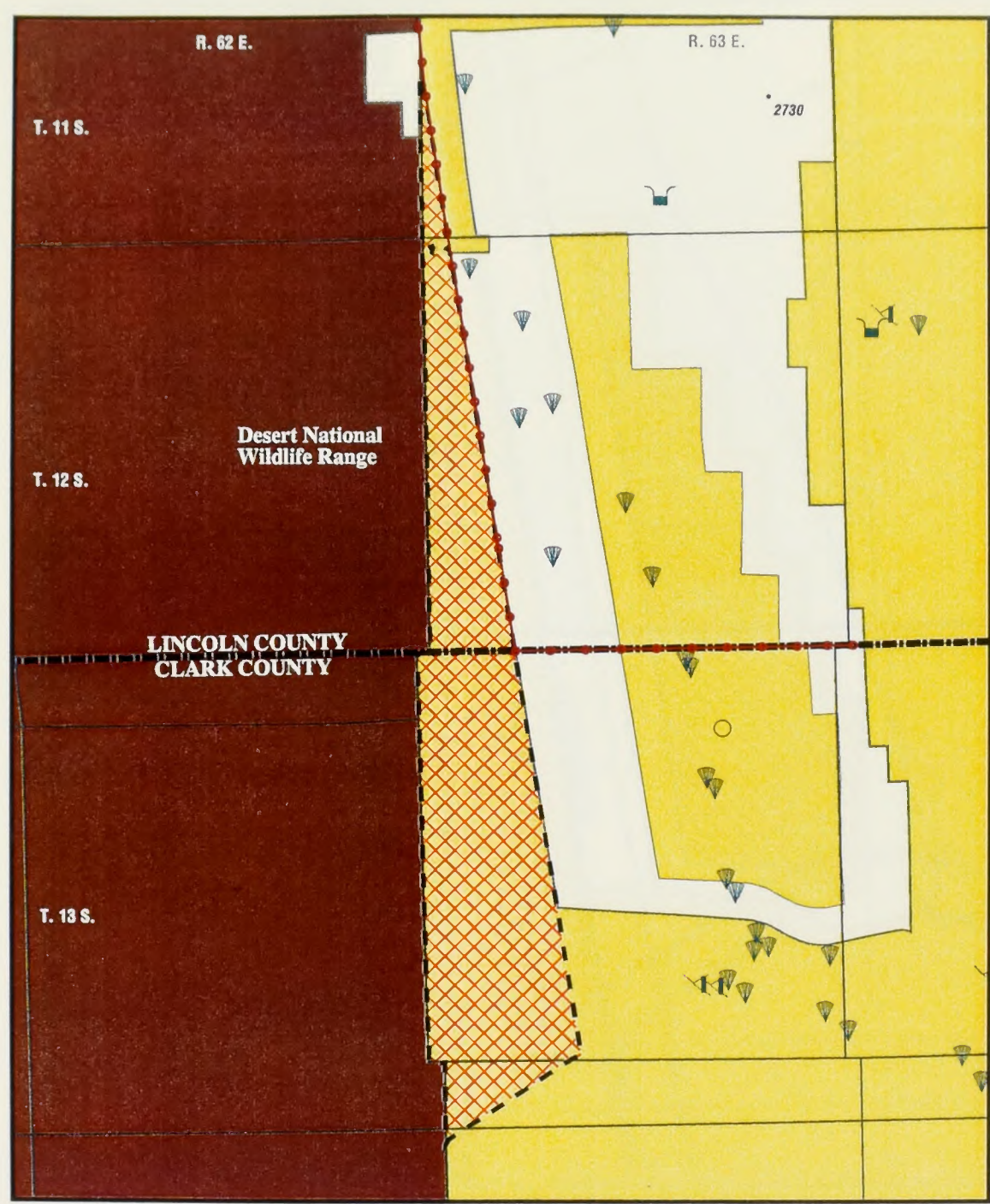
CONTOUR INTERVAL 200 METERS (656 FEET)

- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- XXXX Recommended Non-Suitable

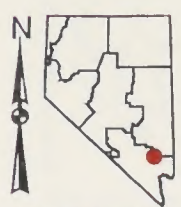


Fish and Wildlife #1 Wilderness Study Area DEVELOPMENTS AND DISTURBANCES

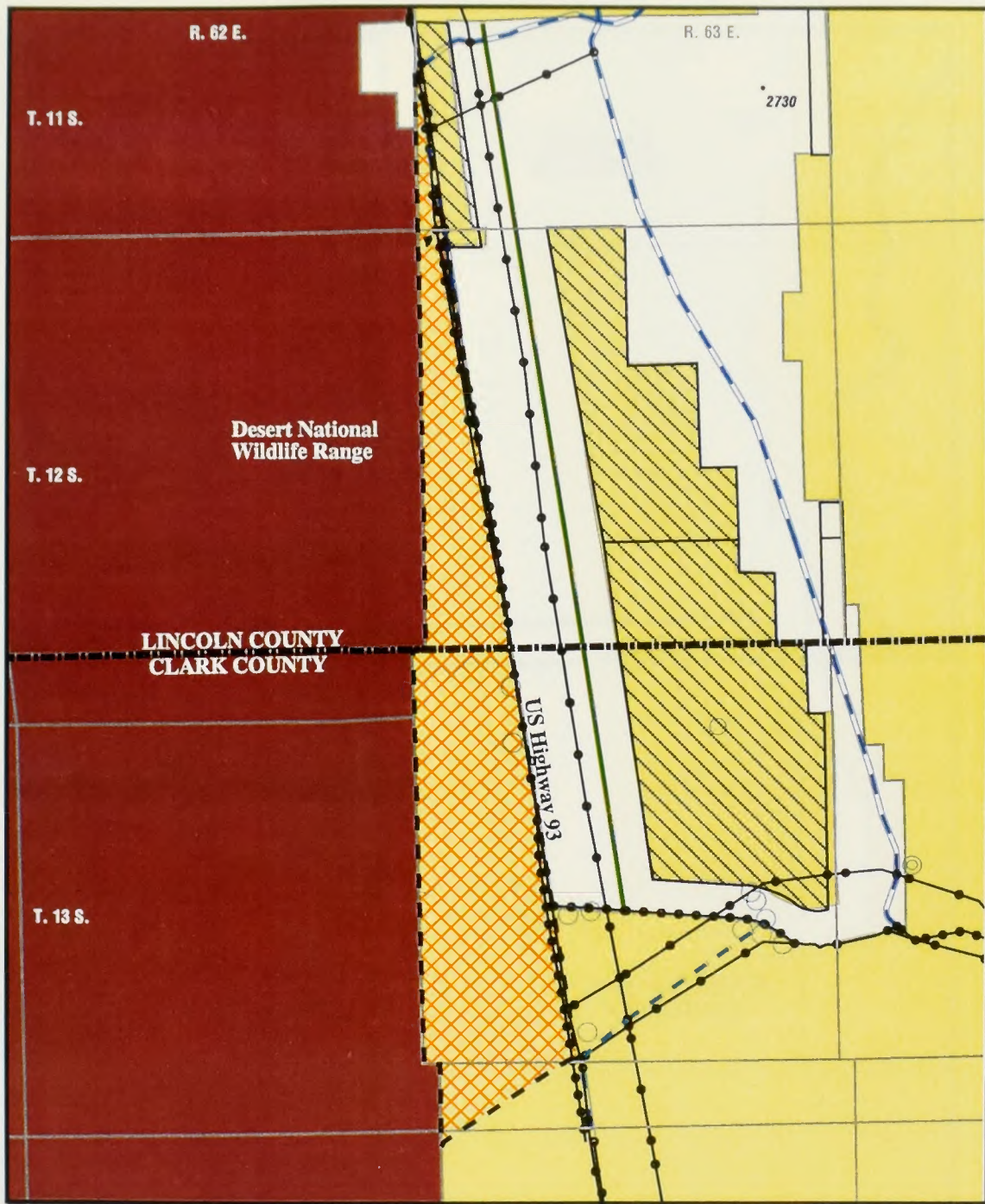


1 0 1 Miles

- BLM
- Private Land
- Other Agency
- Well
- Reservoir
- Trough
- Guzzler
- Fence
- Wilderness Study Area Boundary
- Recommended Non-Suitable



Fish and Wildlife #1 Wilderness Study Area RIGHTS-OF-WAY

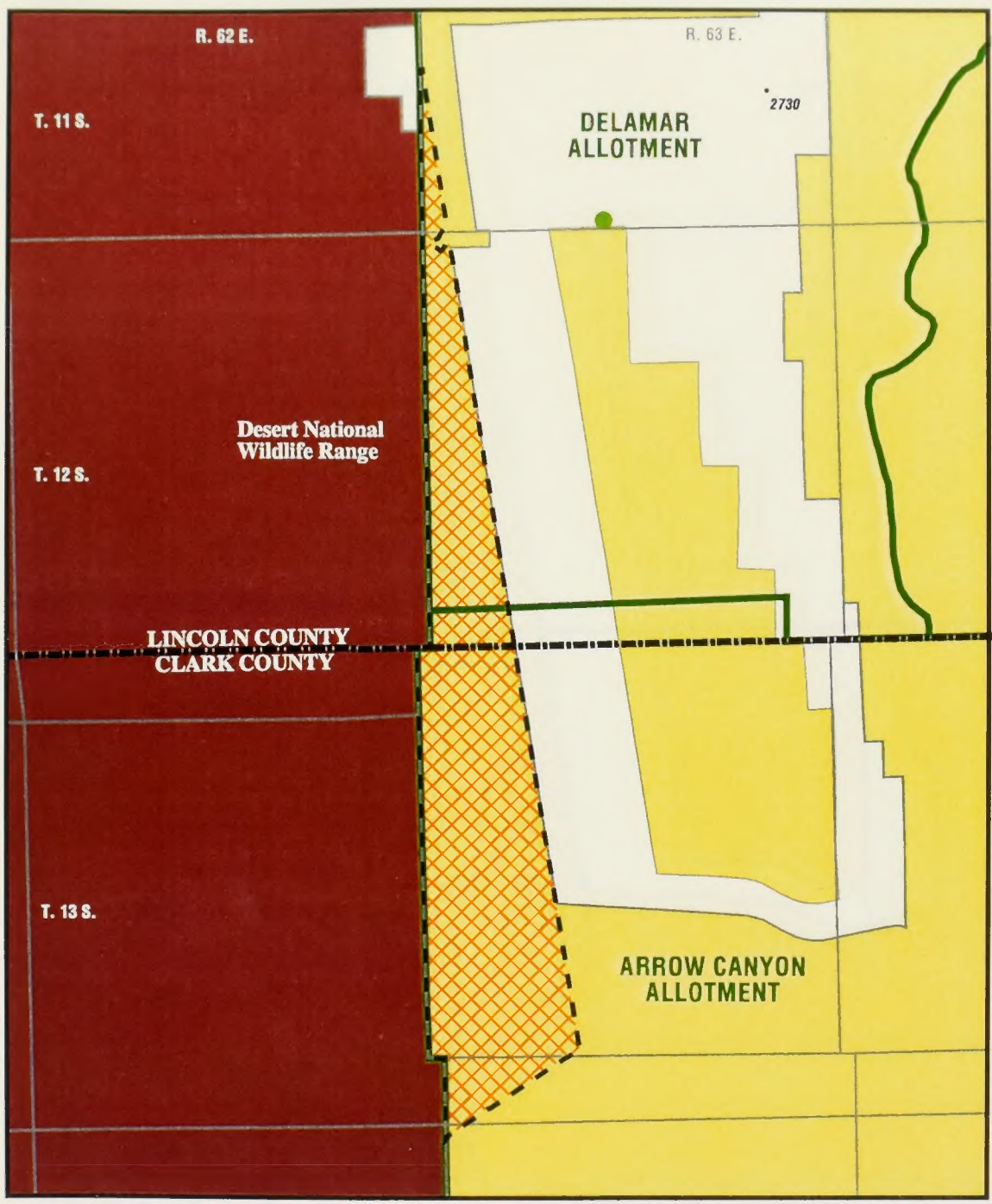


1 0 1 Miles

- | | |
|--------------|--------------------------------|
| BLM | Pipeline |
| Private Land | Road |
| Other Agency | Apex Corridor |
| Well | Powerline |
| Rain Guage | Telephone Line |
| Patent | Wilderness Study Area Boundary |
| Lease | Recommended Non-Suitable |



Fish and Wildlife #1 Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



- Federally Listed Threatened and Endangered Species**
- Observation Site - Desert Tortoise
 - BLM
 - Private Land
 - Other Agency

NO HMA ON THIS MAP

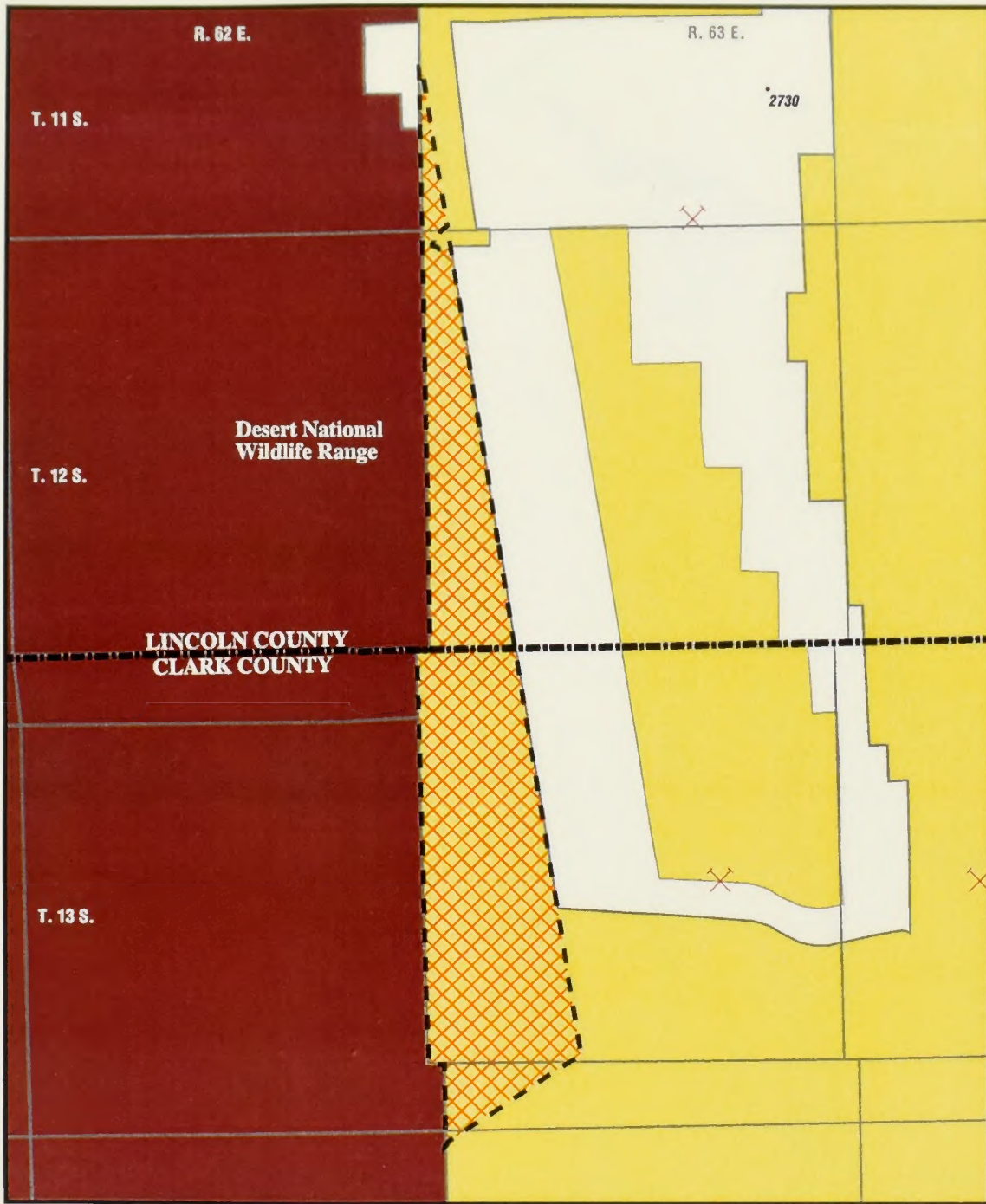
Allotment Boundary

-- Wilderness Study Area Boundary

XXXX Recommended Non-Suitable



Fish and Wildlife #1 Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



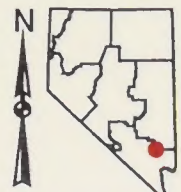
Mining Operations

1 0 1 Miles

NO MINING CLAIMS ON THIS MAP

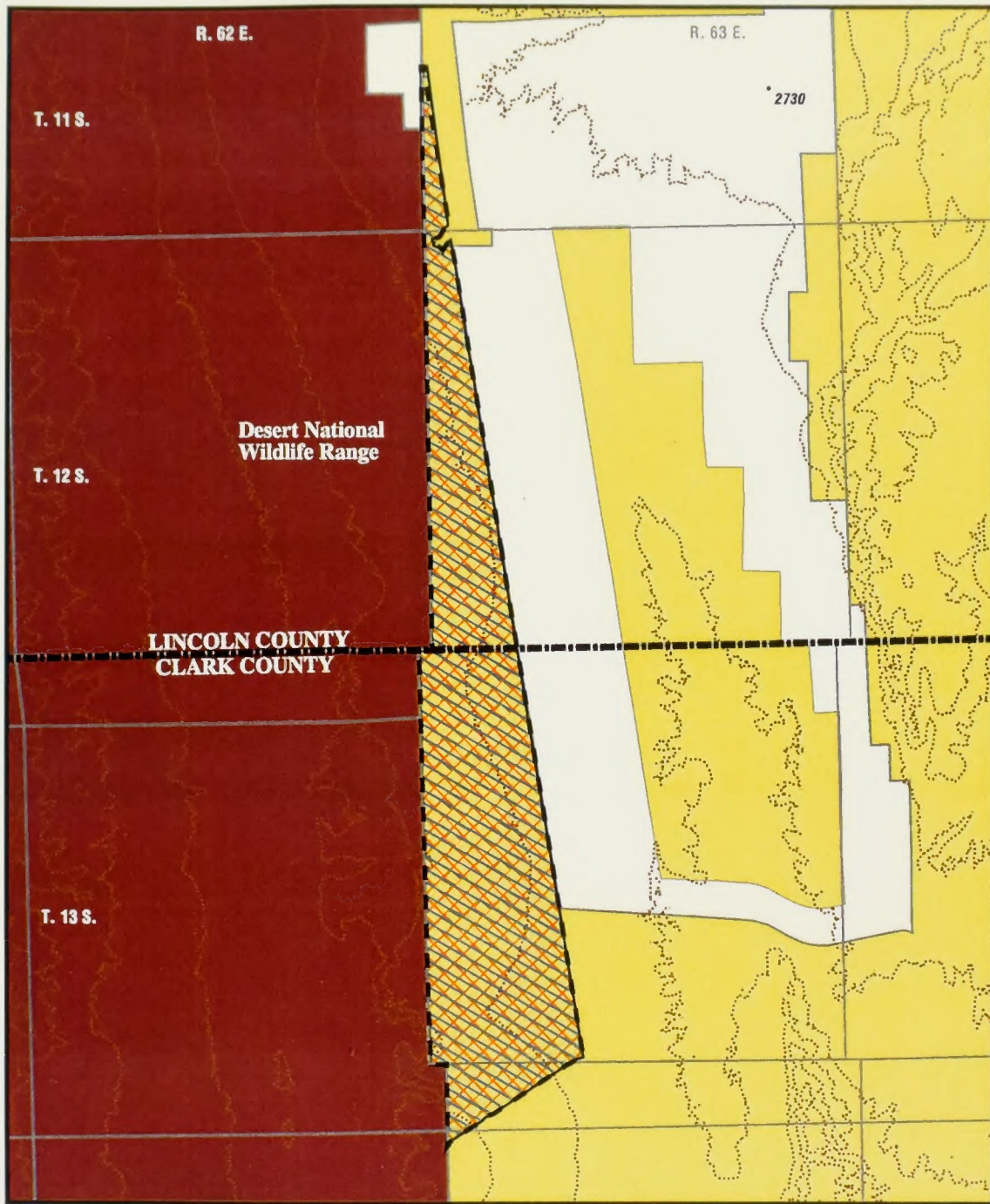
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable



NV-050-201


Fish and Wildlife #1 Wilderness Study Area MINERAL POTENTIAL








1 0 1 Miles

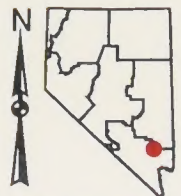
CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 Medium - Oil, Gas

-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable



NV-050-201

ARROW CANYON RANGE WILDERNESS STUDY AREA

1. THE STUDY AREA - 32,853 acres

Arrow Canyon Range Wilderness Study Area (WSA) (NV-050-215) is the northern extremity of the narrow, north-south trending Arrow Canyon Range approximately 35 miles north of Las Vegas, Nevada. Roughly triangular in shape, the western side is approximately 12 miles long and 6 miles across, at its widest point. The west boundary of the study area extends along the base of the mountain on a series of contours. The north boundary is generally the centerline of the Pahrnatag Wash and Arrow Canyon drainages. Battleship Wash is the east boundary, where upon near the southern terminus of Battleship Wash, the boundary turns west across a series of low hills to the Side Canyon drainage. At this point the boundary turns south and generally extends along the base of the mountains and through a pass to tie into the west boundary.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 32,853 acres recommended for nonwilderness

The recommendation for this WSA is to not designate it wilderness but to release all 32,853 acres for uses other than wilderness primarily because of a lack of quality wilderness values throughout a large portion of the WSA. The area generally appears natural but the aggregate affects of gradual incursion of human activity around its perimeter and the demand for unconfined recreation combine to impact naturalness of large portions of the WSA. Solitude opportunities are limited to canyons and ridges of the central core of the WSA. High recreation use in Arrow Canyon and Pahrnatag Wash significantly limit the quality of solitude and primitive recreational experiences in the northern portion of the study area. Opportunities for solitude are limited on the west side due to severe slopes and visibility to a highway (U.S. 93).

The no wilderness recommendation would emphasize maintaining access for motorized recreation. Several off-highway vehicle (OHV) trails and ways are available in the east half of the WSA. Large, broad washes and low, rolling hills provide limited impediments to OHV use. Arrow Canyon and Pahrnatag Wash are easily accessible by OHVs and several ways and cherrystemmed roads extend into the canyons on the east side of the study area. Management of OHV use in the eastern portion of the WSA would be extremely difficult due to a distinct lack of natural barriers or clearly definable boundaries.

Mineral development and exploration in the southwest, east and northeast portions of the study area have affected naturalness. Expansion of mineral operations contiguous to the WSA would significantly degrade wilderness qualities of the Arrow Canyon Range.

Unconfined recreation would be limited to the long, narrow central core of the WSA along the ridgeline and a few short canyons on the slopes of the mountains. Use of this area would be concentrated to a very small portion of the northern end of the WSA. The highest and best use of the area would be for motorized recreation, mineral development, and intensive development of recreation opportunities in Arrow Canyon. Over the long-term, naturalness values and opportunities for solitude would be diminished. Desert tortoise (*Gopherus agassizii*), a special feature identified in the area, would not receive the added protection afforded from wilderness designation. Development of alternative recreation opportunities would be enhanced.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The WSA is essentially natural. Evidence of human activity within the WSA is limited to a few small areas on the east side and confined to an area adjacent to the Pahrnatag Wash. However, most of the impacts are not visible from the majority of the study area. The west side of the study area

includes a ridgeline of limestone peaks and canyons, a central valley cut by numerous washes, and a series of ridges on the eastern end cut by deep washes, including the very nearly vertical sides of Arrow Canyon. The west side of the study is a spectacular cliff face, several thousand feet high, marked by a distinctive dark grey band, arcing across the length of the range.

Approximately six miles of ways, two small mineral exploration pits, an abandoned mining shack and scattered vehicle tracks occur within the study area. The ridgeline core area contains only the shack and is essentially natural. The intrusions affect mainly the northern end of the central valley, an area easily accessible, but are substantially unnoticeable. There is no activity on the west side of the study area due to the topography. This side is clearly visible from U.S. 93.

B. Solitude: Rugged topographic features of the ridgeline and narrow, deep canyons provide outstanding opportunities for solitude. The central valley and eastern ridges offer some opportunities for solitude because of the numerous, deep washes and other features. However, opportunities for solitude are less than outstanding in these areas. There is no vegetative screening in the WSA.

C. Primitive and Unconfined Recreation: Recreation activities are good but not outstanding. Dayhiking, backpacking, rock scrambling, nature photography, hunting and horseback riding are all available. Easy access, scenic views, and challenge are the best characteristics. Lack of diversity limits the quality of the experience, however, there are outstanding opportunities for unconfined recreation in Arrow Canyon itself. Arrow Canyon is several miles long and the broad open bottom of the canyon is confined between sheer, high, canyon walls.

D. Special Features: The sheer western face of the Arrow Canyon Range with its dramatic band of quartzite is of scenic interest. The ridgeline offers excellent vistas of the area in all directions and other features of the basin and range country.

Arrow Canyon has geological, archeological, and scenic values. The canyon, which in places is only 20 feet wide and 300-400 feet deep, is an important location of fossils. Extensive, petroglyph panels are found on the canyon walls and upper reaches of the Pahranaagat Wash. Other archeological resources include; agave roasting pits, shelter caves, lithic and ceramic scatters, and rock alignments.

Bighorn sheep inhabit the mountainous portions of the WSA in all but the driest months.

Desert tortoise (Gopherus agassizii) listed by the Fish and Wildlife Service as a threatened species on April 2, 1990 has been identified within the WSA. Nearly half of the WSA, the lower elevations on the northwest and the eastern half, have been identified as tortoise habitat.

4. MANAGEABILITY

The study area is capable of being managed as wilderness but there will be significant manageability concerns. Boundaries of the study area can easily be identified on the north side of the study area, however, boundaries for the rest of the study area would be difficult to identify and would not be clearly recognized by recreation users of the area. Unauthorized access to the west side of the study area is not anticipated due to the lack of destinations, limited points of ingress, and the sheer cliffs on the west face of the mountains. OHV access to the east and north sides of the study area are unchecked by physical barriers or a clearly defined boundary. These areas have been historically used and changing that pattern of use would be difficult.

Interest in mineral exploration has been concentrated in the north and southeast portions of the study area. Access to pre-FLPMA mining claims in the north portion and post-FLPMA claims in the southern portion of the study area would open more area to OHV activity and create a management burden.

The entire WSA has been leased for oil and gas. Although access could be managed, the impact created and other management concerns are the same as for mining.

5. ENERGY AND MINERAL RESOURCE VALUES

There are 300 acres of pre-FLPMA and 500 acres of post-FLPMA mining claims in the WSA, as of March, 1990, none of which are patented. The entire WSA is covered by 27 post-FLPMA oil and gas leases.

There is no evidence indicating metallic mineral favorability. The area has a moderate to high favorability for nonmetallics including silica, montmorillonite, gypsum, diatomite, limestone, dolomite, and alluvium. Nonmetallic mineral production has included silica sand at the Tiffany Quarry (a patented claim) on the southeastern boundary of the WSA. Large reserves are believed available. Small quantities of bentonite have reportedly been mined from a deposit near the northeastern boundary of the WSA. A quartzite quarry is presently in operation along the southwest side of the WSA.

The favorability for oil and gas resources is moderate. The eastern portion of the WSA has been identified as moderately favorable for geothermal resources.

6. SUMMARY OF WSA SPECIFIC COMMENTS

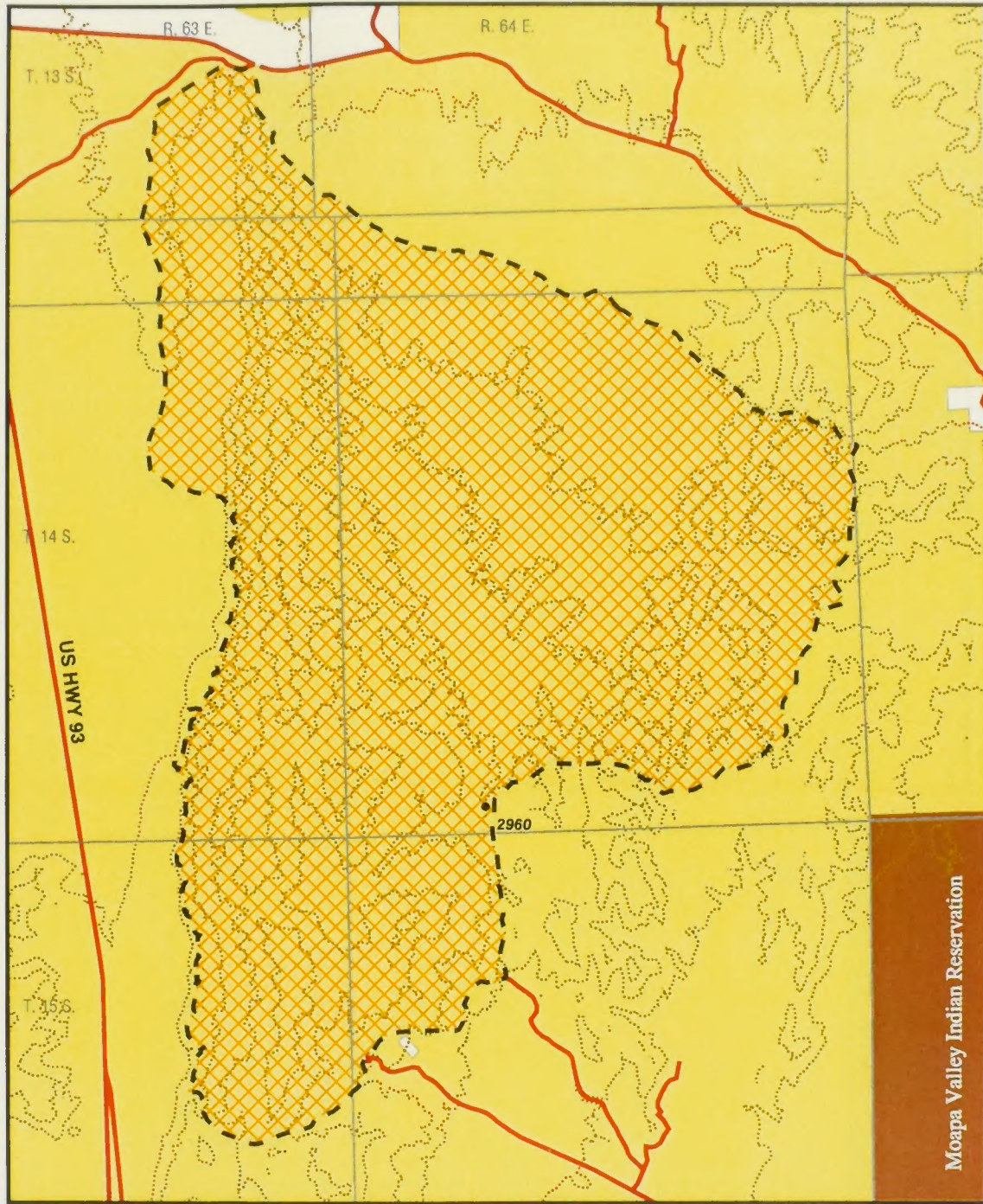
In general, 21 commentors, including the Governor, supported wilderness designation for all or part of the WSA. Five commentors supported no wilderness for the Arrow Canyon Range WSA, mostly citing potential mineral resources. Eleven commentors wanted no wilderness at all and five recommended designating the entire area, along with all WSAs wilderness. Most comments supporting wilderness designation and specifically mentioning the WSA noted outstanding scenic values, manageability, limited resource conflicts, high wilderness values (outstanding opportunities for solitude and primitive recreation), unspoiled biological and cultural resource values, and wildlife habitat potential. Comments opposing wilderness focused on the potential impacts to speculative mineral resource values, impacts to energy and mineral exploration and development, and limitation on wildlife management options.

Clark County Department of Comprehensive Planning in general supported nondesignation of the study area.

The Governor recommended wilderness designation for a portion of the study area, with a strong recommendation to exclude the southwest part of the WSA "in order to allow continued access to mineral resources." The State cited significant recreational and cultural resources in this WSA which outweigh other resource values. Follow up discussions between the state and BLM arrived at a consensus that the area should not be recommended for wilderness. Comments from the State of Nevada Department of Conservation and Natural Resources, Division of State Lands, State Division of Minerals, and Department of Wildlife supported no wilderness.

The U.S. Air Force stated they support alternatives that do not restrict military overflights. The U.S. Geological Survey stated that geologic conditions were adequately considered and that mineral resource potential of those areas recommended suitable for wilderness would be addressed in their joint report with the Bureau of Mines. The EPA supported the proposed action. They recommended that the final recommendation include a statement that water and air quality would be best protected under wilderness designation.

Arrow Canyon Range Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



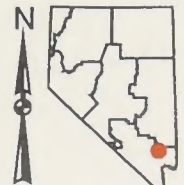
Road

1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

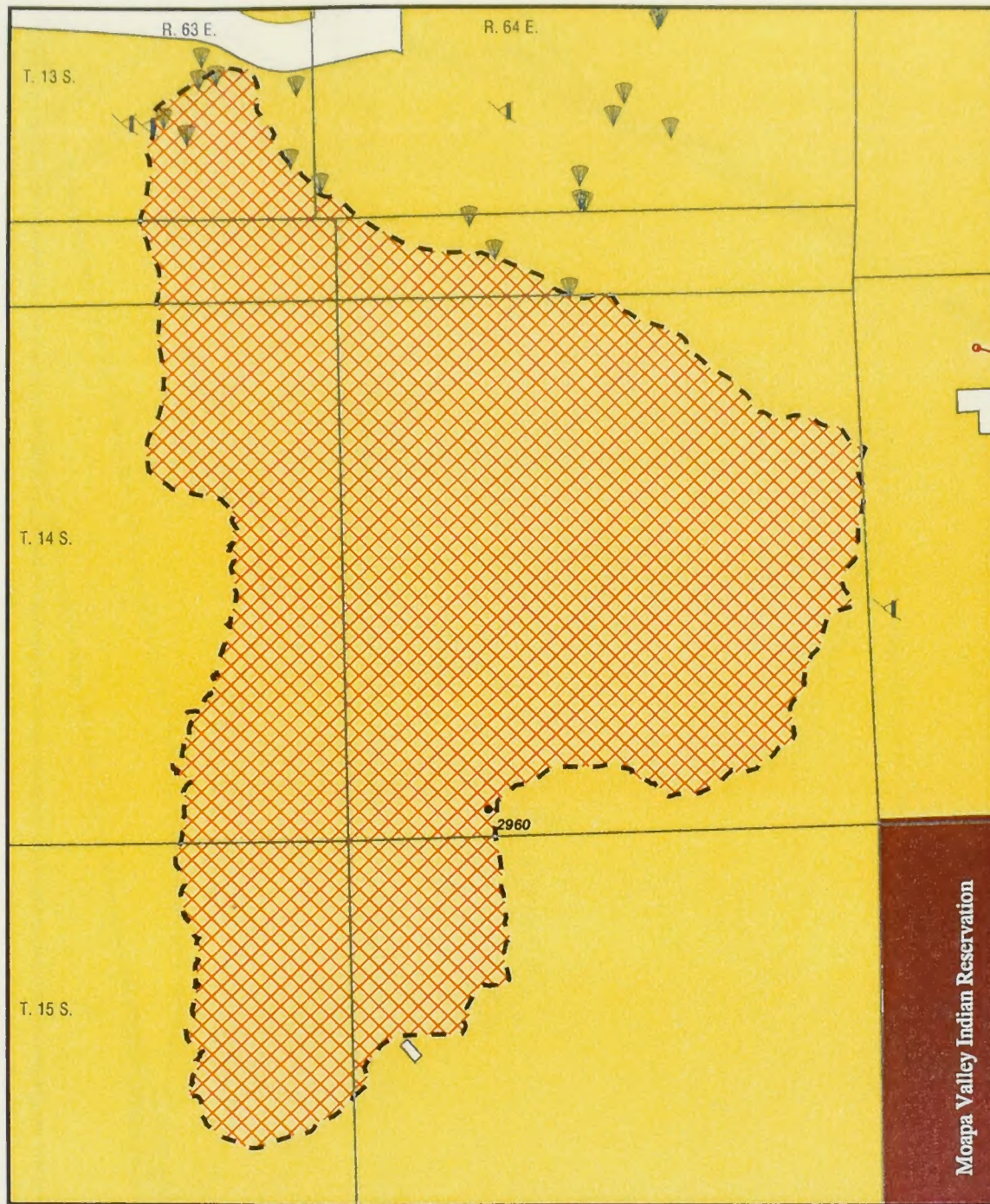
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable



NV-050-215

Arrow Canyon Range Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



1 0 1 Miles

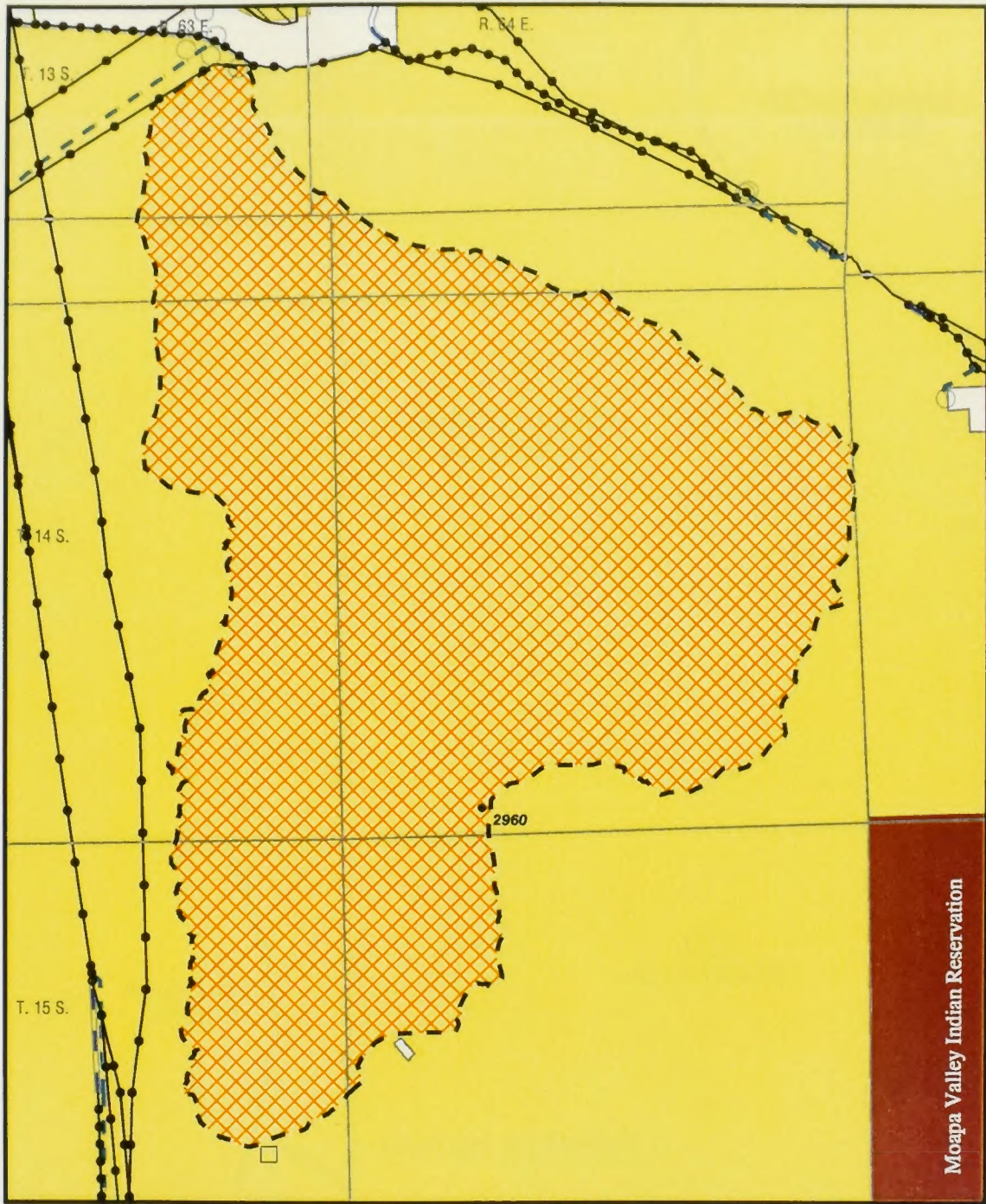
- BLM
- Private Land
- Other Agency

- Reservoir
- Guzzler
- Fence
- Wilderness Study Area Boundary
- Recommended Non-Suitable



NV-050-215

Arrow Canyon Range Wilderness Study Area RIGHTS-OF-WAY



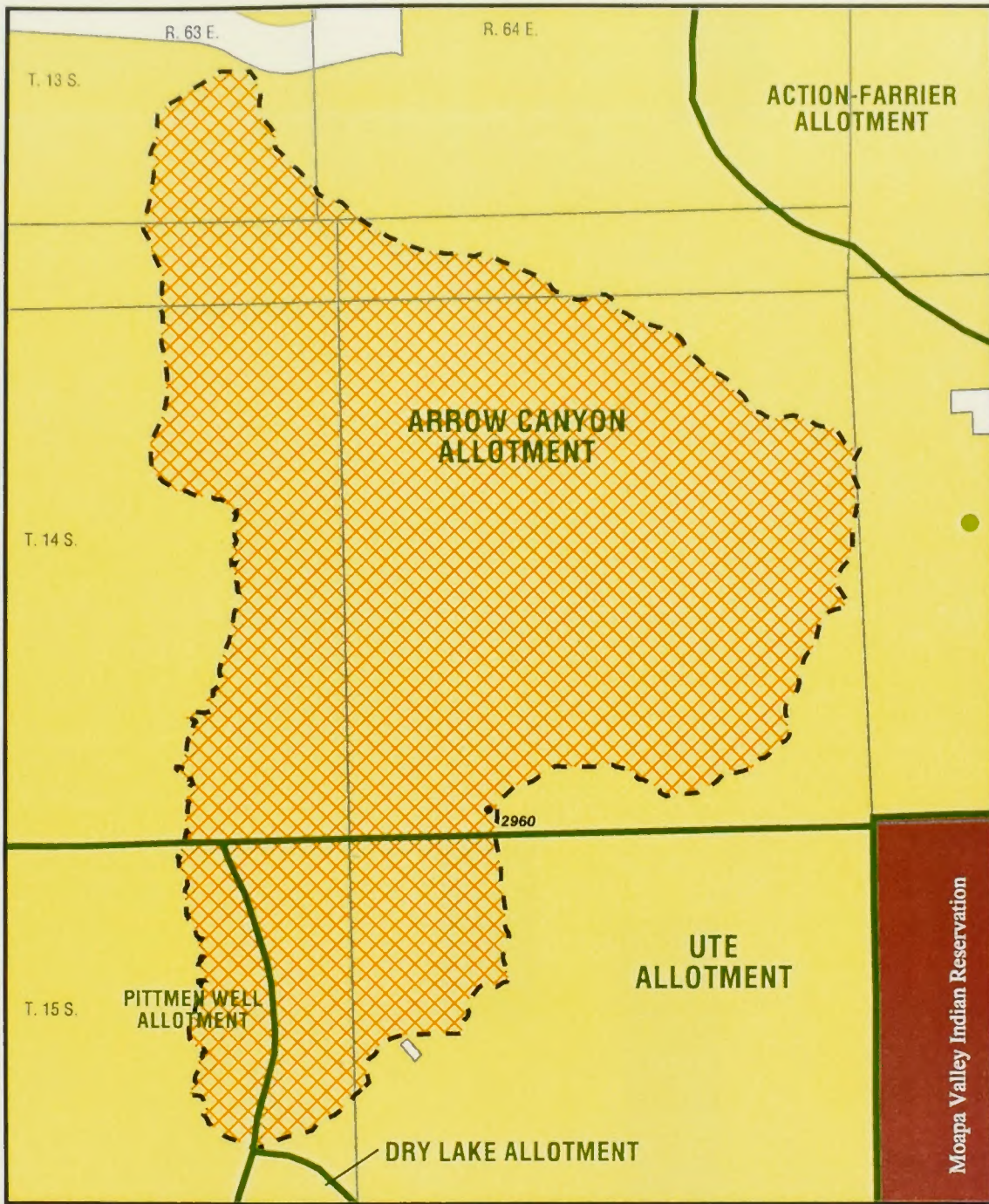
1 0 1 Miles

- BLM
- Private Land
- Other Agency
- Communication Site
- Well
- Lease
- Road
- Pipeline
- Powerline
- Telephone Line
- Wilderness Study Area Boundary
- Recommended Non-Suitable



NV-050-215

Arrow Canyon Range Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



Federally Listed
Threatened
and
Endangered
Species

● Observation Site
- Moapa Dace

■ BLM
□ Private Land
■ Other Agency

NO HMA ON THIS MAP

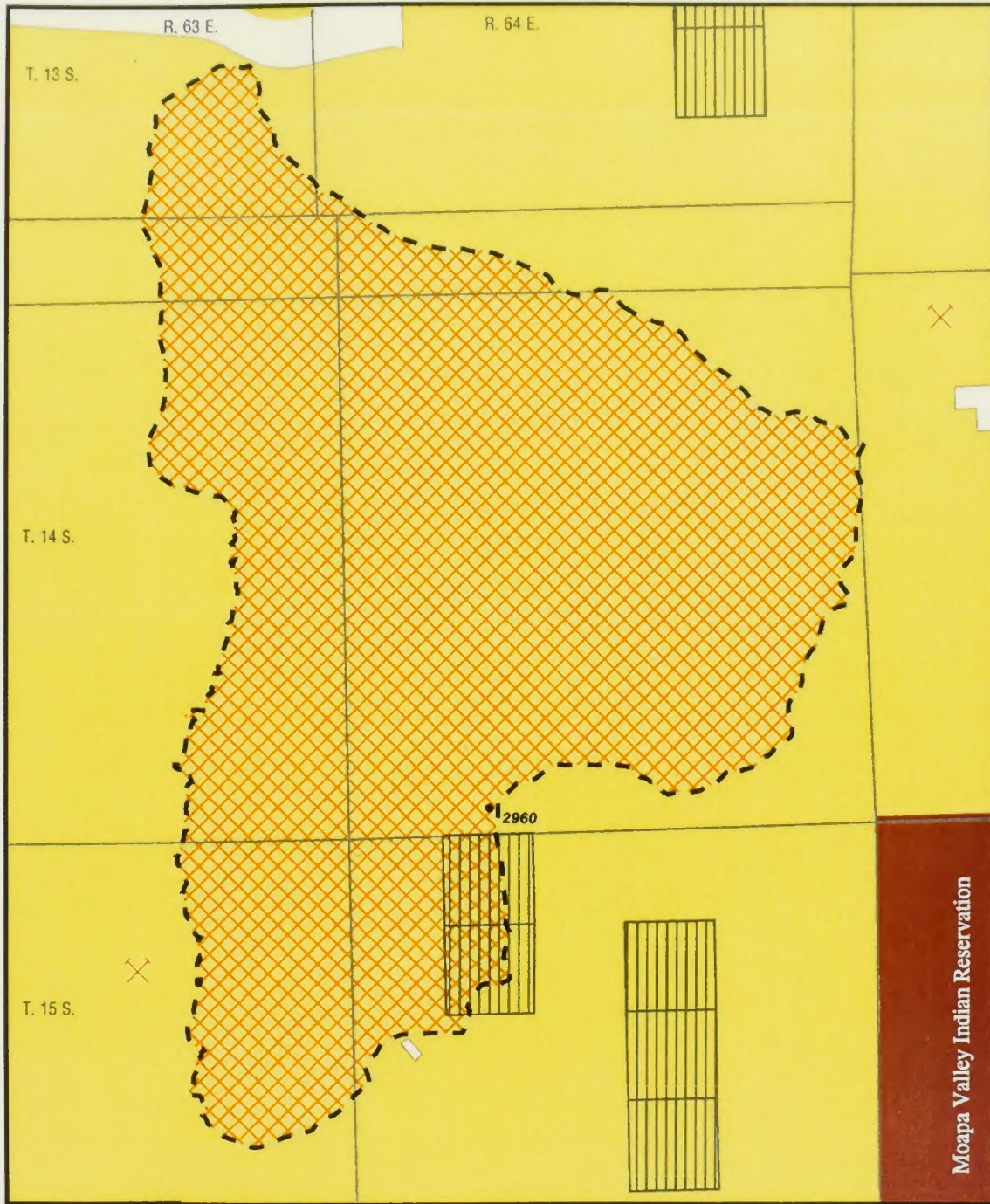
⚡ Allotment
Boundary

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable






NV-050-215




Arrow Canyon Range Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS





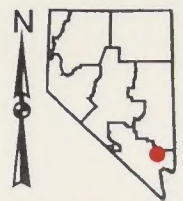
 **Mining Operations** 1 0 1 Miles

Mining Claim Density - 3/97

-  1-5 Claims
-  6-35 Claims
-  36 or more Claims

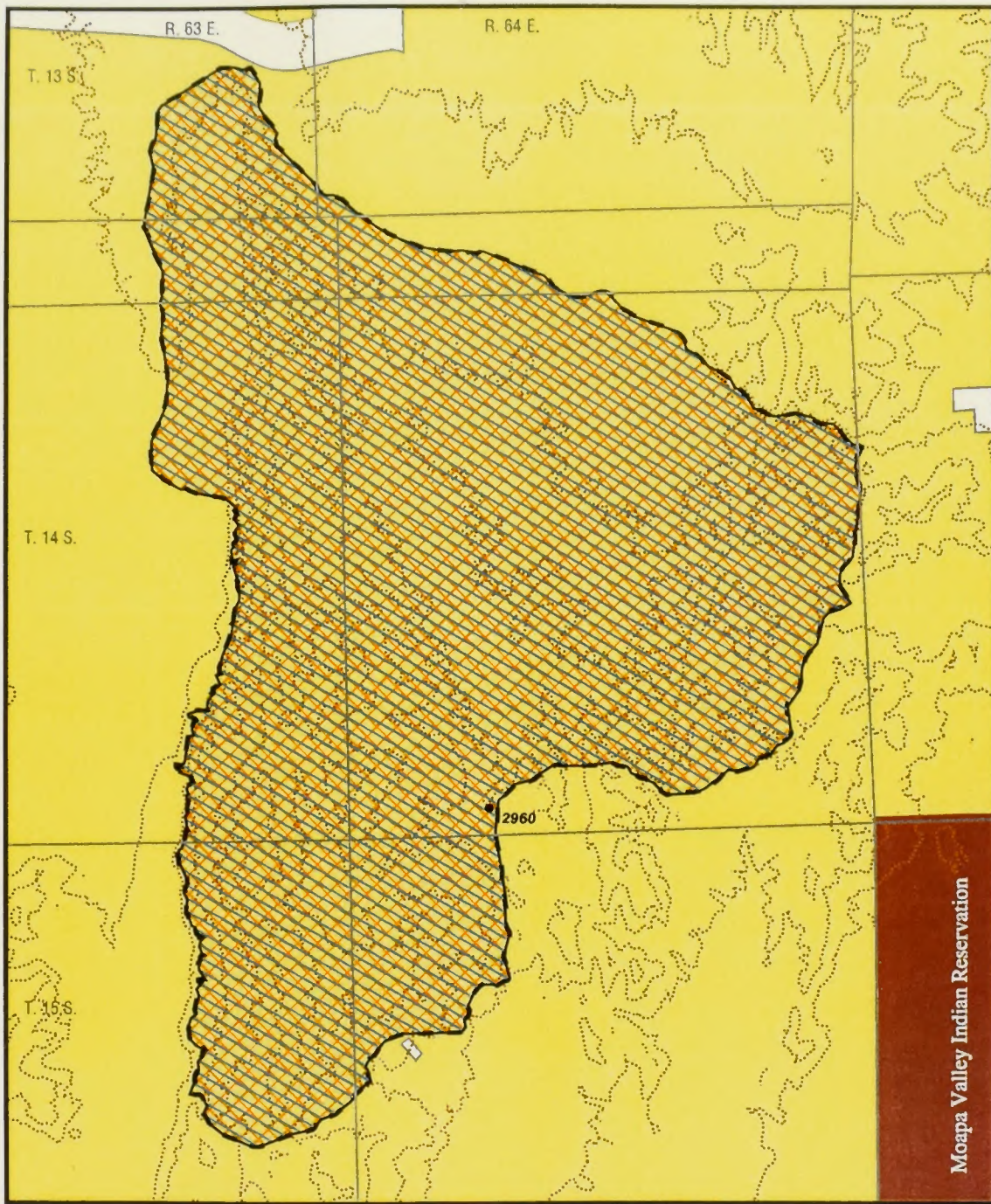
-  BLM
-  Private Land
-  Other Agency

-  **Wilderness Study Area Boundary**
-  **Recommended Non-Suitable**



NV-050-215


Arrow Canyon Range Wilderness Study Area MINERAL POTENTIAL







1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 Medium - Oil, Gas, Silica, Sand, Clay, Gypsum, Diatomite, Limestone, Gravel

-  BLM
-  Private Land
-  Other Agency

- - Wilderness Study Area Boundary
-  Recommended Non-Suitable



NV-050-215

FISH & WILDLIFE NO. 1, 2 and 3 WILDERNESS STUDY AREAS

1. THE STUDY AREA - 50,334 acres

Fish & Wildlife #1, #2 and #3 WSAs (NV-050-201, 216, and 217) are located in northern Clark and southern Lincoln Counties, approximately 35 miles north of Las Vegas, Nevada. The WSAs are of a long, narrow configuration running north-south, approximately 45 miles long and about three miles wide at their broadest point. The study area is divided into three individual WSAs by two heavily traveled, well defined roads. For the purpose of this report, they are being considered as one unit. Fish and Wildlife #1 contains 11,090 acres, #2 contains 17,242 acres and #3 contains 22,002 acres, totalling 50,334 acres of public land. The WSAs are sandwiched between the Desert National Wildlife Range (DNWR) on the west and U.S. Highway 93 to the east.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 50,334 acres recommended for nonwilderness

The recommendation is to not designate these WSAs as wilderness, but to release them for uses other than wilderness because of conflicts with other potential resource uses and manageability concerns.

Quality of wilderness values was a key consideration in the recommendation. Although the WSAs have wilderness values, these values are not considered to be of high enough quality, in comparison to similar WSAs in the Las Vegas area, to merit the area's inclusion in the National Wilderness Preservation System.

All three WSAs generally appear natural but there are several signs of man, primarily vehicle trails due to off-highway vehicle (OHV) travel and a Nevada Department of Transportation (NDOT) materials pit right-of-way, located in the northern WSA. Most of the WSAs are easily accessible to vehicles from Highway 93 and the two roads that separate the three WSAs. Scattered vehicle tracks occur a short distance into the WSAs from Highway 93. Approximately 13 miles of ways are in the three WSAs. Topography in the WSAs primarily consists of an open bajada that is readily accessible to vehicles.

Solitude opportunities available in the WSAs are similar to those afforded by thousands of other acres of BLM administered land in Clark County. These opportunities are due to topography, remoteness and lack of human activity in the area and are not due to any intrinsic values unique to the area. Opportunities to find solitude are extremely limited due to minimal topographic screening and the proximity and influence of outside sights and sounds associated with utility corridors, abandoned sand and gravel operations, and Highway 93.

Desert tortoise is a special feature within all three WSAs. Desert tortoise habitat occurs in approximately 41,909 acres (83 percent) of the 50,334 acres encompassed by the WSAs.

Fish and Wildlife #1, #2, and #3 WSAs have minimal potential for mineral development. However, the edge of the WSAs along Highway 93 has high favorability for salable quantities of sand and gravel. Several rights-of way, within the WSAs, have been issued to NDOT for sand and gravel material sites. These rights-of way have been issued in perpetuity and the total physical impacts would be 300 acres.

At present, there is little threat to existing naturalness of the area. A utility corridor route extending the entire length of the three WSAs, has been identified by potential users. It is projected that five 500 KV transmission lines and one access road could be built within the designated utility corridor. Industry has recommended a one mile wide utility corridor that would extend west of Highway 93 across all three WSAs.

Construction of projected utilities and removal of sand and gravel would physically disturb an estimated

1,919 acres within the WSAs. Western portions of the WSAs are protected due to topography and other physical and administrative constraints. Therefore, even without wilderness designation, the quality and level of values now found in the WSA are not expected to significantly change.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: All three WSAs are primarily natural with few man-made intrusions. Topography consists mainly of flat, gently sloping bajadas extending from the west to the eastern boundary. The only mountain range, the Las Vegas Range, occurs in the central portion of Fish and Wildlife No.2.

Nine ways extend into the area from the eastern and southern boundaries. The majority of these ways (12.9 miles) occur in the Fish and Wildlife #3 WSA. Two wells, which have been abandoned, are in Fish and Wildlife #1 and Fish and Wildlife #3 WSAs. They are substantially unnoticeable in the area as a whole. In Fish and Wildlife #1, there are two existing material site rights-of-way and one material site right-of-way within Fish and Wildlife #3, issued to NDOT for sand and gravel.

B. Solitude: Individually each WSA provides limited opportunities for solitude. Combined, the three units provide areas of outstanding opportunities for solitude. Opportunities are somewhat limited due to the configuration of the units, and are primarily found in the central core area, in the low mountains of the Las Vegas Range, away from Highway 93 and the ways found in the southern end. Throughout most of the WSA topography and vegetation provide for minimal screening.

C. Primitive and Unconfined Recreation: Recreational opportunities in the study areas are fair for such activities as horseback riding, hiking, camping, nature study and sightseeing. All areas provide easy access for these activities, however, there are limited areas of interest or destination points within the WSAs. The Las Vegas Range in Fish and Wildlife #2 would provide the greatest opportunity for primitive and unconfined recreation. Other visits would most likely be transitory in nature, passing through the area to reach the DNWR. Areas of interest to visitors for hiking and sightseeing would be the shelter caves found in Fish and Wildlife #2 and #3 and the bighorn sheep habitat in the Hidden Valley area. Primitive recreational use of the combined study areas is estimated to be 60 visits annually.

D. Special Features: Fish and Wildlife #2 and #3 support a small herd of bighorn sheep in the Las Vegas Range and Hidden Valley. Approximately 80-90 sheep inhabitant these locations.

The desert tortoise (Gopherus agassizii), listed by the U.S. Fish and Wildlife Service as a threatened species on April 2, 1990, has been identified within the WSA. A total of 41,909 acres within the three study areas have been identified as tortoise habitat.

A sensitive plant species, penstemon (Penstemon bicolor ssp. roseus), currently on the "Federal Register of Threatened and Endangered Species" has been identified within the WSAs.

Cultural resources, include several sites consisting of lithic scatters, a rock alignment, some points and flakes and midden, are located in the WSAs. The most important of the sites, Flaherty Shelter Cave in Fish and Wildlife #3, has been dated back to 10 B.C. None of these areas are currently listed on the National Register and there are no plans to list them in the near future.

4. MANAGEABILITY

Fish and Wildlife #1, #2, and #3 WSAs are capable of being managed as wilderness however, there would be manageability concerns associated with the material sites and associated rights-of-way. There would also be management concerns with regard to the narrowness of the study areas and the unfettered accessibility for OHVs.

5. ENERGY AND MINERAL RESOURCE VALUES

Fish and Wildlife Nos. #1 and #2 have moderate nonmetallic mineral potential through the entire WSAs for sand and gravel. The remainder of this area has low potential for nonmetallic minerals. Favorable locations of sand and gravel closer to the Las Vegas market has not created sufficient demand, for materials within the WSAs, to make these deposits economic value for commercial exploitation. All three WSAs have low potential for metallic minerals, even though there are four post FLPMA mining claims in the southern portion of Fish and Wildlife #1. The claims have never been developed.

All of Fish and Wildlife #1 and #2 have moderate potential for oil and gas. There are no leases present.

6. SUMMARY OF WSA SPECIFIC COMMENTS

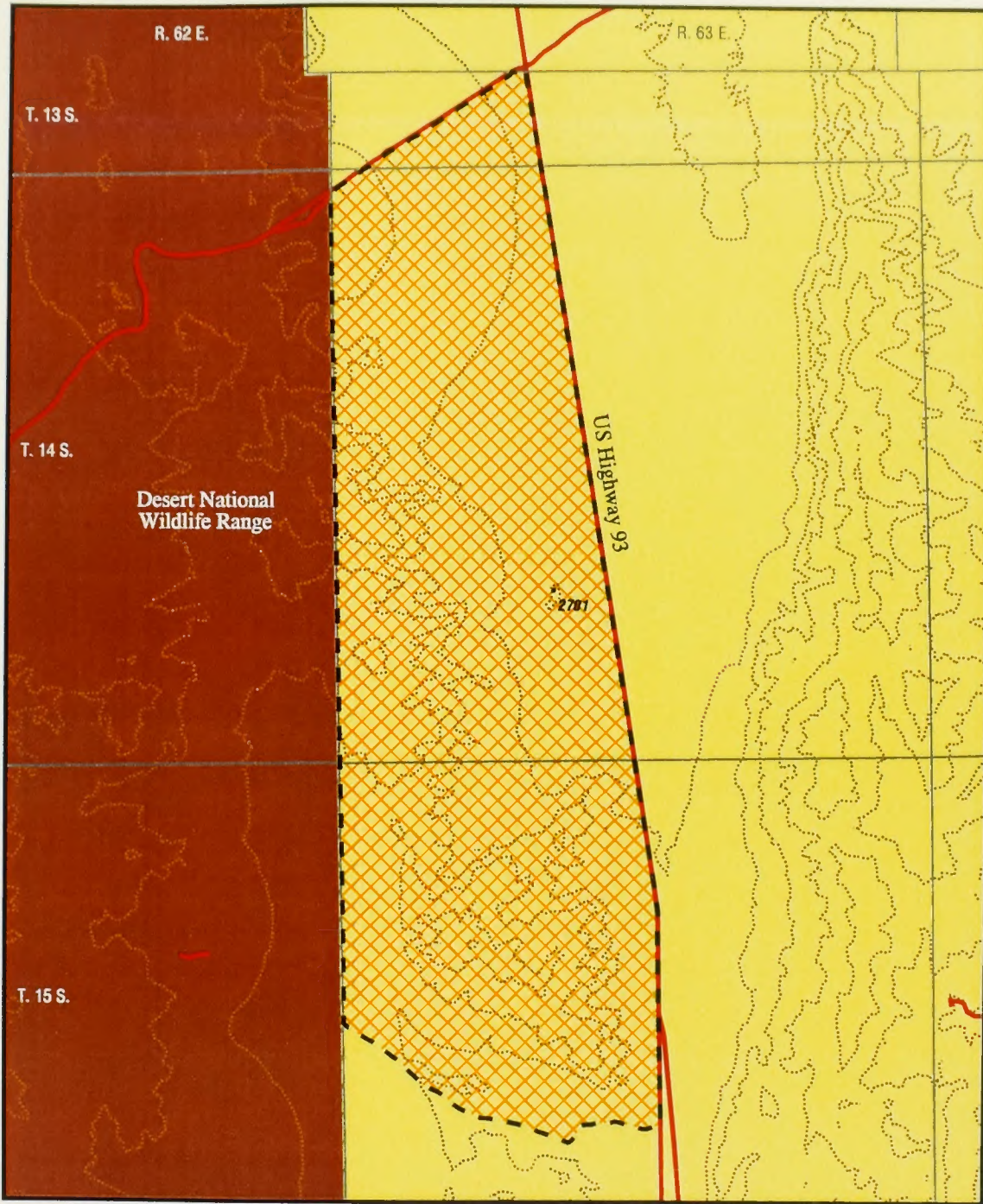
Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. One of the oral comments supported the preferred alternative (no wilderness) for the study area. The other comments did not mention these WSAs.

Of 36 written comments, four supported the preferred alternative and five proposed all wilderness. The subjects of the comments were mineral potential, race courses and excessively easy accessibility, the use of a buffer area between the DNWR and the highway, potential wilderness in the DNWR, an endangered plant, solitude and the placing of a transitional zone between the Mojave Desert and the Great Basin Desert into the National Wilderness Preservation System.

No comments were received from Clark or Lincoln Counties.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS.

Fish and Wildlife #2 Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



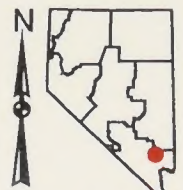
— Road

1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

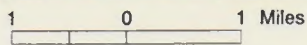
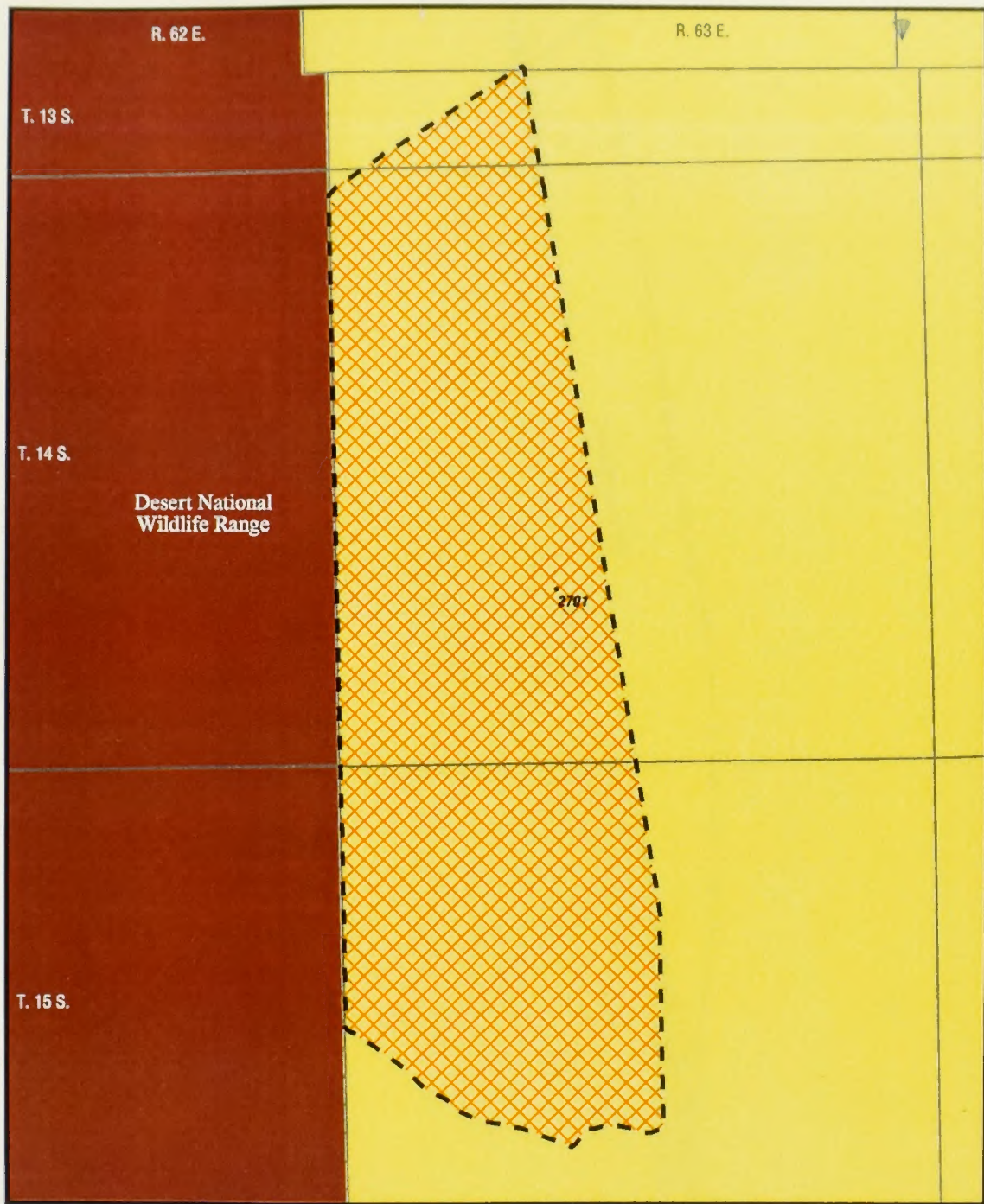
■ BLM
■ Other Agency


- - Wilderness Study Area Boundary
XXXX Recommended Non-Suitable






NV-050-216

Fish and Wildlife #2 Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



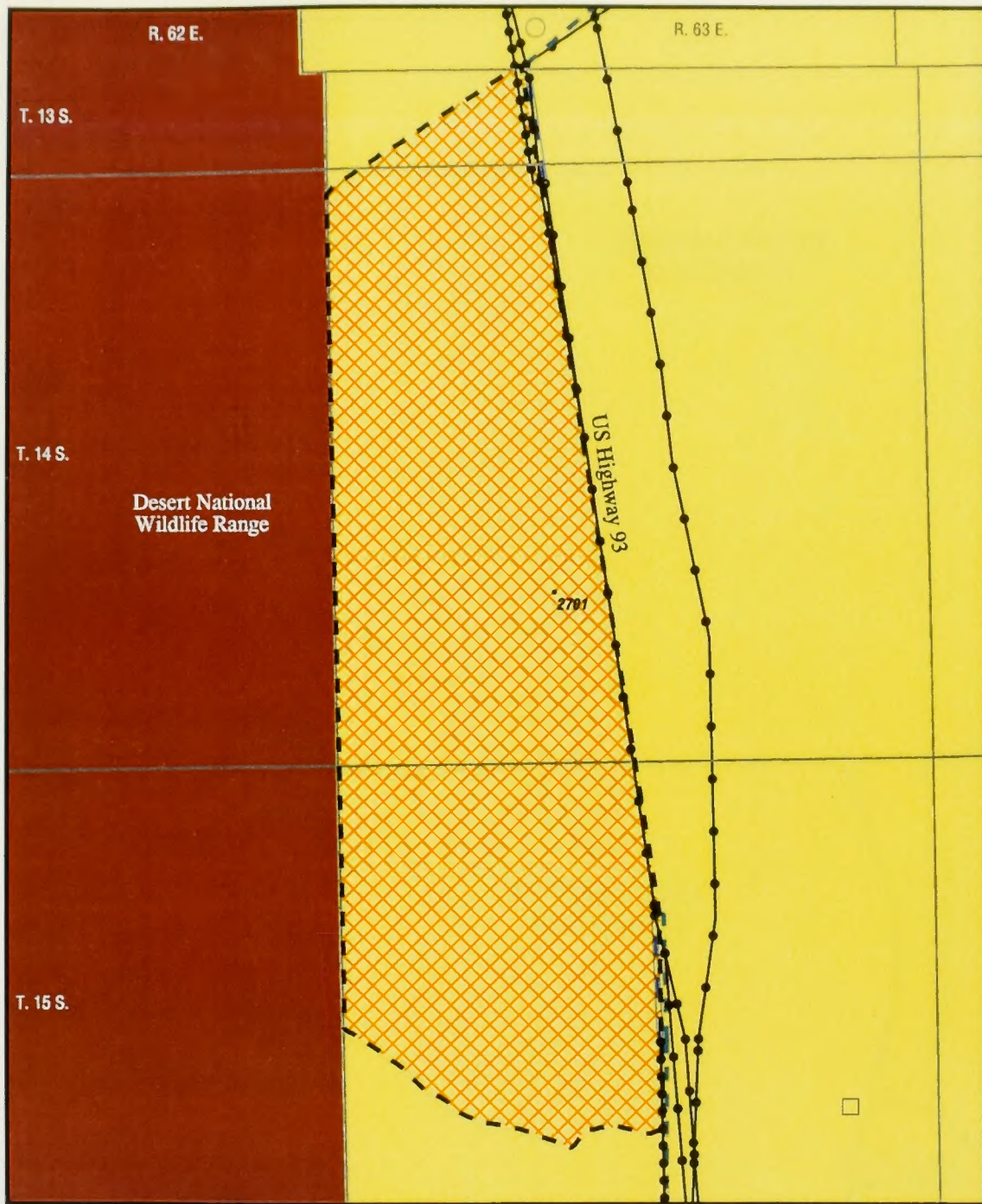
 Guzzler

 BLM
 Other Agency

-- Wilderness Study Area Boundary
 Recommended Non-Suitable



Fish and Wildlife #2 Wilderness Study Area RIGHTS-OF-WAY



1 0 1 Miles

- Communication Site
- Well
- Telephone Line
- - Pipeline
- Road
- Powerline

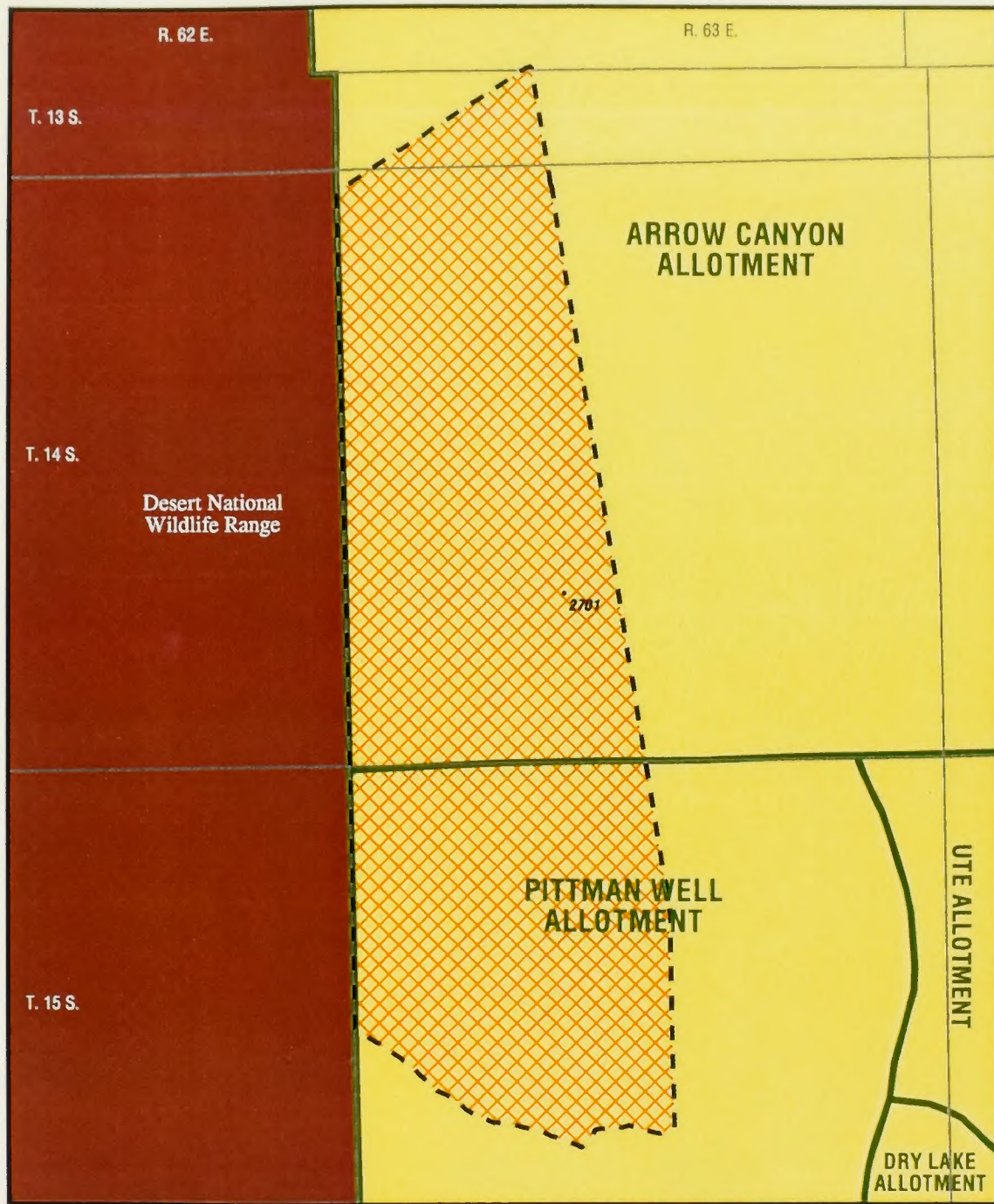
- BLM
- Other Agency

- - Wilderness Study Area Boundary
- XXXX Recommended Non-Suitable



NV-050-216

Fish and Wildlife #2 Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



Federally Listed
Threatened
and
Endangered
Species

● Observation Site
NONE ON THIS MAP

■ BLM
■ Other Agency

NO HMA ON THIS MAP

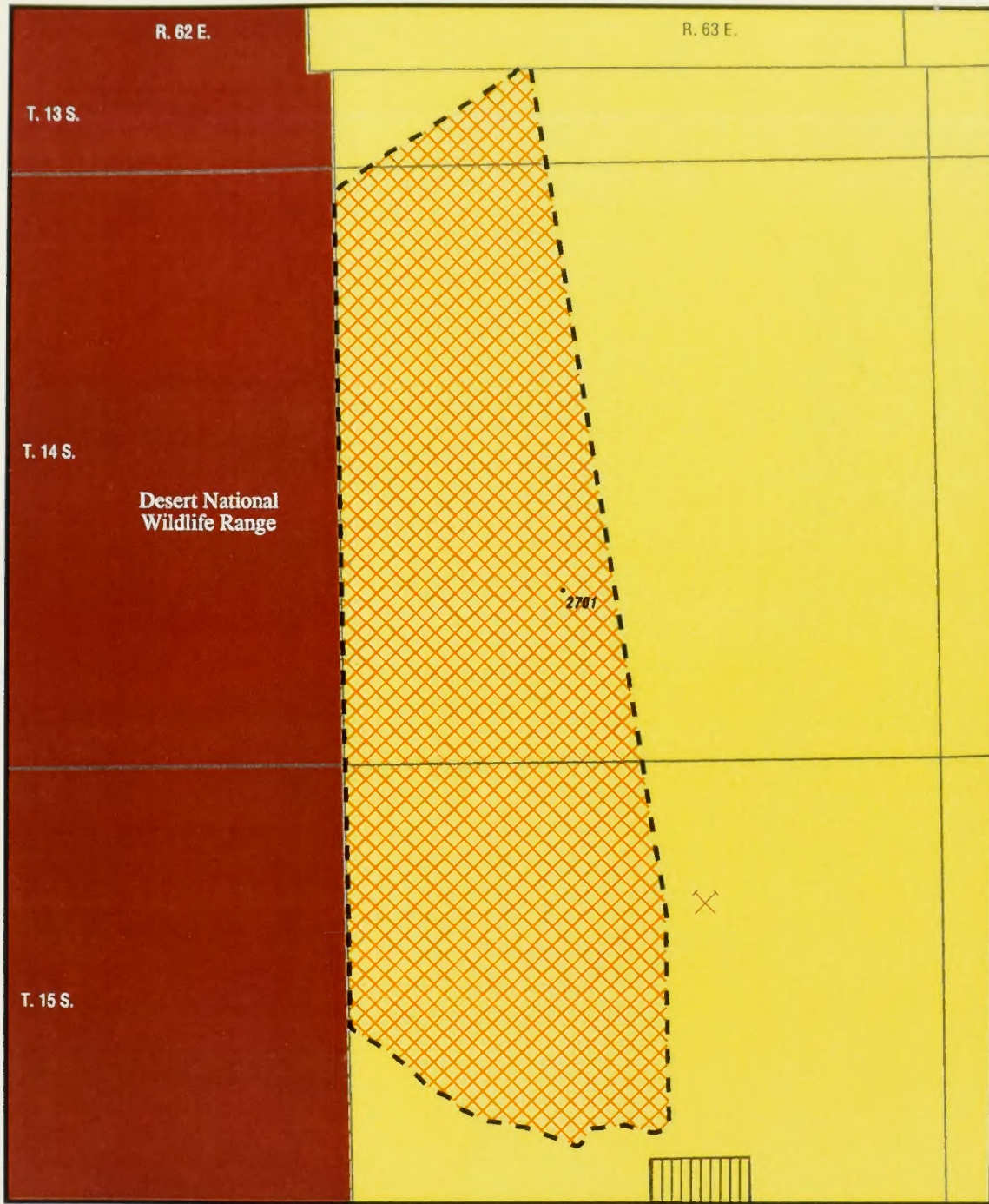
↗ Allotment
Boundary


-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-216




Fish and Wildlife #2 Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS







 Mining Operations

1 0 1 Miles

Mining Claim Density - 3/97

-  1-5 Claims
-  6-35 Claims
-  36 or more Claims

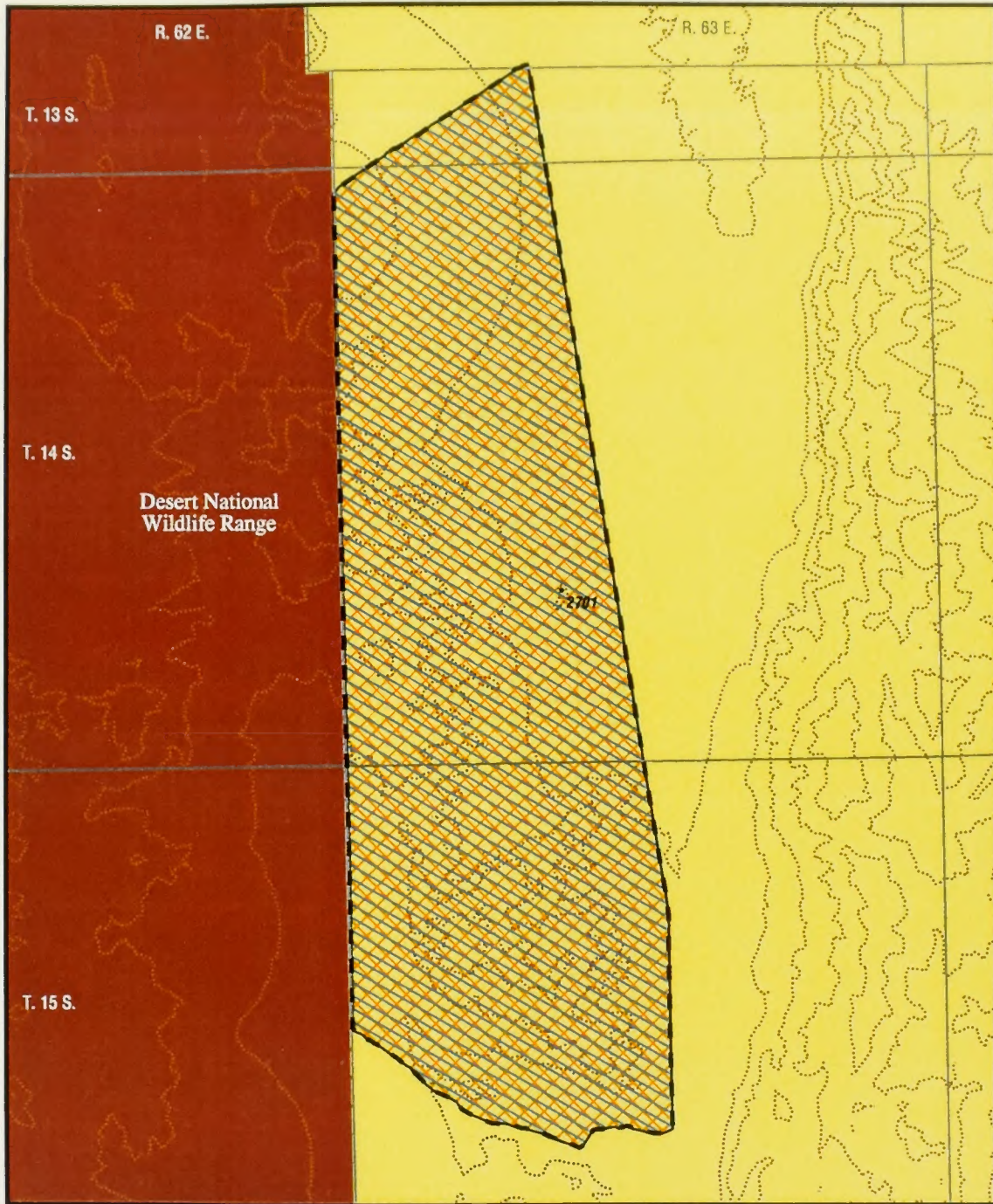
 BLM
 Other Agency

 Wilderness Study Area Boundary
 Recommended Non-Suitable



NV-050-216

Fish and Wildlife #2 Wilderness Study Area MINERAL POTENTIAL



1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential
[Cross-hatched box] Medium - Oil, Gas

[Yellow box] BLM
[Red box] Other Agency

-- Wilderness Study Area Boundary
[Cross-hatched box] Recommended Non-Suitable



NV-050-216

FISH & WILDLIFE NO. 1, 2 and 3 WILDERNESS STUDY AREAS

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Solitude opportunities available in the WSAs are similar to those afforded by thousands of other acres of BLM administered land in Clark County. These opportunities are due to topography, remoteness and lack of human activity in the area and are not due to any intrinsic values unique to the area. Opportunities to find solitude are extremely limited due to minimal topographic screening and the proximity and influence of outside sights and sounds associated with utility corridors, abandoned sand and gravel operations, and Highway 93.

Desert tortoise is a special feature within all three WSAs. Desert tortoise habitat occurs in approximately 41,909 acres (83 percent) of the 50,334 acres encompassed by the WSAs.

Fish and Wildlife #1, #2, and #3 WSAs have minimal potential for mineral development. However, the edge of the WSAs along Highway 93 has high favorability for salable quantities of sand and gravel. Several rights-of way, within the WSAs, have been issued to NDOT for sand and gravel material sites. These rights-of way have been issued in perpetuity and the total physical impacts would be 300 acres.

At present, there is little threat to existing naturalness of the area. A utility corridor route extending the entire length of the three WSAs, has been identified by potential users. It is projected that five 500 KV transmission lines and one access road could be built within the designated utility corridor. Industry has recommended a one mile wide utility corridor that would extend west of Highway 93 across all three WSAs.

Construction of projected utilities and removal of sand and gravel would physically disturb an estimated

1,919 acres within the WSAs. Western portions of the WSAs are protected due to topography and other physical and administrative constraints. Therefore, even without wilderness designation, the quality and level of values now found in the WSA are not expected to significantly change.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: All three WSAs are primarily natural with few man-made intrusions. Topography consists mainly of flat, gently sloping bajadas extending from the west to the eastern boundary. The only mountain range, the Las Vegas Range, occurs in the central portion of Fish and Wildlife No.2.

Nine ways extend into the area from the eastern and southern boundaries. The majority of these ways (12.9 miles) occur in the Fish and Wildlife #3 WSA. Two wells, which have been abandoned, are in Fish and Wildlife #1 and Fish and Wildlife #3 WSAs. They are substantially unnoticeable in the area as a whole. In Fish and Wildlife #1, there are two existing material site rights-of-way and one material site right-of-way within Fish and Wildlife #3, issued to NDOT for sand and gravel.

B. Solitude: Individually each WSA provides limited opportunities for solitude. Combined, the three units provide areas of outstanding opportunities for solitude. Opportunities are somewhat limited due to the configuration of the units, and are primarily found in the central core area, in the low mountains of the Las Vegas Range, away from Highway 93 and the ways found in the southern end. Throughout most of the WSA topography and vegetation provide for minimal screening.

C. Primitive and Unconfined Recreation: Recreational opportunities in the study areas are fair for such activities as horseback riding, hiking, camping, nature study and sightseeing. All areas provide easy access for these activities, however, there are limited areas of interest or destination points within the WSAs. The Las Vegas Range in Fish and Wildlife #2 would provide the greatest opportunity for primitive and unconfined recreation. Other visits would most likely be transitory in nature, passing through the area to reach the DNWR. Areas of interest to visitors for hiking and sightseeing would be the shelter caves found in Fish and Wildlife #2 and #3 and the bighorn sheep habitat in the Hidden Valley area. Primitive recreational use of the combined study areas is estimated to be 60 visits annually.

D. Special Features: Fish and Wildlife #2 and #3 support a small herd of bighorn sheep in the Las Vegas Range and Hidden Valley. Approximately 80-90 sheep inhabitant these locations.

The desert tortoise (Gopherus agassizii), listed by the U.S. Fish and Wildlife Service as a threatened species on April 2, 1990, has been identified within the WSA. A total of 41,909 acres within the three study areas have been identified as tortoise habitat.

A sensitive plant species, penstemon (Penstemon bicolor ssp. roseus), currently on the "Federal Register of Threatened and Endangered Species" has been identified within the WSAs.

Cultural resources, include several sites consisting of lithic scatters, a rock alignment, some points and flakes and midden, are located in the WSAs. The most important of the sites, Flaherty Shelter Cave in Fish and Wildlife #3, has been dated back to 10 B.C. None of these areas are currently listed on the National Register and there are no plans to list them in the near future.

4. MANAGEABILITY

Fish and Wildlife #1, #2, and #3 WSAs are capable of being managed as wilderness however, there would be manageability concerns associated with the material sites and associated rights-of-way. There would also be management concerns with regard to the narrowness of the study areas and the unfettered accessibility for OHVs.

5. ENERGY AND MINERAL RESOURCE VALUES

Fish and Wildlife Nos. #1 and #2 have moderate nonmetallic mineral potential through the entire WSAs for sand and gravel. The remainder of this area has low potential for nonmetallic minerals. Favorable locations of sand and gravel closer to the Las Vegas market has not created sufficient demand, for materials within the WSAs, to make these deposits economic value for commercial exploitation. All three WSAs have low potential for metallic minerals, even though there are four post FLPMA mining claims in the southern portion of Fish and Wildlife #1. The claims have never been developed.

All of Fish and Wildlife #1 and #2 have moderate potential for oil and gas. There are no leases present.

6. SUMMARY OF WSA SPECIFIC COMMENTS

Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. One of the oral comments supported the preferred alternative (no wilderness) for the study area. The other comments did not mention these WSAs.

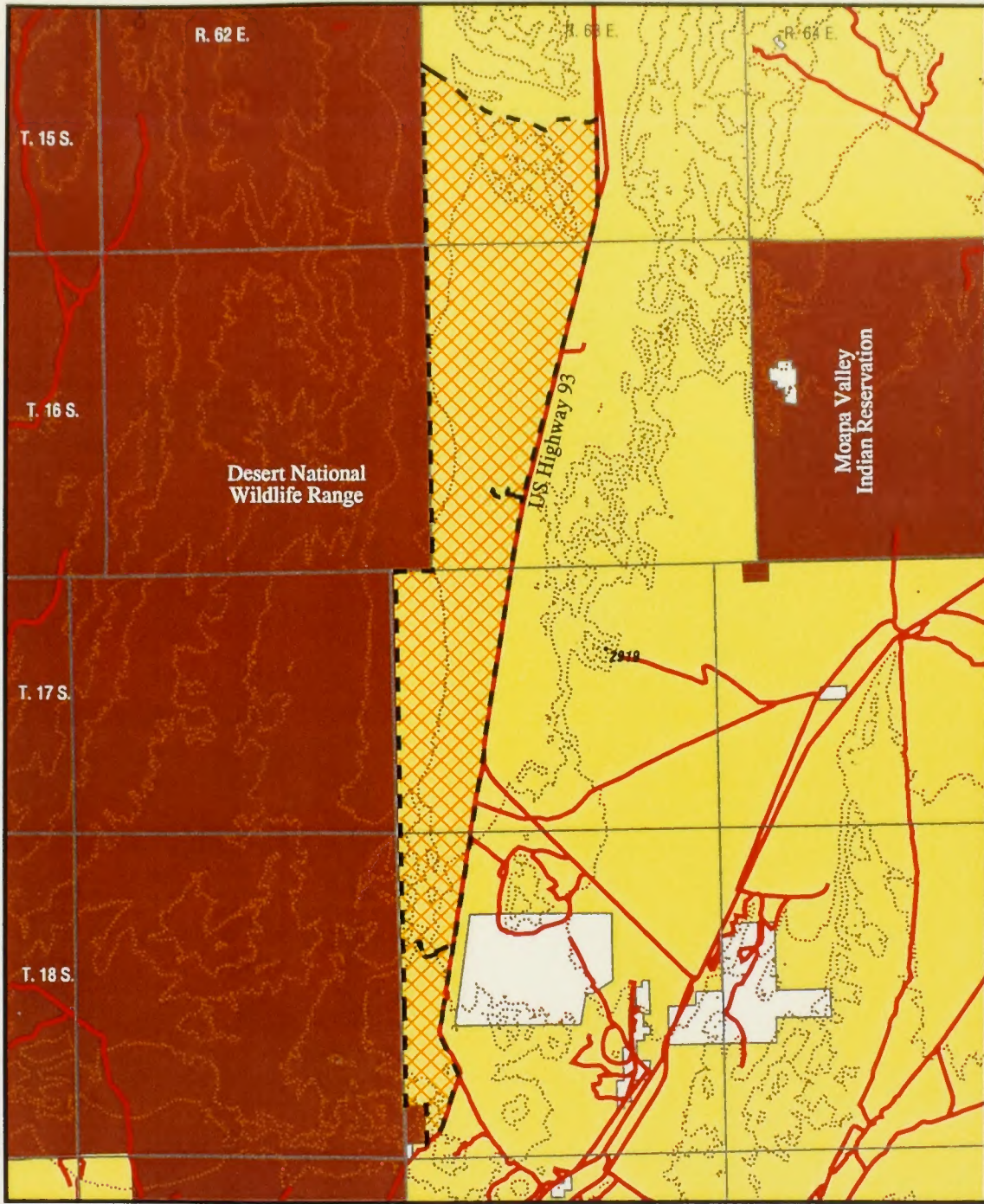
Of 36 written comments, four supported the preferred alternative and five proposed all wilderness. The subjects of the comments were mineral potential, race courses and excessively easy accessibility, the use of a buffer area between the DNWR and the highway, potential wilderness in the DNWR, an endangered plant, solitude and the placing of a transitional zone between the Mojave Desert and the Great Basin Desert into the National Wilderness Preservation System.

No comments were received from Clark or Lincoln Counties.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS.

Fish and Wildlife #3 Wilderness Study Area

WSA BOUNDARIES AND LAND OWNERSHIP



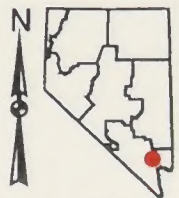
— Road
○ Spring

1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

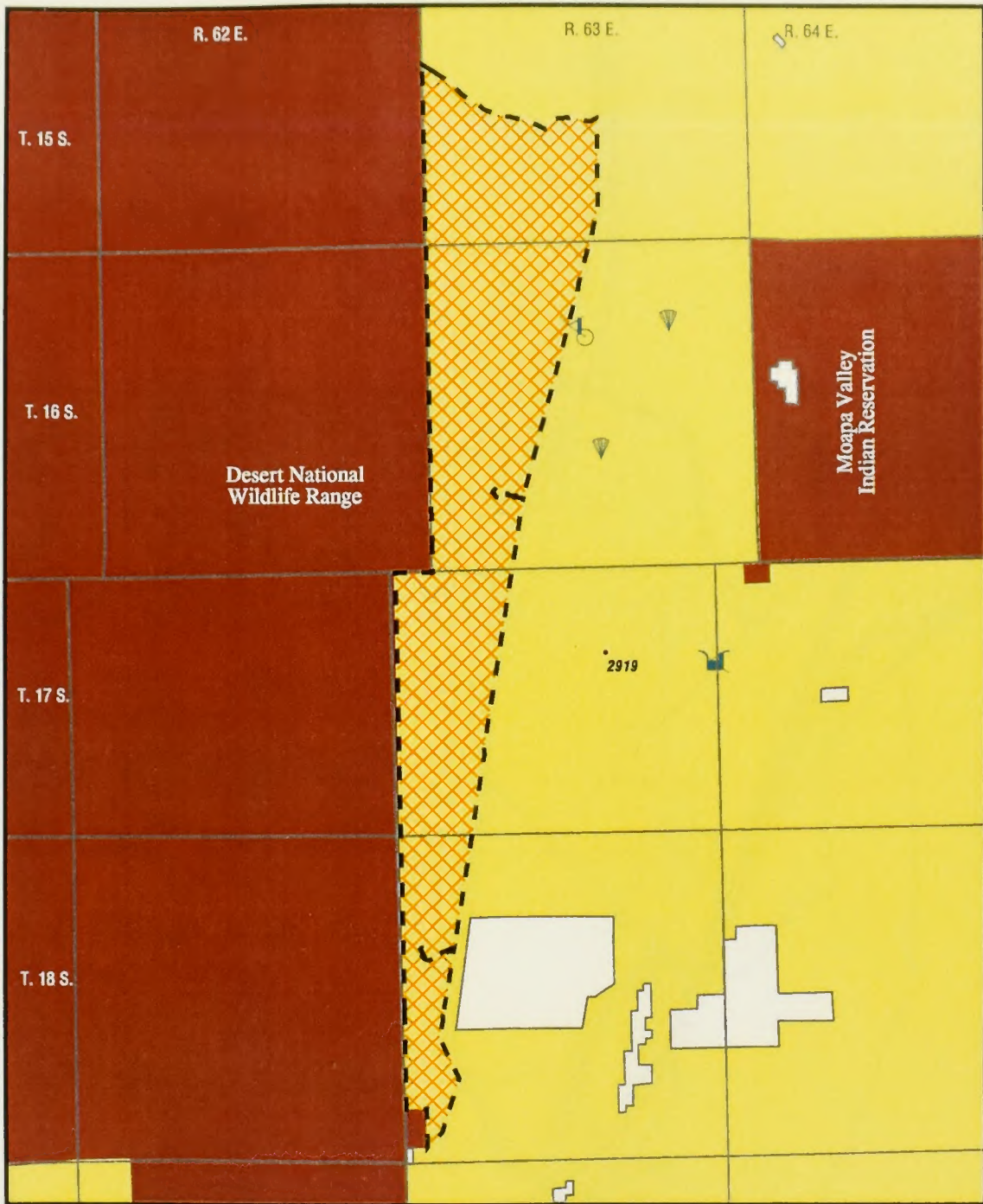
■ BLM
□ Private Land
■ Other Agency

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-217

Fish and Wildlife #3 Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



1 0 1 Miles

○ Well
◐ Reservoir
◑ Trough
◒ Guzzler

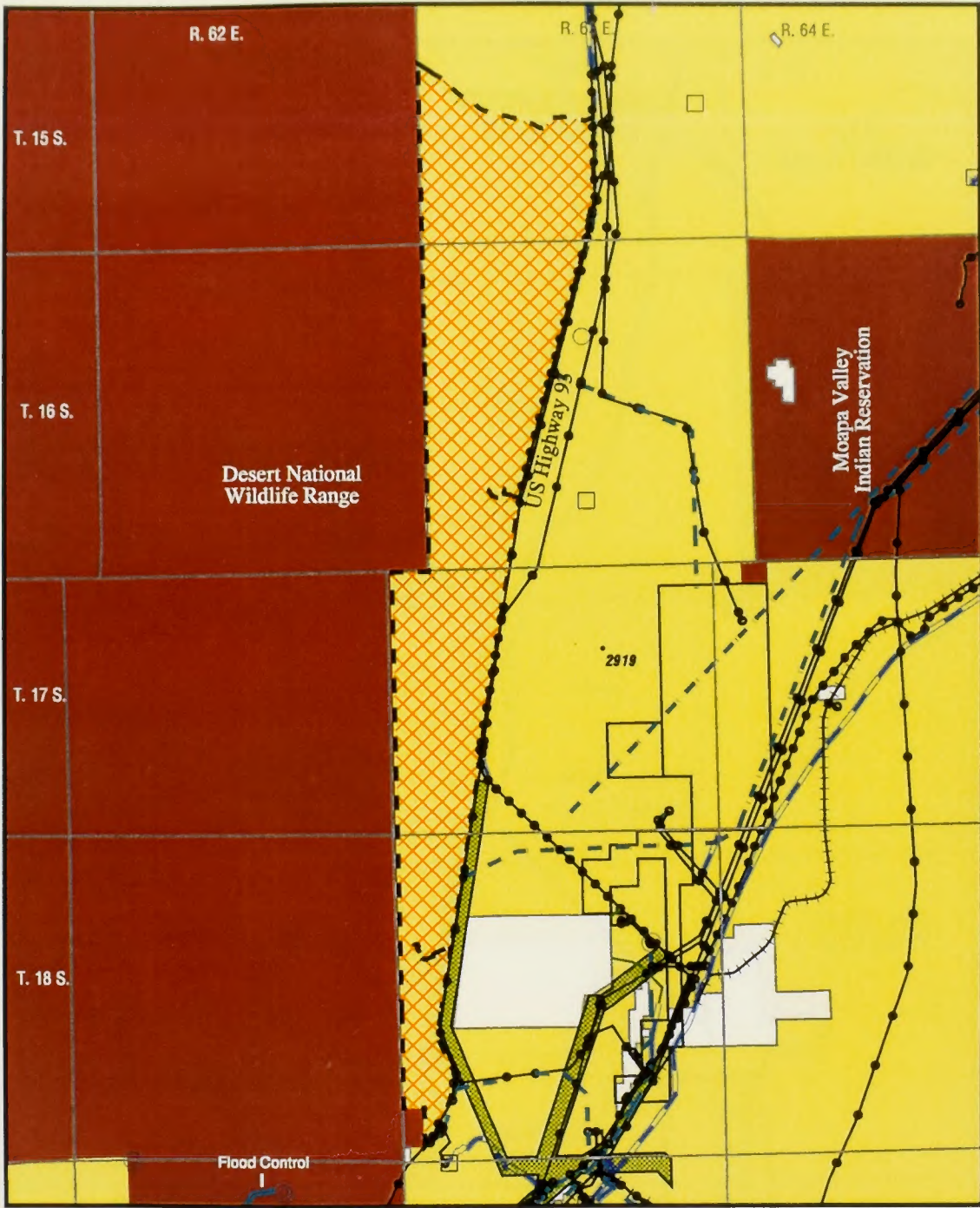
■ BLM
□ Private Land
■ Other Agency

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-217

Fish and Wildlife #3 Wilderness Study Area RIGHTS-OF-WAY



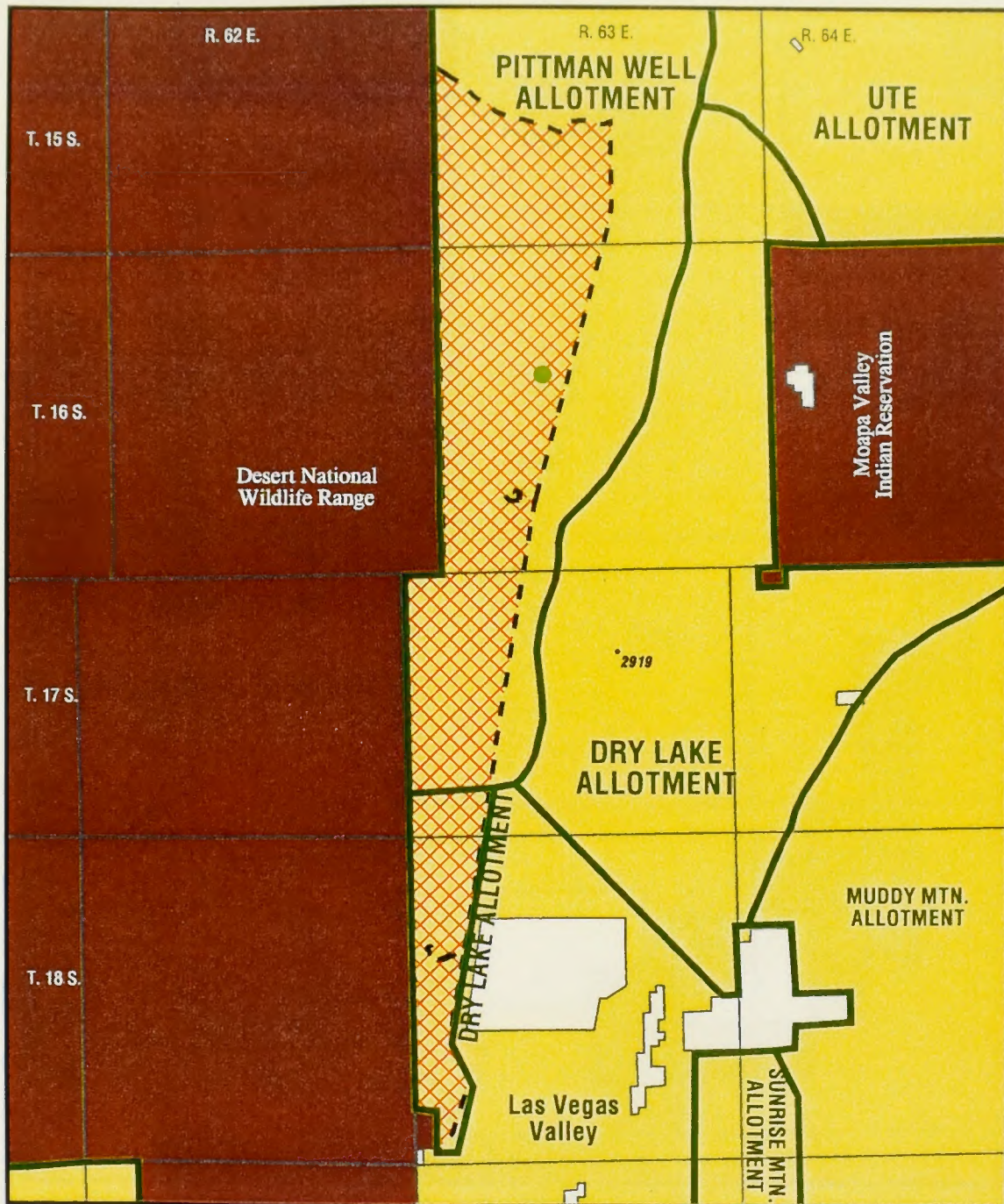
1 0 1 Miles

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> BLM Private Land Other Agency | <ul style="list-style-type: none"> Communication Site Well Rain Gauge Power Plant Apex Corridor Wilderness Study Area Boundary Recommended Non-Suitable | <ul style="list-style-type: none"> Pipeline Road Railroad Powerline Telephone Line |
|---|--|---|



NV-050-217

Fish and Wildlife #3 Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



**Federally Listed
Threatened
and
Endangered
Species**

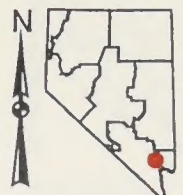
● Observation Site
- Desert Tortoise

BLM
 Private Land
 Other Agency

NO HMA ON THIS MAP

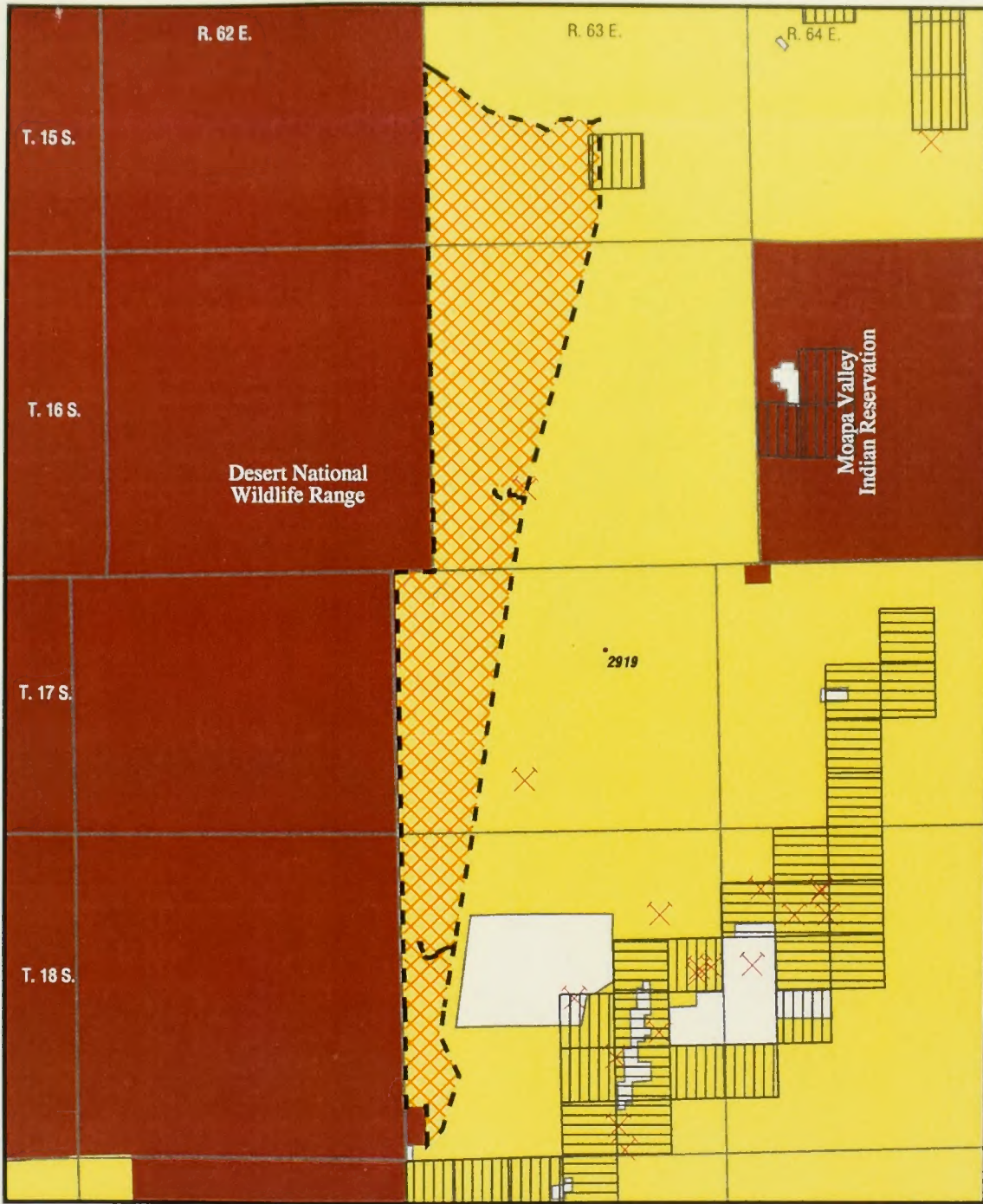
**Allotment
Boundary**

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-217

Fish and Wildlife #3 Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations

1 0 1 Miles

Mining Claim Density - 3/97

- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

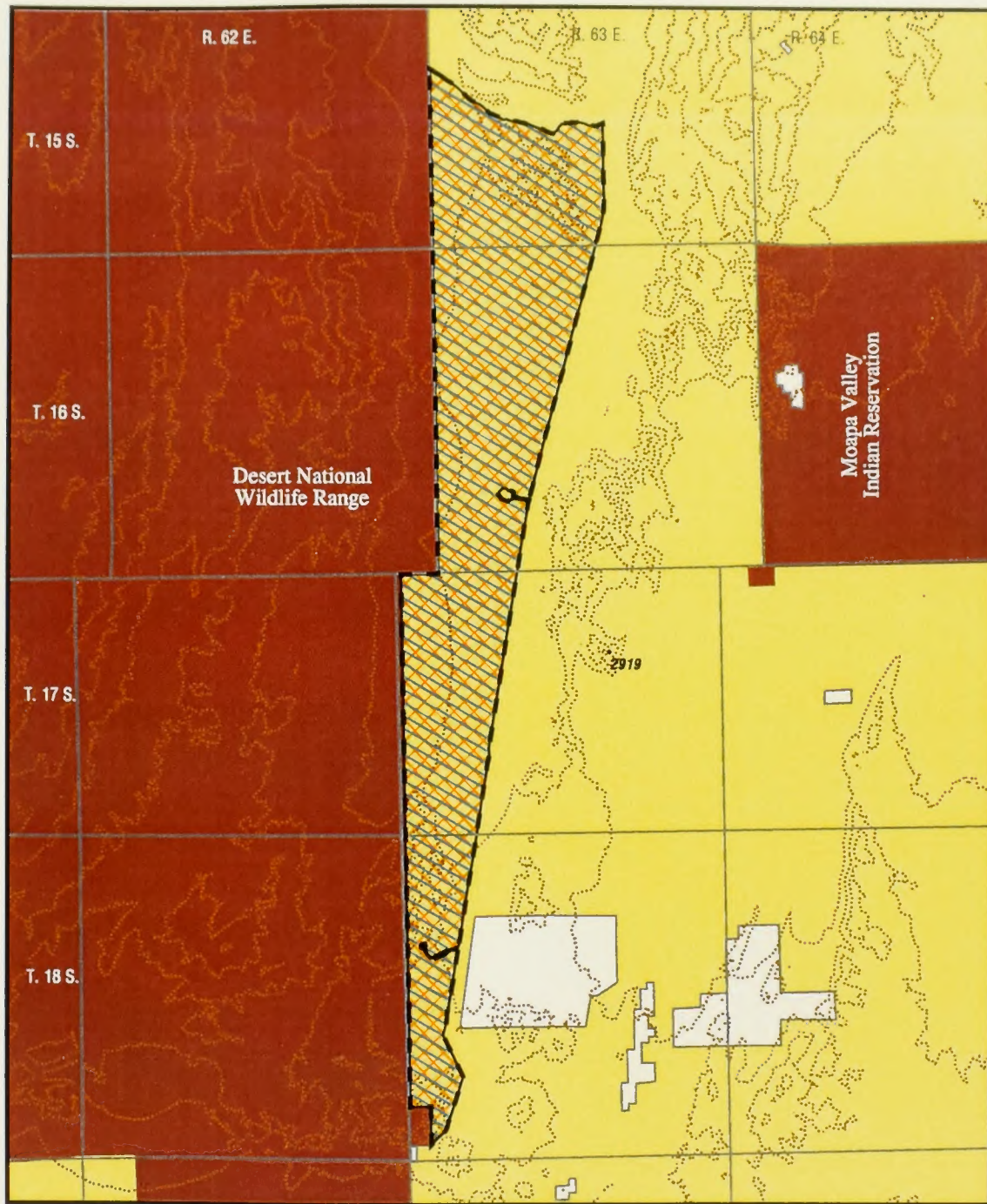
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable



NV-050-217

Fish and Wildlife #3 Wilderness Study Area MINERAL POTENTIAL








1 0 1 Miles

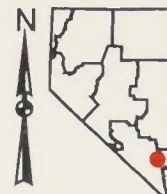
CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 Medium - Oil, Gas

-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable



NV-050-217

MUDDY MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA - 96,170 acres

Muddy Mountains Wilderness Study Area (WSA) (NV-050-229) is located in Clark County, approximately 20 miles northeast of Las Vegas, Nevada. It is irregular in shape, approximately 18 miles long and 14 miles across at its widest point. Beginning north of Color Rock Quarry and extending approximately 16 miles southeast to Bitter Spring, the northeast boundary is the American Borax Road. A combination of 4 miles of jeep trails, approximately 6 miles of common boundary with the Lake Mead National Recreation Area (LMNRA) and Bureau of Reclamation (BOR) administered land, private lands, and nearly 11 miles of road from Lovell Wash east to patented mining claims, is the southern boundary. The northwest boundary is the old Arrowhead Trail, a well used dirt road.

2. RECOMMENDATION AND RATIONALE - 36,850 acres recommended for wilderness 59,320 acres recommended for nonwilderness

It is recommended that approximately 36,850 acres be designated as wilderness and approximately 59,320 acres be released for uses other than wilderness. Outstanding wilderness values, high scenic quality, a pristine landscape, supplemental values of cultural and wildlife, easily identified boundaries and manageability were key considerations leading to the recommendation.

Intrusions from casual off-highway vehicle (OHV) use and mineral exploration are limited to the extreme southwest portion of the WSA, in the vicinity of the Gale Hills, and the extreme northeast area, south of Buffington Pockets. Extremely rugged topography in most of the WSA limits accessibility.

Opportunities for solitude and primitive recreation are outstanding in all areas of the WSA due to a diverse pattern and variety of topography, and its sheer size.

Significant cultural resources and geologic features are present adding to the educational and scientific values of the WSA.

Exploration and development of mineral resources, within the WSA, are expected to occur in the extreme southwest and east adjacent to or in close proximity to existing mining operations. Despite this, wilderness values present and scientific and educational values of the area far outweigh the resources at risk.

Much of the WSA is critical bighorn sheep habitat and wilderness designation would ensure that habitat is maintained in its present condition and would eliminate potential impacts to bighorn sheep.

Areas recommended to be released for uses other than wilderness, the broad sweeping bajadas and Bitter Spring Valley, could be potentially difficult to manage due to possible mineral development along the southwest boundary and accessibility to OHVs. At present, there is little risk to the existing character and naturalness in these areas and nondesignation will not significantly alter or affect values present, except in the southwest area should mineral values be developed. Mineral development in Bitter Spring Valley is not likely to occur.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The entire Muddy Mountain WSA is predominately natural. Little or no evidence of the presence of man is visible within the WSA, except in the northeast portion in the Buffington Pockets area where a number of ways occur. The way into Hidden valley, the core of the area recommended for wilderness designation, was closed in 1985 with the cooperation and assistance of OHV groups and other

environmental groups. Natural succession has begun and the area is returning to its natural state. Most OHV activity is concentrated outside of the area recommended for wilderness designation and is confined to the northeast and southwest portions of the WSA. The imprint of this activity is not substantially noticeable within the WSA and does not detract from the area's natural character.

Muddy Peak, Anniversary Narrow, West End Wash, and the rugged limestone and sandstone hills and valleys, which comprise the area recommended for designation, create a complex pattern of narrow, confined valleys, ridges and mountain peaks. This area is nearly pristine due to limited access and the rugged character of the area.

The 59,320 acres of WSA recommended for uses other than wilderness are primarily in a natural condition. However, the potential influence of external mining activities in the Gale Hills area may decrease the quality of the wilderness experience in the southwest corner of the WSA. There is a recent increase in interest in development of silica sand and gypsum resources in the West End Wash and Gale Hills area.

B. Solitude: Cliffs, peaks, numerous narrow canyons in the sandstone cliffs and boulders in the northwest portion of the WSA, and deeply cut canyons, such as Anniversary Narrows and Lovell Wash on the south and the deep canyon on the north end of the area recommended for wilderness designation, provide numerous opportunities for seclusion and a variety of scenic vistas and wilderness experiences for visitors in the Muddy Mountain core and most of the Gale Hills. The northern bajada, Bitter Spring Valley, White Basin, and two of the basins in the Gale Hills are broad open landscapes that offer a lesser degree of screening for solitude. Although most of the WSA is screened from outside sights and sounds, commercial and light military air traffic passes several thousand feet overhead.

C. Primitive and Unconfined Recreation: Dayhiking, backpacking, nature study, photography, technical rock climbing and scrambling are outstanding in this WSA. The extremely varied topography offers numerous destinations, trip lengths, challenge levels, and a nearly limitless variety of wilderness experiences. A temperate climate and the Bureau's Bitter Spring Back Country Byway provide easy access year round.

D. Special Features: Geological, archeological, and scenic resources and bighorn sheep are the outstanding features of the WSA. Unusual sandstone formations within Hidden and Wild Sheep Valleys were exposed by erosion creating a "fenster" or window through the overthrust limestone of the Muddy Mountain mass. Limestone cliffs form a scenic background and, from the top, offer outstanding views of basin and range physiography and Lake Mead. The conglomerate of the Gale Hills formation readily forms cliffs, the most impressive of which are the 600 foot West End Wash cliffs.

Desert bighorn are found throughout the WSA except during periods of drought. Several guzzler projects in the WSA and throughout the Muddy Mountains have been developed to expand the yearlong habitat of bighorn sheep. Wild horses and burros inhabit the southern and eastern portion of the WSA in the broad open valleys of Bitter Spring Valley and White Basin yearlong.

There are numerous archeological resources present. Site types include agave roasting pits, numerous pictograph and petroglyph panels, open camp sites, rock shelters, quarry sites, and lithic and ceramic scatters. Hidden Valley, eligible for the National Register of Historic Places, shows signs of occupation spanning over 4,000 years.

4. MANAGEABILITY

The entire Muddy Mountains WSA can reasonably be managed as wilderness to preserve wilderness values now present. The study area is a solid block of public land with no private inholdings, State lands or rights-of-way. The study area is easily identifiable with roads and trails defining its entire perimeter.

OHV activity in the east portion and mineral development in the southwest portion of the WSA would be management concerns. OHV activity in the east end of the WSA is limited to travel up a single dry wash. Mining activity and post claims are limited to the southwest portion of the WSA near West End Wash. There are no valid existing rights associated with claims in the WSA.

5. ENERGY AND MINERAL RESOURCE VALUES

The Muddy Mountains WSA, has a high potential for mineral deposits of calcium borates and lithium. Known and potential mineral deposits are concentrated in the east-central and south-central parts of the study area. Zeolites (in particular clinoptilolite) are present in some tuff beds throughout much of the study area with the majority of the deposits external to the WSA in the northeast, this inferred resource potential is probably moderate to high. Steam-sediment sampling suggests that the Muddy Mountains area has little potential for mineral deposits of metals other than lithium. Clay minerals are mined at one locality outside the WSA. Building stone and silica sand have moderate to low potential in some places.

Oil and gas potential within the study area is low. The U.S. Geological Survey determined that the petroleum potential for the study area is regarded as poor, chiefly because of the lack of known potential source rocks.

6. SUMMARY OF WSA SPECIFIC COMMENTS

During formal public review of the Draft EIS, a total of 42 comments specifically addressing this WSA were received. Of those, 39 were written comments and three were oral statements, all received at the public hearing on the Draft EIS. In general, 33 commentors supported wilderness designation for all or part of the WSA, including 9 who supported recommending more area for wilderness designation. Three commentors supported less acreage recommended for wilderness designation. Seven individuals who commented recommended no wilderness for the Muddy Mountain WSA.

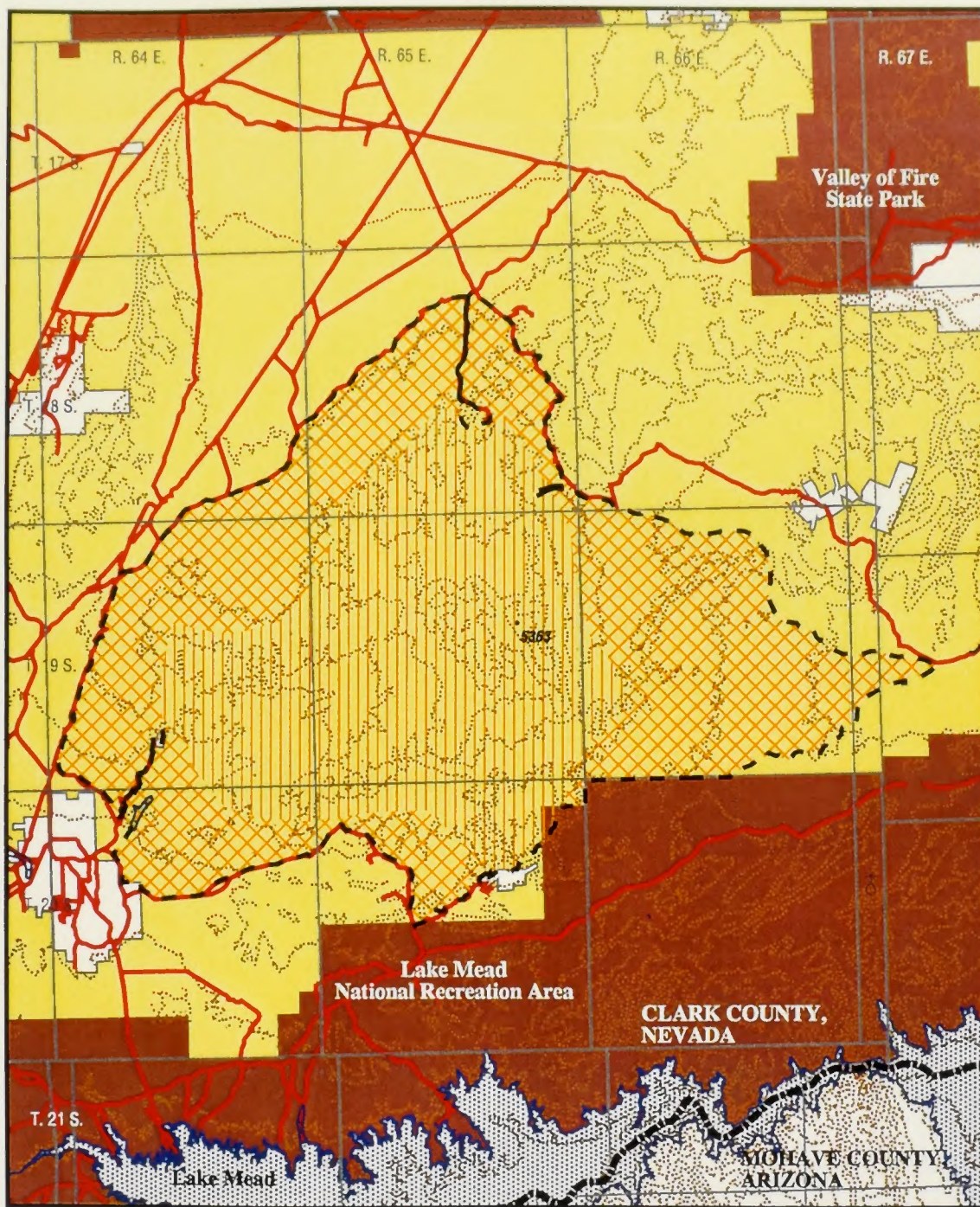
Most comments which supported wilderness designation and specifically mentioned the WSA noted outstanding wilderness values, unspoiled biological and cultural resource values, outstanding and unusual scenic amenities of the study area, and wildlife habitat potential. Comments opposing wilderness focused on potential mineral resources and impacts to energy and mineral exploration and development. The area of concern for those who opposed wilderness designation or a reduced acreage for wilderness designation, the southwest and northeast portion of the WSA, is not recommended for wilderness designation.

Clark County Department of Comprehensive Planning, in general, supported the wilderness designation.

The Governor of the State of Nevada supported the BLMs recommendation with a strong recommendation for excluding part of the southwest portion of the WSA "in order to allow continued access to mineral resources." Comment letters received from the State of Nevada Department of Conservation and Natural Resources, Division of State Lands also supported the Bureau's Preferred Alternative. The State Divisions of Minerals, Department of Wildlife and Agriculture did not support the Preferred Alternative.

The U.S. National Park Service (NPS) concurred with recommending a portion of the Muddy Mountains study area for wilderness designation citing wilderness designation of contiguous public lands would enhance NPS management of the Bowl of Fire. The U.S. Air Force stated they support alternatives that do not restrict military overflights. The U.S. Geological Survey stated that geologic conditions were adequately considered in the Draft EIS. The EPA supported the proposed action and suggested that the final recommendation include a statement that water and air quality would be best protected under wilderness designation.

Muddy Mountains Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



— Road
○ Spring

1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

☪ Lake
~ Wash

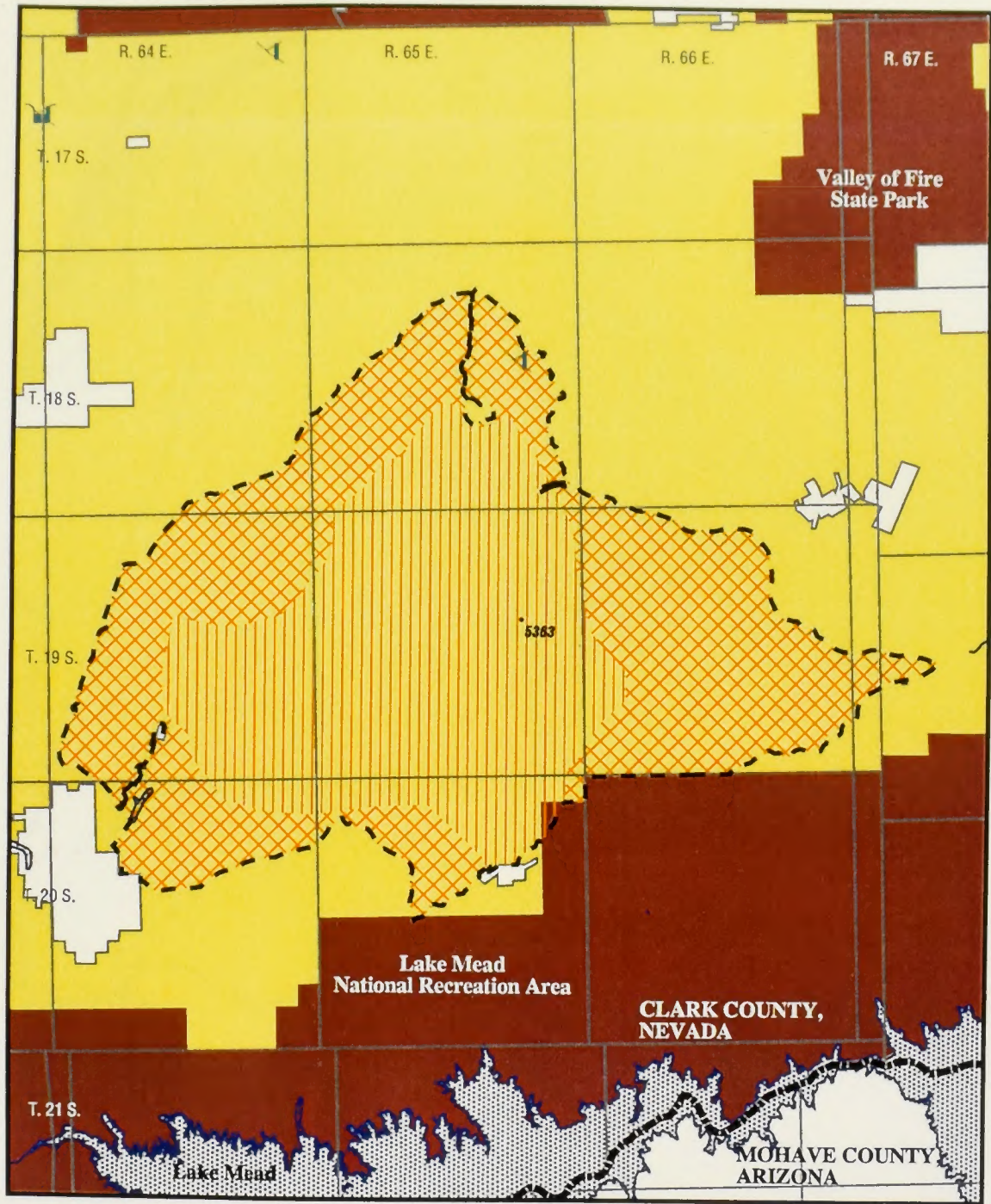
■ BLM
□ Private Land
■ Other Agency

--- Wilderness Study Area Boundary
▣ Recommended Non-Suitable
▮ Recommended Suitable





NV-050-229




Muddy Mountains Wilderness Study Area DEVELOPMENTS AND DISTURBANCES






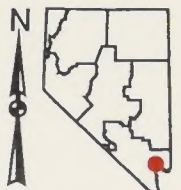
1 0 1 Miles

 Lake
 Wash

 Reservoir
 Trough

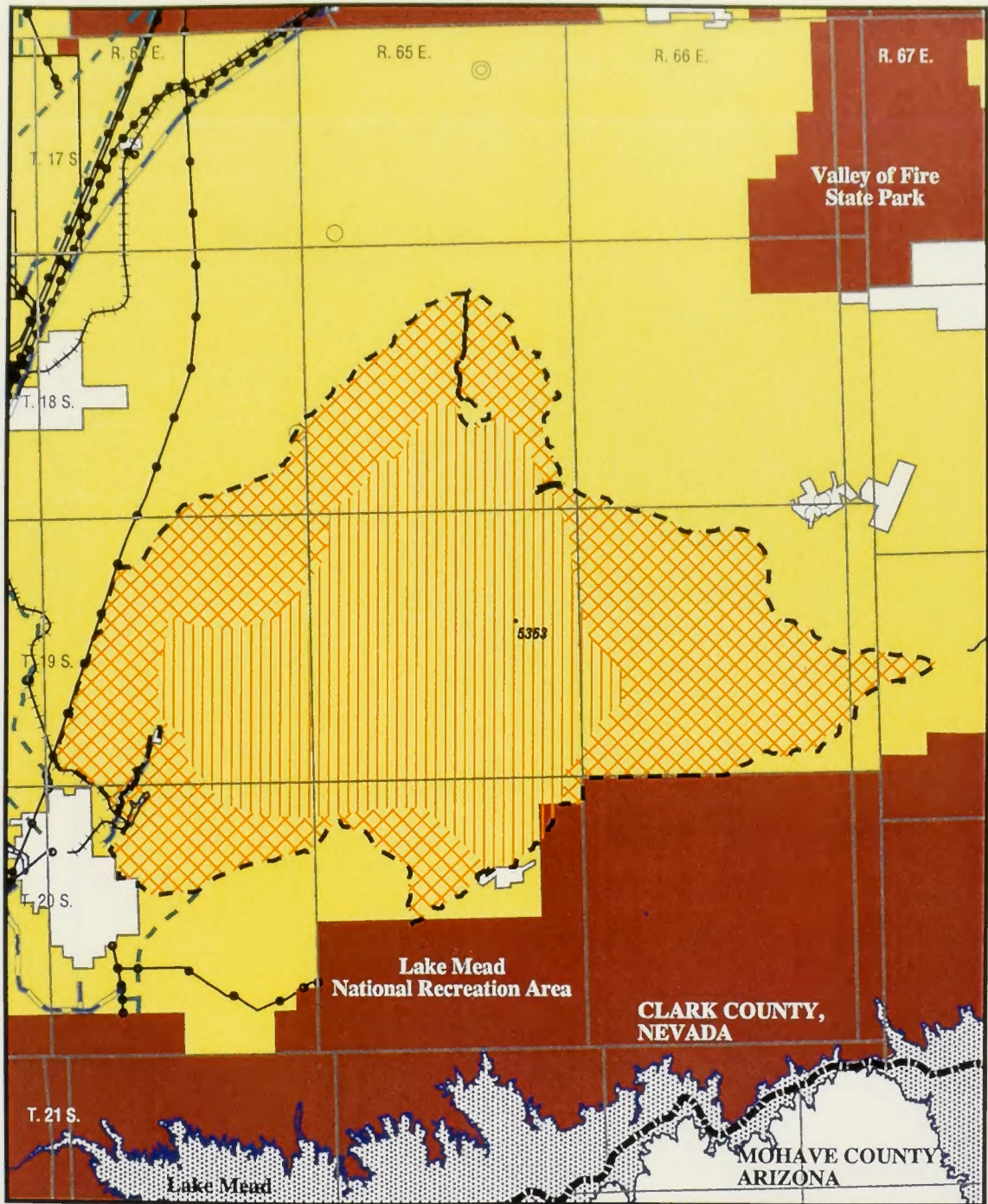
 BLM
 Private Land
 Other Agency

 Wilderness Study Area Boundary
 Recommended Non-Suitable
 Recommended Suitable

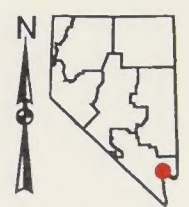


NV-050-229

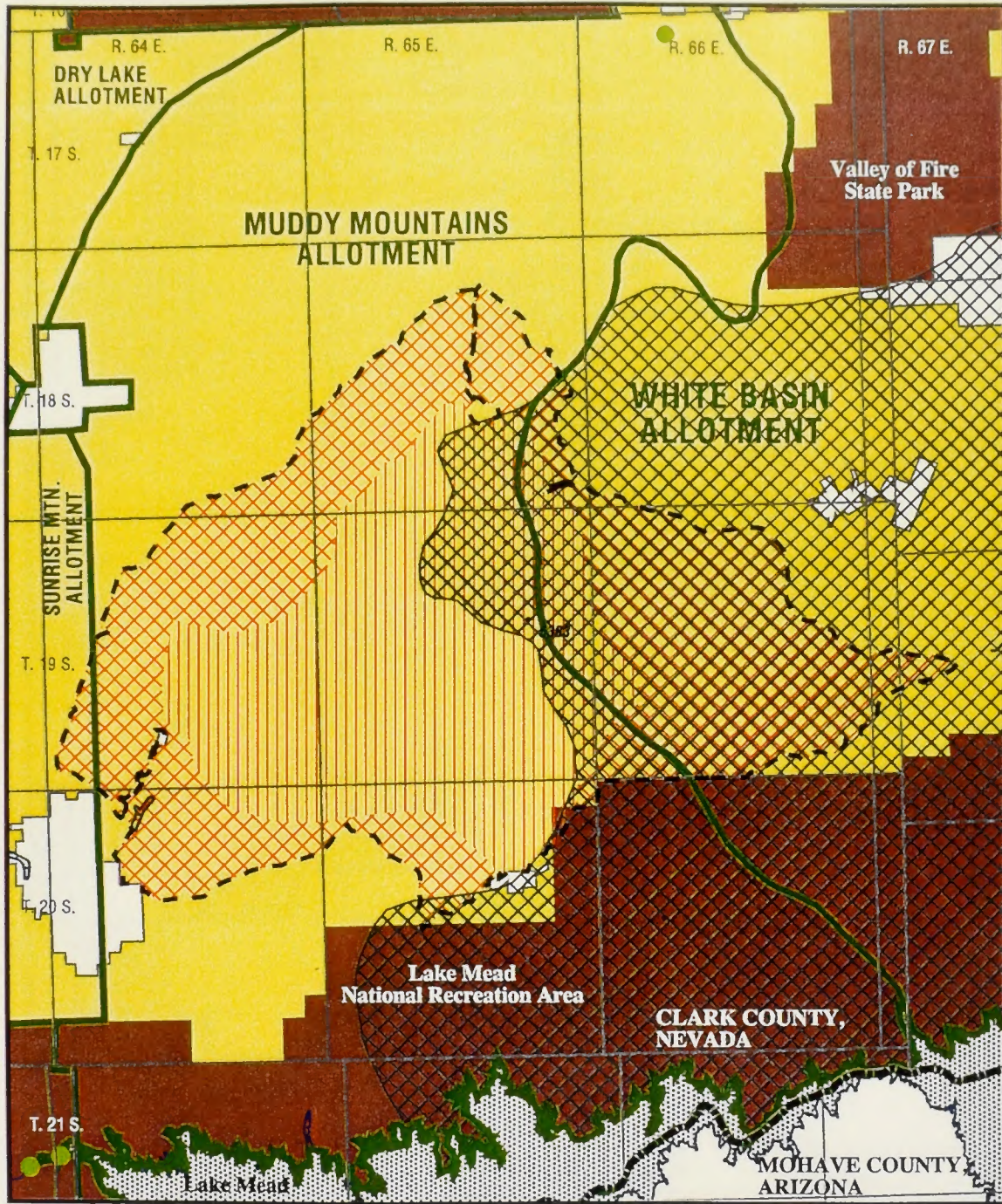
Muddy Mountains Wilderness Study Area RIGHTS-OF-WAY



- | | | |
|--------------|--------------------------------|----------------|
| BLM | Well | Pipeline |
| Private Land | Rain Gauge | Powerline |
| Other Agency | Power Plant | Telephone Line |
| | Road | Railroad |
| | Wilderness Study Area Boundary | |
| | Recommended Non-Suitable | |
| | Recommended Suitable | |



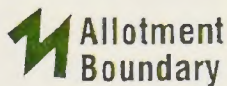
Muddy Mountains Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



- Federally Listed Threatened and Endangered Species**
- Observation Site - Desert Tortoise, Razorback Sucker, Least Tern
- BLM
- Private Land
- Other Agency



Muddy Mountains HMA

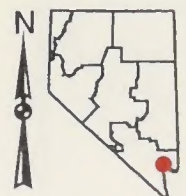


Allotment Boundary

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable

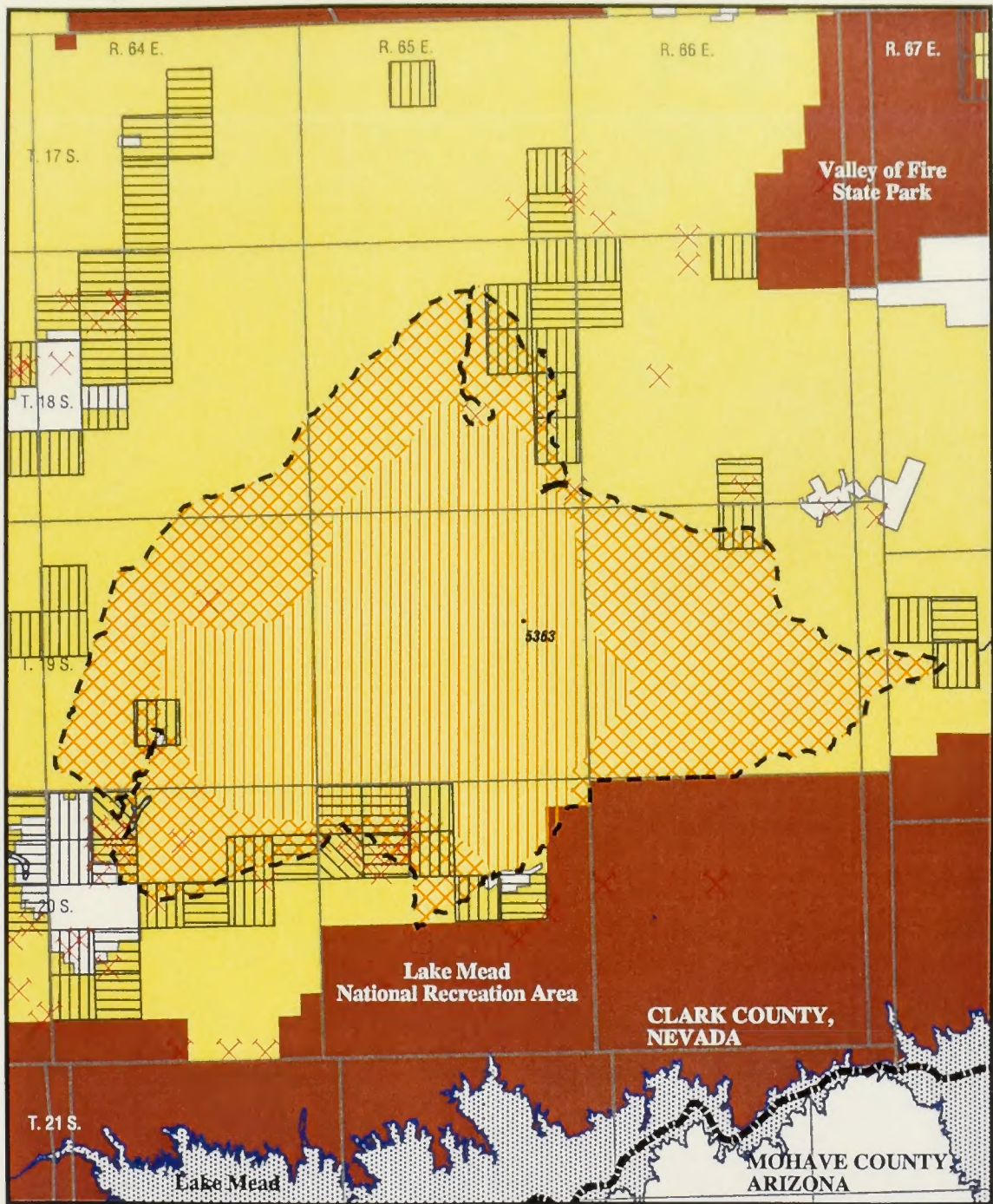


Lake Wash



NV-050-229

Muddy Mountains Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations

1 0 1 Miles

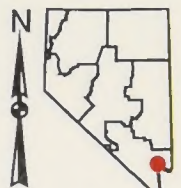
Lake Wash

Mining Claim Density - 3/97

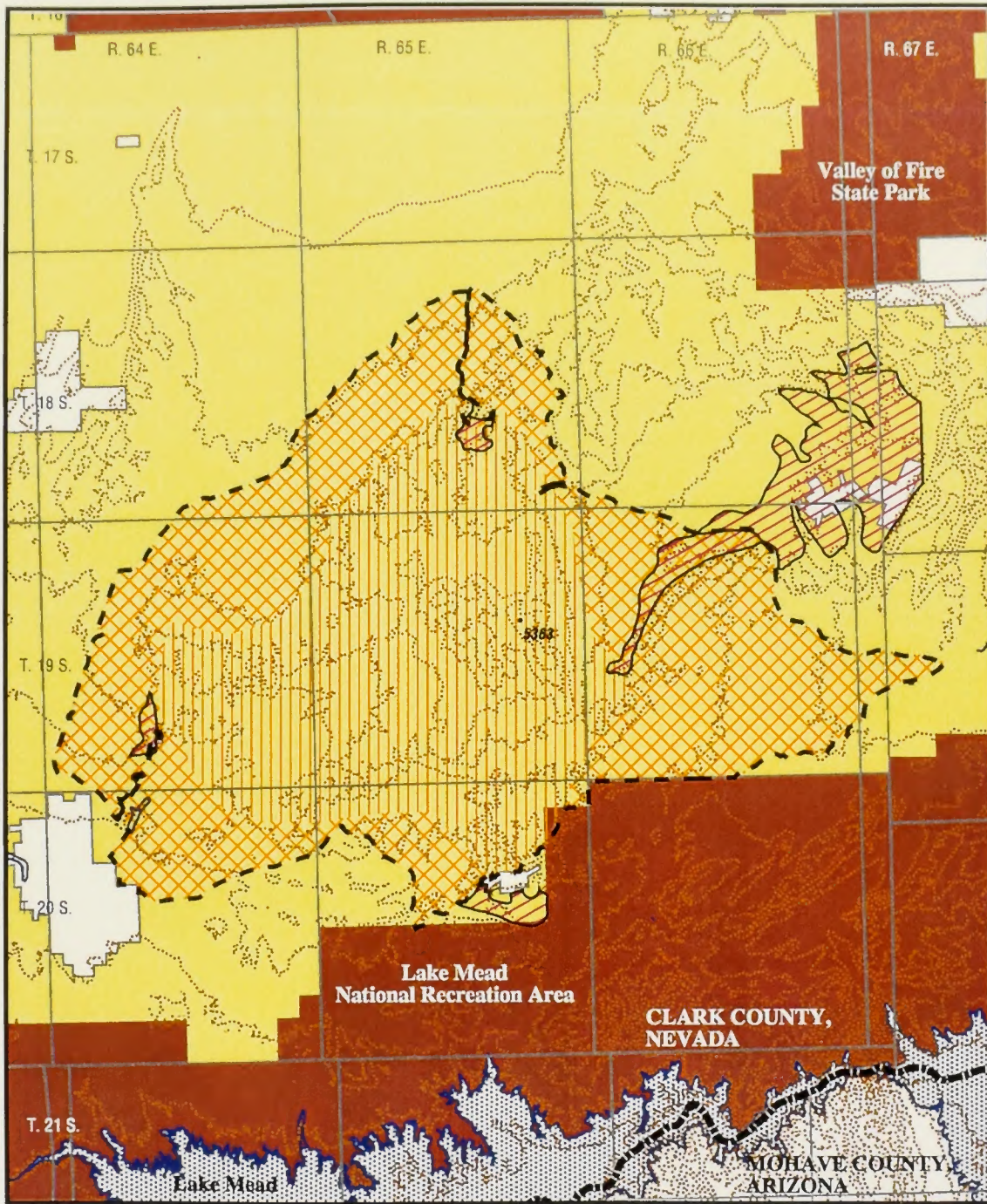
- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable




Muddy Mountains Wilderness Study Area MINERAL POTENTIAL




1 0 1 Miles


CONTOUR INTERVAL 200 METERS (656 FEET)

 Lake Wash




Mineral Potential

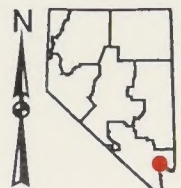
 High - Borate, Lithium, Clay, Building Stone

-- Wilderness Study Area Boundary

 Recommended Non-Suitable

 Recommended Suitable

 BLM
 Private Land
 Other Agency



NV-050-229

LIME CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA - 34,680 acres

Lime Canyon Wilderness Study Area (WSA) (NV-050-231) is located in the Overton Arm region, near Lake Mead, northwest of Gold Butte in eastern Clark County, Nevada. The study area includes 34,680 acres of public land and surrounds 838 acres of patented mining claims. The WSA has a generally elongated shape that is north-south oriented. It is about 13 miles long and varies between three and seven miles wide. Lake Mead National Recreation Area (LMNRA) borders the WSA on the west and its boundary is the western boundary of the WSA. Gold Butte Wash and the Old Gold Butte Road is the eastern boundary. Quail Spring Wash Road is the southern boundary for approximately 2.5 miles before the boundary turns down a major wash north of Mocking Bird Spring.

2. RECOMMENDATION AND RATIONALE - 13,895 acres recommended for wilderness 20,785 acres recommended for nonwilderness

The recommendation for this WSA is to designate approximately 13,895 acres as wilderness and release approximately 20,785 acres for uses other than wilderness. The central portion of the WSA is recommended for wilderness because of high quality naturalness, outstanding opportunities for solitude and primitive recreation, and the lack of conflicts with other actual or potential users of the area.

Topographically diverse, the recommended area consists of alluvial and badlands formations, a hogback like limestone ridge, deep rock drainages, and wide sandy washes. Remoteness and topographic diversity of the area coupled with the adjacent undeveloped lands to the east, ensures outstanding solitude opportunities of the highest quality.

Designation of the area recommended for wilderness would expand the spectrum of primitive recreational opportunities for residents and visitors within the southern Nevada region. Pristine scenic vistas would also be preserved. Popular recreation activities such as sightseeing, photography, hiking, and backpacking would be enjoyed within an expansive primitive setting. Wilderness designation will preserve an undisturbed area of ecological interest, providing educational and scientific information. A variety of wildlife inhabit the area and the potential for identifying prehistoric cultural sites exists. Three major faults cross the area and make interesting geologic features.

Inaccessibility of the adjacent LMNRA land and rugged terrain provide natural, physical barriers to vehicular access. Remoteness of the area, demanding topography, and easily recognizable boundaries would enhance manageability of the area as wilderness.

Conflicts with other resource uses of the lands recommended for designation are limited. High volume-low value commodities, such as limestone, dolomite, and sand and gravel would not be mined in the area because of the distance to market and the availability of similar resources in the region. Development of gypsum resources and exploration for energy resources is projected to occur on lands adjacent to the area recommended for wilderness. Projected activity would indirectly conflict with opportunities for solitude along the recommended area's eastern boundary. No other resource conflicts are projected for the area.

The 20,785 acres of public land, not recommended for wilderness, completely surrounds the land recommended for wilderness on all sides except for the border contiguous with the LMNRA. Three parcels of patented land are within the area not recommended for wilderness.

Mineral development is projected to occur within the area on three patented mining claims. Development of minerals would require access into the claims, across public land. Development of minerals within the

claims would negatively influence wilderness values on the surrounding public land not recommended for wilderness. Exploratory drilling of one oil and gas well is projected to occur along the WSA's eastern border.

Not designating 20,785 acres of public land for wilderness would enhance management of the area by eliminating conflicts with potential development of access to private land, mineral development, and oil and gas exploration activities.

Lands not recommended for wilderness designation would be negatively impacted by any activity occurring on the patented mining claims. Not recommending these areas for wilderness emphasizes maintaining access for motorized recreational activities, such as OHV use.

Over the long-term, naturalness values and opportunities for solitude within those lands not recommended for wilderness would be diminished by increased motorized recreational use and mineral and energy exploration and development. Desert tortoise (Gopherus agassizi), golden bear poppy (Arctomecon californica), and gila monster (Heloderma suspectum), special features identified in the area, would not receive the added protection afforded from wilderness designation.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The WSA is primarily natural. It consists of small, rugged drainages, gently rolling hills, two paralleling ridges, a narrow canyon and several wide, sandy washes. The most pristine portion of the study area occurs in the central portion along the ridges and in the canyons. There are no man-made intrusions in this area.

Along the boundaries and lower portions of the WSA, there are several intrusions. Eight ways extend into the study area for a total of 12.7 miles. The longest occurs across the bajada and wide washes in the southwest corner of the study area. There are three short allotment fences, one of which is a gap fence that crosses the mouth of Lime Canyon. Two bird guzzlers and an earthen reservoir are found in the southern and eastern fringes of the WSA.

B. Solitude: Within the area recommended for wilderness designation outstanding opportunities for solitude exist. Excellent topographic screening exists due to the large diversity of topography which ranges from small, rugged drainages to gently rolling hills. Two paralleling ridges extend the length of the WSA to the narrow canyon and several wide washes on the edge of the unit. The central and northern portions (approximately 10,000 acres) provide maximum topographic screening and secluded areas where outstanding opportunities for solitude occur. The most prominent secluded area occurs along Lime Ridge, which runs the length of the WSA. Excellent opportunities also exist in Lime Canyon.

Vegetation within the unit is typical of the Mojave Desert, including cactus, creosote bush, annual grasses, scattered communities of Joshua trees and yucca plants. Low growing vegetation provides nominal screening, except along the eastern boundary where intermittent stands of Joshua provide better screening.

C. Primitive and Unconfined Recreation: There are numerous opportunities for primitive and unconfined recreational activities, including day hikes, backpacking, nature study, hunting and photography. Outstanding opportunities for primitive recreation occur mostly in the central portion of the study area along major ridges, canyons, drainages and rolling hills. The greatest variety of topography, wildlife and points of interest are located within this portion of the WSA.

D. Special Features: Lime Ridge and Lime Canyon are of unique scenic and geologic quality resulting from faulting activity.

The desert tortoise (Gopherus agassizii), listed by the U.S. Fish and Wildlife Service as a threatened species on April 2, 1990, has been identified within the WSA.

4. MANAGEABILITY

The entire WSA is not reasonably manageable as wilderness. Management of vehicular access along the southern and eastern portions of the WSA due to accessibility and limited physical impediments is a significant concern. The 838 acres of patented mining claims within the interior of the WSA and access to those claims is a concern.

The 13,895 acre portion of the WSA recommended for wilderness designation is easily managed as wilderness. The patented mining claims are external to this area.

Five pre-FLPMA load claims are located within the WSA. Valid existing rights are uncertain at this time. There are no known post-FLPMA mining claims within the WSA.

5. ENERGY AND MINERAL RESOURCE VALUES

The entire WSA has moderate potential for nonmetallic minerals (gypsum). Although there is abundant deposits of limestone and dolomite, they have low development potential. Similar deposits closer to a market make these deposits of lower value. The Lime Canyon WSA is considered to have low favorability for the occurrence of energy resources.

6. SUMMARY OF WSA SPECIFIC COMMENTS

In 1986, the area was reinstated in the wilderness study process as a result of an April 1985 decision in Sierra Club vs Watt concerning certain lands that were deleted from wilderness review in 1982 and 1983. As a result of the court case, the area was reinventoried to document wilderness characteristics.

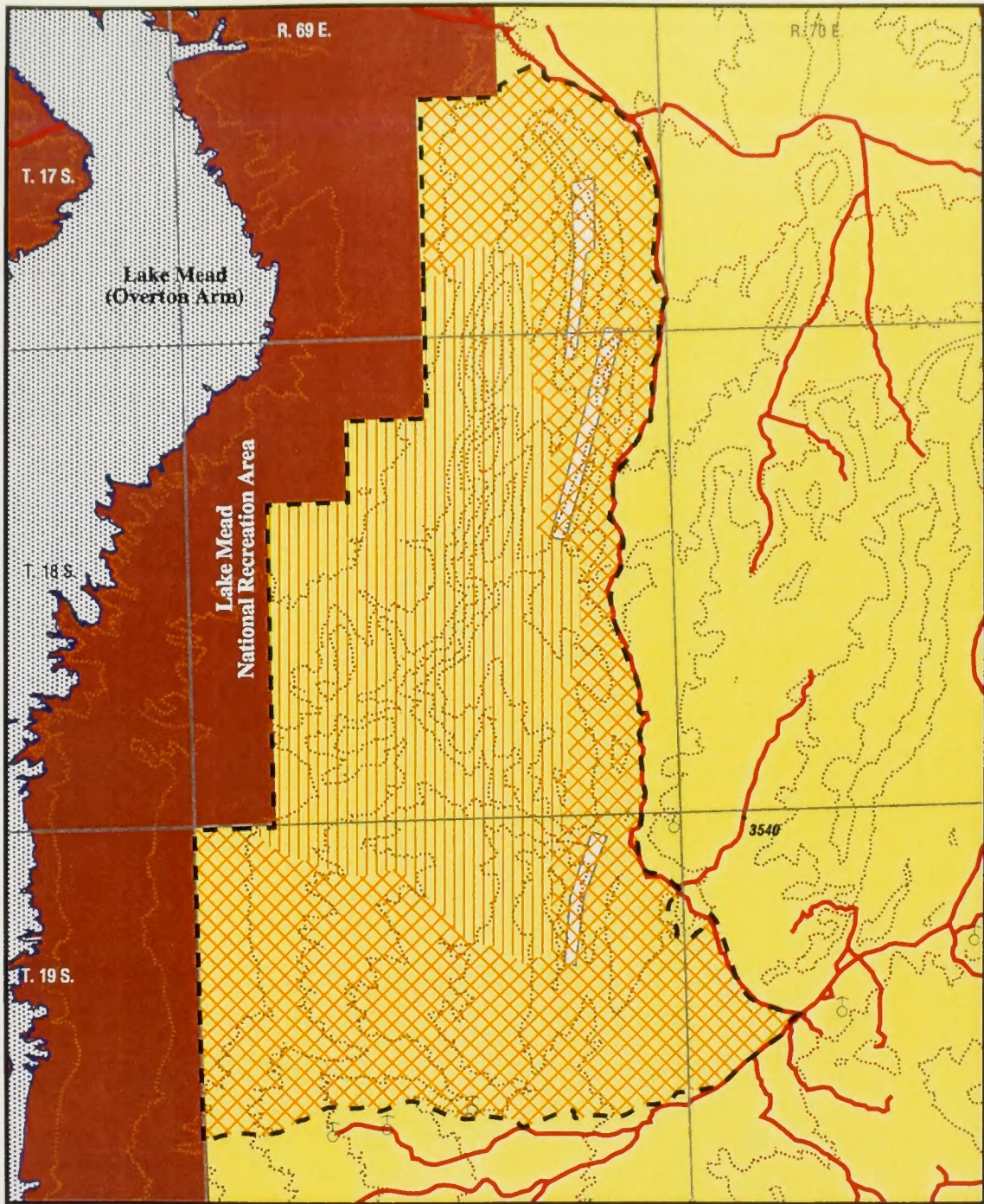
Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. One of the oral comments supported the Preferred Alternative (Partial Wilderness) for the Lime Canyon WSA. None of the other comments mentioned this WSA.

Of the 36 written comments, eight supported the preferred alternative and none specifically recommended another alternative for this WSA. The subjects of the comments were mineral potential, race courses, designation of adjacent lands as wilderness, watershed and wildlife habitat.

No comments were received from Clark County.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS and the recommendation is partial wilderness.

Lime Canyon Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



— Road
○ Spring

1 0 1 Miles

☞ Lake

CONTOUR INTERVAL 200 METERS (656 FEET)

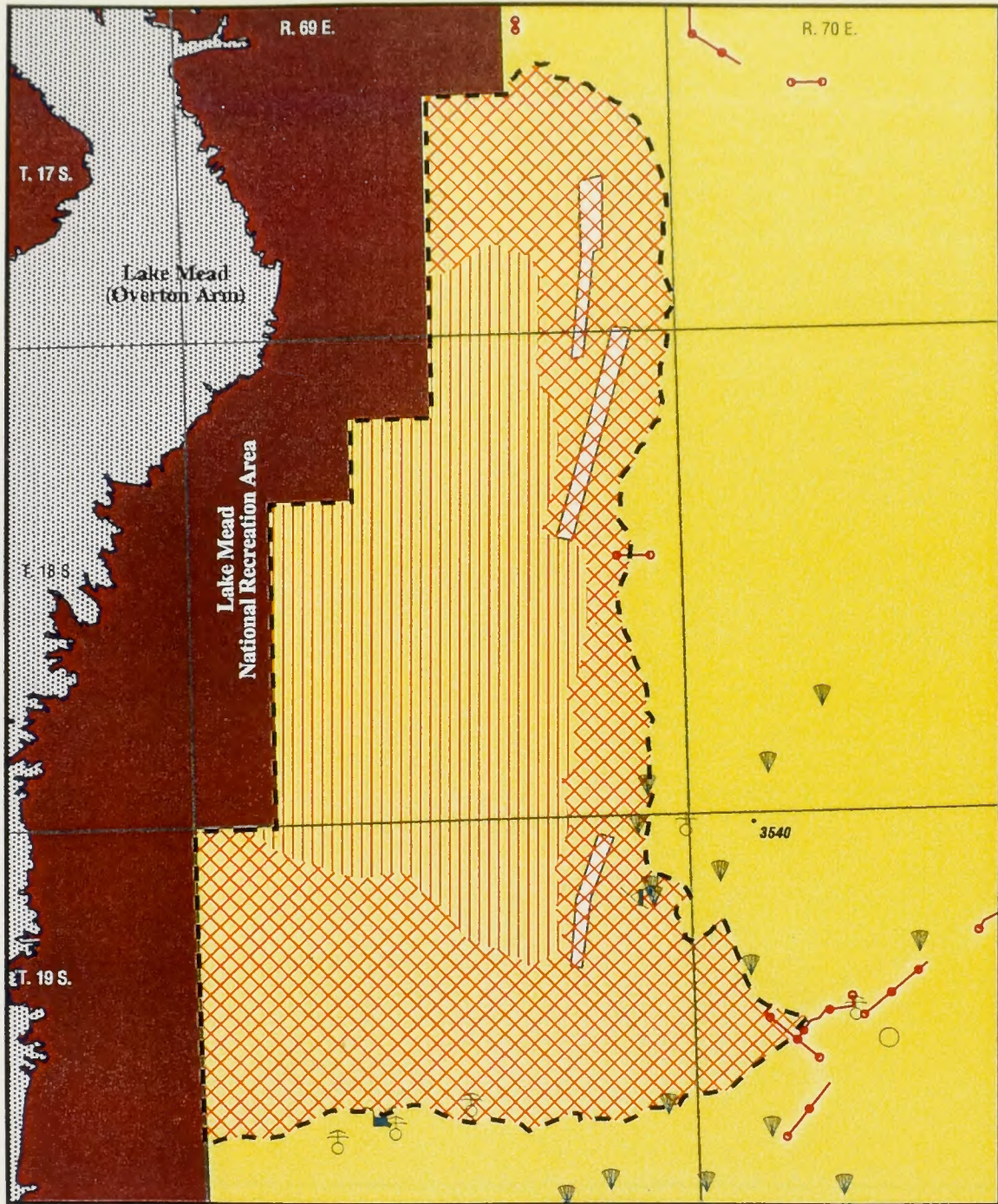
■ BLM
□ Private Land
■ Other Agency

-- Wilderness Study Area Boundary
⊠ Recommended Non-Suitable
||| Recommended Suitable





NV-050-231




Lime Canyon Wilderness Study Area DEVELOPMENTS AND DISTURBANCES






1 0 1 Miles

 Lake

-  Well
-  Dev. Spring
-  Reservoir
-  Trough
-  Guzzler
-  Fence

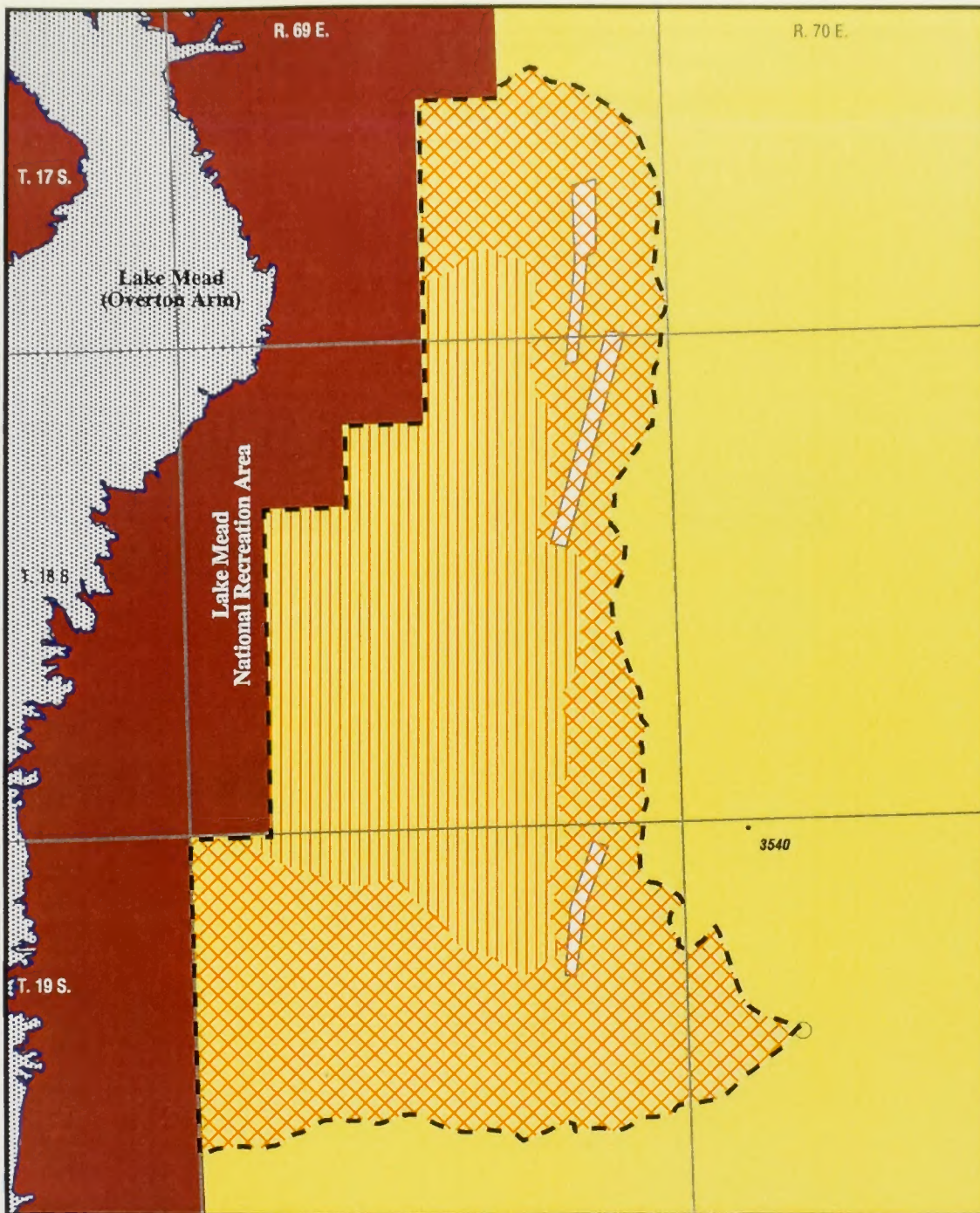
-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable
-  Recommended Suitable





NV-050-231




Lime Canyon Wilderness Study Area RIGHTS-OF-WAY






1 0 1 Miles

 Lake

 Well

-  BLM
-  Private Land
-  Other Agency

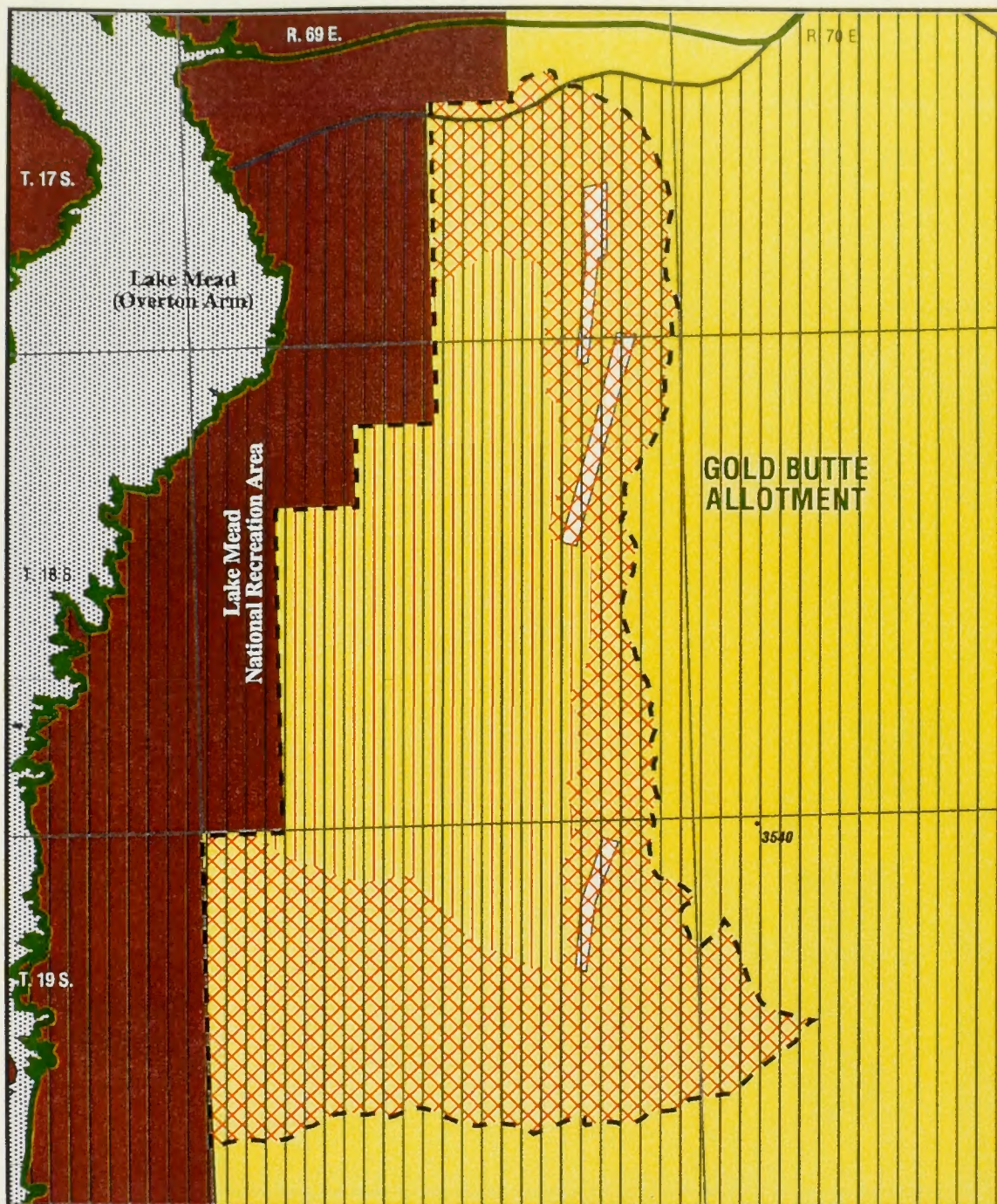
-  -- Wilderness Study Area Boundary
-  Recommended Non-Suitable
-  Recommended Suitable



NV-050-231

Lime Canyon Wilderness Study Area

ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



Federally Listed
Threatened
and
Endangered
Species

● Observation Site
NONE ON THIS MAP

■ BLM
□ Private Land
■ Other Agency

1 0 1 Miles

☞ Lake

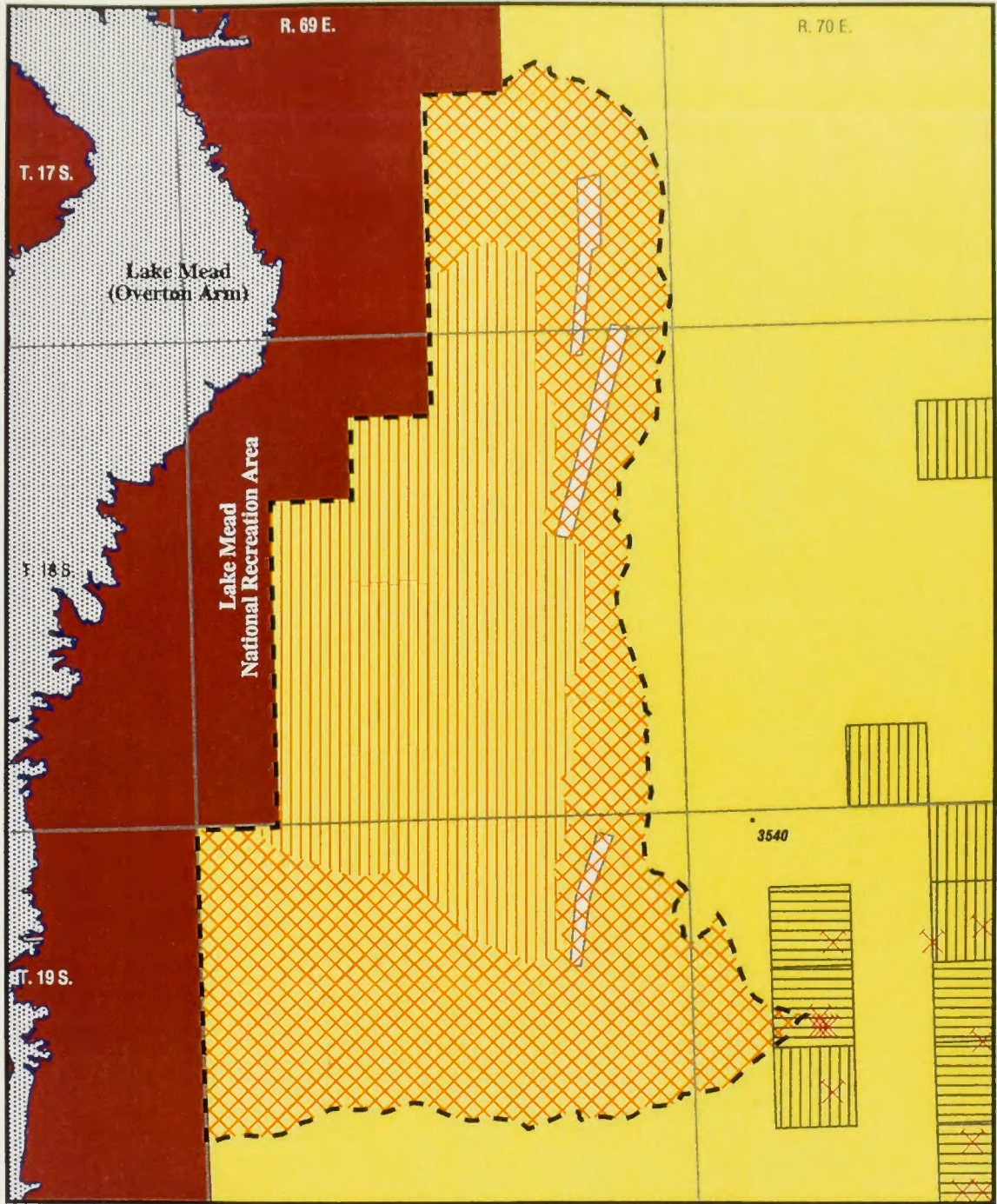
□ Gold Butte HMA

↗ Allotment
Boundary

--- Wilderness Study Area Boundary
 ☒ Recommended Non-Suitable
 |||| Recommended Suitable



Lime Canyon Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations

1 0 1 Miles

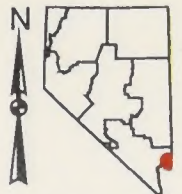
Lake

Mining Claim Density - 3/97

- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

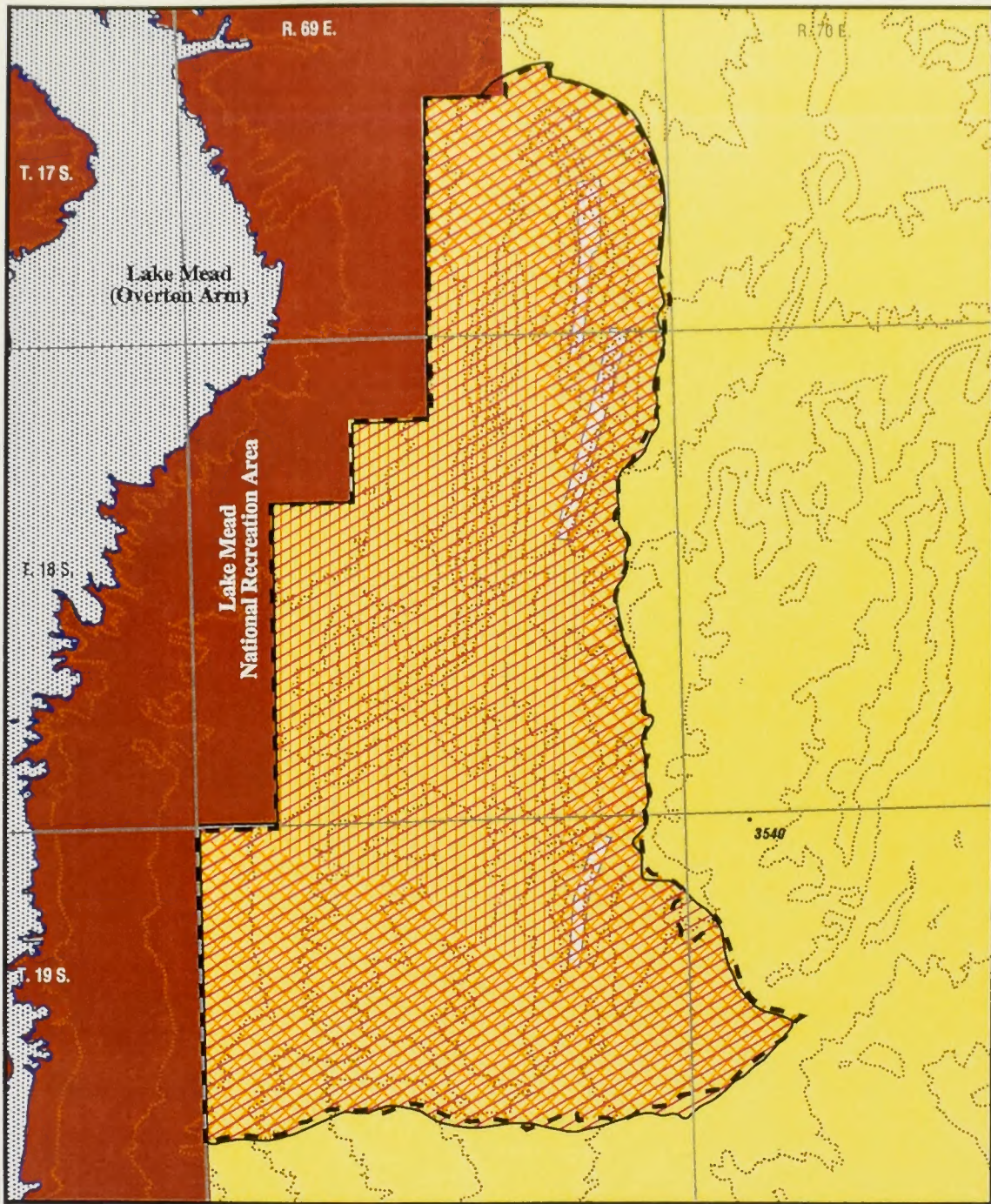
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable




NV-050-231

Lime Canyon Wilderness Study Area MINERAL POTENTIAL







1 0 1 Miles




CONTOUR INTERVAL 200 METERS (656 FEET)

 Lake

Mineral Potential

 High - Gypsum

-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable
-  Recommended Suitable



NV-050-231

Million Hills
7

MILLION HILLS WILDERNESS STUDY AREA

1. THE STUDY AREA - 21,296 acres

The Million Hills Wilderness Study Area (WSA) (NV-050-233) is located in northeastern Clark County, approximately 45 miles east of Las Vegas, Nevada, across Lake Mead in an area known as Gold Butte. Although relatively close to Las Vegas, the WSA is more than two hours driving time away. The study area contains 21,296 acres of public land. The border is composed of nine miles of section lines, 3.4 miles of fence bordering land reserved by the Bureau of Reclamation (BOR), 10.5 miles of road and physiographic features for 8.8 miles.

Million Hills WSA is an elongated shape, approximately 10 miles in length and slightly more than five miles wide, at its widest point. The Arizona-Nevada border is the eastern boundary of the WSA from the Thomas Gap Road south to BOR withdrawn land. Lake Mead National Recreation Area (LMNRA) is contiguous to the southern three miles of the WSA. The northeast boundary extends slightly more than one mile along the shoulder of the Thomas Gap Road from the Arizona-Nevada state line to a wash. The west boundary of the WSA starts at the Thomas Gap road and extends southwest, up a wash, to a mining exploration road, along the shoulder of that road south to the Garden Spring Road. The west boundary continues south along an old dirt road from the Garden Spring Road to the Devils Cove Road. The boundary continues south on the shoulder of the Devils Cove Road to the intersection of the road and BOR land in T.19S. R. 71E., section 31. BOR withdrawn lands, from the Devils Cove Road to the Arizona-Nevada border, is the southern boundary. The Garden Spring Road and the Azure Mine are cherry-stemmed from the west boundary of the WSA near Garden Spring for slightly over three miles into the center of the WSA.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 21,296 acres recommended for nonwilderness

The recommendation for this WSA is to release all 21,296 acres for uses other than wilderness. The recommendation emphasizes maintaining access to the entire WSA for mineral exploration and extraction. The entire WSA has moderate nonmetallic mineral potential (dolomite and limestone) and the central portion has moderate metallic mineral potential (base metals). Of most significance is the presence of high grade cobalt in the area, which was identified in the Bureau of Mines Mineral Land Assessment Report of 1988 (MLA 34-88). Cobalt is currently listed as a Strategic and Critical Material. The collected samples showed a grade comparable to that found in the nation's only primary cobalt deposit.

The recommendation would also permit exploration of oil and gas within the northern portion of the WSA. Although the area rates a low potential for the occurrence of energy resources, exploration adjacent to the WSA has been active. In addition, interest has been expressed by the holder of the five oil and gas leases in the area to actively explore for energy resources.

The significant showing of cobalt in the area combined with the current interest (80 acres of mining claims) is sufficient evidence to conclude that in the future this area could produce significant quantities of important mineral resources.

The exploration and potential extraction of mineral resources in this WSA, particularly cobalt, will cause the loss of wilderness values. The projected exploration of some or all of the 80 acres of mineral claims and the 2,800 acres of oil and gas leases would affect an estimated 12,656 acres of the WSA. Even after mineral exploration, much of the extreme southern portion of the WSA will retain wilderness characteristics.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The WSA is primarily natural. The topography of the area's north half is composed of low ridges and gently rolling hills. Wide sand washes cut through the hills and alluvial slopes. The southern portion of the WSA consists of a north-south tilted ridge made up of colorful folds. The ridge gives way to numerous steeply rugged perpendicular drainages and canyons.

Several ways pass through the WSA. A two mile way runs through Immigrant Canyon from the Garden Springs Road to the Devil's Cove Road. A second way extends from the north side of Garden Springs Road along the wash's ridge line. A third way, about 1/2 mile long, comes into the WSA from the southwest and a fourth extends from Devil's Cove Road into New Spring Wash to a developed spring. The fifth way extends from the northeast boundary.

Two short barbed wire fences are located within the WSA for a total of 1.8 miles in the northeast corner and in the southwest. There are two developed springs present, New Spring in the southwest corner and Julies Spring northwest of Azure Ridge.

B. Solitude: Outstanding opportunities for solitude can be found within approximately 9,500 acres of the WSA. These opportunities are essentially offered by abundant rock outcrops along Azure Ridge and Million Hills. Combined vegetative cover of the mountain brush community and desert community species, and the numerous drainages and canyons provide essential features to enhance solitude opportunities.

C. Primitive and Unconfined Recreation: Recreational opportunities are good to excellent. There are fantastic scenic vistas, secluded spots and geologic features that would entice visitors for hiking, photography, nature study or backpacking. These opportunities are available in two distinct desert atmospheres. The northern portion provides a low desert environment with marginal desert landscape. The southern portion offers excellent opportunities in a mid-elevation mountain brush environment.

D. Special Features: The WSA offers excellent raptor nesting sites, few of which are found within the Las Vegas District. There is also a large population of burros. They congregate here because of the gentle sloping landscape and the proximity to water in Lake Mead.

The desert tortoise (*Gopherus agassizii*), listed as a threatened species by the U.S. Fish and Wildlife Service on April 2, 1990, has been identified within the WSA. A total of 8,960 acres of the study area have been identified as tortoise habitat.

4. MANAGEABILITY

The entire study area can reasonably be managed as wilderness to preserve wilderness values now present. The area is a solid block of public land with no private inholdings, State lands or rights-of-way. The perimeter is easily identifiable on all sides, except for the eastern boundary on the Arizona-Nevada state line, or is contiguous to the LMNRA. Accessibility to off-highway vehicles (OHV) in the northern area would require additional commitment of resources to manage. Vehicular access would be mainly confined to the washes.

Five pre-FLPMA and two post-FLPMA mining claims are located in the central and west-central portion of the WSA, encumbering less than 120 acres. Five oil and gas leases, in the northwest portion of the WSA, encompass less than 2800 acres.

5. ENERGY AND MINERAL RESOURCE VALUES

The entire WSA has moderate nonmetallic mineral potential (dolomite and limestone) and twenty per cent of the WSA has moderate metallic mineral potential (base metals).

Field review of the area by the U.S. Bureau of Mines identified the presence of cobalt (strategic mineral) associated with manganese deposits. The presence of cobalt is of special significance as the grade is comparable to that found in the Blackbird Mining District in Idaho, the nations only primary cobalt deposit.

Exploration of claims near the Azure Mine is projected. It is estimated that 6.4 acres of surface disturbance associated with three miles of road construction, drill pad construction and trenching of test pits would occur.

Million Hills WSA is considered to have low favorability for the occurrence of energy resources. Presently, there are five oil and gas leases (2,800 acres) in the study area. Based on current energy exploration activity occurring outside the WSA, it is projected that two exploratory wells would be drilled within the northwestern portion of the WSA. Surface disturbance from the wells would total approximately 13.5 acres, involving six acres for well pads cleared of surface vegetation and topsoil and the construction of 2.5 miles of access roads.

6. SUMMARY OF WSA SPECIFIC COMMENTS

In 1986, the area was reinstated in the wilderness study process as a result of an April 1985 decision in Sierra Club vs Watt concerning certain lands that were deleted from wilderness review in 1982 and 1983. As a result of the court case, the area was reinventoried to document wilderness characteristics.

Public comments received during the reinventory (1986) supported the wilderness study area status because of the following reasons: opportunities for solitude, naturalness, special features and close proximity to National Heritage Sites. Of the seven comments, four recommended that the area be designated wilderness. One comment specifically stated that the area should not be recommended for wilderness designation because of oil and gas and mineral resource potential.

Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing in Reno, Nevada on August 4, 1988. None of the oral comments supported the all or partial wilderness alternatives and 2 supported the Proposed Action (No Wilderness Alternative).

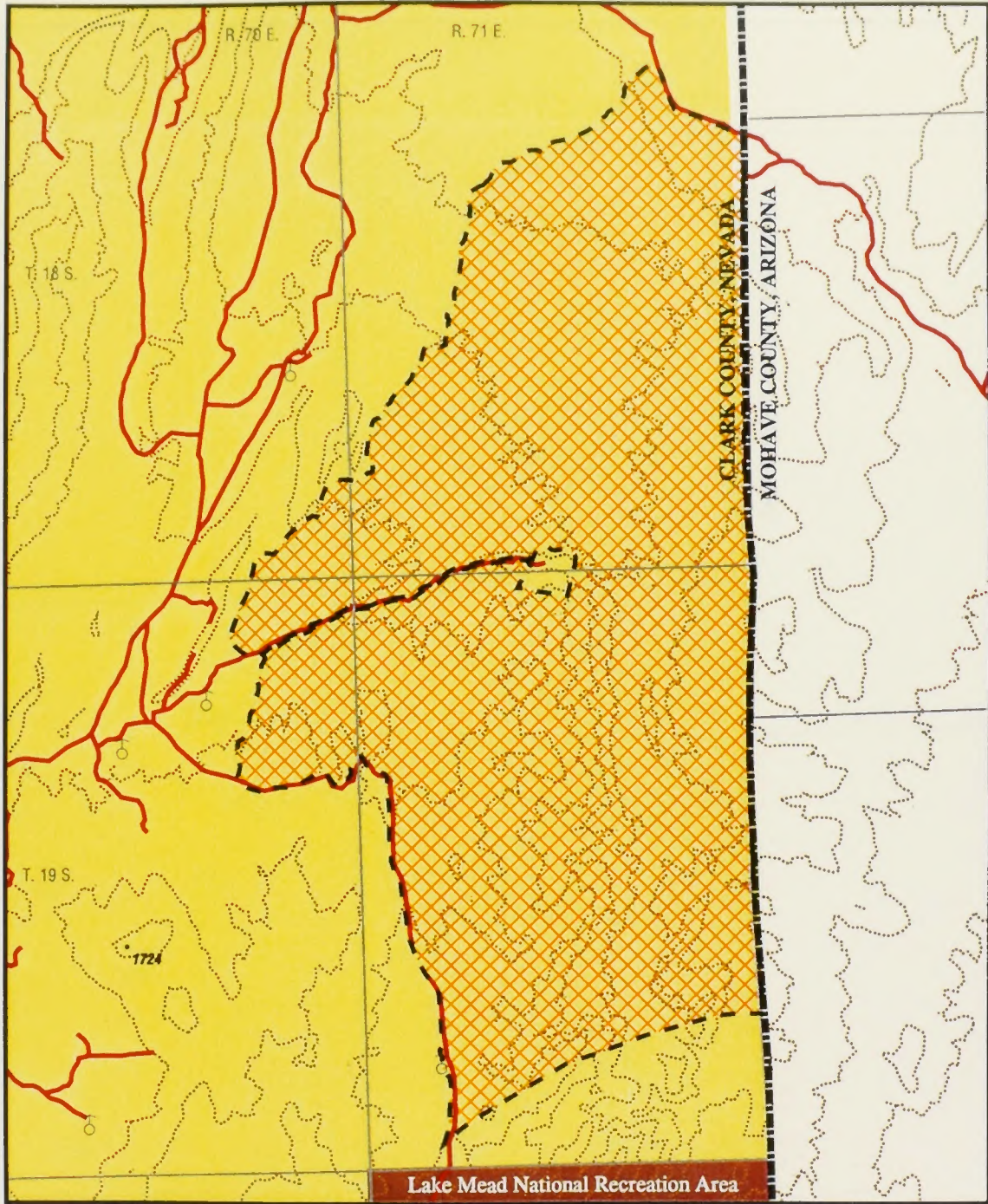
Of 36 written comments, two supported the all wilderness recommendation, two favored the partial alternative and three supported no wilderness. The subjects of the comments were; desert tortoise, oil and gas leases, mineral resources, race courses, the possibility of adjacent wilderness in the LMNRA, wildlife habitat and watershed.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS.

The Great Basin Complex of the U.S. Fish and Wildlife Service supported the partial alternative to preserve the habitat of the desert tortoise.

No comments were received from Clark County.

Million Hills Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



— Road
○ Spring

1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

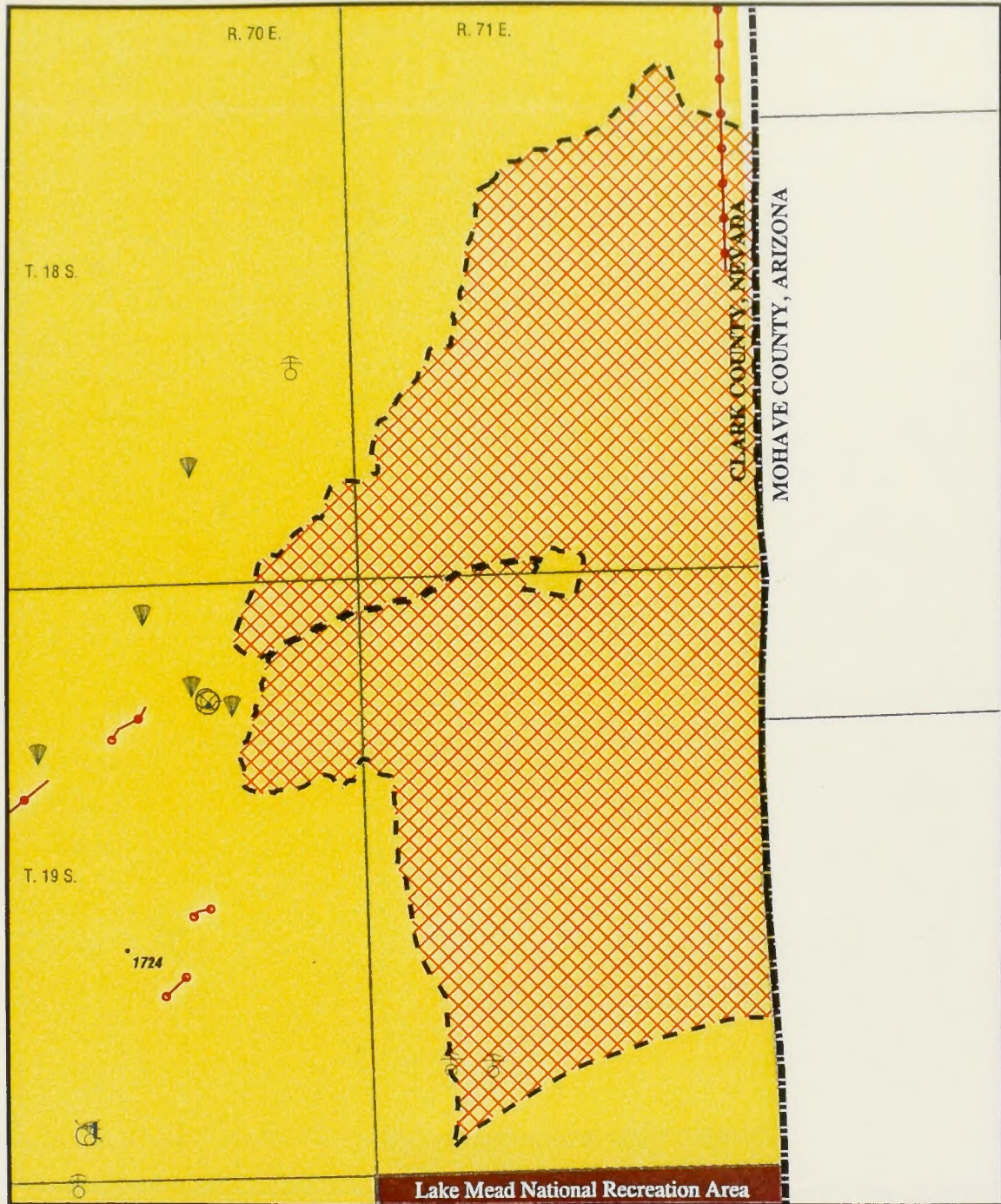
■ BLM
■ Other Agency

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-233

Million Hills Wilderness Study Area DEVELOPMENTS AND DISTURBANCES

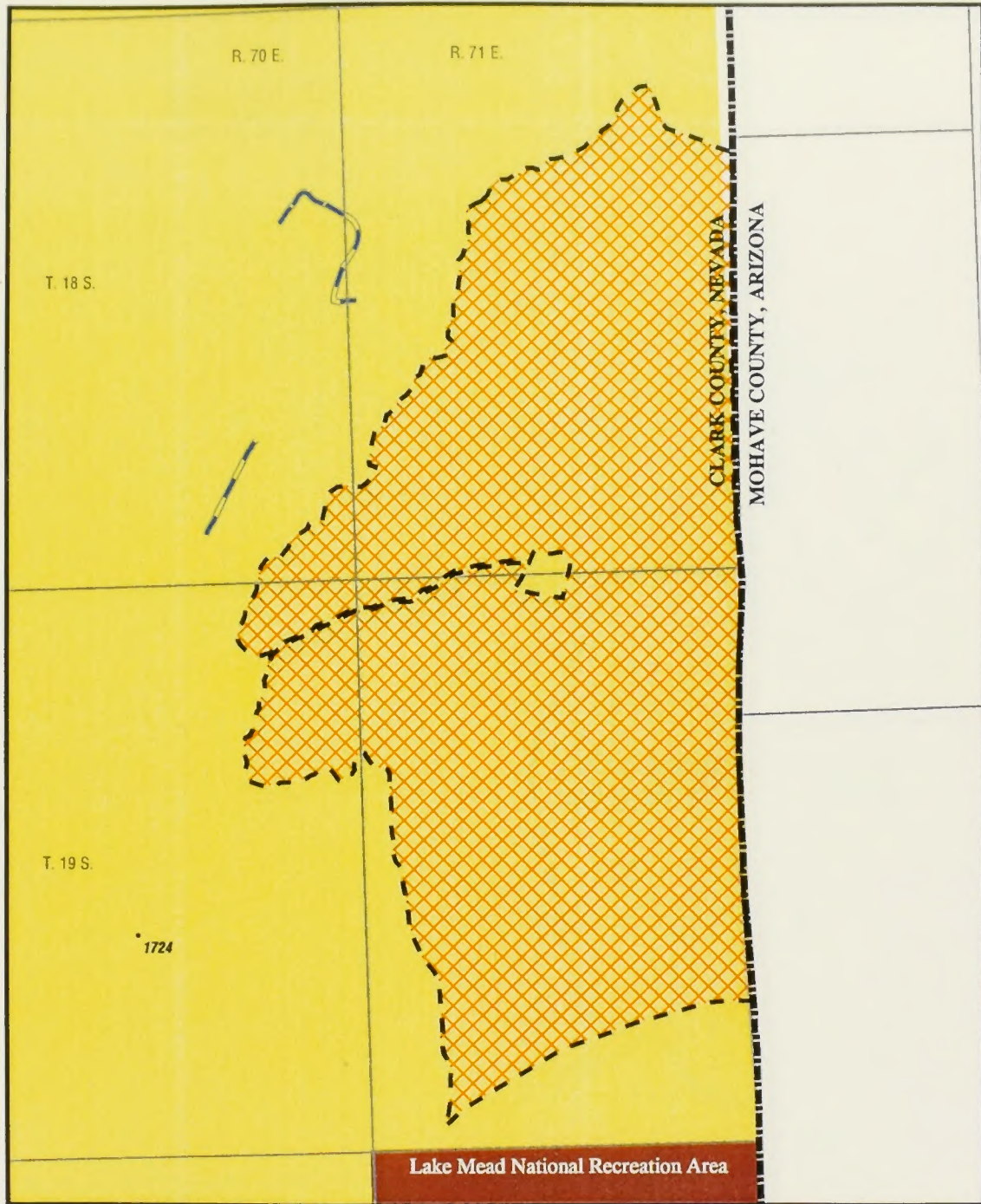


1 0 1 Miles

- BLM
- Other Agency
- Well
- Reservoir
- Water Tank
- Dev. Spring
- Corral
- Guzzler
- Fence
- Wilderness Study Area Boundary
- Recommended Non-Suitable



Million Hills Wilderness Study Area RIGHTS-OF-WAY



— Road

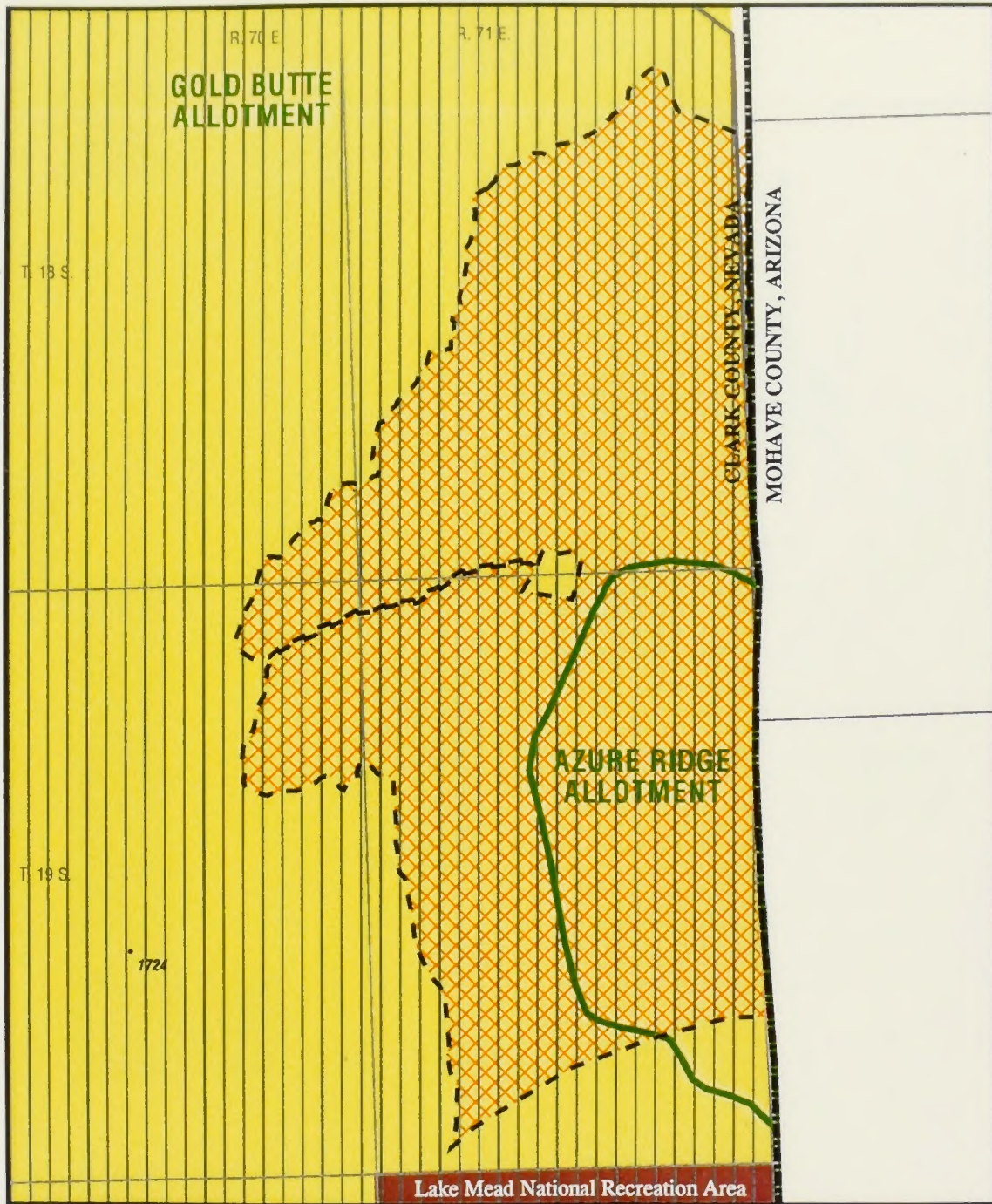
■ BLM
■ Other Agency

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable






NV-050-233

Million Hills Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES






**Federally Listed
Threatened
and
Endangered
Species**

 **Observation Site**
NONE ON THIS MAP

 **BLM**
 **Other Agency**

 **Gold Butte HMA**

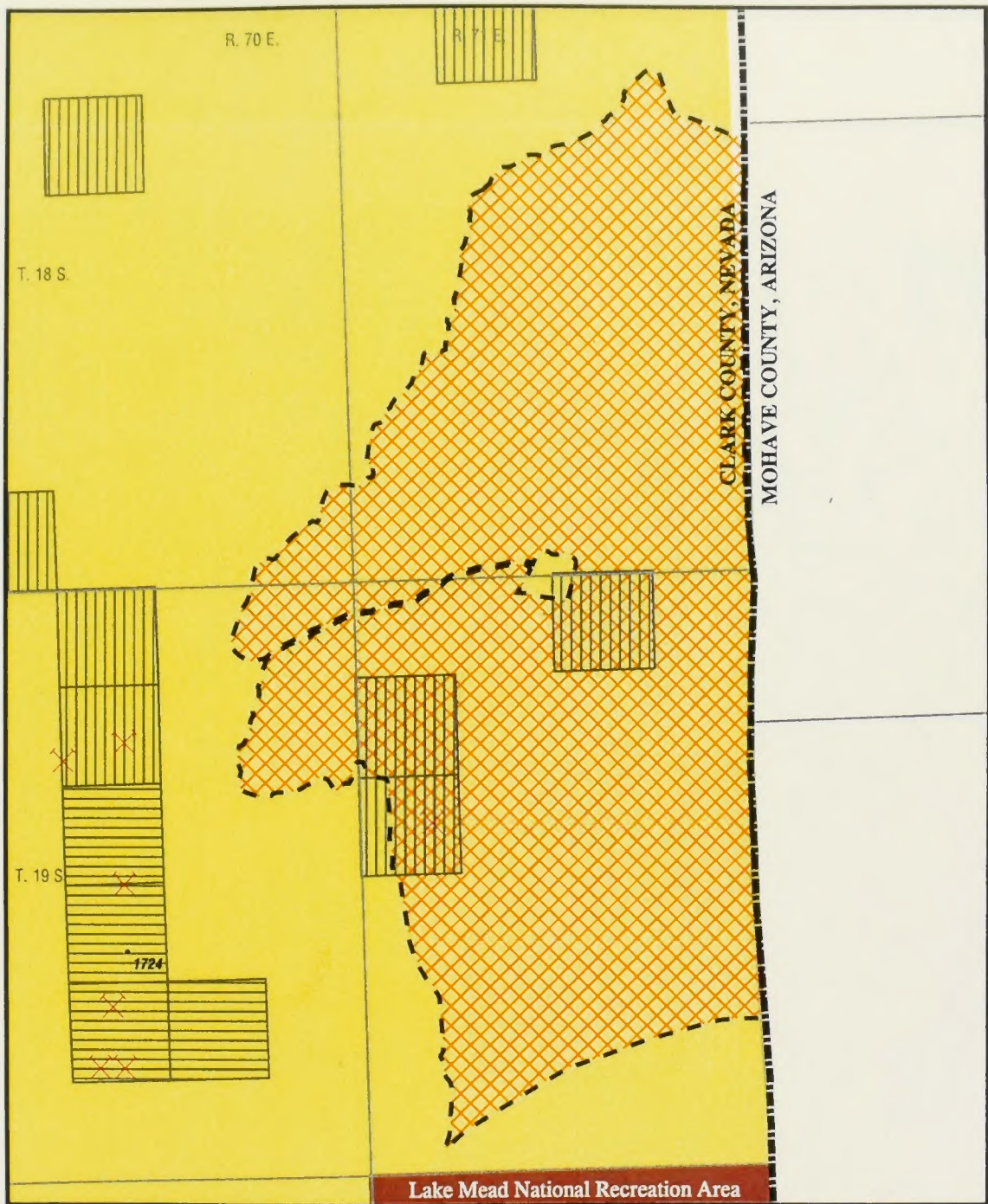
 **Allotment
Boundary**

 **Wilderness Study Area Boundary**
 **Recommended Non-Suitable**



NV-050-233

Million Hills Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations

1 0 1 Miles

Mining Claim Density - 3/97

- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

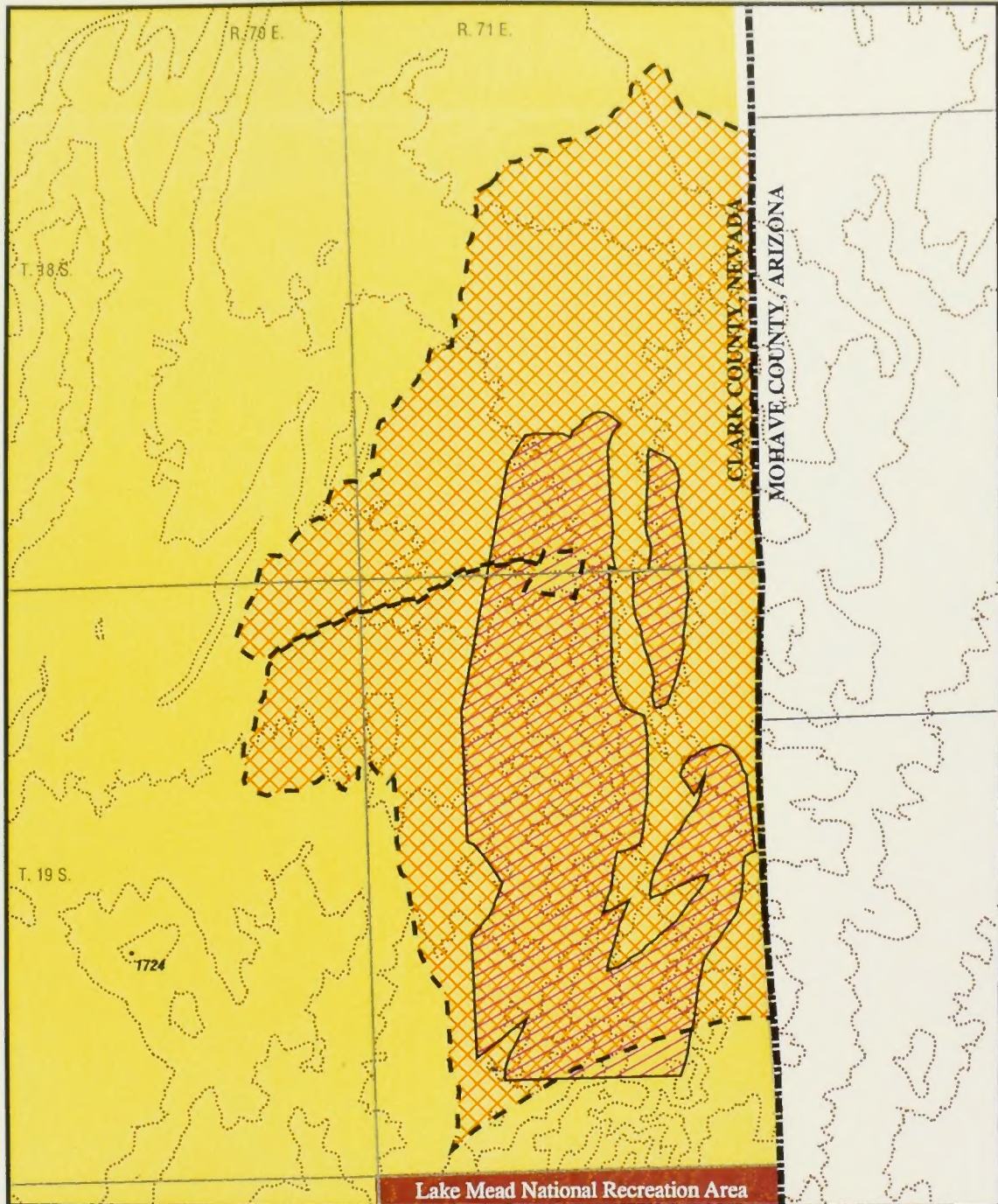
BLM
 Other Agency

-- Wilderness Study Area Boundary
 Recommended Non-Suitable



NV-050-233


Million Hills Wilderness Study Area MINERAL POTENTIAL






1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 High - Copper, Lead, Zinc, Cobalt, Gold, Silver, Germanium, Gallium

 BLM
 Other Agency

-- Wilderness Study Area Boundary
 Recommended Non-Suitable



NV-050-233

GARRETT BUTTES WILDERNESS STUDY AREA

1. THE STUDY AREA - 11,835 acres

The Garrett Buttes Wilderness Study Area (WSA) (NV-050-235) is located in eastern Clark County, approximately 45 miles due east of Las Vegas, Nevada. The study area contains approximately 11,835 acres of public land.

The boundary begins at the intersection of the Catclaw Road and the Scalon Ferry Road. It proceeds to the west along the Catclaw Road to the boundary of the Lake Mead National Recreation Area (LMNRA) and heads south along this boundary for almost four miles. It then meets land reserved by the Bureau of Reclamation and follows the northern edge of this land in a southeasterly direction until it meets the Lakeside Mine Road. The boundary then follows this road easterly to the Scalon Ferry Road and then to the north until it meets the Catclaw Road, the starting point. The WSA is approximately five miles wide by five miles long.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 11,835 acres recommended for nonwilderness

The recommendation for this WSA is to release all 11,835 acres for uses other than wilderness. The quality of the wilderness values was the key consideration in the recommendation. While the WSA contained the wilderness values necessary for study, they are not considered to be of a quality to merit the area's inclusion in the National Wilderness Preservation system. The WSA generally appears natural but there are several site-specific signs of man, primarily rangeland improvements and wildlife developments, which impact naturalness locally. Solitude opportunities available in the WSA are similar to those afforded by the thousands of acres of land adjacent to the WSA. These opportunities are due to the remoteness of the area and not due to any intrinsic values unique to the WSA. The WSA does not offer outstanding opportunities for primitive and unconfined recreation.

In addition, the no wilderness recommendation for the WSA would emphasize maintaining access for motorized recreational activities such as off-highway driving and upland game bird hunting. The WSA provides excellent opportunities for these activities as the area's character and terrain is best suited for these types of uses.

Over the long-term, naturalness values and opportunities for solitude within the WSA would be diminished by the increase in motorized recreational activity. Also, the desert tortoise (*Gopherus agassizii*), the special feature identified in the area, would not receive the added protection afforded from wilderness designation.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The WSA is primarily natural. The center portion of the study area is the most pristine. This WSA consists of a gently sloping outwash plain on the west, two rounded buttes to the east, and a small ridge running the length of the southern boundary.

There are 4.9 miles of ways present. One extends from the northern boundary into the center of the WSA. Other short intrusions follow washes and one comes into the unit from the eastern boundary. Other man-made features include five developed seeps and springs and seven upland game bird drinkers scattered throughout the WSA.

B. Solitude: The WSA provides outstanding opportunities for solitude in the short, narrow, twisting canyon at the eastern edge of Spring Wash, the best area for natural screening and seclusion. The WSA is of

sufficient size that outstanding opportunities for solitude exist within its center. At this point, the WSA's boundaries would be at equal distance. The sparse, low, desert shrubs provide only marginal screening.

C. Primitive and Unconfined Recreation: Recreation opportunities in this WSA are limited. Opportunities for hiking, hunting, horseback riding and backpacking are available, however, there are few special features or attractive landscapes to draw a visitor. Hunting for upland game birds (Gambel's quail) is best along the boundary roads as is horseback riding. Spring Wash Canyon offers colorful and interesting rock formations and has the most interesting hiking areas.

D. Special Features: There is a herd of wild burros that migrates through the WSA. They normally frequent the western portion, which is close to water.

The desert tortoise (Gopherus agassizii), listed by the U.S. Fish and Wildlife Service as a threatened species on April 2, 1990, may occur within the WSA.

4. MANAGEABILITY

The study area is capable of being managed as wilderness but there will be some manageability concerns regarding the 20 acres under an oil and gas lease. There are no mining claims present.

There would be management concerns regarding unauthorized access for motorized types of recreational activities and access for maintenance of range improvements.

5. ENERGY AND MINERAL RESOURCE VALUES

Approximately 6,509 acres of the WSA (55 percent) has moderate potential for nonmetallic minerals (sand and gravel). The entire study area has low potential for metallic minerals and energy resources. There is no known indication of mineralization within the WSA. Exploration of and development for potential minerals is not expected to occur within the WSA due to lack of interest, absence of mining claims and prospecting activity and poor marketable location.

The WSA is rated as having low potential for energy resources. Neither exploration nor development of potential energy resources is projected to occur as the rock strata are not suitable reservoirs for hydrocarbon accumulation. There are no mining claims, and no oil and gas or geothermal leases present.

In summary, quantities of various mineral or energy resources are unknown, the potential for occurrence is from moderate to low in the WSA.

6. SUMMARY OF WSA SPECIFIC COMMENTS

In 1986, the area was reinstated in the wilderness study process and reinventoried to document its wilderness characteristics as a result of an April 1985 decision in Sierra Club vs Watt concerning certain lands that were deleted from wilderness review in 1982 and 1983.

Public comments received during the reinventory (1986) supported the WSA status because of the following reasons: opportunities for solitude, naturalness, special features and close proximity to National Heritage Sites. Of the seven comments, four recommended that the area be designated wilderness. One comment stated that the area should not be recommended for wilderness designation.

Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. Two of the oral comments

supported the preferred alternative (no wilderness) for this WSA. None of the other comments mentioned this WSA.

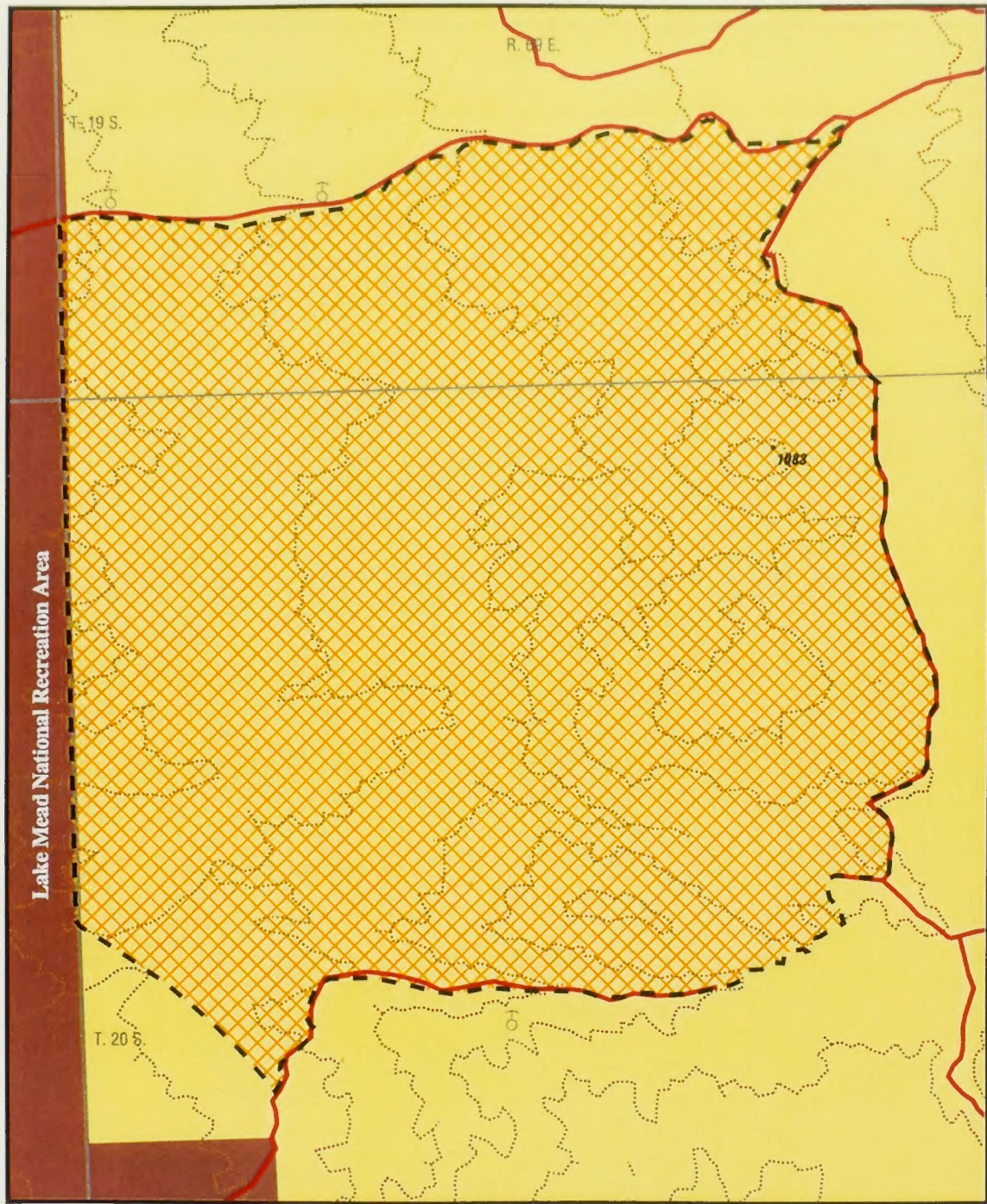
Of the 36 written comments, five supported the preferred alternative and one proposed all wilderness. The subjects of the comments were mineral potential, race courses and excessively easy accessibility.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS.

No comments were received from Clark County.



Garrett Buttes Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



— Road
○ Spring

1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

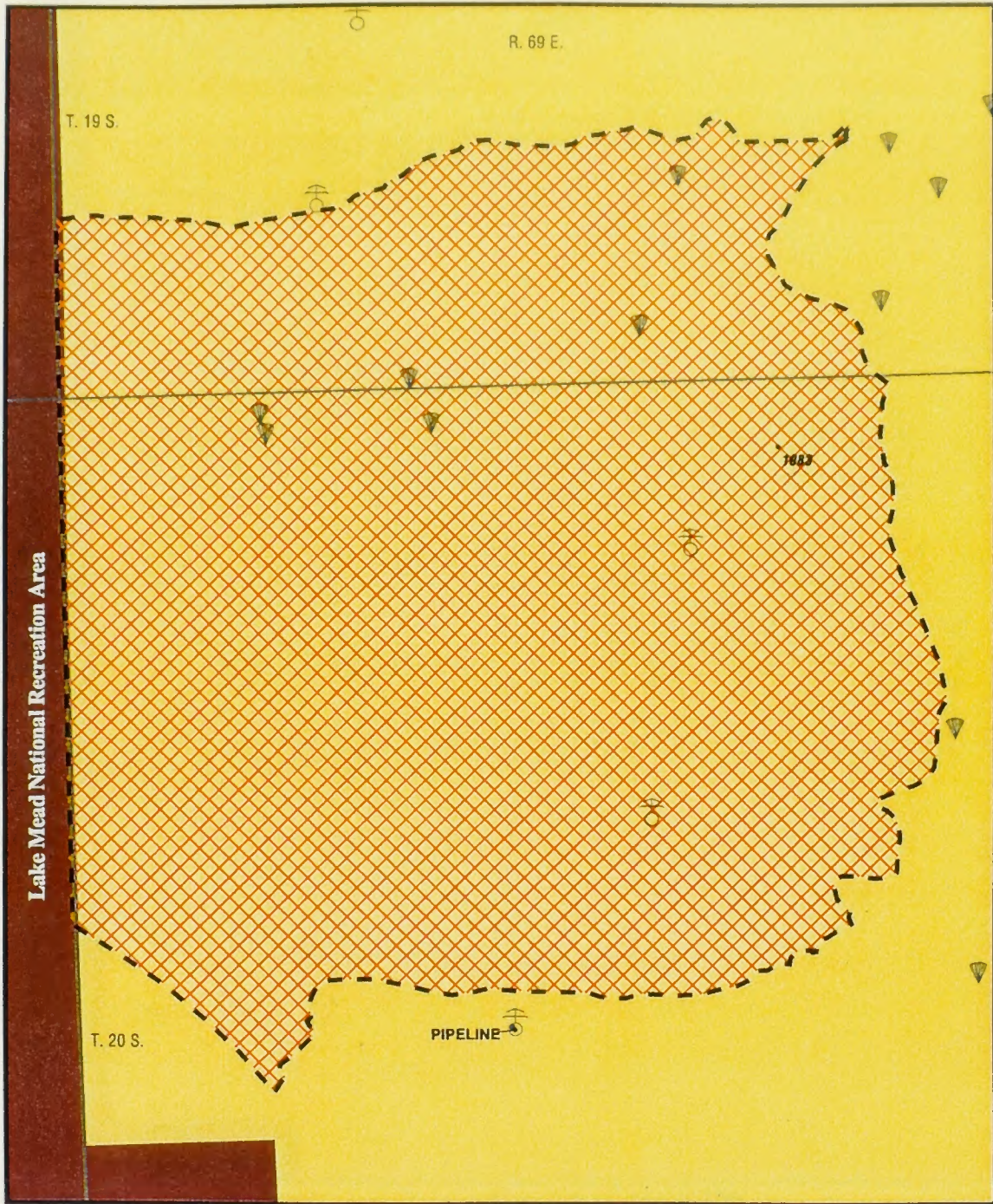
■ BLM
■ Other Agency

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-235

Garrett Buttes Wilderness Study Area DEVELOPMENTS AND DISTURBANCES

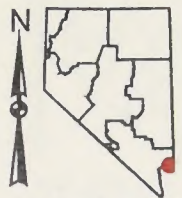


1 0 1 Miles

⊕ Dev. Spring
◊ Guzzler

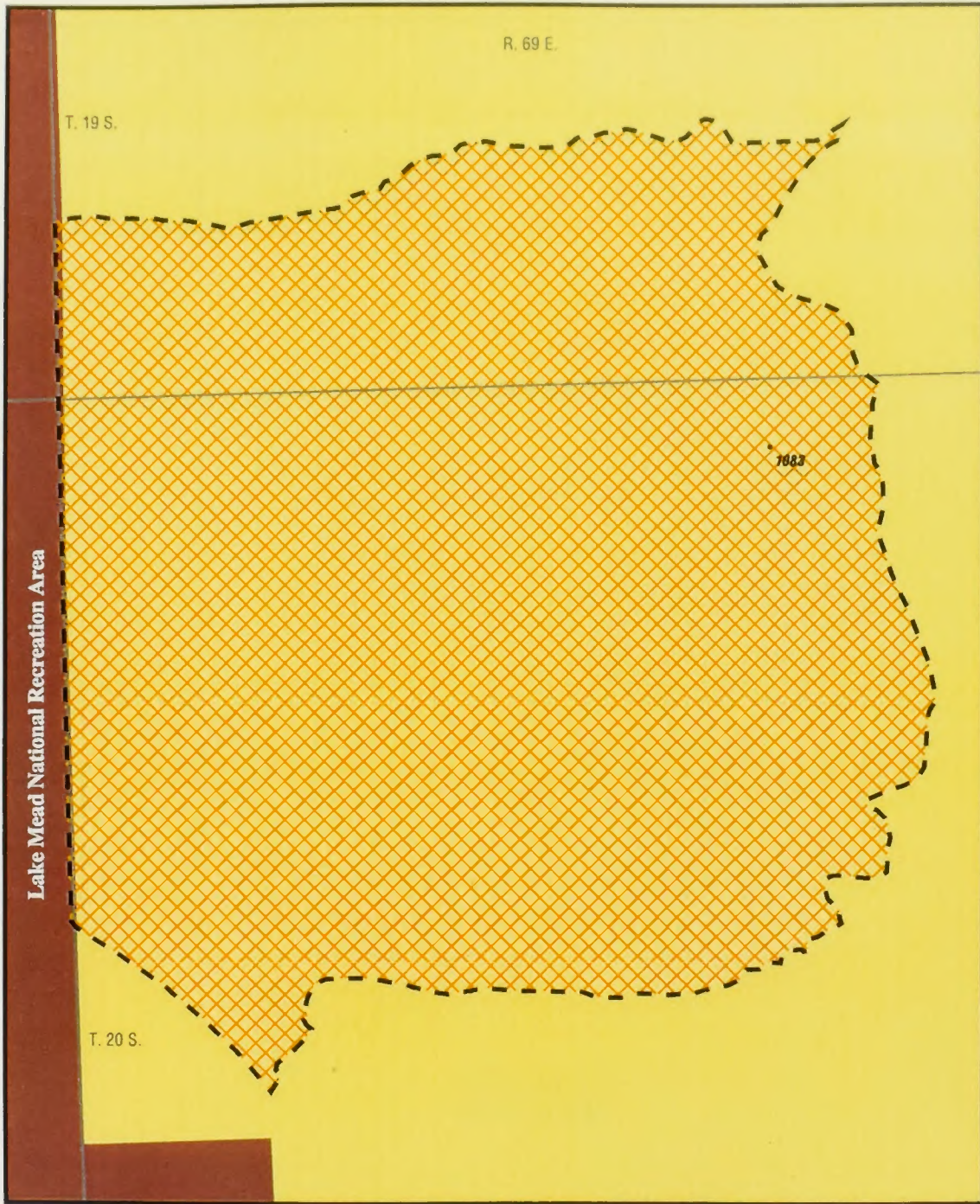
■ BLM
■ Other Agency

- - Wilderness Study Area Boundary
⊗ Recommended Non-Suitable





NV-050-235



Garrett Buttes Wilderness Study Area RIGHTS-OF-WAY



1 0 1 Miles

NO RIGHTS OF WAY ON THIS MAP

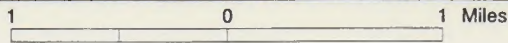
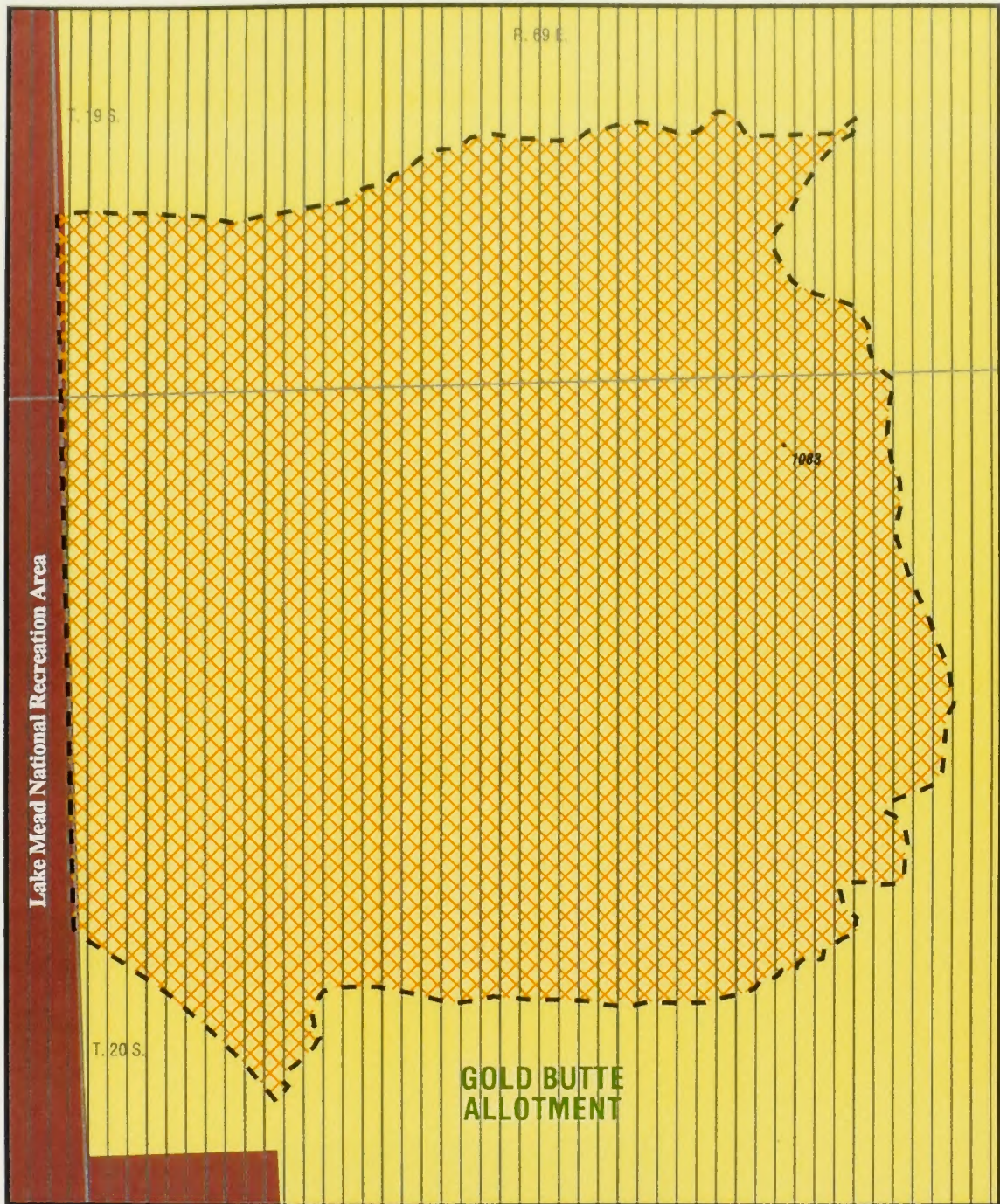
 **BLM**
 **Other Agency**

 **Wilderness Study Area Boundary**
 **Recommended Non-Suitable**



NV-050-235

Garrett Buttes Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



Federally Listed
Threatened
and
Endangered
Species

● Observation Site
NONE ON THIS MAP

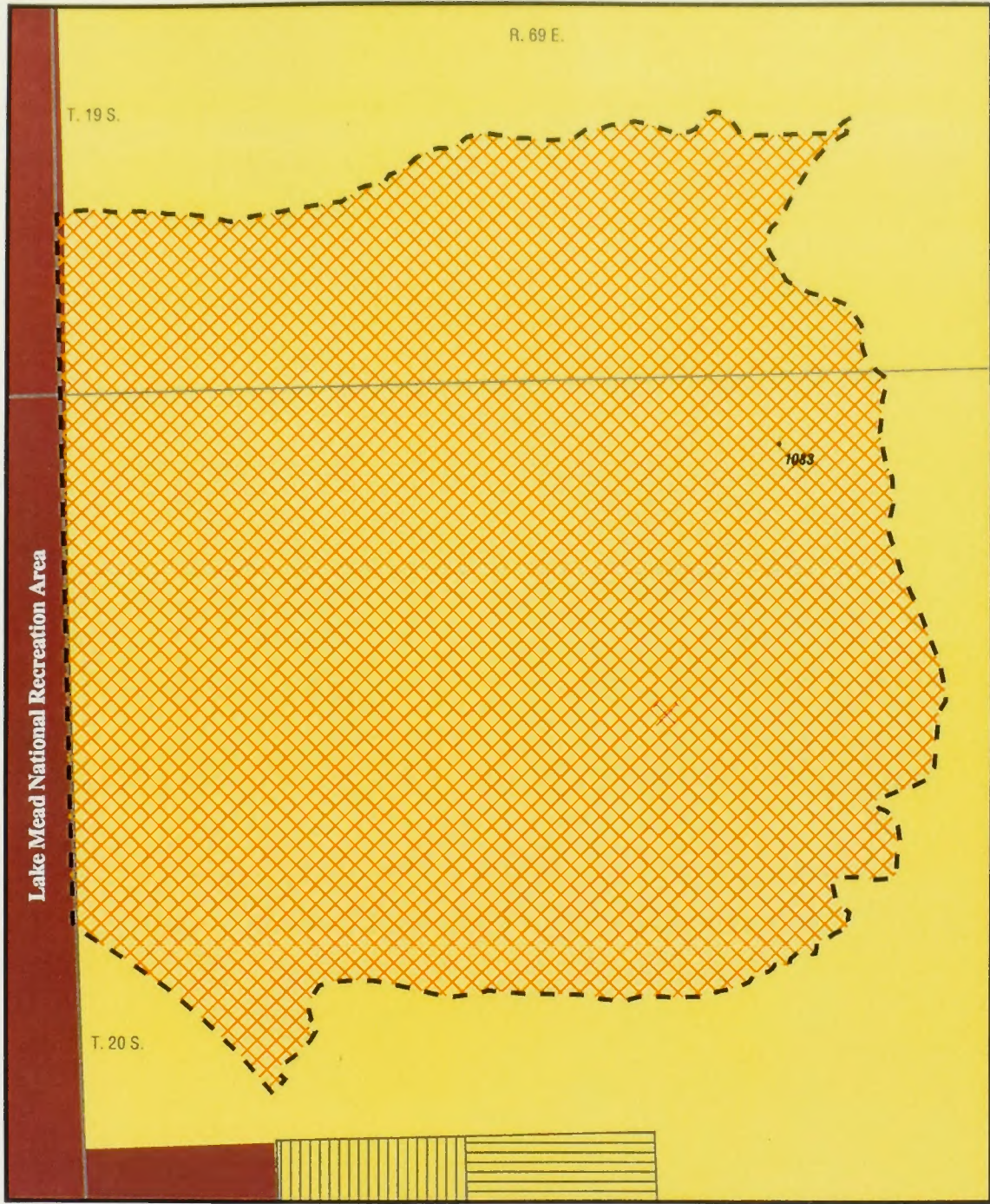
□□□ Gold Butte HMA

■ BLM
■ Other Agency

-- Wilderness Study Area Boundary
××× Recommended Non-Suitable








Garrett Buttes Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS





 Mining Operations 1 0 1 Miles

Mining Claim Density - 3/97

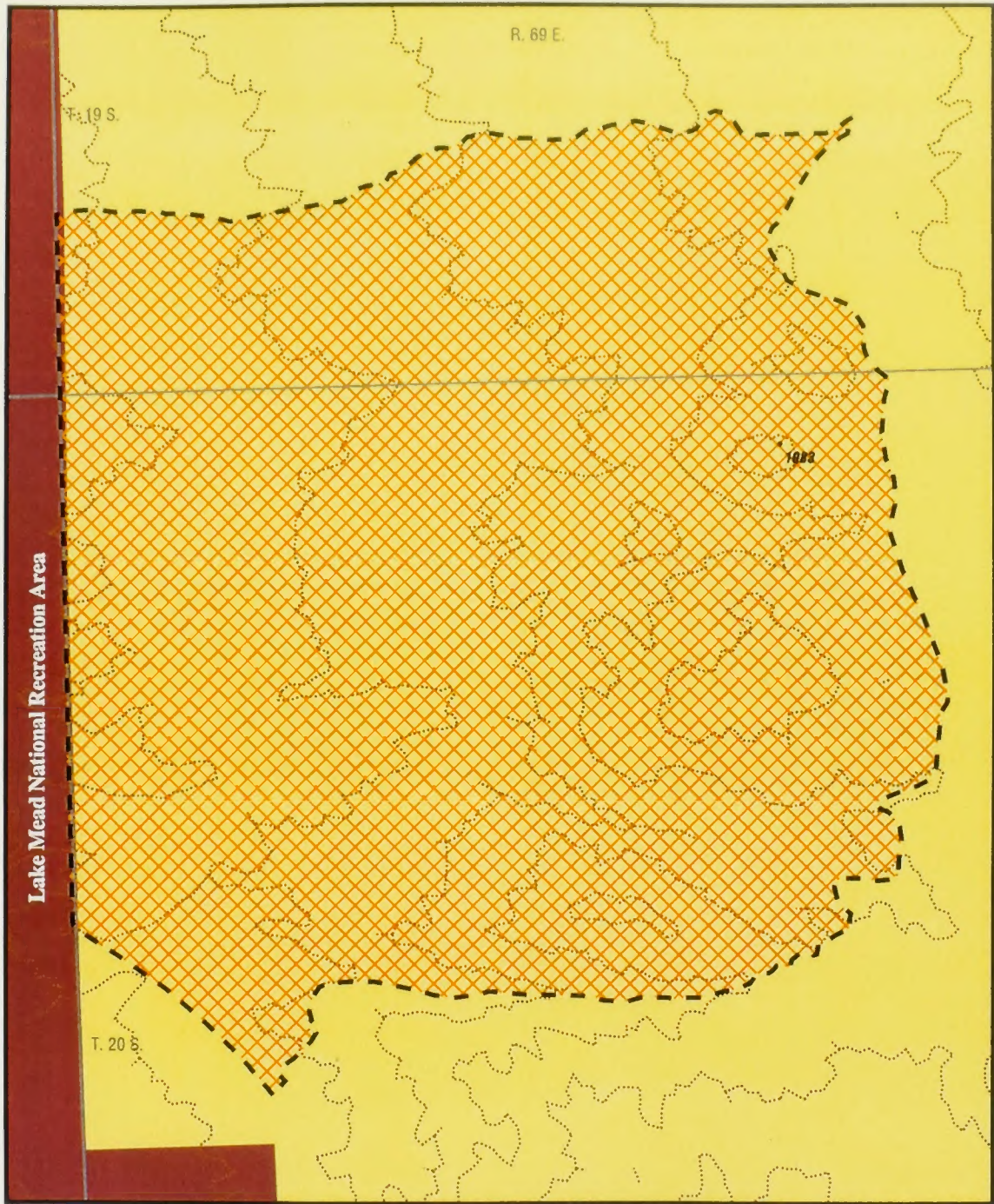
-  1-5 Claims
-  36-35 Claims
-  36 or more Claims

-  BLM
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable




Garrett Buttes Wilderness Study Area MINERAL POTENTIAL






1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 Medium - Gold, Beryllium

 BLM
 Other Agency

-- Wilderness Study Area Boundary
 Recommended Non-Suitable



NV-050-235

JUMBO SPRINGS WILDERNESS STUDY AREA

1. THE STUDY AREA - 3,466 acres

Jumbo Springs Wilderness Study Area (WSA) (NV-050-236) is located in eastern Clark County, near the Lake Mead National Recreation Area (LMNRA), approximately 50 miles east of Las Vegas, Nevada and encompasses approximately 3,466 acres of public lands. The WSA boundary is defined by physical features and common boundaries with the LMNRA to the east and Bureau of Reclamation withdrawn lands to the south. The western and northern boundary is defined by a progression of peak to peak lines and ridgelines. Section lines common with the LMNRA define the east boundary. A section line common with Bureau of Reclamation (BOR) withdrawn land, immediately south of the WSA, is the southern boundary. Jumbo Springs WSA is approximately 3.5 miles long in a north-south direction and 1.5 miles in an east-west direction.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 3,466 acres recommended for nonwilderness

The recommendation for this WSA is to release all 3,466 acres for uses other than wilderness. Lack of wilderness values and small size of the WSA were key considerations in the recommendation. The WSA generally appears natural, but outstanding opportunities for solitude and primitive recreation are lacking. The area's small size limits opportunities for solitude as there are few secluded locales or isolated spots. Visitors would frequently encounter one another due to the area's restrictive size and limited screening. Outstanding opportunities for primitive types of recreation are unavailable as interesting destinations and focal points of interest are absent.

The WSA would retain its natural qualities without wilderness designation as no surface disturbing activities are proposed for the area.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The WSA is predominantly natural. It is in a pristine condition with no man-made features. The study area consists of the upper canyons of three major washes which drain from the edge of a plateau east toward Lake Mead. The canyons are rugged. Elevations range from 2,700 feet along the southeastern boundary to the 4,700 foot ridge on the northern end. Vegetation consists of low mountain brush species.

B. Solitude: Less than outstanding opportunities for solitude exist within the WSA. There is no vegetative screening present. Canyons are subdivided into several tributary drainages with intervening ridges and rocky outcrops that provide limited locales for seclusion.

C. Primitive and Unconfined Recreation: The area contains recreation opportunities similar to other rugged mountain ranges in the region. There are no particularly unusual recreation draws, attractions or desirable destinations within the study area. There are limited opportunities for hiking and backpacking. Visitors would be able to gain scenic views of portions of the LMNRA, such as Iceberg Canyon, and the lower reaches of the Grand Canyon. They can also pass through the area on their way to LMNRA.

D. Special Features: There are no special features in this WSA.

4. MANAGEABILITY

The entire study area can reasonably be managed as wilderness to preserve wilderness values now

present. The area is a solid block of public land with no private inholdings, State lands or rights-of-way. The perimeter is easily identifiable on all sides, except for the southeastern boundary which is common with BOR withdrawn lands, or is contiguous to the LMNRA.

5. ENERGY AND MINERAL RESOURCE VALUES

The study area is rated as having moderate potential for the occurrence of nonmetallic minerals (titanium) in 25 percent of the area (866 acres). The remainder of the WSA is rated as low for both metallic and nonmetallic minerals. Exploration or development of potential minerals is not expected to occur due to lack of interest and poor marketable location. The WSA is considered to have low favorability for the occurrences of energy resources. Exploration or development of potential energy resources is not projected to occur as the rock structure of the WSA is not suitable for the accumulation of hydrocarbons. There is no known mineralization within the WSA.

There are no known pre-FLPMA or post-FLPMA mining claims, oil and gas or geothermal leases within the WSA.

6. SUMMARY OF WSA SPECIFIC COMMENTS

In 1986, the area was reinstated in the wilderness study process as a result of an April 1985 decision in Sierra Club vs Watt concerning certain lands that were deleted from wilderness review in 1982 and 1983. As a result of the court case, the area was reinventoried to document wilderness characteristics.

Comments to the initial inventory cited roads, mining activity, spring developments, a communication site, and a lack of opportunity for solitude or recreation as disqualifying the unit from further study. Concern was expressed that further study would conflict with oil and gas exploration, exploration for sheet mica and gold, recreational rockhounding, and other potential mineral resource values. Opposition was expressed to WSA designation of any area contiguous to the National Park Service (NPS) wilderness proposal if the BLM area did not meet the wilderness criteria when evaluated by itself. Other comments supported further wilderness consideration of the unit because it is natural and contiguous to the NPS proposal and because excessively strict criteria were used to evaluate it. These comments were about the original 35,936 acre study unit, of which Jumbo Springs WSA is only a small part.

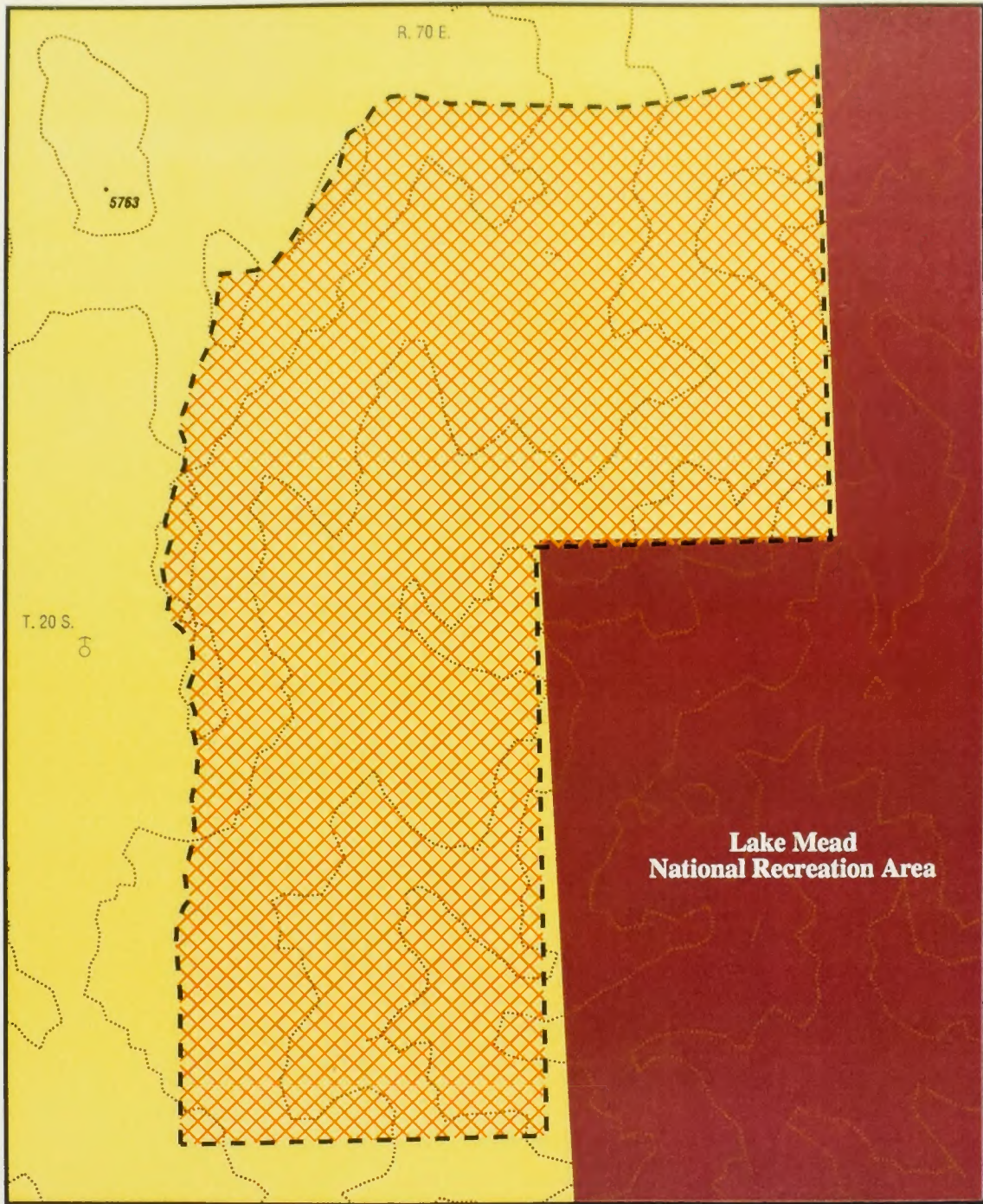
Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. One of the oral comments supported all wilderness and one supported the Preferred Alternative (no wilderness).

Of the written comments, two supported the all wilderness recommendation and four supported no wilderness. Subjects of the comments were the mineral resources, race courses, wildlife habitat, and protection of the watershed.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS.

No comments were received from Clark County.

Jumbo Springs Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



Spring

0.5 0 0.5 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

Lake Mead
National Recreation Area

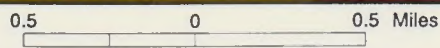
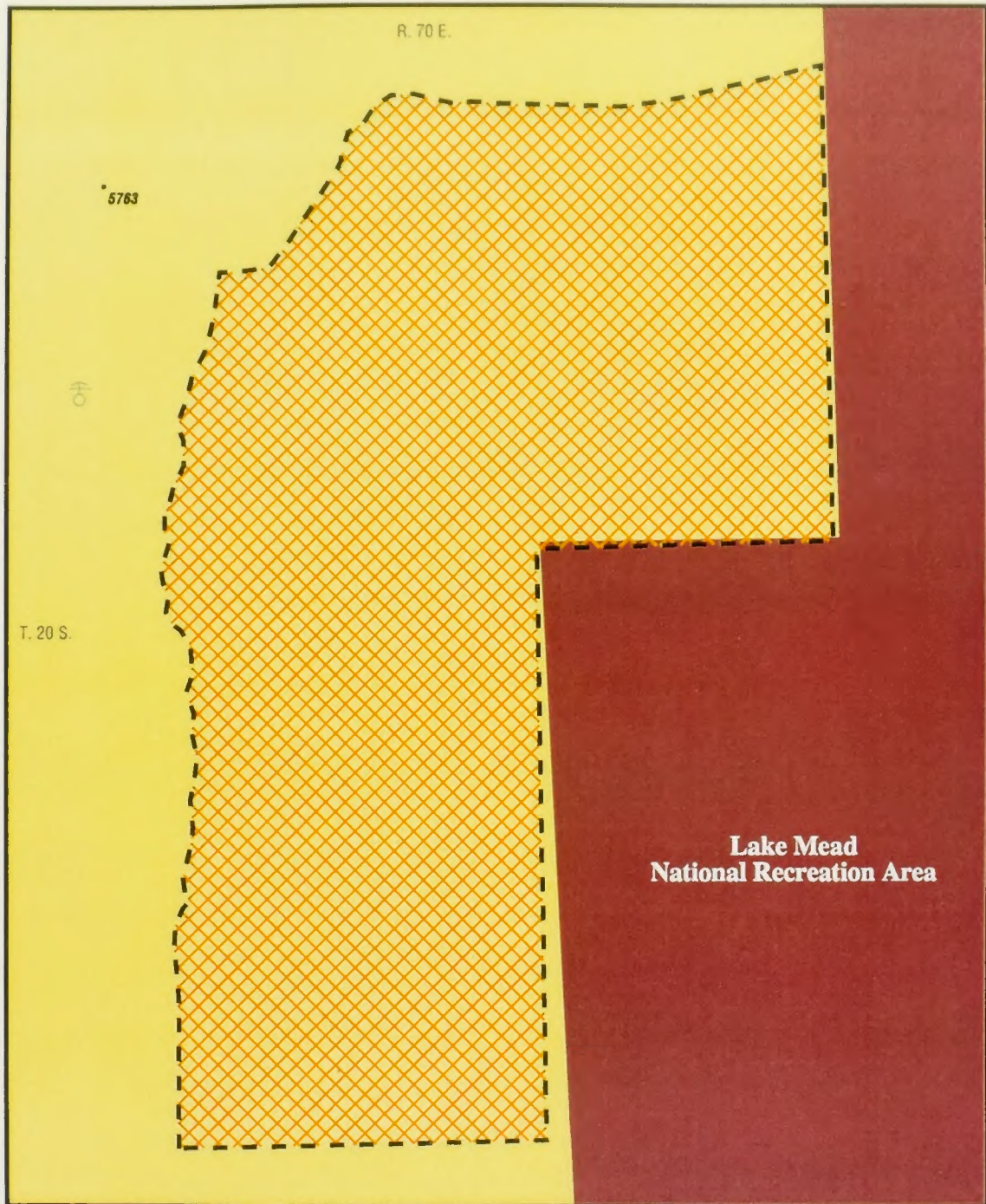
BLM
Other Agency


-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable







NV-050-236

Jumbo Springs Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



 Dev. Spring

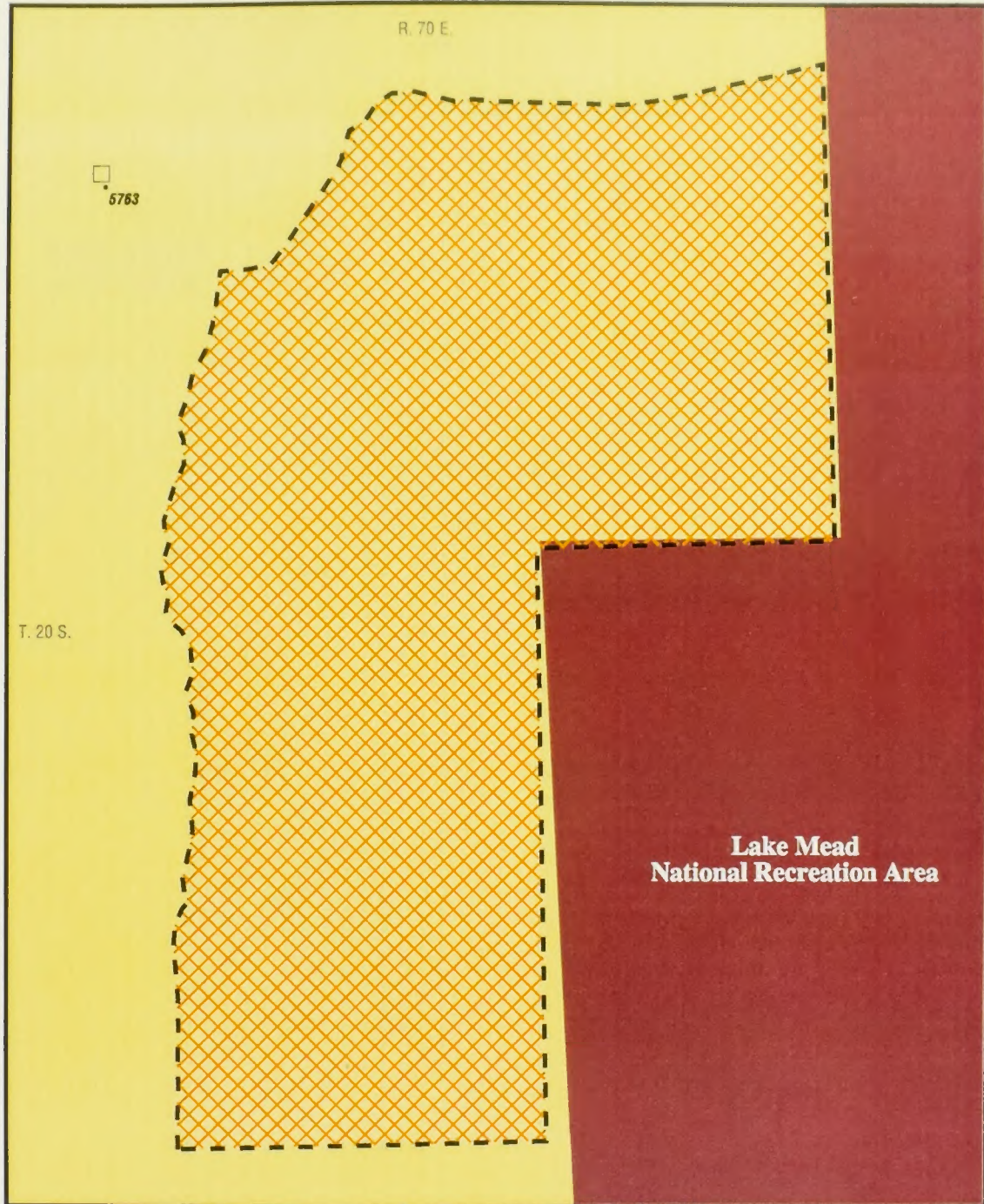
 BLM
 Other Agency

 Wilderness Study Area Boundary
 Recommended Non-Suitable



NV-050-236

Jumbo Springs Wilderness Study Area RIGHTS-OF-WAY



0.5 0 0.5 Miles

□ Communication Site

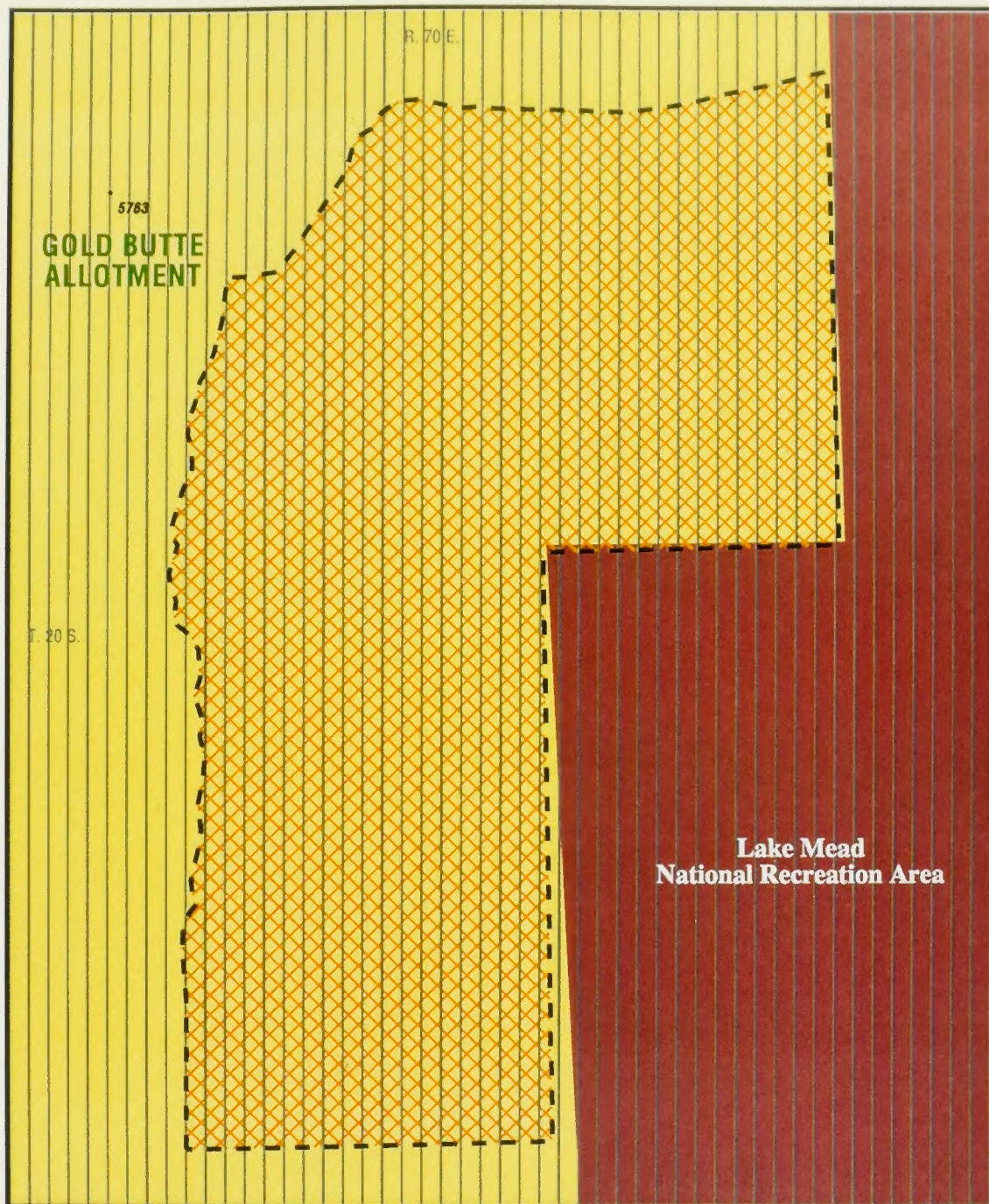
BLM
Other Agency

-- Wilderness Study Area Boundary
Recommended Non-Suitable



NV-050-236

Jumbo Springs Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



Federally Listed
Threatened
and
Endangered
Species

● Observation Site
NONE ON THIS MAP

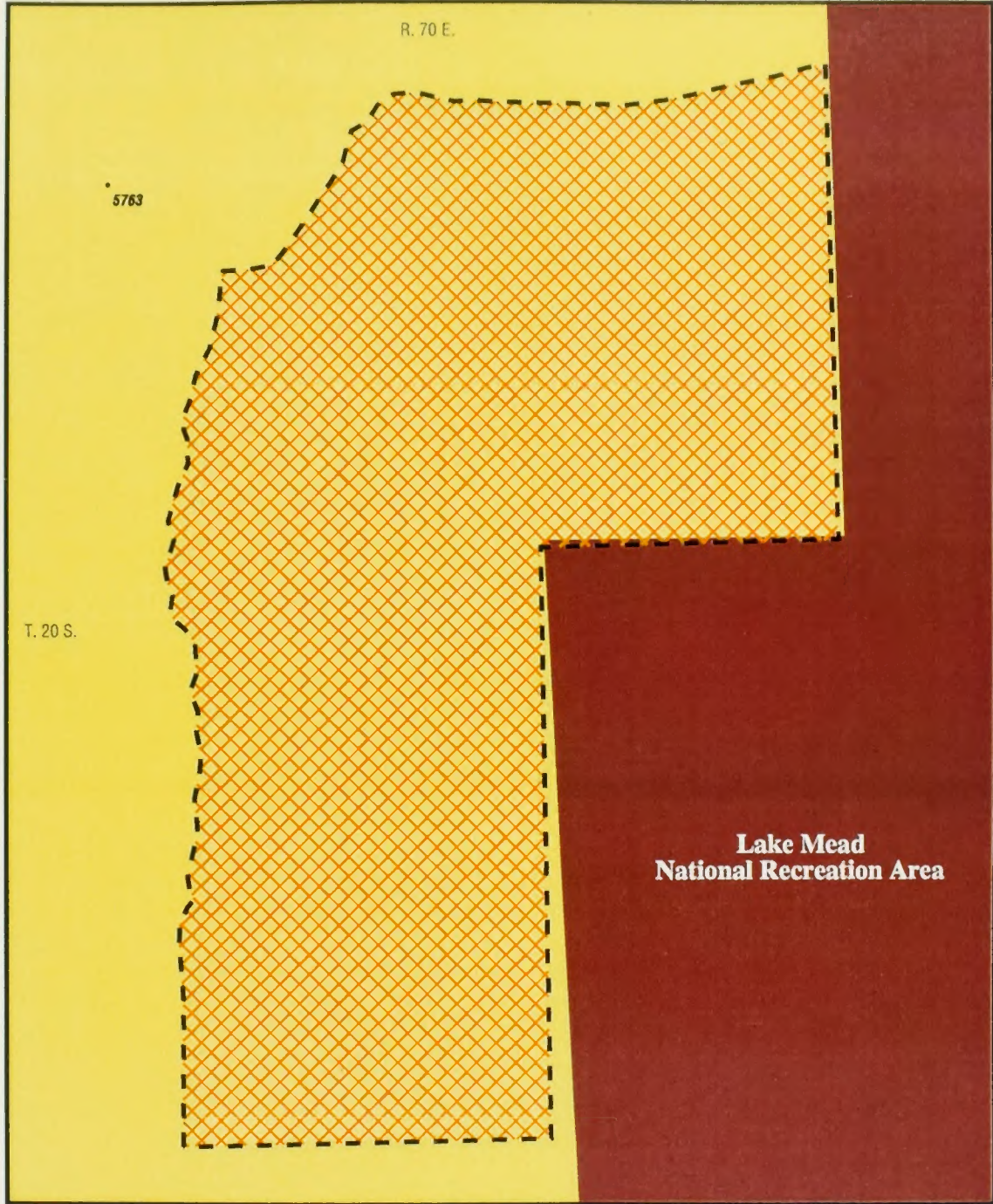
■ BLM
■ Other Agency

□ □ □ Gold Butte HMA



- - Wilderness Study Area Boundary
× × × Recommended Non-Suitable




Jumbo Springs Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



NO MINING CLAIMS OR OPERATIONS ON THIS MAP

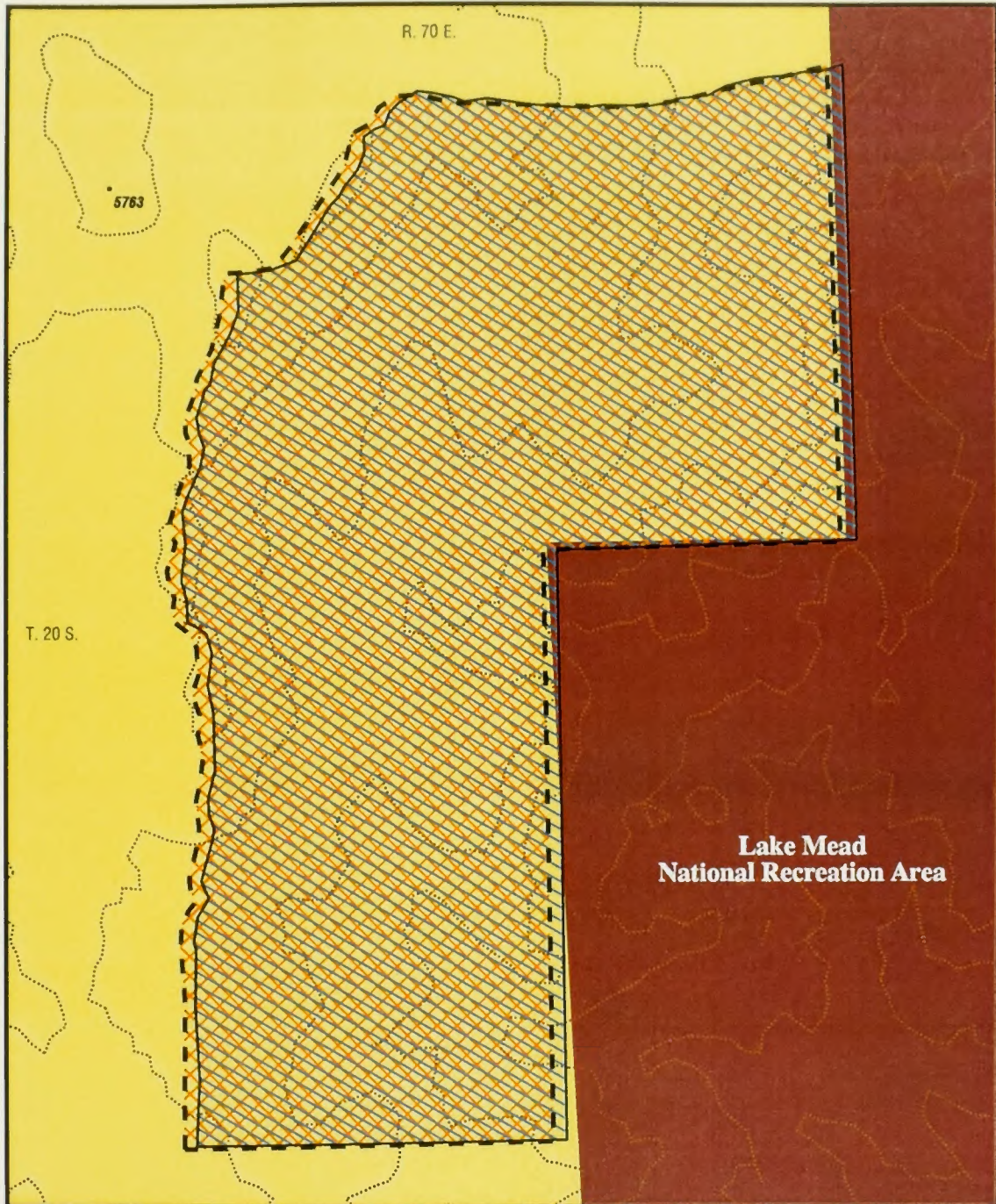
 BLM
 Other Agency

-- Wilderness Study Area Boundary
 Recommended Non-Suitable




NV-050-236



Jumbo Springs Wilderness Study Area MINERAL POTENTIAL




0.5 0 0.5 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 Medium - Gold, Lead, Beryllium

 BLM
 Other Agency

-- Wilderness Study Area Boundary
 Recommended Non-Suitable



MOUNT STIRLING WILDERNESS STUDY AREA

1. THE STUDY AREA - 69,650 acres

Mount Stirling Wilderness Study Area (WSA) (NV-050-401) is located 45 miles west of Las Vegas, Nevada, in Clark and Nye Counties. Encompassing the northern most portion of the Spring Mountain Range, the WSA contains 69,650 acres of Forest Service and BLM lands with no split estate or private inholdings. The northwest corner of the WSA adjoins six 40 to 80 acre parcels of private land. From this point going south the boundary follows the base of the range where at the southwest corner the boundary adjoins one parcel of private land. The south-southeast boundary runs along the Wheeler Wash Road and over Wheeler Pass. From Wheeler Wash Road the eastern boundary heads north following major topographic features and contour lines. The northern boundary runs through the bajada to the base of the mountain range. One major cherrystem road extends two and one-half miles into the WSA from the southern border, in the vicinity of Wheeler Well.

The National Forest and Public Lands of Nevada Enhancement Act (Public Law 100-790) adjusted the administrative boundaries for the Toiyabe National Forest, Placing approximately 91 percent of the Mount Stirling WSA within the new Forest boundary.

2. RECOMMENDATION AND RATIONALE - 50,682 acres recommended for wilderness¹ 19,050 acres recommended for nonwilderness

The recommendation is to designate 50,682 acres as wilderness allowing for the construction of two miles of access road across the northeastern portion of the WSA. A total of 19,050 acres would be released for uses other than wilderness. The 50,682 acre area is recommended for wilderness designation because it is natural and provides outstanding opportunities for both solitude and primitive and unconfined recreation.

The area is manageable as wilderness, due primarily to the extreme rugged terrain, dense vegetation and its relative inaccessibility to off-highway vehicles (OHV). Portions of the recommended area may be difficult to manage where the terrain and vegetation is less restrictive, thus providing some limited access for unauthorized OHV use. Such areas would be limited to the periphery and possibly along portions of the road projected for development through the recommended area's northeast corner.

Conflicts with minerals exists within the northern and western portions of the recommended area, where mining claims are located. No mineral resources have been identified, but there is a high mineral resource potential for undiscovered deposits of gold along the northern and western boundaries.

Grazing use of the area will be allowed to continue in accordance with management plans and allotment management objectives. Removal of pinyon-juniper as a wildlife management tool for developing elk habitat would not take place within the recommended area. Interpretative signing of the Wood Canyon Rock Art area, proposed as a management tool for cultural resources, would not be implemented within the area recommended for wilderness.

The 19,050 acres recommended for nonwilderness are comprised of five parcels located on the periphery of the WSA. These parcels are recommended for nonwilderness in order to reduce some of the resource conflicts presently occurring and projected to occur. These areas also offer less than quality wilderness values of solitude and primitive recreational opportunities.

¹Includes 82 acres exterior to the WSA boundary for management purposes.

Adjustments to the WSA's north-northwest borders established a boundary that is more definable and easily locatable for visitors utilizing the area. The northern portion of the WSA, not recommended for wilderness, would remain available for mineral exploration in an area that has a high mineral resource potential for gold. Conflicts with mineral resources within the northern portion of the WSA would be reduced by the recommendation of nonwilderness for this area. Conflicts between OHV use and wilderness would be reduced as the area would remain open to OHVs. Where terrain and vegetation does not restrict access, visitors are able to pursue motorized types of recreation.

The northeastern lobe extends into a bajada that is easily accessible to OHVs. This portion of the WSA would remain available to visitors for motorized types of recreational pursuits.

The southern area, encompassing Wheeler Well and the charcoal kilns, is heavily used by OHVs and nondesignation would allow its continuation. In addition, projected development of a semi-primitive campground could be constructed within this area. Development of recreational facilities would help to meet the needs and demand placed on the area's recreational resources by the rapidly increasing population of Clark County.

Exploration of existing mining claims and the development of potential mineral resources is projected to occur within the southern area. Nondesignation of this portion of the WSA would reduce possible conflicts between wilderness and the development of potential mineral resources.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The 50,682 acres recommended for wilderness are predominately natural. There are nine developed springs located along the area's periphery and are visible within their immediate vicinities. Two and one-half miles of ways are located within the northern portion of the recommended area and are substantially screened due to abundant tree cover. A terraced burned area east of Wheeler Peak is distinctly visible from the peak and along the southeastern boundary.

Outside influences, that directly affect the recommended area's naturalness, consists of four cherrystem roads which cut into the southern boundary, but vegetative cover limits their overall influence. The roads do allow minimal vehicle access into the area recommended for nondesignation.

Within the area recommended for nondesignation, two corrals and one developed spring are located along the northern boundary road. One way extends from the southern boundary into the area's central drainage. A portion of the terraced burn occupies the southeast section of the area. Overall influence of human imprints on naturalness of the area, as perceived by the average visitor, is negligible.

B. Sollitude: Within the area recommended for wilderness outstanding opportunities for solitude exist. Canyons and ridges and the heavy forest cover provides excellent screening and secluded locations.

Within the area not recommended for wilderness, numerous opportunities for solitude exist, but not to an outstanding degree.

C. Primitive and Unconfined Recreation: The area recommended for wilderness contains outstanding opportunities for primitive and unconfined types of recreational experiences. Most of the area allows freedom of movement due to numerous drainages, hills, rock outcroppings and forest cover. Wheeler Peak and Mount Stirling provide scenic vistas of the area and surrounding valleys. Rugged landscapes provides challenging routes and destinations for hikers and backpackers. Visitors to the area would have opportunities to view and study diverse wildlife species. Marine paleozoic fossiliferous formations, two large petroglyph sites and remnants of a campsite and pine nut milling site provide visitors a visible look at the area's geologic and cultural history.

Few primitive recreational opportunities exist within the area recommended for nonwilderness. Visitors could utilize a limited portion of the area for hiking and camping which provide few interesting features and challenges.

D. Special Features: The area recommended for designation contains one of the most complete sections of marine paleozoic fossiliferous formations in Nevada, two large petroglyph sites, a cultural site which may have been used for pine nut milling, and a site with rock circles which may be the remnants of an encampment. Three charcoal kilns, which have been listed on the National Register of Historic Places, are located within the portion of the WSA recommended for nonwilderness. In addition, the WSA constitutes part of the habitat of the only elk herd in Clark County.

4. MANAGEABILITY

Mount Stirling WSA can reasonably be managed as wilderness to preserve values present. The area is a solid block of public land with no private inholdings, state lands or rights-of-way. There are 17 existing mining claims located within the WSA, however valid rights have not been identified. Under wilderness designation, unauthorized cross-country vehicle use would be difficult to manage within those portions of the WSA where the terrain does not restrict access. This would apply primarily to the periphery of the area and along the cherrystemmed roads.

5. ENERGY AND MINERAL RESOURCE VALUES

There is a high resource potential for gold along the Grapevine fault system and along the northern border at Gold Spring. The area south of Big Timber Spring has an unknown mineral resource potential for gold along a poorly exposed normal fault system. No identified resources were found within the recommended area. Seventeen mining claims were located within the WSA. No oil, gas or geothermal leases exist.

6. SUMMARY OF WSA SPECIFIC PUBLIC COMMENTS

There were 40 comments received. In general, 36 commentors supported wilderness designation for all or part of the WSA, and four commentors supported no wilderness.

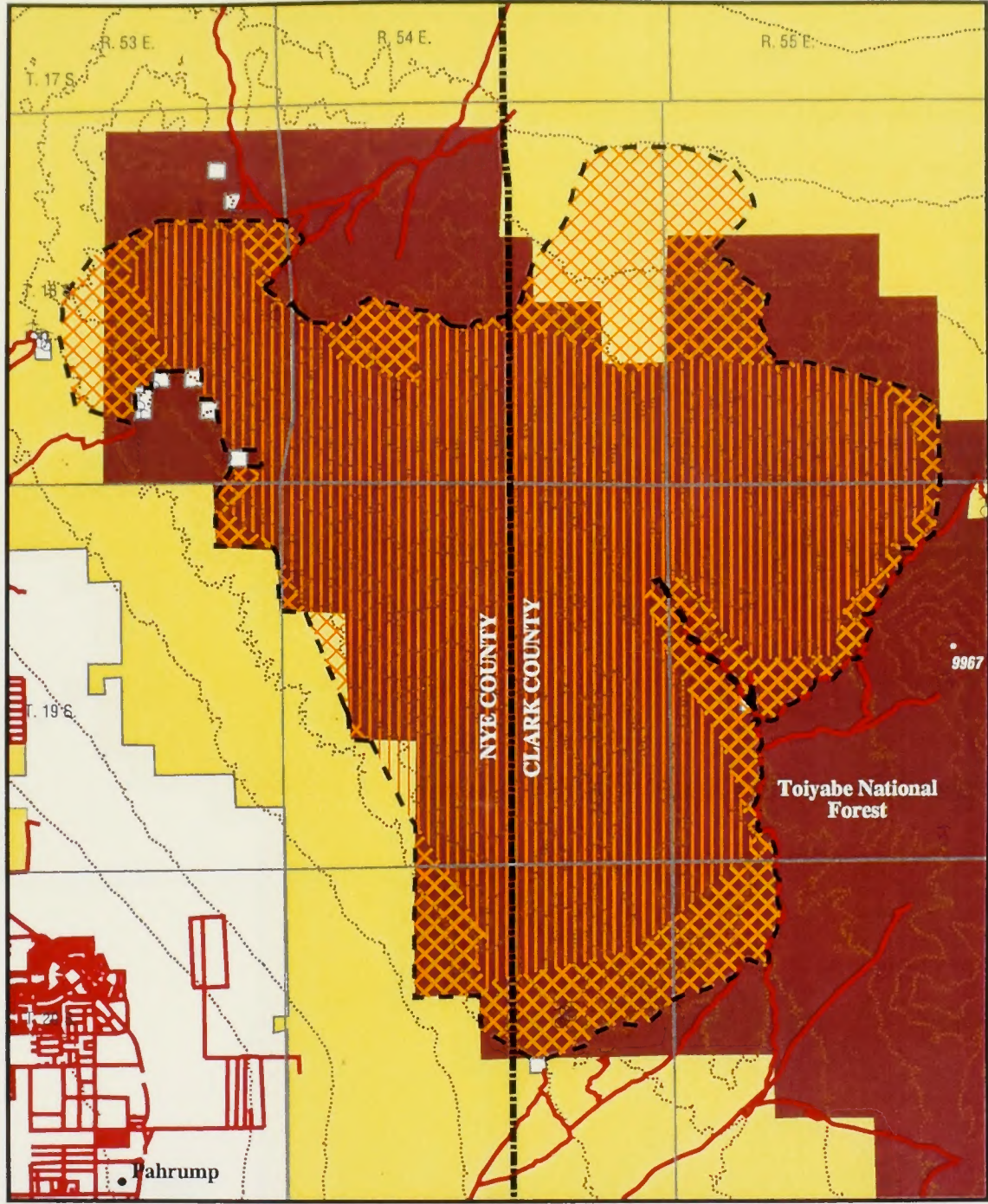
Most comments which specifically mentioned the WSA touch on high wilderness values, unspoiled biological and cultural resource values, wildlife habitat potential for Elk, and the benefits Mt. Stirling peak provides to the WSA. Comments opposing wilderness centered around potential mineral resource values and potential mineral exploration/development of the WSA.

The Clark County Department of Comprehensive Planning generally agreed with the recommended wilderness designations contained within the Preferred Alternative in the Clark Draft EIS.

The Governor of Nevada supported the Bureau's Preferred Alternative. Previous comment letters received from the State agencies did not support the Bureau's Preferred Alternative.

The U.S. Forest Service proposed boundary changes to the Mount Stirling Preferred Alternative in the Final EIS. The change would allow for the construction of a road through the area recommended for wilderness designation, the deletion of Wheeler Peak and the inclusion of Mount Stirling Peak. The U.S. Air Force stated they support alternatives that do not restrict military overflights. The U.S. Geological Survey stated that geologic conditions were adequately considered in the Draft EIS and that mineral resource potential of those areas recommended for wilderness would be addressed in their joint report with the Bureau of Mines. The EPA supported the proposed action and recommended that the final recommendation include a statement that water and air quality will be best protected under wilderness designation.

Mount Stirling Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



— Road
○ Spring

1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

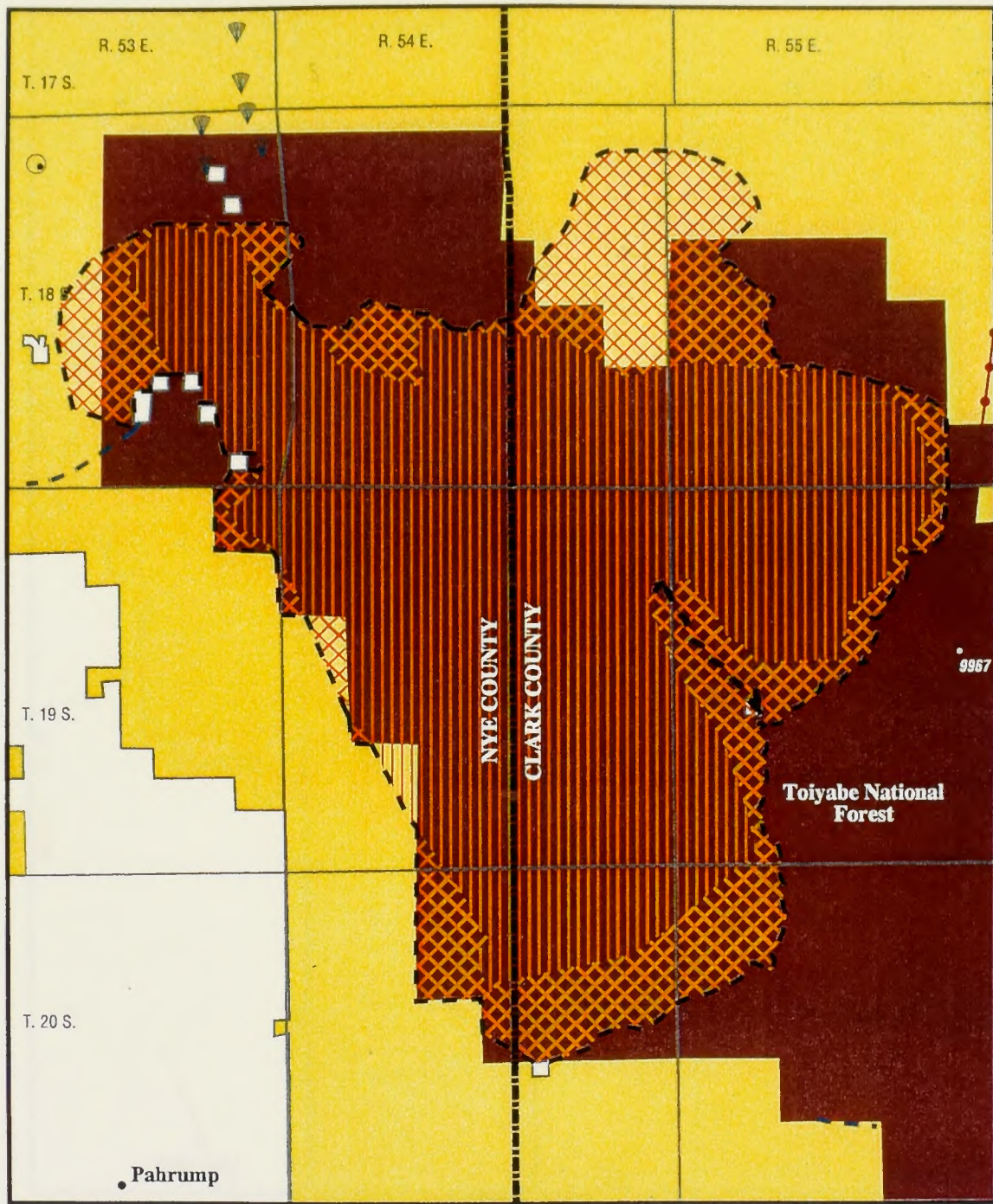
■ BLM
□ Private Land
■ Other Agency

- - Wilderness Study Area Boundary
××× Recommended Non-Suitable
||| Recommended Suitable



NV-050-401

Mount Stirling Wilderness Study Area DEVELOPMENTS AND DISTURBANCES

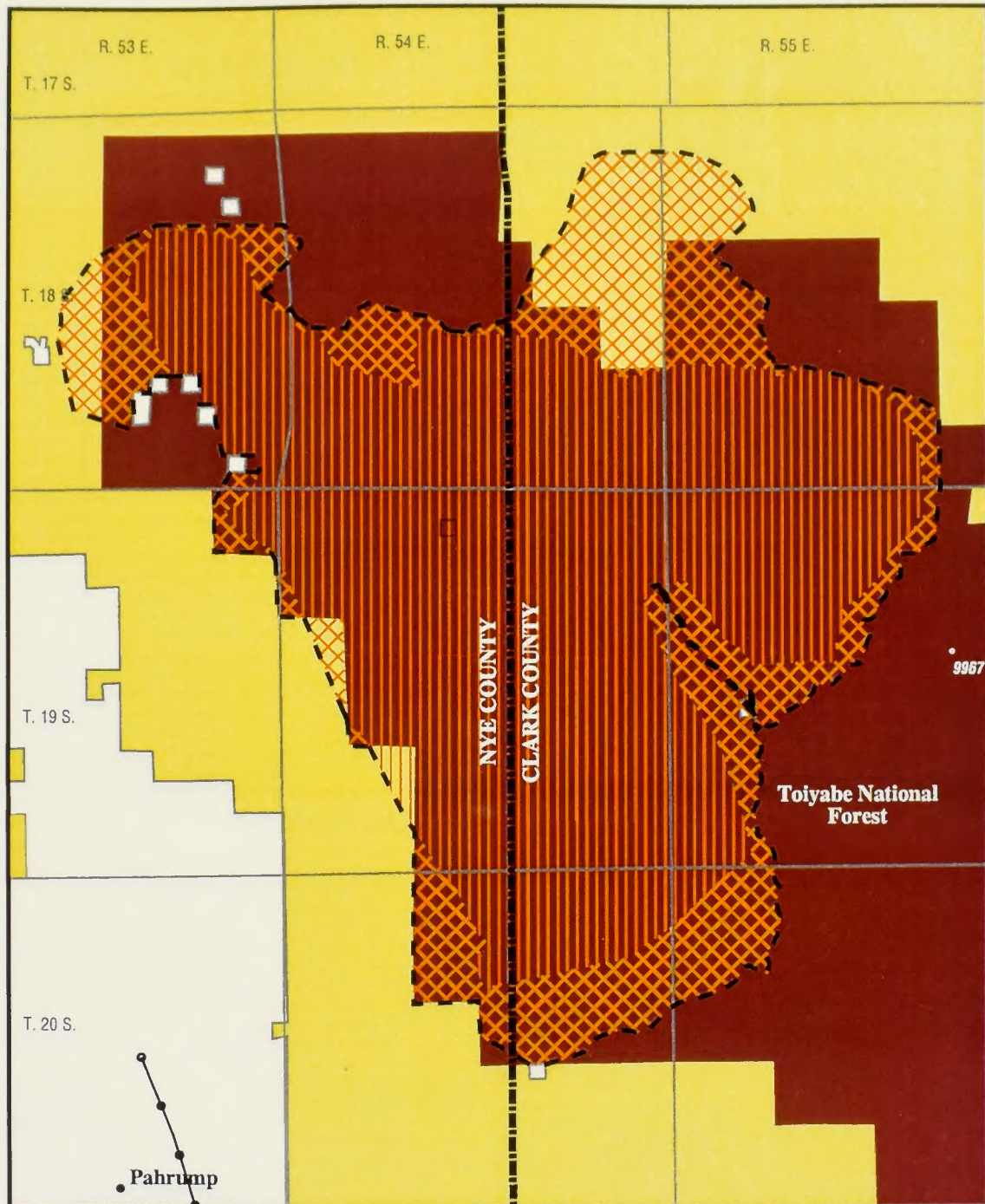


- BLM
- Private Land
- Other Agency

- Well
- Other
- Guzzler
- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable
- Pipeline
- Fence



Mount Stirling Wilderness Study Area RIGHTS-OF-WAY



1 0 1 Miles

—●— Powerline
□ Communication Site

■ BLM
□ Private Land
■ Other Agency

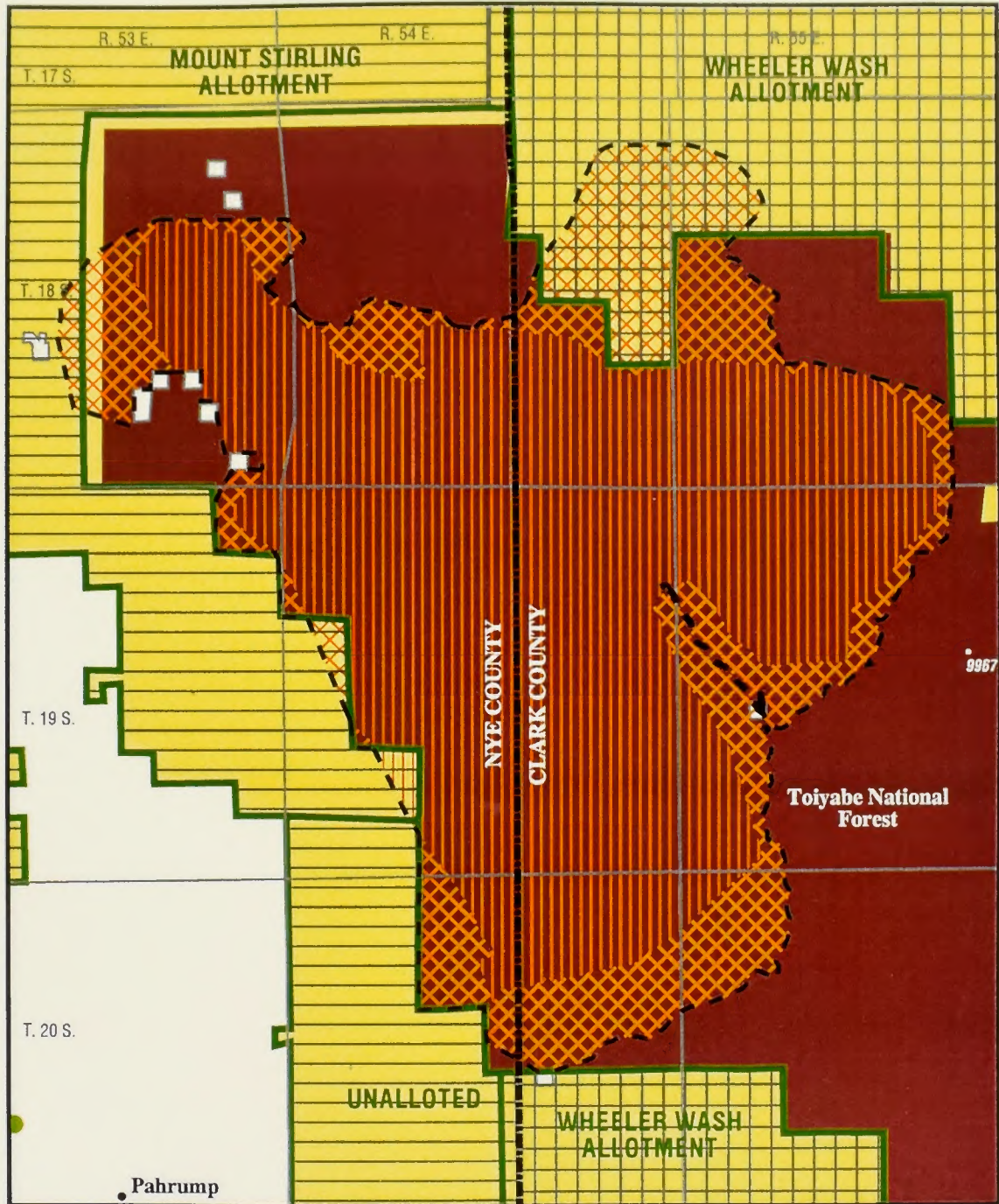
- - Wilderness Study Area Boundary
××× Recommended Non-Suitable
||||| Recommended Suitable



NV-050-401

Mount Stirling Wilderness Study Area

ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



Federally Listed
Threatened
and
Endangered
Species

● Observation Site
- Desert Tortoise

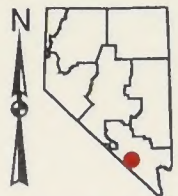
■ BLM
■ Private Land
■ Other Agency

1 0 1 Miles

□ Johnnie HMA
□ Lucky Strike HMA

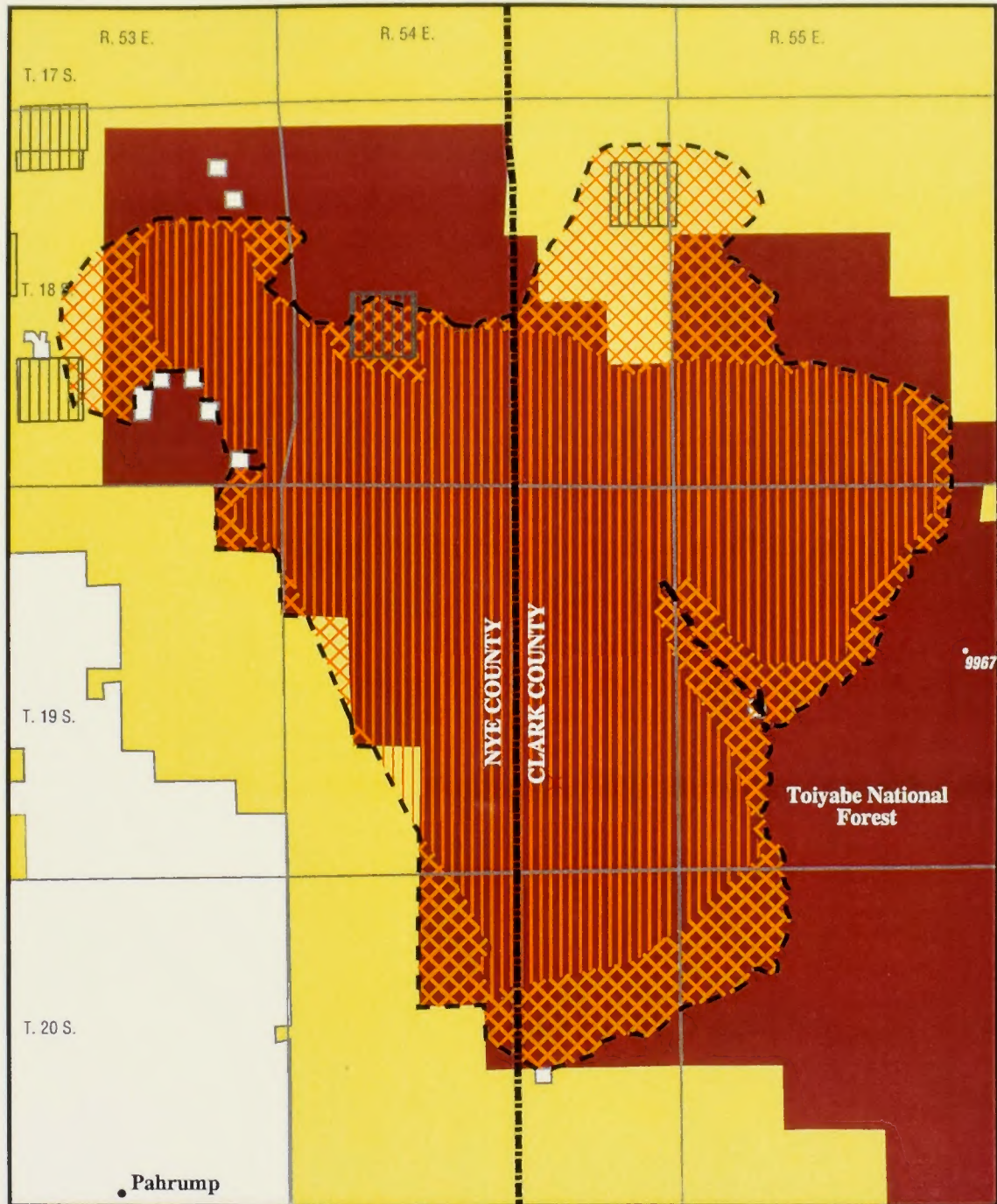
⚡ Allotment
Boundary

- - Wilderness Study Area Boundary
 ✕✕✕ Recommended Non-Suitable
 |||| Recommended Suitable



NV-050-401

Mount Stirling Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations

1 0 1 Miles

Mining Claim Density - 3/97

- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

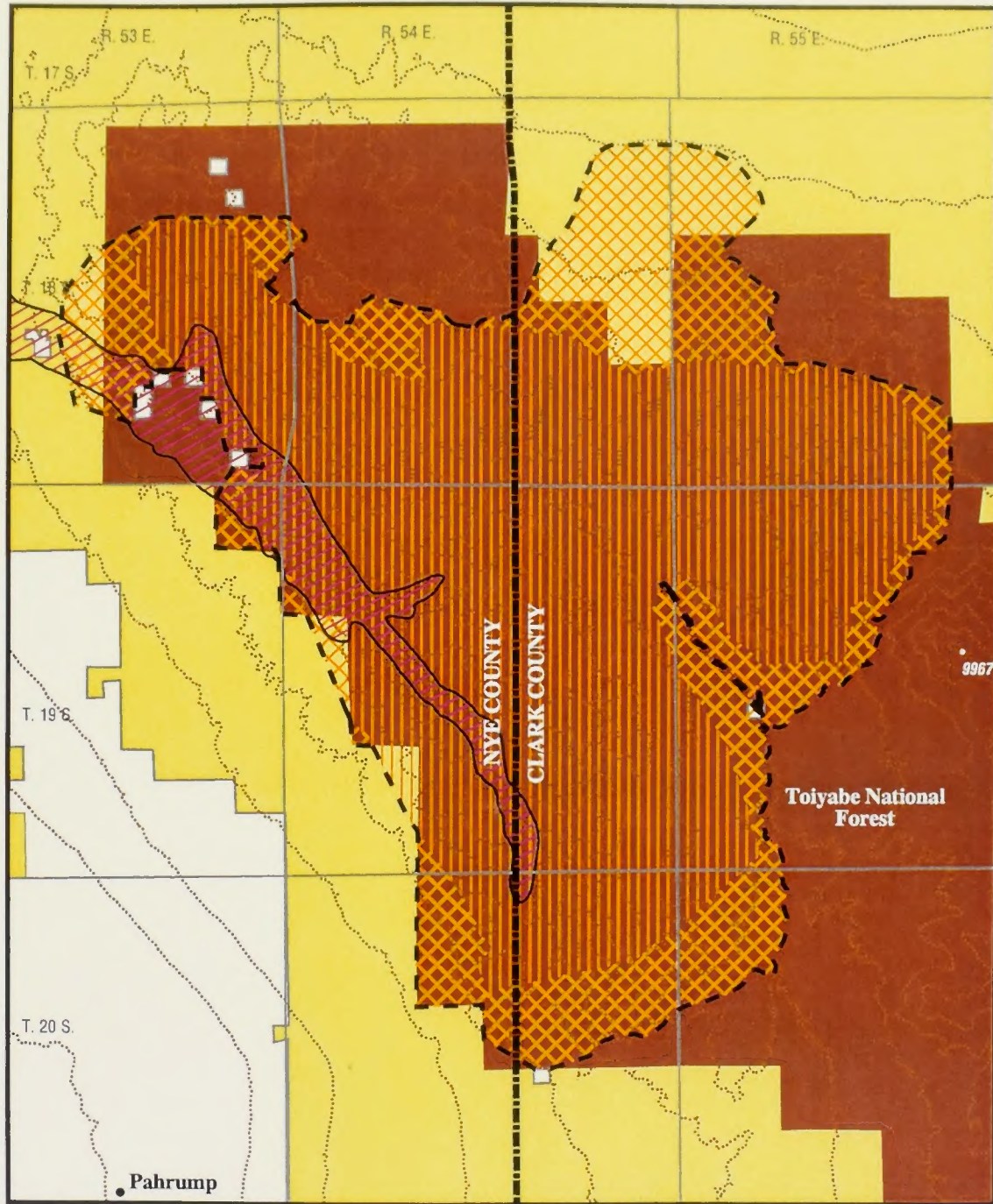
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable



NV-050-401

Mount Stirling Wilderness Study Area MINERAL POTENTIAL









1 0 1 Miles

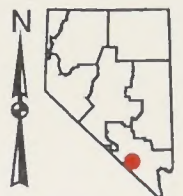
CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 High - Gold

-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable
-  Recommended Suitable



NV-050-401

QUAIL SPRINGS WILDERNESS STUDY AREA

1. THE STUDY AREA - 12,145 acres

The Quail Springs Wilderness Study Area (WSA) (NV-050-411) is located in northwestern Clark County, approximately 10 miles northwest of Las Vegas, Nevada. The study area includes 12,145 acres of public land.

The boundary is a combination of roads, a shared boundary with the Desert National Wildlife Range (DNWR), corporate boundary for the City of Las Vegas, a common border with the Moapa Indian Reservation, and an old abandoned railroad grade. Approximately thirteen and three-quarter miles of section lines on the entire north and eastern boundary of Quail Springs WSA are the common boundary with the DWWR, administered by the U.S. Fish and Wildlife Service. The western boundary begins near the Corn Creek Station and continues in a southerly direction, a little over three miles, along the Corn Creek Springs Road until it intersects with the abandoned Tonopah-Tidewater Railroad grade. From this point the boundary extends southeast approximately four miles, along the abandoned railroad grade, to the Las Vegas Corporate Boundary. Near the center of the boundary on the southwest side, the boundary jogs around the Moapa Indian Reservation and shares a common boundary. The southern boundary is approximately four and three-quarters of a mile long, along section lines, and is the Las Vegas Corporate Boundary. Irregular in configuration, the WSA is slightly more than ten miles in length (northwest to southeast), slightly more than three miles wide at it's widest point, and a little over one mile wide at it's narrowest point. The northern and eastern boundary is contiguous with the DNWR.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 12,145 acres recommended for nonwilderness

The recommendation for this WSA is to release all 12,145 acres for uses other than wilderness. The recommendation for the Quail Springs WSA emphasizes maintaining access to the entire area for uses other than wilderness. The quality of the wilderness values and the reduction of conflicts with utility and rail line development were the key considerations in the recommendation. While the WSA contained wilderness values necessary for study, they are not considered to be of a quality to merit the area's inclusion in the National Wilderness Preservation system. Solitude opportunities available in the WSA are limited to a small area and are similar to other lands adjacent to the study area. Opportunities for solitude are due to the remoteness of certain portions of the WSA and not due to any intrinsic values unique to the area. Quail Springs WSA does not offer outstanding opportunities for primitive and unconfined recreation.

The no wilderness recommendation would also emphasize making the area available for utility and rail line development. Expansion and growth of Las Vegas Valley has sparked the need for utility expansion. In addition, the Department of Energy has identified a route through the WSA for development of a rail line to the Yucca Mountain repository site. Values of these potential developments outweigh the WSA's wilderness values.

Over the long-term naturalness values and opportunities for solitude within the WSA would be diminished by increased motorized recreational activity and utility and rail line development. Also, desert tortoise (*Gopherus agassizii*), a special feature identified in the area, would not receive added protection afforded from wilderness designation.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The WSA is primarily in a natural condition. It is moderately flat with gentle sloping bajadas on the southern end. A major wash runs through the southern part of the study area. The north-

central portion of the WSA, north of the wash, is the most natural. There are 9.3 miles of ways which pass through the WSA, the longest of which is 3.8 miles, and crosses the north half of the study area. A large sand wash in the southeastern portion of the WSA provides an ideal area for off-highway vehicle (OHV) use. This area is crisscrossed with tracks from motorcycles and other OHVs. There are no range or wildlife developments in the study area.

B. Solitude: Vegetation and topography provide only minimal screening, however, the study area's size provides limited outstanding opportunities for solitude. These opportunities occur in the central portion of the WSA, away from the boundaries and ways, near the DNWR, which cross the unit in the south and north.

C. Primitive and Unconfined Recreation: Recreational opportunities are best for horseback riding. Gently sloping terrain provides for easy access. A lack of diversity in the landscape and lack of points of interest does not offer a high quality experience. It is more likely that the study area is used as access to the DNWR which is located contiguous and north of the WSA.

D. Special Features: The desert tortoise (Gopherus agassizii), listed by the U.S. Fish and Wildlife Service as a threatened species on April 2, 1990, has been identified within the WSA. A total of 12,145 acres of the study area have been identified as tortoise habitat.

Two paleontological sites have been recorded near the WSA's southern boundary. These are not potentially eligible for the National Register.

4. MANAGEABILITY

The study area can reasonably be managed as wilderness but, there would be manageability concerns associated with the 13 pre-FLPMA mining claims (260 acres). These claims have valid existing rights and development would create intrusions from mining or drilling operations which would seriously and adversely impact wilderness values present. Noise, dust and visual intrusions are a few of the impacts. Access to these parcels would also have to be granted. Development of these claims is not projected to occur.

There will also be management concerns associated with unauthorized motorized vehicle use. The area's terrain is readily accessible to motorized vehicles as few natural barriers exist. The possibility of frequent unauthorized use is magnified by close proximity to a large residential population near the study area's southern boundary.

5. ENERGY AND MINERAL RESOURCE VALUES

A total of 12,145 acres (100% of WSA) rates as having moderate nonmetallic mineral potential for sand and gravel (GEM 1983). Geologic formations are not considered to be favorable for the location of metallic minerals or energy resources.

There are 13 placer claims located in the southwestern portion of the WSA. There has been no development of these claims in the past and none is expected in the future. There are no oil and gas leases in the study area. Favorability for energy resources within the WSA is unknown.

6. SUMMARY OF WSA SPECIFIC COMMENTS

In 1986, the area was reinstated in the wilderness study process as a result of an April 1985 decision in Sierra Club vs Watt concerning certain lands that were deleted from wilderness review in 1982 and 1983. As a result of the court case, the area was reinventoried to document wilderness characteristics.

Public comments received during the reinventory (1986) supported the WSA status because of the opportunities for solitude and naturalness. Of the seven comments received three specifically stated that the WSA should not be recommended for wilderness designation. One specific comment supported the area for wilderness designation.

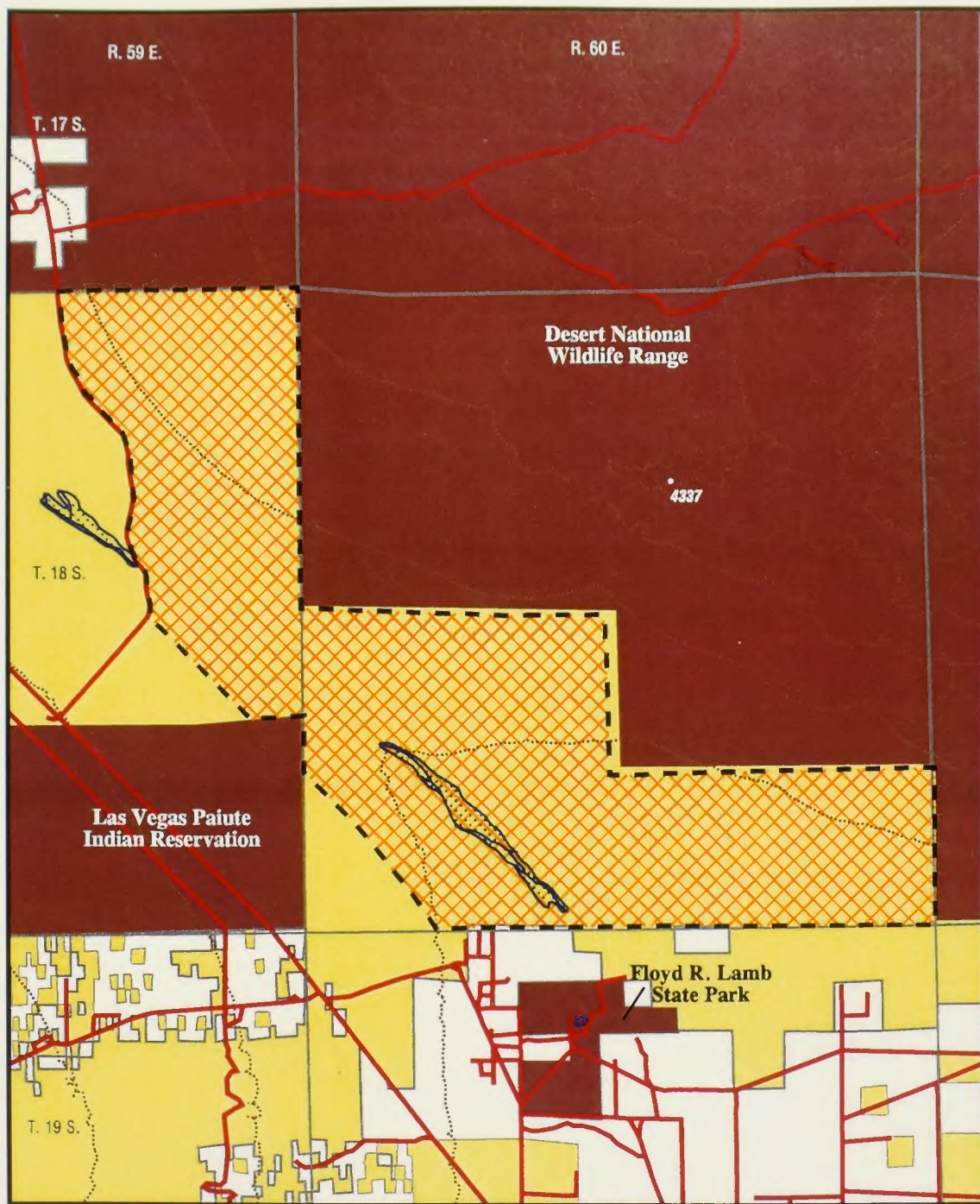
Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. None of the oral comments supported the all or partial wilderness alternatives and 1 supported the preferred alternative (no wilderness).

Of the 36 written comments, one supported the all wilderness recommendation and six supported no wilderness. Subjects of the comments were race courses, lack of outstanding opportunities for solitude and potential rail rights-of-way. This last issue was a concern of the U.S. Department of Energy.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS.

No comments were received from Clark County, or the cities of Las Vegas and North Las Vegas.

Quail Spring Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



—○— Road Spring

1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

— Wash

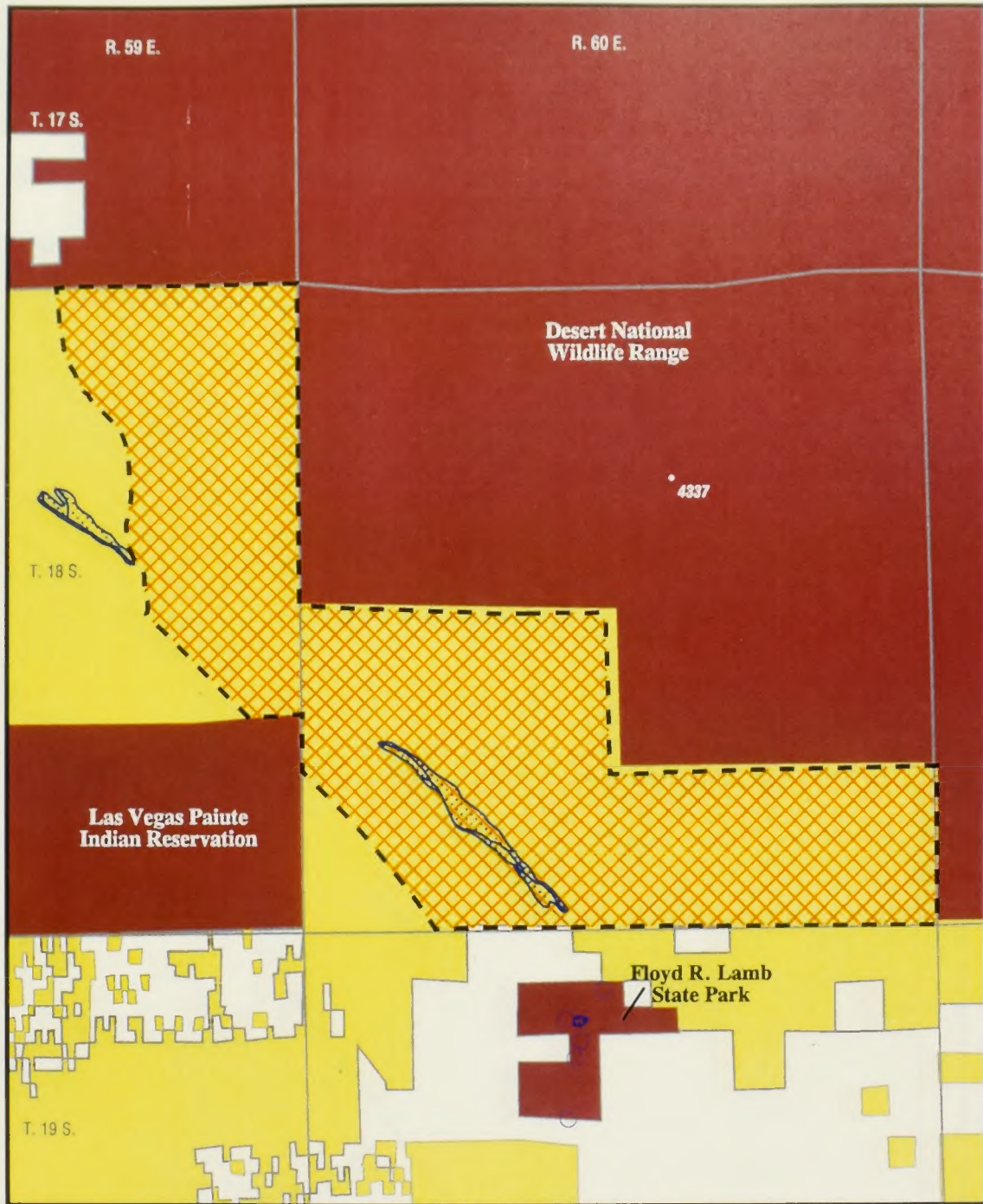
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- XXXX Recommended Non-Suitable



NV-050-411

Quail Spring Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



1 0 1 Miles

Wash

○ Well

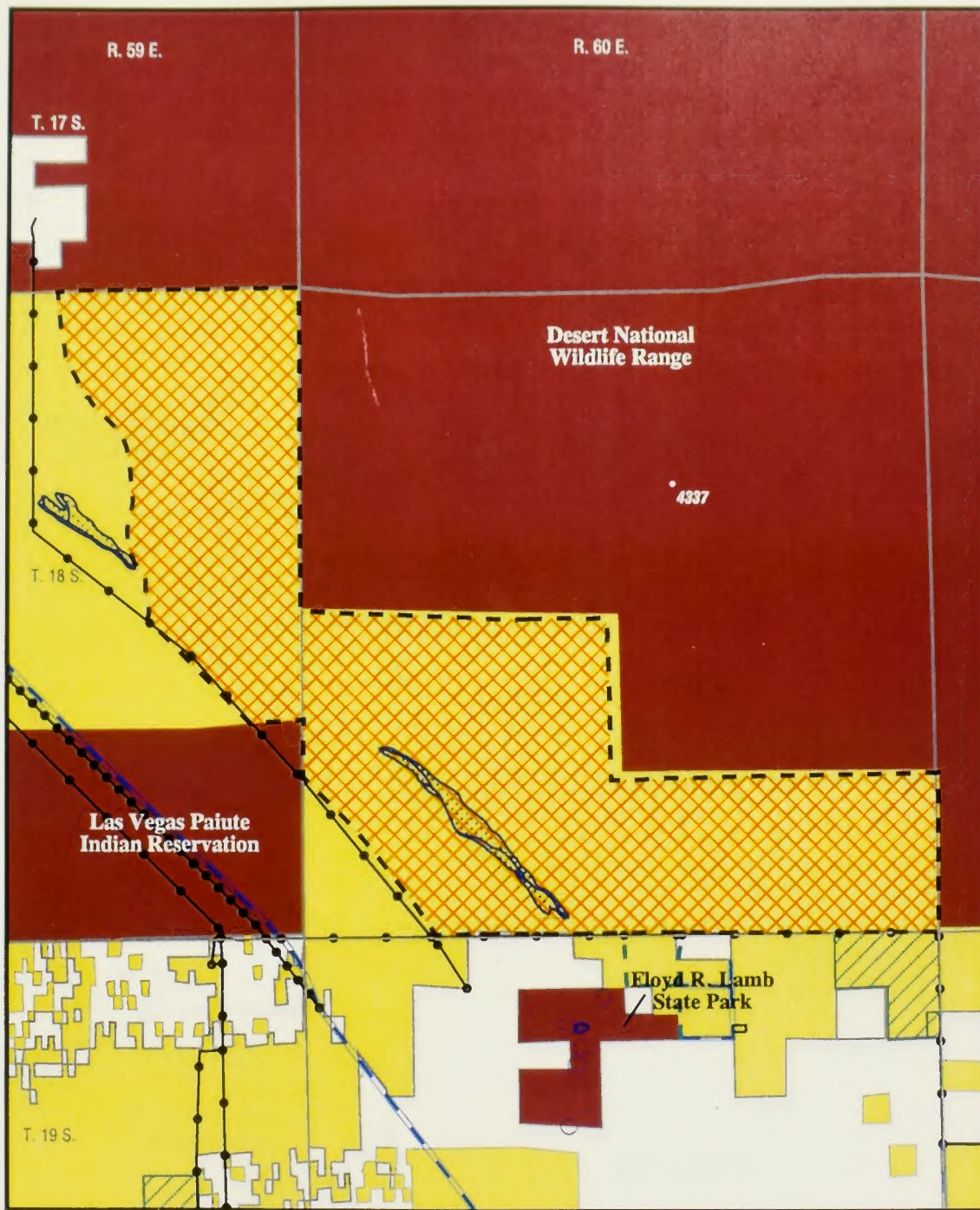
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable



NV-050-411

Quail Spring Wilderness Study Area RIGHTS-OF-WAY



1 0 1 Miles

Wash

- BLM
- Private Land
- Other Agency

- Pipeline
- Powerline
- Road
- Telephone Line
- Well
- Flood Control

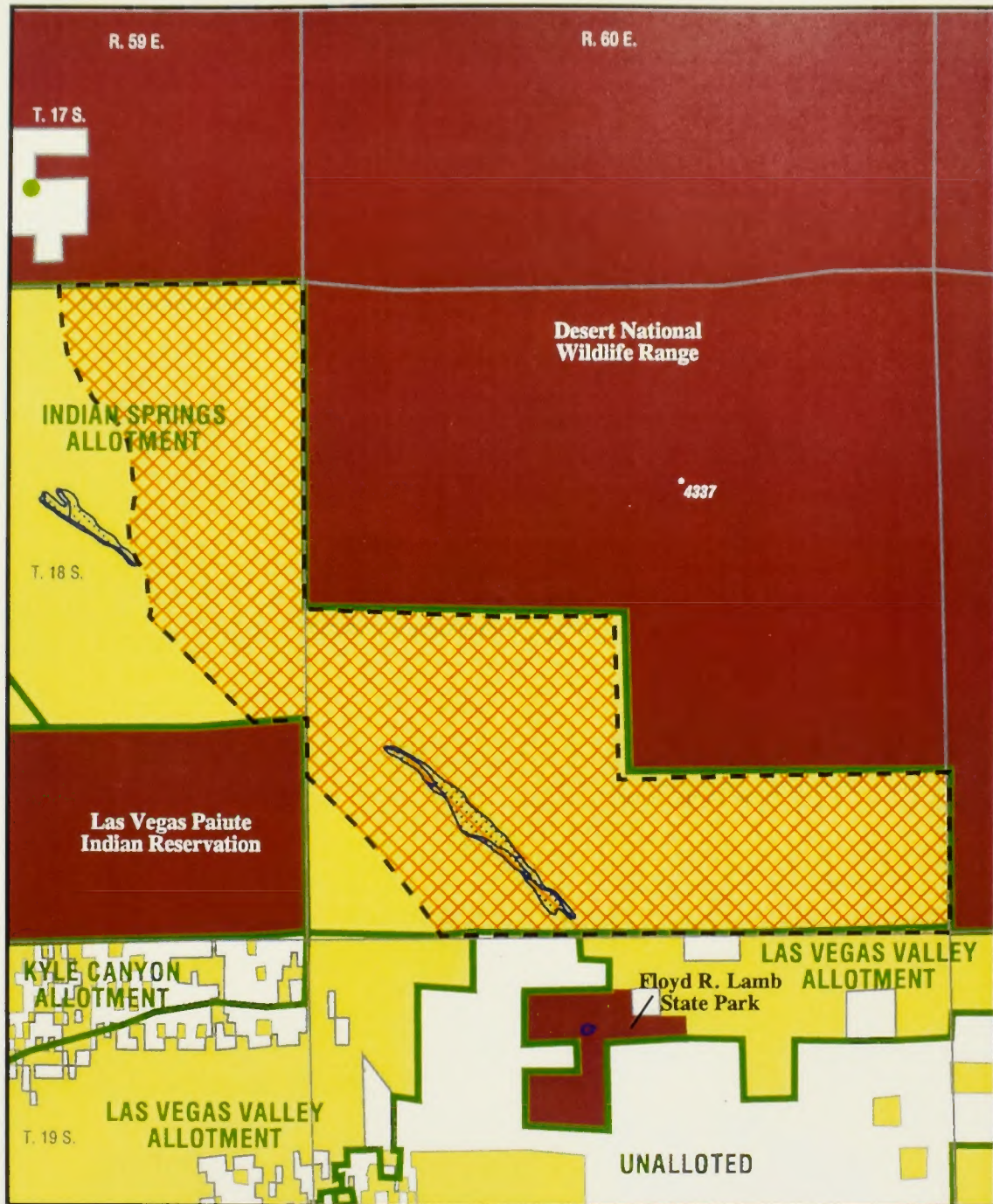
- Wilderness Study Area Boundary
- Recommended Non-Suitable




NV-050-411




Quail Spring Wilderness Study Area

ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES






**Federally Listed
Threatened
and
Endangered
Species**

 Observation Site
- Wood Stork

 BLM
 Private Land
 Other Agency

NO HMA ON THIS MAP

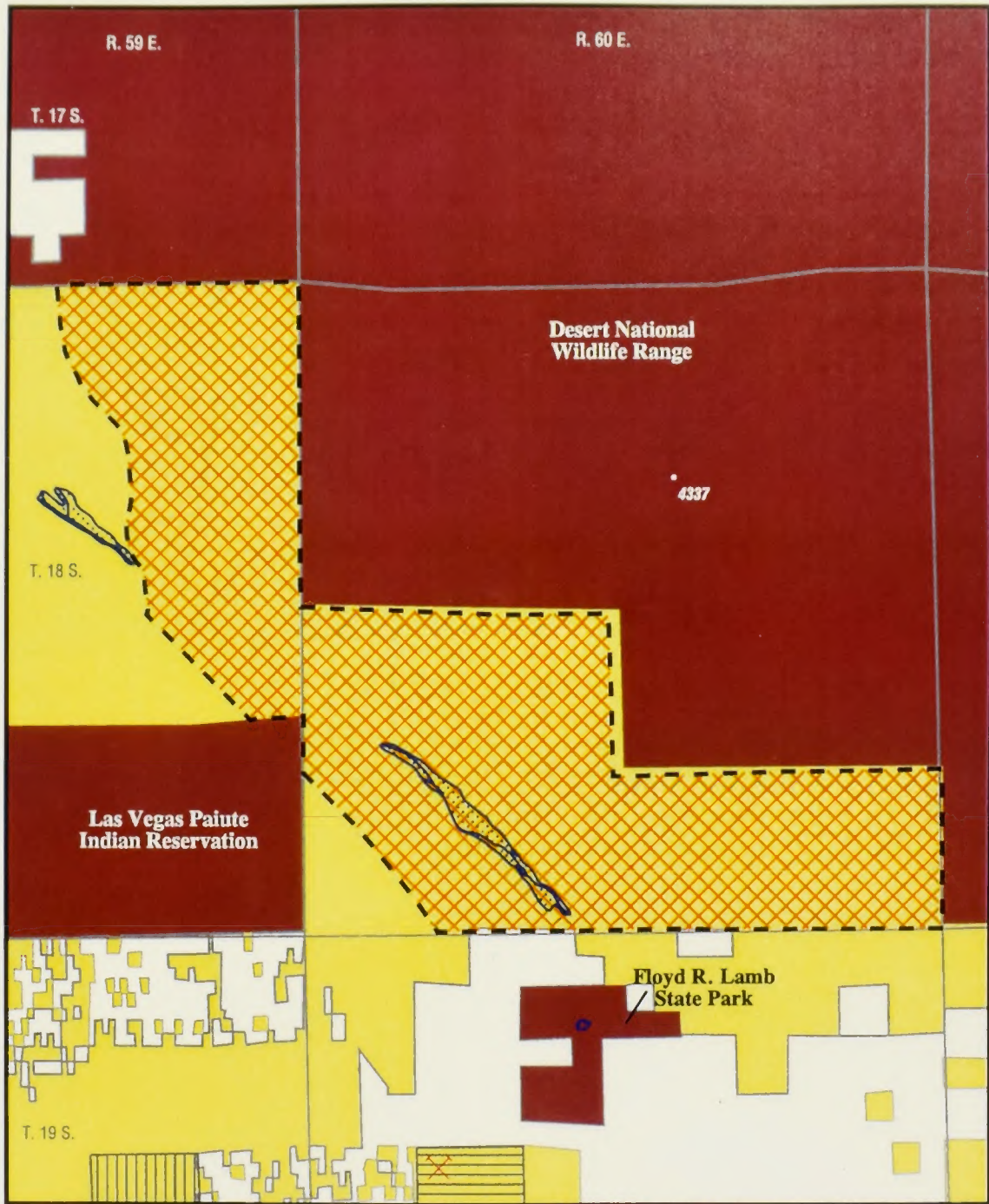
 Allotment
Boundary

 Wilderness Study Area Boundary
 Recommended Non-Suitable



NV-050-411

Quail Spring Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Claim Density - 3/97

- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

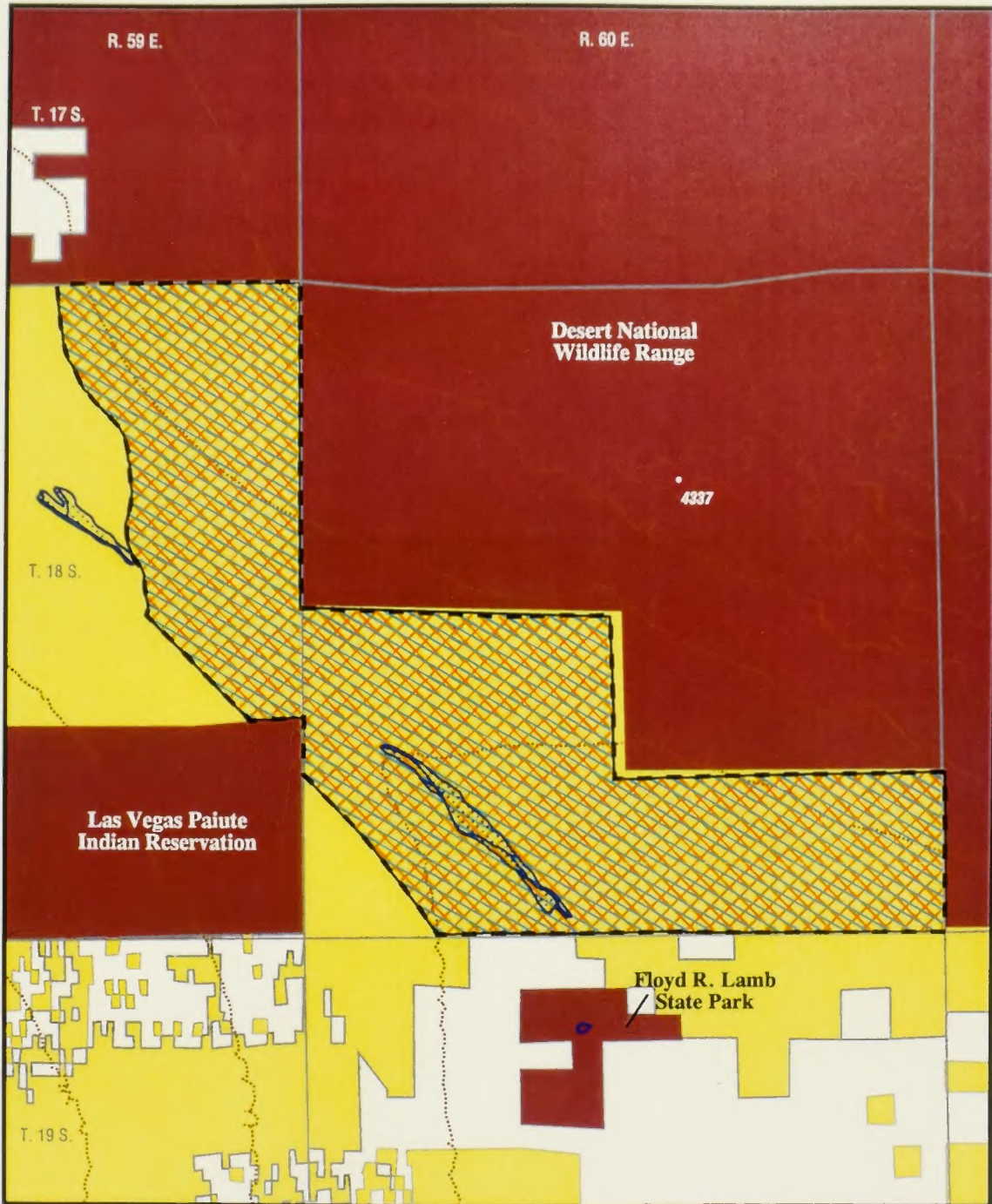
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable



NV-050-411

Quail Spring Wilderness Study Area MINERAL POTENTIAL







1 0 1 Miles



CONTOUR INTERVAL 200 METERS (656 FEET)

Wash

Mineral Potential

 Medium - Sand, Gravel

-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable



NV-050-411

La MADRE MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA - 61,630 acres¹

The La Madre Mountains Wilderness Study Area (WSA) (NV-050-412) encompasses approximately 61,630 acres of public land on the east side of the Spring Mountains, approximately 12 miles west of Las Vegas, Nevada. A large part of the south central portion of the WSA is contained within the Red Rock Canyon National Conservation Area (RRCNCA).

The northern boundary of the WSA is identified by a dirt road and the Toiyabe National Forest boundary as it existed prior to 1990. The eastern boundary extends generally along section lines for approximately six and one-half miles to where it intersects private lands and then borders private lands adjacent to Brownstone Basin. The southern boundary is the Red Rock scenic loop drive, Willow Spring road and Red Rock Summit road between the Pine Creek and La Madre Mountains WSAs. The southwest boundary is generally identified by the Lovell Canyon road and utility line extending to private property in Lovell Canyon, the private property boundary around the Sky Mountain Preserve, and the Lovell Summit road between Lovell Canyon and Trout Canyon. The west boundary is the quarter section line in sections 15, 22, and 27, T. 20 S., R. 58 E., slightly east of the private property in Trout Canyon.

The National Forest and Public Lands of Nevada Enhancement Act of 1988, adjusted administrative boundaries, placing approximately 20,324 acres, 33 percent, of the WSA within the Toiyabe National Forest. Approximately 18,955 acres (45 percent) of the area recommended for wilderness designation will be under Forest Service administration, the remainder of the area is recommended for uses other than wilderness.

2. RECOMMENDATION AND RATIONALE - 42,005 acres recommended for wilderness **19,625 acres recommended for nonwilderness**

The recommendation for this WSA is to designate approximately 42,005 acres of public land as wilderness because of its high quality values, its outstanding opportunities for both solitude and primitive and unconfined recreation, the lack of conflicts with uses of the area, and the overwhelming public support for designation of this area. Approximately 19,625 acres would be released for uses other than wilderness.

The recommendation differs from the proposed action in the Final EIS due to changed land status. The western end (west of Lovell Canyon) is now contiguous with designated wilderness (Mt. Charleston) and is a natural link between the existing wilderness and the area proposed for wilderness. Alternative A (with revised acreage figures) was then selected to replace the original proposed action and now is the recommendation.

The area is manageable as wilderness, due primarily to the extreme rugged terrain, dense vegetation and its relative inaccessibility to motorized vehicles. Much of the area recommended for wilderness designation is within the RRCNCA where off-highway vehicle (OHV) use is limited to existing roads and trails.

Areas of the WSA not recommended for wilderness designation includes the northern portion where there are conflicts with mining claim development, increased pressures from urban development, and increased OHV activity on an existing way. The western portion surrounds private lands within Lovell Canyon, where

¹Errors were discovered when WSA acres were recalculated due to enactment of the Nevada Public Lands and National Forests Enhancement Act of 1989. Total acreage of WSA increased from 56,967 to 61,630. Boundary of WSA did not change.

management of the area as wilderness would be difficult due to the sights and sounds of resort activity. The recommendation emphasizes maintaining access to the northern portion, for mineral exploration and development, and to the western portion for recreation development.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The entire WSA is predominately natural. La Madre Mountain and the other mountains, hills and valleys which comprise the area recommended for designation, are essentially untouched by man. Most OHV activity is concentrated outside this area on the northern and southeastern portion with the majority occurring outside of the WSA.

The area recommended for uses other than wilderness is primarily in a natural condition, however, the influence of external activities decreases the quality of the experience. Mining claims, OHV activity, and future proposed development of private lands combine to reduce the natural qualities of the area.

B. Solitude: Within the area recommended for wilderness designation outstanding opportunities for solitude exist. The rugged complex of deep canyons, draws, summits, ridges and the pinyon-juniper cover provides excellent screening and secluded areas. In the portions recommended for uses other than wilderness the influence of urban development, mineral activity, and sounds of OHV activity significantly diminish the quality of solitude.

C. Primitive and Unconfined Recreation: Primitive and unconfined recreation opportunities are outstanding in the area recommended for wilderness because of the variety, quality, and accessibility of the activities. Dayhiking, backpacking, rockclimbing and scrambling, nature study and photography are all outstanding due to the unique special features of the area and the variety of destinations and levels of challenge. Access to the area is outstanding from all directions, primarily from locations within the RRCNCA.

Primitive recreational opportunities exist in the portions of the WSA recommended for uses other than wilderness, however, the quality and diversity of that opportunity is significantly less than in the area recommended for wilderness.

D. Special Features: Red and buff colored sandstone formations in the Calico Hills, White Rock Hills, Brownstone Basin, and Little Red Rock area are of geological, ecological and scenic interest. The cross-bedded sandstone demonstrates their origin as former sand dunes. The brightly colored sandstone contrasts sharply with the rugged, spectacular limestone cliffs that backdrop them. La Madre Mountain and its sheer cliffs on the southeast side are the single most dominant feature within the area recommended for wilderness. The Keystone Thrust of the older limestone of the La Madre Range, that have been pushed over the younger sandstone, is dramatically evident above Brownstone Basin. This particular site is internationally regarded as the single finest example of a thrust fault and is of significant geologic and scientific interest.

The large variation in elevation (6,000 feet) allows for a variety of plant communities from Southern Mohave desert shrub to sub-alpine environments of white fir and ponderosa pine. Natural water impoundments in the sandstone provide near perennial water sources that support a variety of wildlife. The area provides crucial summer habitat for a sizeable herd of bighorn sheep and a small herd of elk.

Prehistoric sites occur throughout the area recommended for wilderness. Site types include rock art panels (both pictographs and petroglyphs), agave roasting pits, rock shelters, camp sites, milling sites, and lithic and ceramic scatters. Brownstone Canyon has been listed on the National Register of Historic Places because of the concentration and diversity of cultural site types, the occurrence of rare polychrome pictographs.

4. MANAGEABILITY

The area recommended for wilderness can reasonably be managed as wilderness. The area is a solid block of public land with no private inholdings, State lands, split estate lands or rights-of-way. No valid rights currently exist. Most of the area is in the RRCNCA and closed to mineral entry. Mineral resource potential has been identified as low and development of minerals is not expected.

Within the area not recommended for wilderness, a lack of natural and physical impediments to OHV access, and known sand and gravel and nonmetallic mineral resources make this area unsuitable for wilderness management.

5. ENERGY AND MINERAL RESOURCE VALUES

Assessment of the mineral potential for that portion of the La Madre Mountains WSA recommended for wilderness found that stream sediments delineated a zone of slight silver, lead and zinc anomalies. However, the report judged the area to have low mineral resource potential for silver, lead, and zinc. No known deposits of nonmetallic minerals occur within the area, and discovery of significant near-surface deposits is unlikely. Sand and gravel and limestone suitable for construction materials are abundant within the area, but, because similar materials are available closer to major markets, occurrences were not classified as resources. The potential for petroleum resources is rated as low.

6. SUMMARY OF WSA SPECIFIC PUBLIC COMMENTS

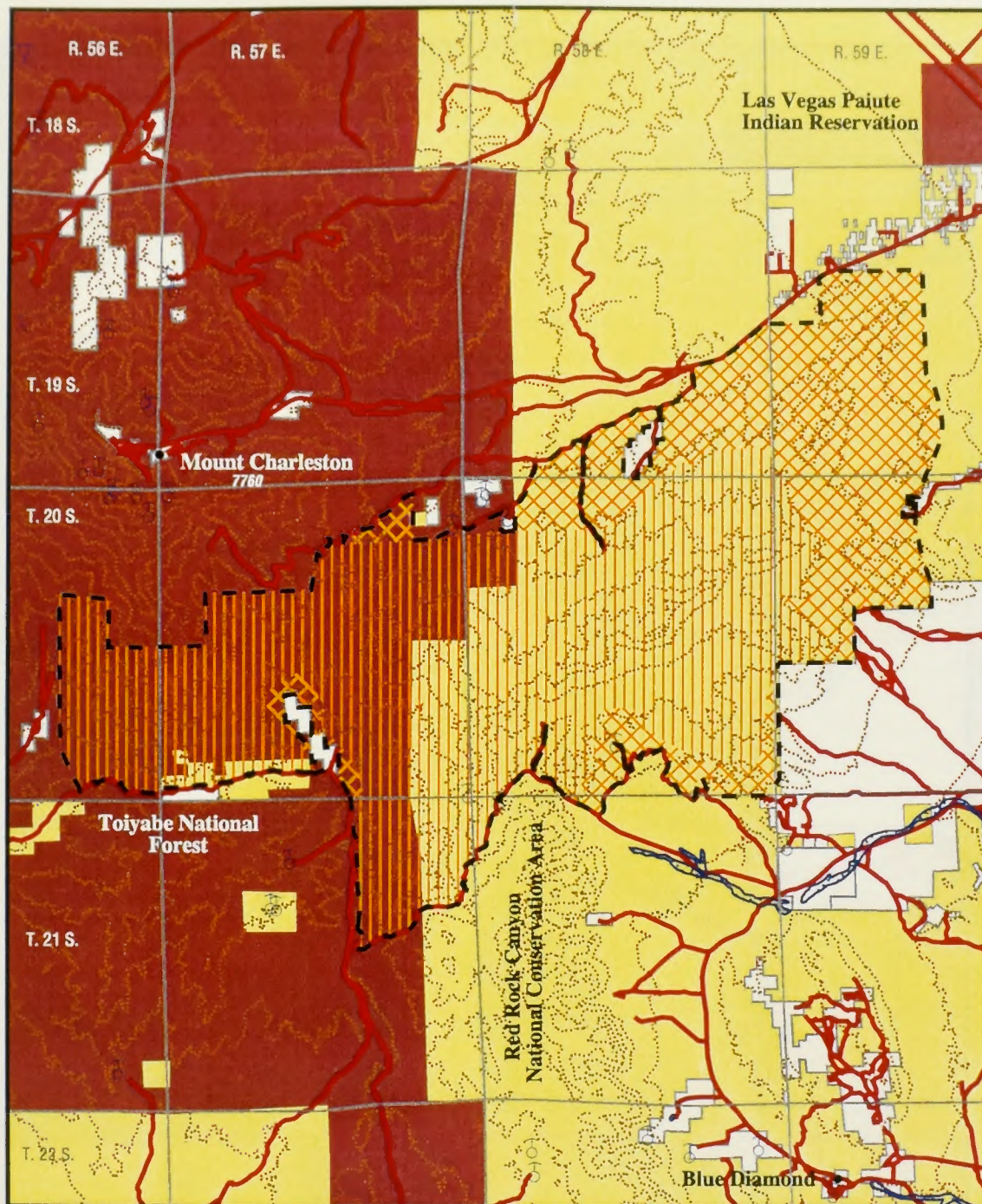
Of the 35 comments received, 33 commentors supported wilderness designation for all or part of the WSA, including two who wanted more area in the recommended wilderness area, and two that wanted less. Two commentors supported no wilderness for the La Madre Mountains WSA. Most comments which specifically mentioned the WSA and supported wilderness designation, touched on high wilderness values (outstanding opportunities for solitude and primitive recreation), unspoiled biological and cultural resource values, and wildlife habitat. Comments opposing wilderness noted speculative mineral resource potential and potential impacts to energy and mineral exploration and development.

Clark County Department of Comprehensive Planning supported the emphasis on recreation management for the Spring Mountains and agreed that designating portions of the Spring Mountains would enhance the range of recreation opportunities for the citizens of Clark county.

The Governor of Nevada, supported the Bureau's Preferred Alternative recommending only that a small portion of the WSA be dropped for minerals development. The Governor's comments stated "this WSA will provide an excellent compliment to the recreational opportunities of the Red Rock and Mount Charleston areas, offering outstanding solitude and wilderness experience within a short distance of the Las Vegas metropolitan area". Previous comment letters from Division of State Lands also supported the Preferred Alternative. The State Divisions of Minerals, Department of Wildlife and Agriculture did not support the Bureau's Preferred Alternative.

The U.S. Forest Service supported the preferred alternative, recommending only a minor boundary adjustment to better define the boundary in the Lovell Canyon area. The U.S. Air Force stated they support alternatives that do not restrict military overflights. The U.S. Geological Survey stated that geologic conditions were adequately considered in the Draft EIS and that mineral resource potential of those areas recommended suitable for wilderness would be addressed in their joint report with the Bureau of Mines. The EPA supported the proposed action and recommended that the final recommendation include a statement that water and air quality will be best protected under wilderness designation.

LaMadre Mountains Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



—○— Road Spring

1 0 1 Miles

Wash

CONTOUR INTERVAL 200 METERS (656 FEET)

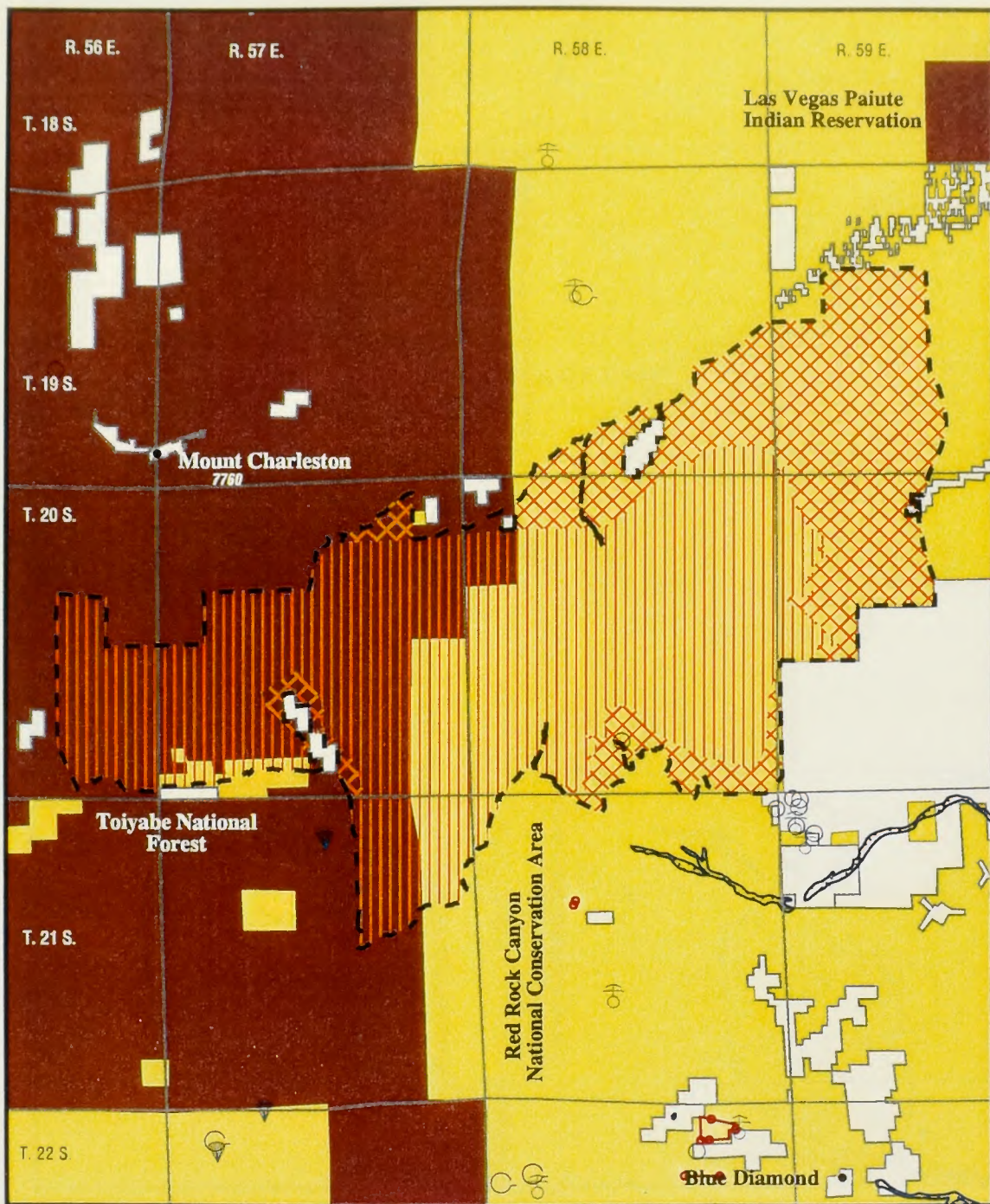
■ BLM
□ Private Land
■ Other Agency

--- Wilderness Study Area Boundary
◇◇◇◇ Recommended Non-Suitable
||||| Recommended Suitable



NV-050-412

LaMadre Mountains Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



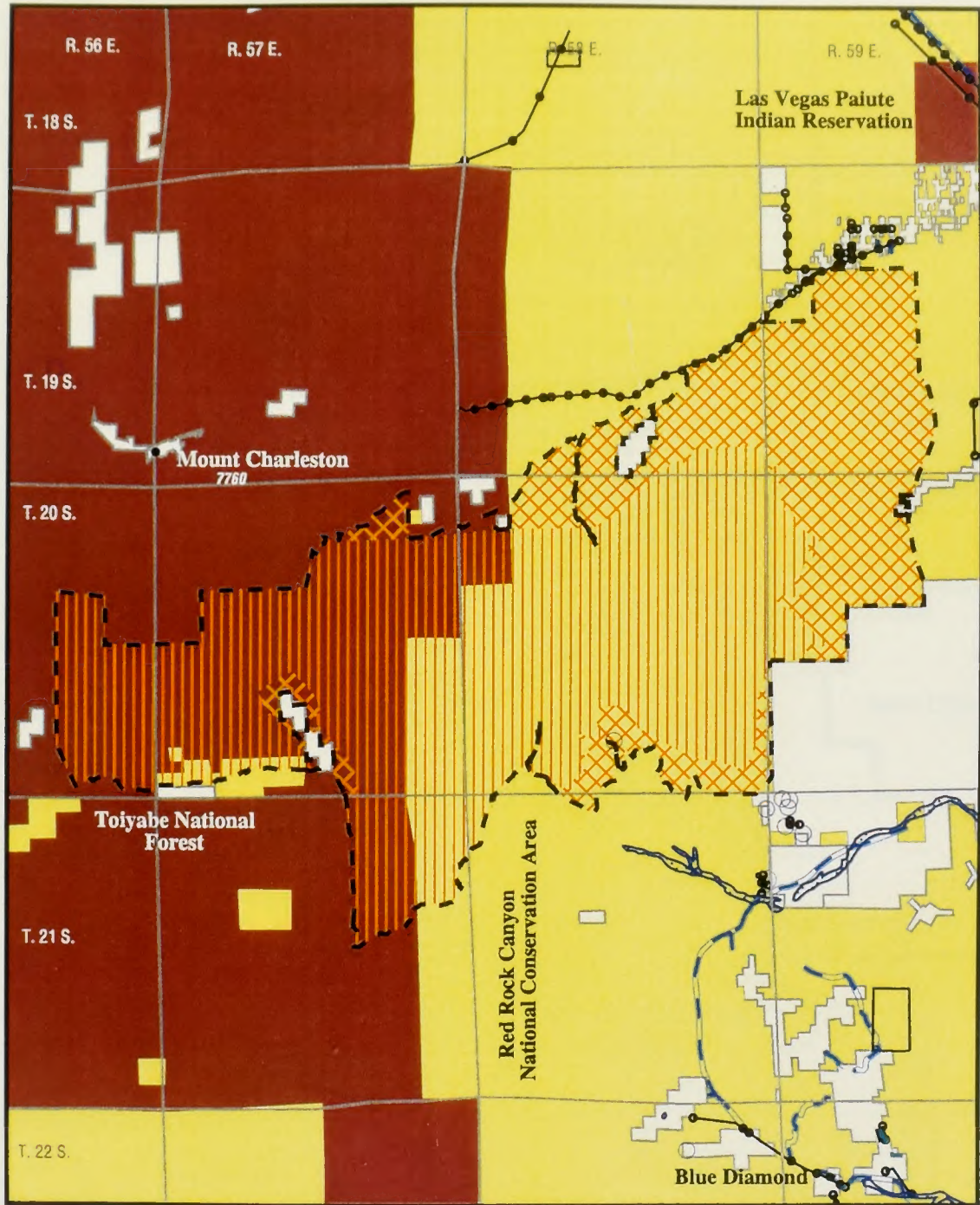
1 0 1 Miles

Wash

- BLM
- Private Land
- Other Agency
- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable
- Well
- Dev. Spring
- Guzzler
- Fence
- Corral



LaMadre Mountains Wilderness Study Area RIGHTS-OF-WAY



1 0 1 Miles

Wash

- | | |
|----------------|-------|
| Powerline | Well |
| Pipeline | Other |
| Telephone Line | Road |

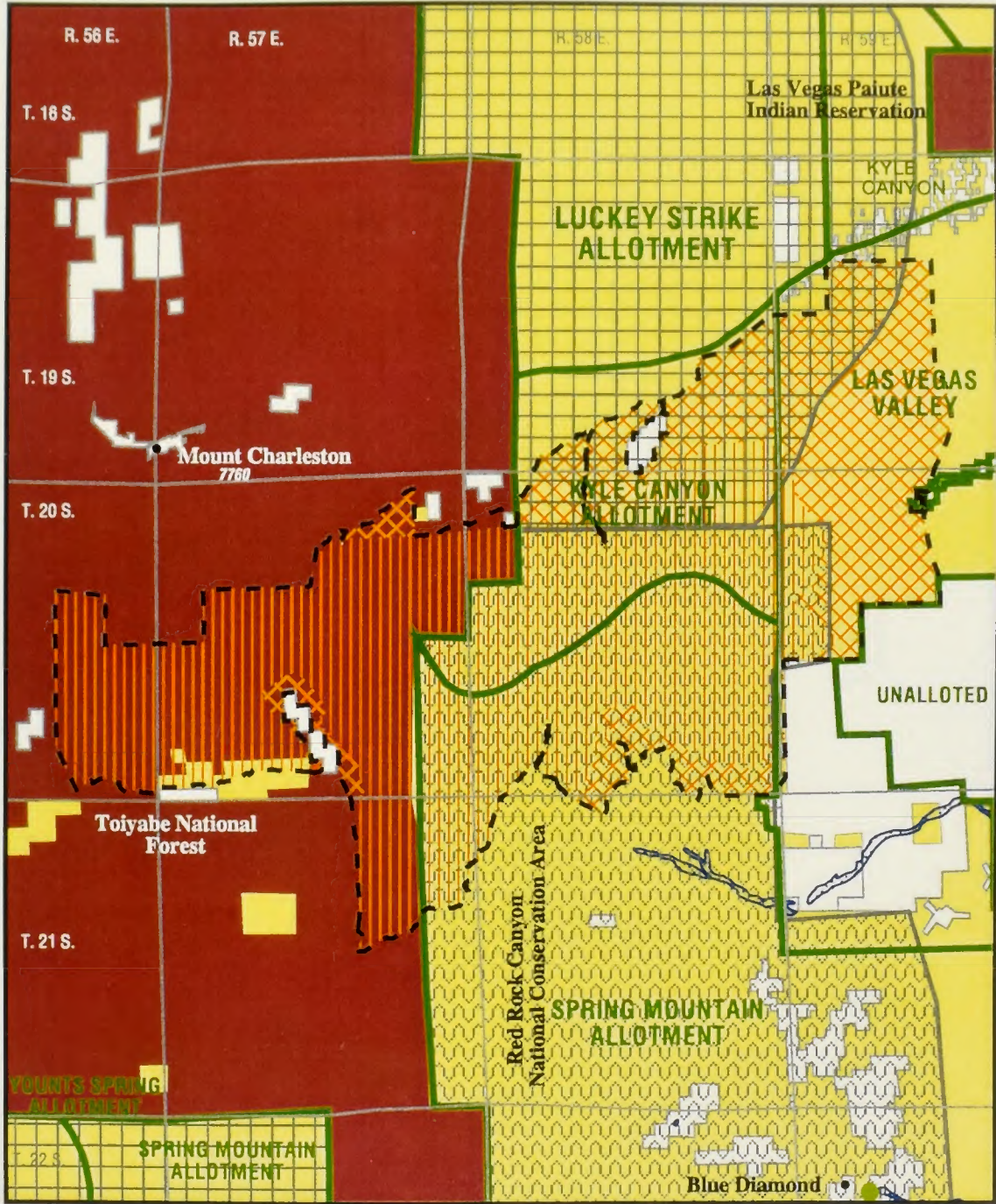
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable



NV-050-412

LaMadre Mountains Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



**Federally Listed
Threatened
and
Endangered
Species**

Observation Site
- Desert Tortoise

BLM
 Private Land
 Other Agency

1 0 1 Miles

Lucky Strike HMA
 Red Rocks HMA

Allotment
Boundary

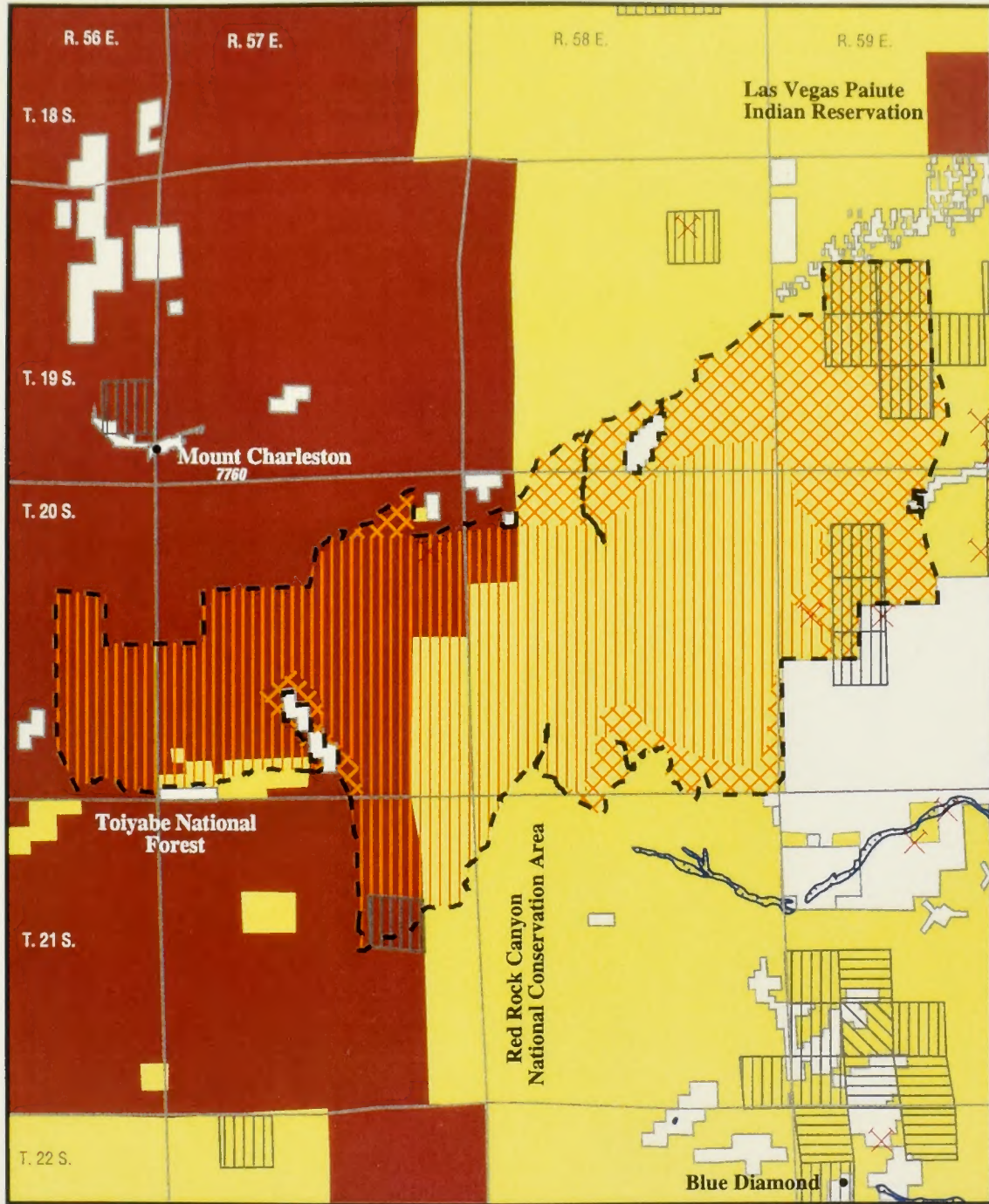
Wilderness Study Area Boundary
 Recommended Non-Suitable
 Recommended Suitable

Wash



NV-050-412

LaMadre Mountains Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations

1 0 1 Miles

Wash

Mining Claim Density - 3/97

- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

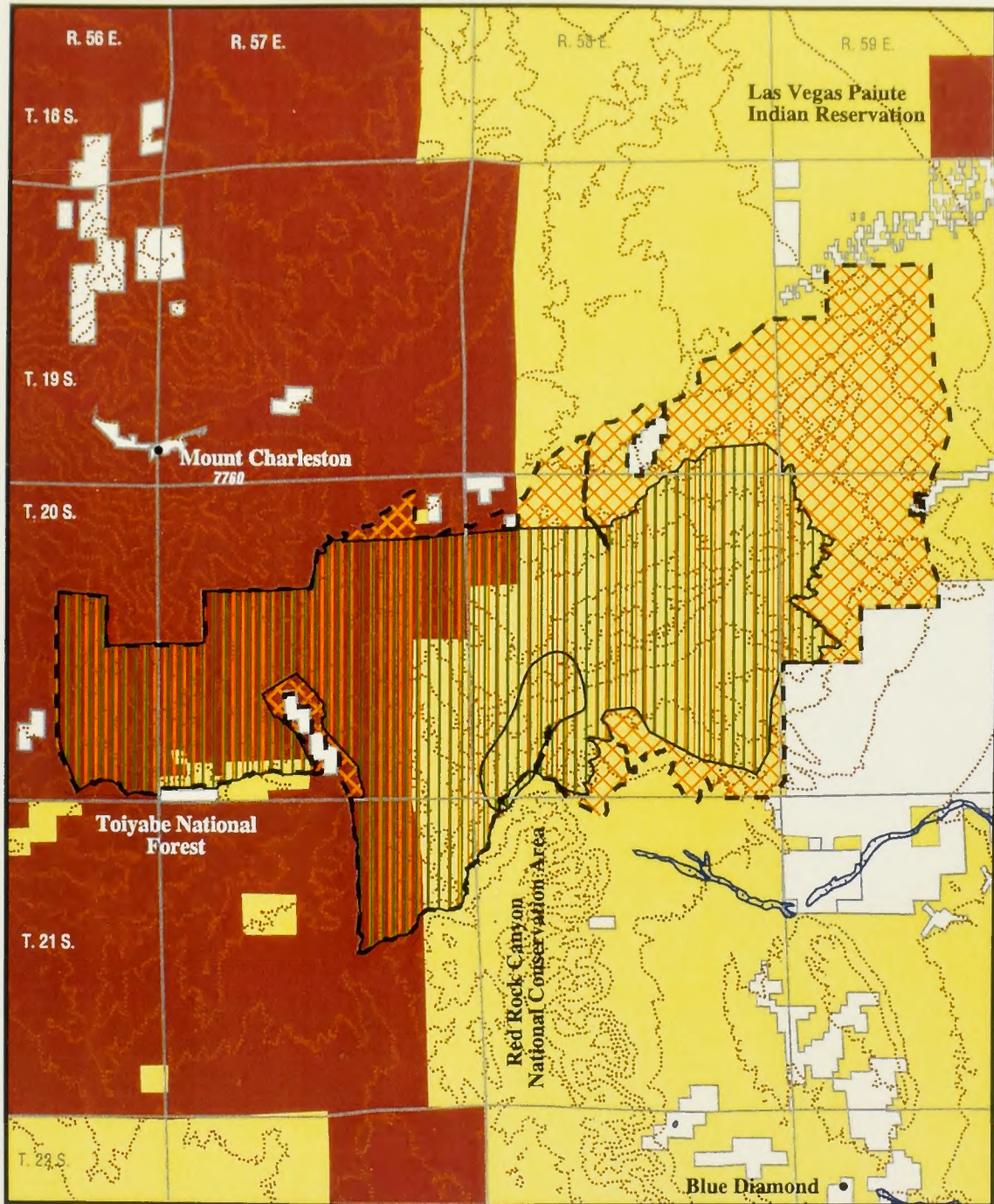
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable



NV-050-412

LaMadre Mountains Wilderness Study Area MINERAL POTENTIAL



1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

Wash

Mineral Potential

Low - Oil, Gas, Lead, Silver, Zinc

- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable



NV-050-412

PINE CREEK WILDERNESS STUDY AREA

1. THE STUDY AREA - 24,618 acres¹

The Pine Creek Wilderness Study Area (WSA), (NV-050-414), is located approximately 15 miles west of Las Vegas, Nevada. It contains 24,618 acres of public lands, with no split estate or private inholdings. The majority of the WSA is inside the Red Rock Canyon National Conservation Area (RRCNCA), in the southern portion of the Spring Mountain Range. The west boundary of the WSA is identified by a utility line right-of-way and the Lovell Canyon road. Private land in the Mountain Springs area and a utility line right-of-way mark the southern boundary. The Red Rock Summit road, marks the northern boundary of the WSA. The east boundary of the WSA follows the base of the Red Rock escarpment, skirting around two small parcels of State owned lands.

The National Forest and Public Lands of Nevada Enhancement Act (Public Law 100-550) adjusted the administrative boundaries for the Toiyabe National Forest, placing approximately 15 percent of the Pine Creek WSA within the new Forest boundary.

2. RECOMMENDATION AND RATIONALE - 22,966 acres recommended for wilderness 2,357 acres recommended for nonwilderness

The recommendation for this WSA is to designate 22,966 acres of public land, including 705 acres outside the WSA, as wilderness and release approximately 2,357 acres for uses other than wilderness. Wilderness designation is recommended because of high quality wilderness values and special features, its easy accessibility for primitive and unconfined recreational uses, the lack of conflicts with other actual or potential uses, and the overwhelming public support for wilderness designation of this area.

Designation would preserve and protect an undisturbed area for several solitude-dependent wildlife species, and numerous prehistoric and historic archeological sites. This offers residents of a booming metropolitan area outstanding opportunities for a quality wilderness experience within 15 miles of the urban sprawl.

Outstanding opportunities for solitude and primitive and unconfined recreation are available within the WSA. The numerous canyons and stands of ponderosa pine, pinyon, and juniper isolate visitors from one another and provide geological, ecological and scenic interest for hikers. The sheer sandstone cliffs challenge rock climbers and scramblers and serve as dramatic backdrops for photographers. Perennial springs, seasonally flowing streams, and waterfalls permit backpack camping yearlong. Wildlife viewing and nature study are particularly enjoyable in the cool, moist canyons which support a variety of small and large animal species and many rare and endemic plant types.

Within the area recommended for wilderness, extremely rugged terrain and dense vegetation have acted as a natural barrier, precluding motorized access. This inaccessibility enhances the manageability of the WSA. The RRCNCA encompasses most of the WSA where off-highway vehicle (OHV) use is limited to existing roads and trails.

Conflicts with other resource uses of the lands recommended for designation are limited. Seventy-five percent of the recommended area is contained within the RRCNCA and closed to mineral entry; the remaining western portion of the WSA is open to mining location.

¹All acreage figures were recalculated after passage of the Nevada Public Lands Enhancement Act which transferred lands within the WSA from BLM to Forest Service jurisdiction. The total increased by 618 acres.

Approximately 2,083 acres of BLM and 274 acres of Forest Service administered land, recommended as nonwilderness, are located along the eastern and western borders of the WSA. Adjustments to the eastern boundary delineated a more easily identifiable boundary along the base of the escarpment. This action would enhance the management of the WSA by providing a recognizable boundary for that portion of the WSA. The remaining acreage recommended as nonwilderness is located in a strip on the western boundary of the WSA, and include areas where OHV use is ongoing and not impeded by natural physical barriers. Management of this area for OHV use is considered to be more appropriate than for wilderness values.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The 22,966 acres recommended for wilderness are predominately natural. The sandstone cliffs of the escarpment, narrow canyons of Pine Creek, and the stands of ponderosa pine, pinyon and juniper have formed natural barriers to the intrusion of man. Rare and endemic plant species still flourish adjacent to the perennial stream and springs and along ephemeral water courses; solitude-dependent wildlife still find quality habitat within the WSA.

The majority of the area is free of man's imprints. A single 2 mile long cherry-stemmed way runs on the west side of the study area; this is a localized imprint visible only from the immediate vicinity.

B. Solitude: Within the area recommended for wilderness designation exists outstanding opportunities for solitude. The rugged complex of canyons and ridges provides excellent topographic screening. The sandstone cliffs have differentially weathered into natural arches, bridges and pockets that create numerous secluded spots. These geologic features are heavily interlaced with dense stands of pinyon-juniper and ponderosa pine, forming isolated glades in which the visitor is remote from even relatively nearby groups. Willow, ash, and hackberry form a secondary vegetative cover along the canyon bottoms. These distinctive features combine to create an area where not only can outstanding solitude be found, but where its enjoyment is greatly complemented by natural and scenic values.

C. Primitive and Unconfined Recreation: Opportunities for primitive and unconfined recreation are outstanding in the area recommended for wilderness designation because of the variety, quality, and accessibility of the activities. Dayhiking, backpacking, rockclimbing and scrambling, nature study and photography are all enhanced by the unique geology, scenic beauty, rare and endemic biota, and rich cultural manifestations. Perennial spring and seasonal catchments provide year-round water sources for backpack camping.

D. Special Features: Several special features supplement the wilderness values of the area recommended for wilderness designation. The sandstone cliffs are the dominant landform feature. The cross-bedding of ancient sand dunes and the Keystone Overthrust of limestone are of geologic and paleontological interest. Weathering of the sandstone layers has created natural bridges, arches, and sloughs through which seasonal runoff cascades as waterfalls to the canyons below.

Canyons below the escarpment create micro-climates that sustain botanical resources dramatically different from those of the surrounding Mohave desert. They support species of milkvetch, penstemon, worts, and numerous ferns that are endemic to Red Rock Canyon and the Spring Mountains. Relic stands of ponderosa pine occur at unusually low elevations in the WSA.

Unique plant communities and reliable water sources of the Pine Creek WSA sustain a variety of solitude-dependent animals. A sizeable herd of bighorn sheep find crucial summer habitat within the area recommended for wilderness. The presence of kit fox, bobcat, mountain lion, and a variety of raptors also offers excellent opportunities for scientific observation and nature study in this WSA.

A wide range of cultural resources are of special value in the reconstruction of regional history. High concentrations of rock art sites, with both petroglyphs and the more unusual pictographs, rock shelters, and campsites suggest that the unique biomes within the WSA were very important to early peoples. Milling stations and agave roasting pits point to the processing of local plant resources. The historic Spanish trail also passes through the extreme southern end of the WSA.

4. MANAGEABILITY

The entire WSA and the additional acreage recommended for wilderness designation could reasonably be managed as wilderness to preserve values now present in the area. The area is a solid block of public land with no private inholdings, State lands or rights-of-way. OHV use is confined to existing ways within the WSA, and designated roads in the RRCNCA.

5. ENERGY AND MINERAL RESOURCE VALUES

The WSA has moderate favorability for oil and gas, low favorability for geothermal, and low favorability to unfavorable for metallic minerals. The entire WSA is moderately favorable for sand and gravel resources.

Sixty-five percent (15,600 acres) of the WSA is contained in the RRCNCA, and thus segregated from mining laws, preventing mineral entry. An additional 150 acre area, Pine Creek Research Natural Area, is also withdrawn from mineral entry. There are twelve oil and gas leases covering 22,800 acres of the WSA. Approximately 35 post-FLPMA mining claims are located in the southwest portion of the WSA. This area is not recommended for wilderness.

6. SUMMARY OF WSA SPECIFIC PUBLIC COMMENTS

During formal public review of the draft EIS, a total of 33 comments specifically addressing this WSA were received. Of those, 32 were written comments and one was an oral statement, all received at the public hearing on the draft EIS. In general, 30 commentors supported wilderness designation for all or part of the WSA, including three who wanted more area in the recommended wilderness area. Three commentors supported no wilderness for the Pine Creek WSA.

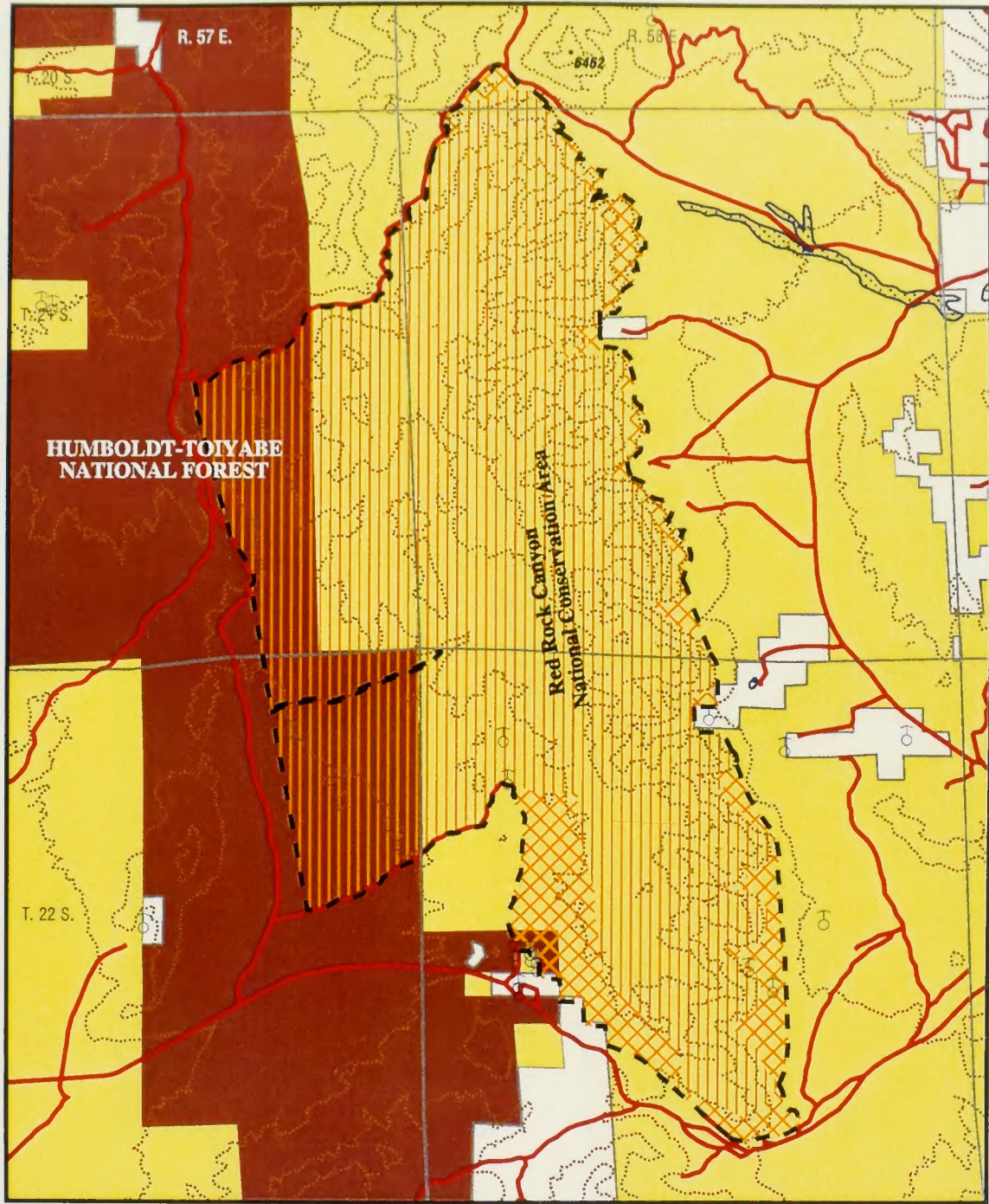
Most comments which supported wilderness designation and specifically mentioned the WSA noted the high wilderness values (outstanding opportunities for solitude and primitive recreation), the unspoiled biological and cultural resource values, and the wildlife habitat potential. Comments opposing wilderness focused on the potential mineral resource and impacts to energy and mineral exploration and development.

Clark County Department of Comprehensive Planning supported the emphasis on recreation management for the Spring Mountains and agreed that designating portions of the Spring Mountains would enhance the range of recreation opportunities for the citizens of Clark County.

The Governor of Nevada supported the Preferred Alternative, with a strong recommendation for excluding part of the southwest portion of the WSA "in order to allow continued access to mineral resources." Comment letters from other State agencies did not support the Preferred Alternative.

The U.S. Forest Service supported the Preferred Alternative. The U.S. Air Force stated they support alternatives that do not restrict military overflights. The EPA supported the proposed action and recommended that a statement be added that water and air quality would be best protected under wilderness designation.

Pine Creek Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



— Road
○ Spring

1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

Wash

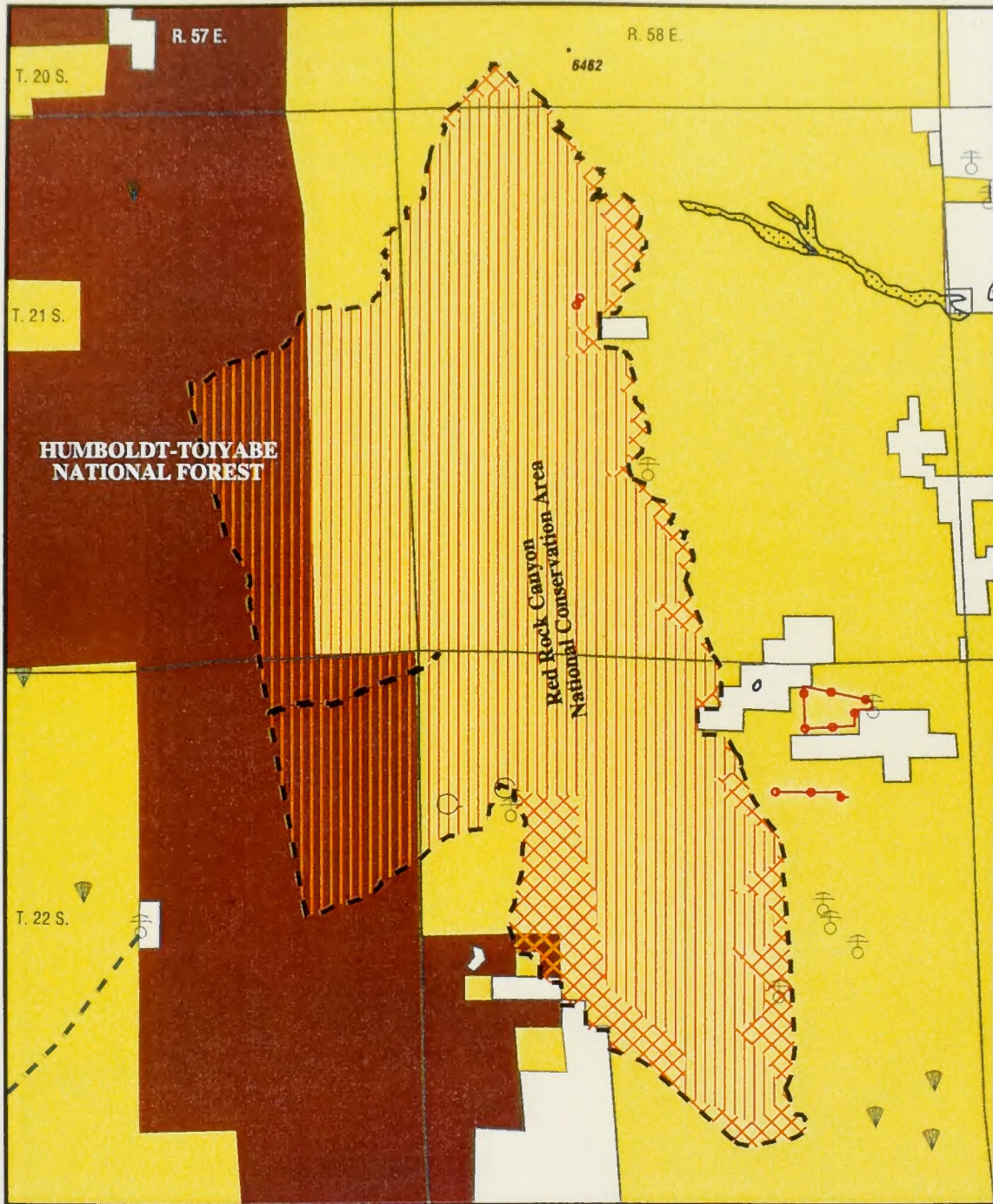
■ BLM
□ Private Land
■ Other Agency

- - Wilderness Study Area Boundary
▣ Recommended Non-Suitable
▤ Recommended Suitable



NV-050-414

Pine Creek Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



1 0 1 Miles

Wash

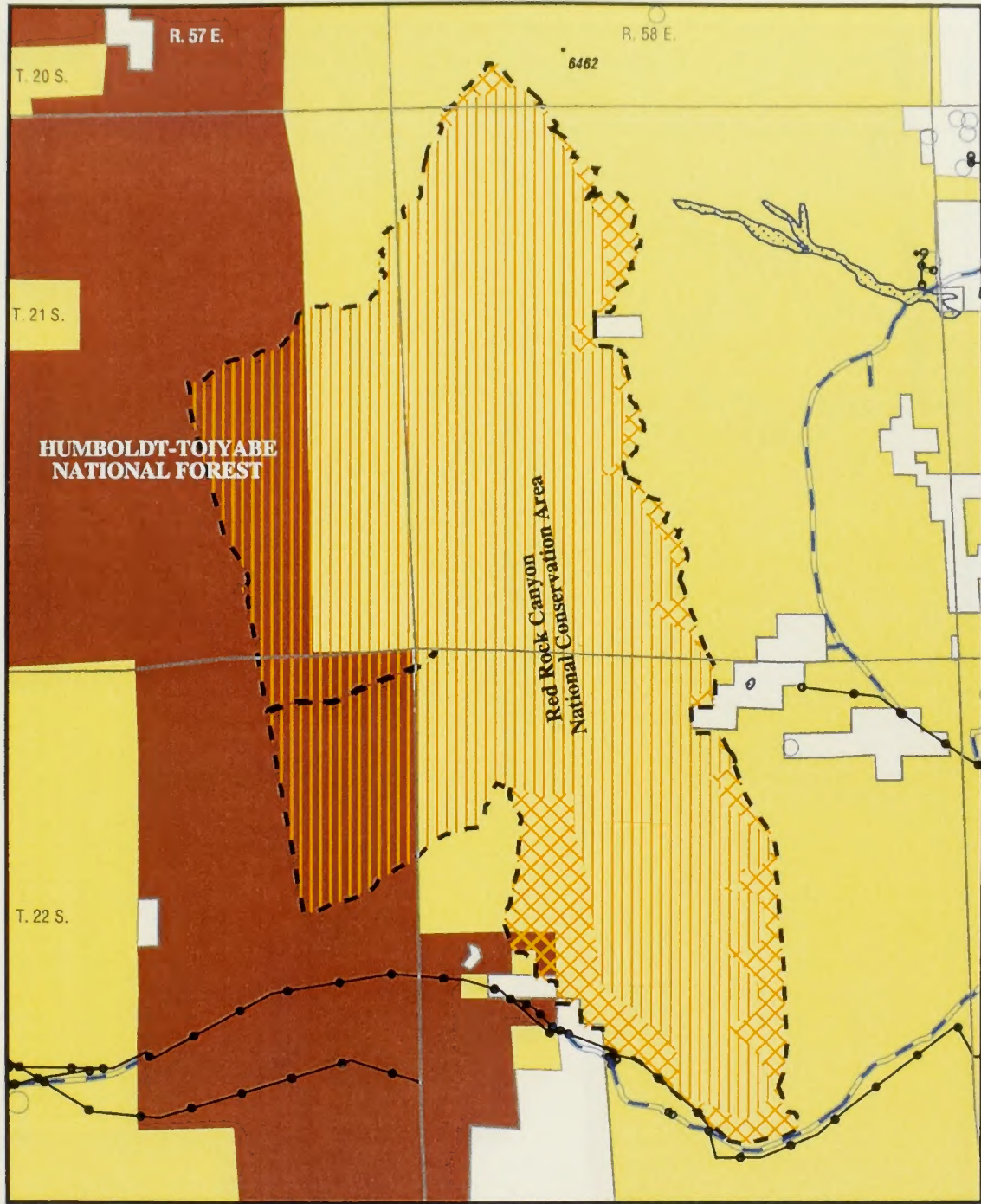
- Corral - - - Pipeline
- ▼ Guzzler ● - - Fence
- ⊕ Dev. Spring

- BLM
- Private Land
- Other Agency

- - Wilderness Study Area Boundary
- ⊗ Recommended Non-Suitable
- ||| Recommended Suitable



Pine Creek Wilderness Study Area RIGHTS-OF-WAY



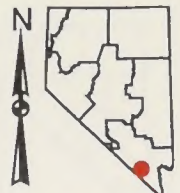
1 0 1 Miles

Wash

— Road ○ Well
●—● Powerline ●—● Telephone Line

■ BLM
□ Private Land
■ Other Agency

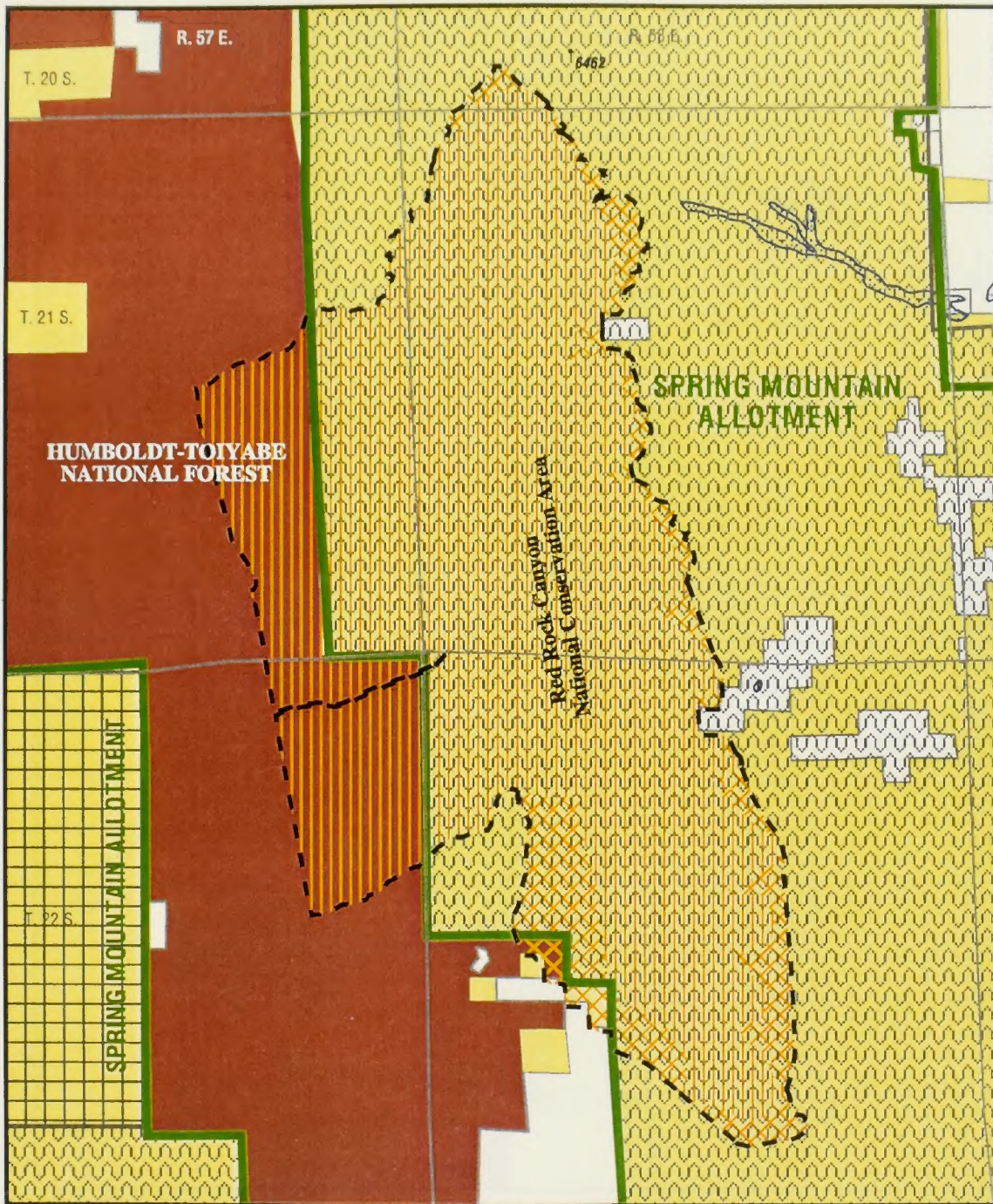
- - Wilderness Study Area Boundary
▨ Recommended Non-Suitable
▨▨▨ Recommended Suitable



NV-050-414

Pine Creek Wilderness Study Area

ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCENCES



**Federally Listed
Threatened
and
Endangered
Species**

● Observation Site
NONE ON THIS MAP

- BLM
- Private Land
- Other Agency

1 0 1 Miles

Wash

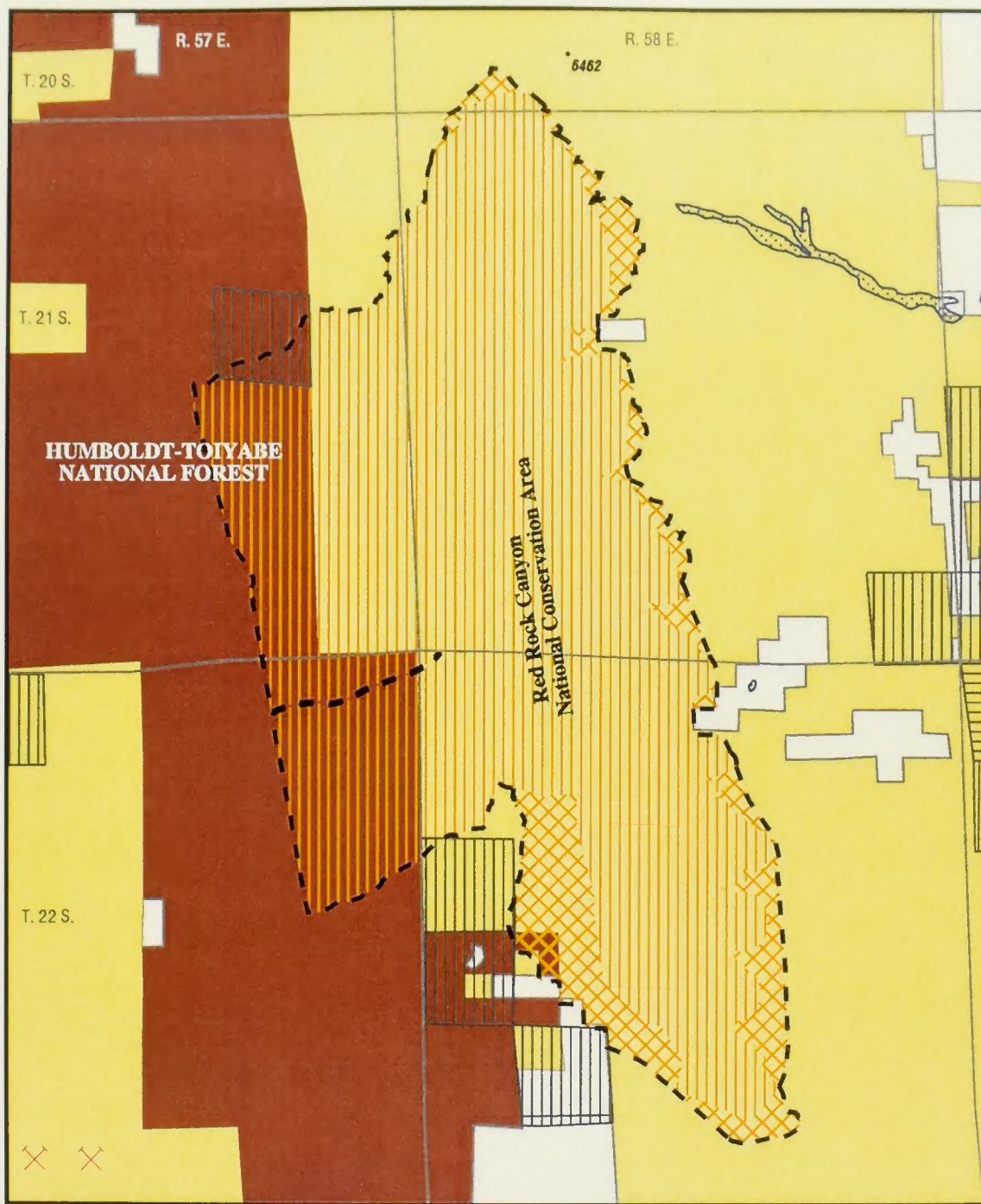
- Red Rocks HMA
- Lucky Strike HMA

**Allotment
Boundary**

- - Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable



Pine Creek Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations

1 0 1 Miles

Wash

Mining Claim Density - 3/97

- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

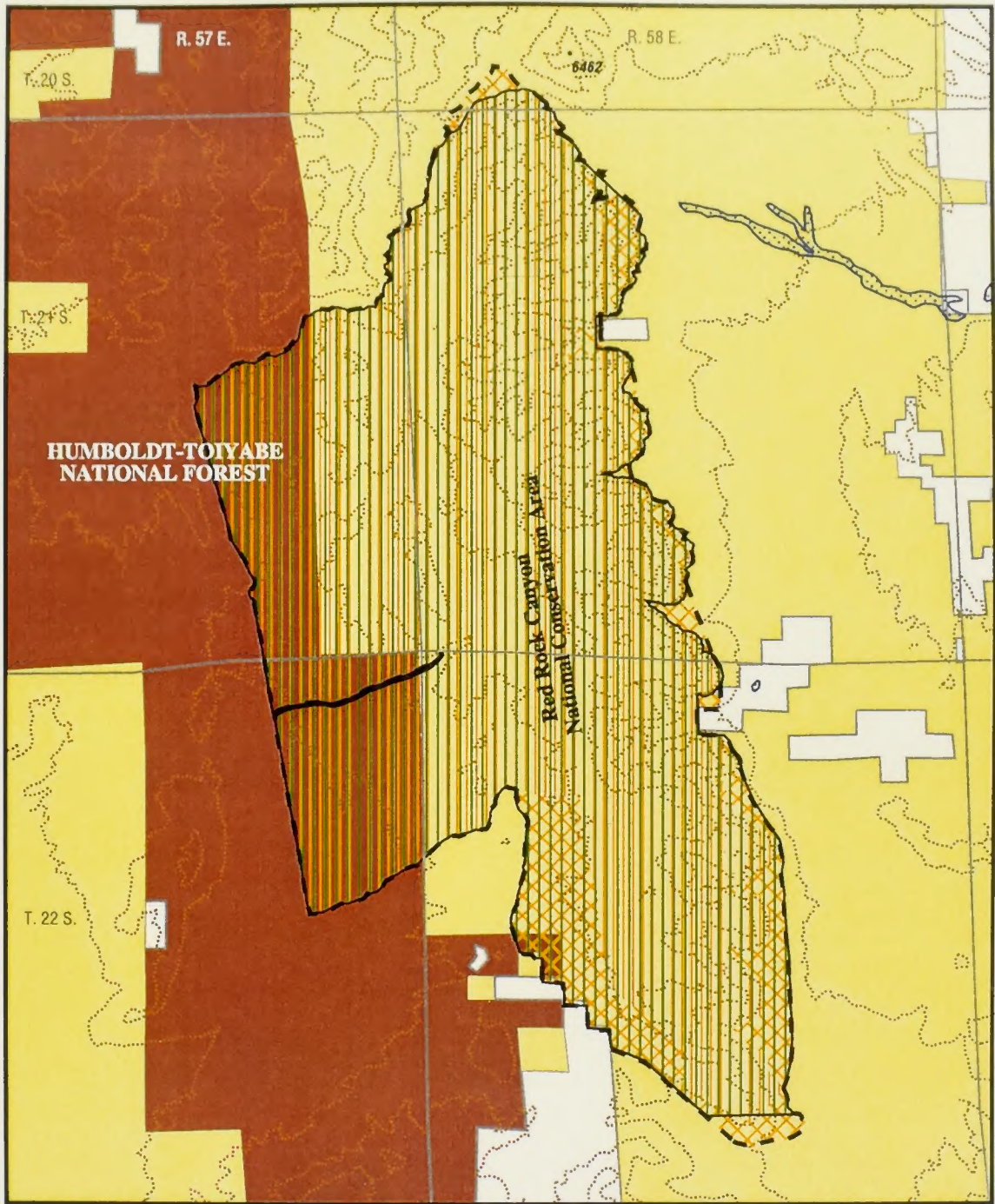
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable



NV-050-414

Pine Creek Wilderness Study Area MINERAL POTENTIAL



1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

Wash

Mineral Potential

Low - Oil, Gas

- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable



NV-050-414

EL DORADO WILDERNESS STUDY AREA

1. THE STUDY AREA - 12,290 acres

El Dorado Wilderness Study Area (WSA) (NV-050-423) lies in the southeastern portion of Clark County, Nevada, approximately one hour's drive from Las Vegas, Nevada. The study area contains 12,290 acres of public land and surrounds a private inholding of 87 acres in a roughly rectangular configuration, 5 miles long and 4 miles wide. It is bordered by the El Dorado Valley Act Lands (EVAL) to the north, Nevada State Route 165 to the west, Lake Mead National Recreation Area (LMNRA) on the east, and the mining town of Nelson to the south.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 12,290 acres recommended for nonwilderness

The recommendation is to not designate this WSA as wilderness, but to release the area for uses other than wilderness. It is based upon a determination of potential resource conflicts, manageability concerns and the fact that the area possessing the highest wilderness values would not be sufficiently large to stand alone as wilderness without designation of the contiguous LMNRA lands. Placing the lands back in multiple resource management would allow for future reconsideration, under Section 202 of the Federal Land Policy and Management Act, of this area as a portion of the much larger area within the LMNRA, should the National Park Service (NPS) recommend that area for wilderness designation. Pending that review, the BLM would continue to manage the WSA in a manner that would preserve those values inherent in the study area.

External activities that could potentially impact or induce additional impacts to the WSA are future development of the EVAL for urban or industrial uses. Development of the valley would create additional roads and ways contiguous to the northern portion of the study area, which would improve access and encourage off-highway vehicle (OHV) travel into the WSA. There are few natural barriers to impede encroachment of OHV activity into much of the west and north-central portions of the WSA.

There is one patented mining claim within the WSA. Designation as wilderness could significantly impact future development of mineral resources and exploration within and adjacent to the El Dorado Mining District, adjacent to the southern portion of the WSA. BLM concurred with the State of Nevada that the highest and best use for this area is mineral development. Development of the patented mining claim, in the eastern portion of the WSA, would require BLM to authorize an access road which would significantly impair the wilderness values, in the northeast portion of the WSA, and detract from solitude and wilderness experience over a relatively large area.

Much of the northern portion of the WSA affords easy and unrestricted OHV access, up broad washes, to the core of the WSA. Implementation of a vehicle closure would be nearly impossible due to a distinct lack of clearly identifiable natural features to be used in developing a manageable boundary.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The majority of the WSA is in a natural condition. The rugged topography of the area has had limited development attempts by man. In an area of over 12,000 acres, man-made intrusions include vehicle tracks along washes of the western WSA, one developed spring and three short ways, totaling less than 1 mile each. These features are primarily visible within their immediate area, leaving approximately 95 percent of the study area unaffected by man.

Several man-made features create external imprints on the WSA. State Route 60 is adjacent to much of

the western edge of the study area and forms a portion of the southern boundary. The communities of Boulder City, 13 miles to the north, and Nelson, located at the southwestern corner of the WSA, are visible from high points along the western boundary. Several high voltage powerlines run across El Dorado Valley, approximately 3.5 miles northwest of the WSA. Mining activities continue along the southern boundary of the study area. These external imprints are visible from higher elevations within the WSA.

B. Solitude: The mountainous core of the WSA insures outstanding opportunities for solitude. The central and eastern portions of the WSA consist of rugged peaks and ridges, cut by wide washes, canyons and narrow drainages. Oak Creek and Lonesome Canyons, two long canyons filled with scrub oak, contain numerous secluded spots. Opportunities for a visitor to find a secluded spot are dependent on topographic and vegetative screening. Approximately 50 percent of the WSA consists of narrow drainages and wide canyons with pockets of dense vegetation that create outstanding opportunities for solitude. The gentle bajada of the northwestern region, with its sparse vegetative cover, permits an open view of external features and activities; limited opportunities for solitude would be available within this area.

C. Primitive and Unconfined Recreation: Recreational opportunities in the WSA are very good and quite varied. More primitive recreational use would be concentrated in the mountainous region of the study area where major canyons and drainages provide interesting features, seclusion and varying degrees of challenge. A powerline road and State Route 60 permit year-round access to the north, south and west boundaries of the WSA.

Backpacking, horseback riding and camping opportunities are considered outstanding in 50 percent of the WSA. Several routes north through the unit would permit scenic-hikes of more than one day's duration. Excellent camping sites are available in Oak Creek Canyon, with topographic and vegetative screening contributing to the wilderness experience.

Wildlife related recreational activities such as nature studies, photography and hunting are available in the WSA. Desert wildlife, including desert tortoise, bighorn sheep and wild burros, can be seen. Colorful landscapes, diverse geologic formations and scenic vistas provide excellent subject matter for photography. Populations of bighorn sheep and Gambel's quail make the WSA attractive to hunters.

D. Special Features: The WSA contains several supplemental values, not the least of which is its proximity to the LMNRA. Broad, uninterrupted vistas across the LMNRA and the Colorado River into Arizona are spectacular from the ridges and peaks in the WSA. Unique geologic features such as colorful tuff formations, basalt flows and a natural bridge (Gregory's Arch) contribute to the aesthetic experience within the WSA.

Desert tortoise (*Gopherus agassizii*), listed by the U.S. Fish and Wildlife Service (FWS) as a threatened species on April 2, 1990, has been identified within the WSA. A total of 2,700 acres have been identified as tortoise habitat.

Ecologically, the area supports populations of Gambel's quail, bighorn sheep and wild burros. The El Dorado area is reported to be habitat for a mating pair of peregrine falcons, an endangered species. Two sensitive plant species (*Penstemon bicolor* ssp. bicolor and *Penstemon bicolor* ssp. roseus) have been identified in the WSA.

4. MANAGEABILITY

The WSA is capable of being managed as wilderness however, there would be concerns associated with OHV management and access for mineral development. The WSA surrounds a 120 acre undeveloped patented mining claim which lies along the study area's eastern boundary. Present access requires cross country travel through a small portion of the WSA. Exercising of the rights of access to the patented parcel

could include motorized types of transportation.

The Western Utility group and other utility companies have proposed designation of an above and below ground utility corridor (in "Western Regional Corridor Study", 1986) across the southern portion of the WSA.

The northern boundary of the WSA is contiguous to the EVAL. They will most likely be intensively developed.

The WSA is contiguous along its eastern boundary to the LMNRA. The LMNRA Final Environmental Impact Statement-General Management Plan (GMP) released in July, 1986 identified these lands as meeting the criteria of the Wilderness Act of 1964.

5. ENERGY AND MINERAL RESOURCE VALUES

The entire WSA is classified as having low favorability for metallic and non-metallic minerals and moderate favorability for the occurrence of uranium. There are no known deposits of these resources in the study area. The entire WSA has a low favorability for the occurrence of sand and gravel. No material sites occur within the study area at present.

The WSA lies within the El Dorado Mining District, where significant amounts of gold, silver, and copper were produced. No development has taken place on the 24 mining claims located within the WSA.

No known oil and gas or geothermal deposits occur within the WSA. Also, no oil and gas leases exist within the WSA.

6. SUMMARY OF WSA SPECIFIC COMMENTS

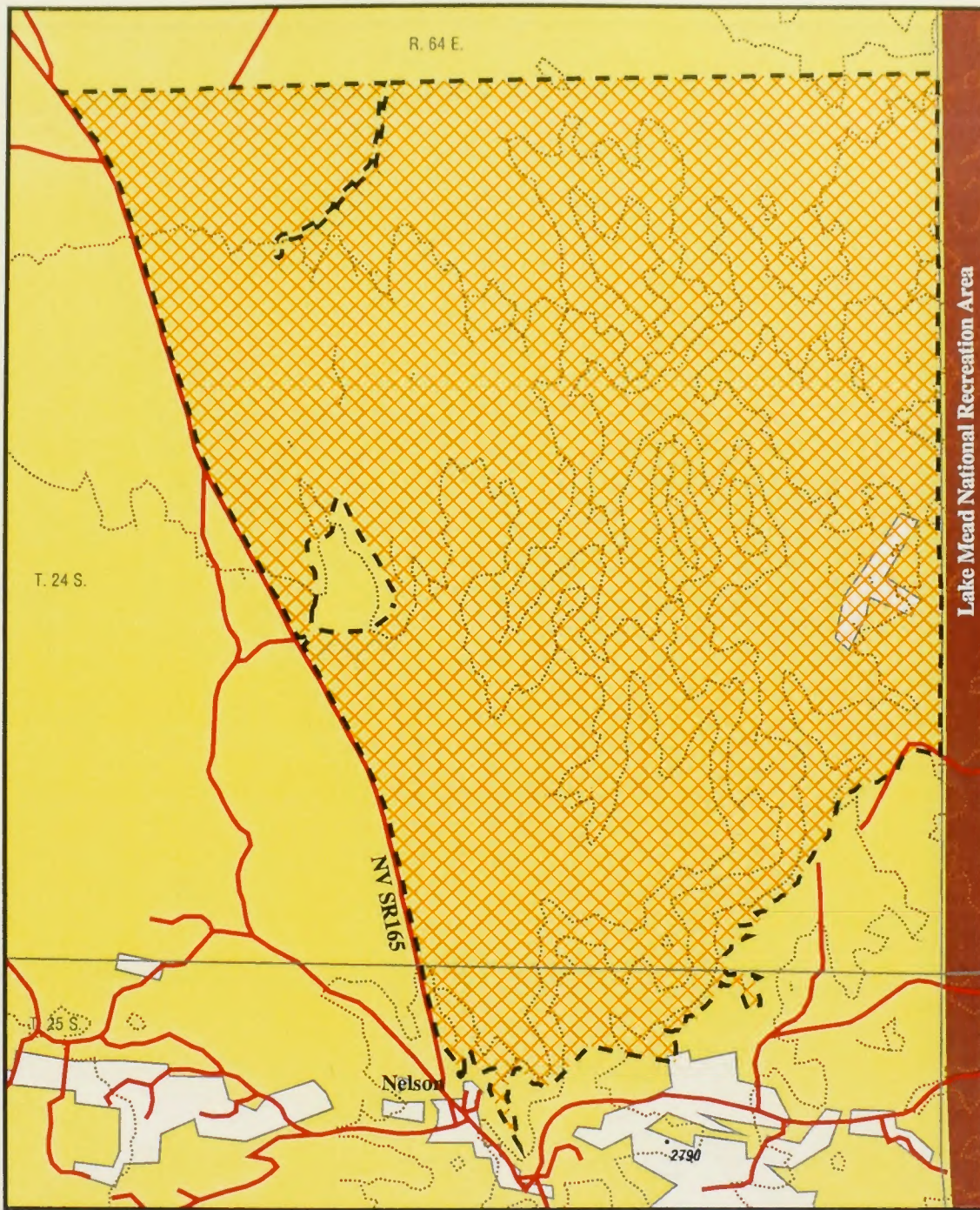
A total of 28 oral statements were presented during hearings. One of the oral comments supported the preferred alternative (no wilderness) for the study area. The other comments did not specifically mention the WSA, but, generally opposed wilderness from the position of restricting personal rights and unknown mineral potential.

Of the 35 written comments, five supported the preferred alternative not to designate the area wilderness. Two of the five also identified the option for a modified partial wilderness alternative for the east portion of the study area not accessible to OHVs. Two comments supported a modified partial wilderness alternative that would include the east side of the WSA (9,570 acres) and the upper portion of the drainage system into the LMNRA proposed wilderness area. The subjects of the comments opposed to wilderness designation centered upon unknown wilderness potential and historic OHV use of the area.

The State of Nevada, including the Governor and various agencies, concurred with the recommendation.

There were no comments received from Federal agencies specifically directed towards this study area and none took a position on the recommendation for any WSA. The Environmental Protection Agency referred to mineral potential in all WSAs without rendering a statement or position on wilderness designation. The NPS mentioned unknown cultural resources as a reason for recommending designation of the WSA. the FWS identified wilderness designation as a method of protecting the threatened desert tortoise. Bureau of Mines comments were not specific.

El Dorado Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



Lake Mead National Recreation Area

— Road

1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

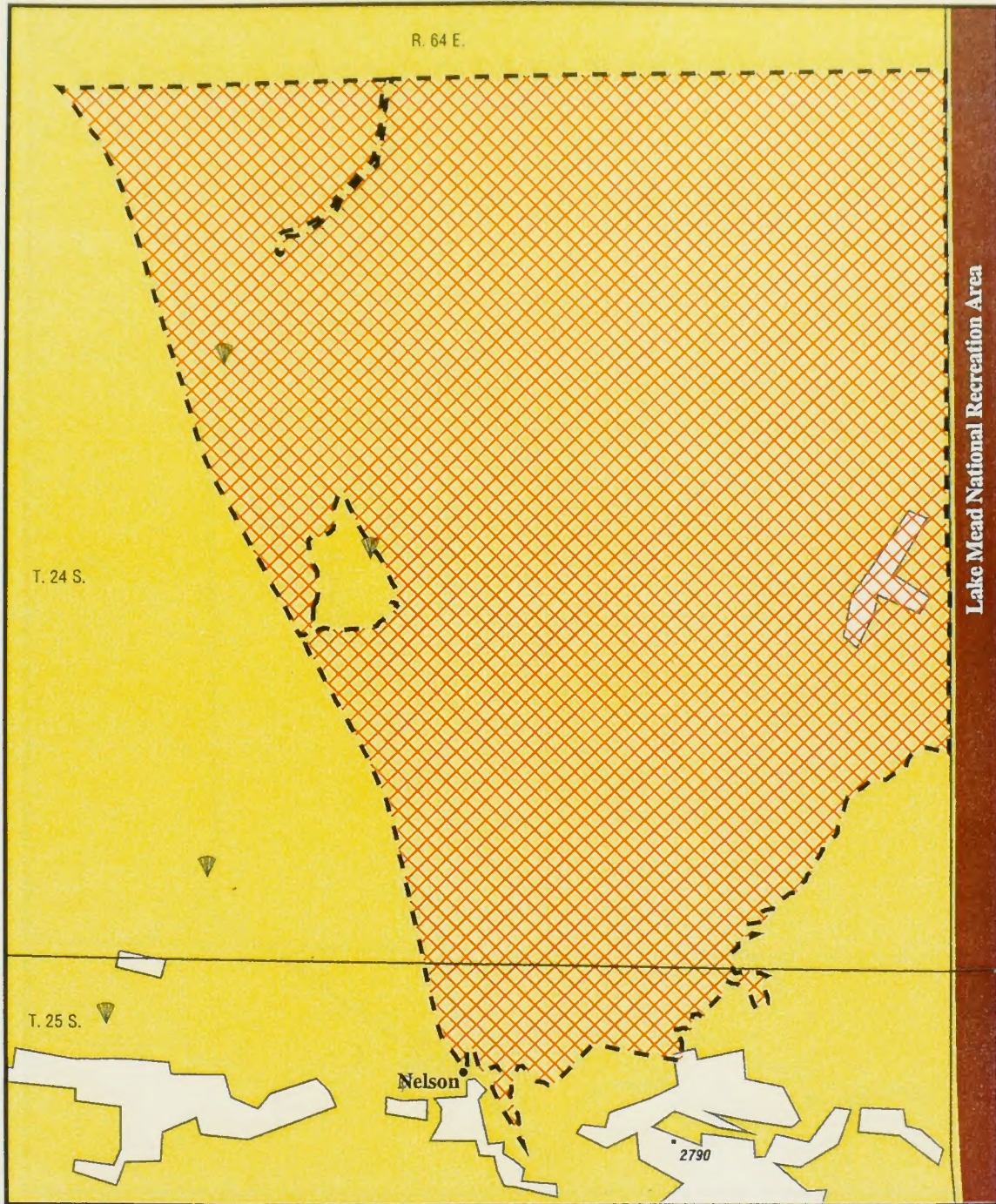
- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- XXXX Recommended Non-Suitable



NV-050-423

El Dorado Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



Lake Mead National Recreation Area

1 0 1 Miles

○ Well
▼ Guzzler

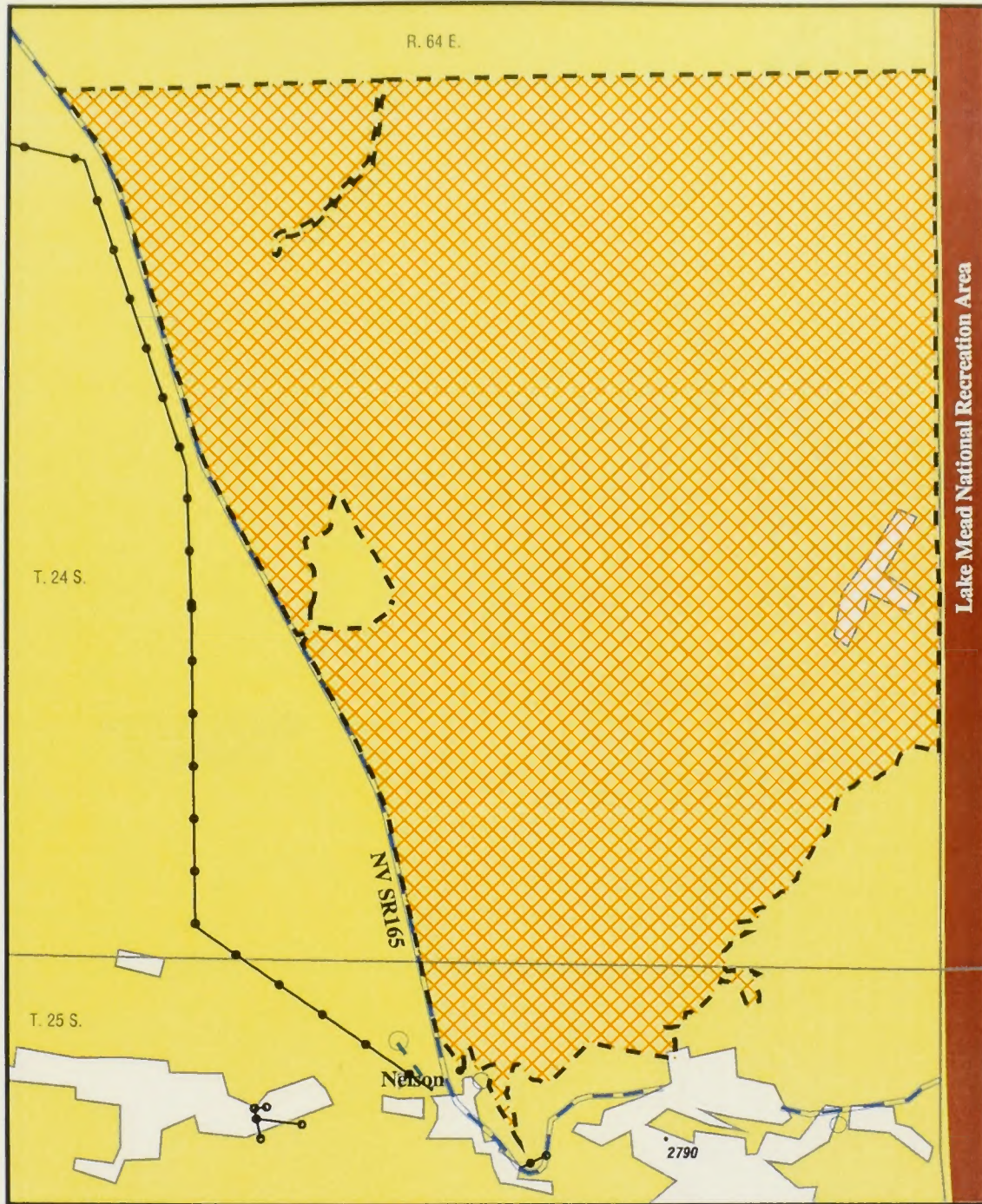
■ BLM
□ Private Land
■ Other Agency

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-423

El Dorado Wilderness Study Area RIGHTS-OF-WAY



1 0 1 Miles

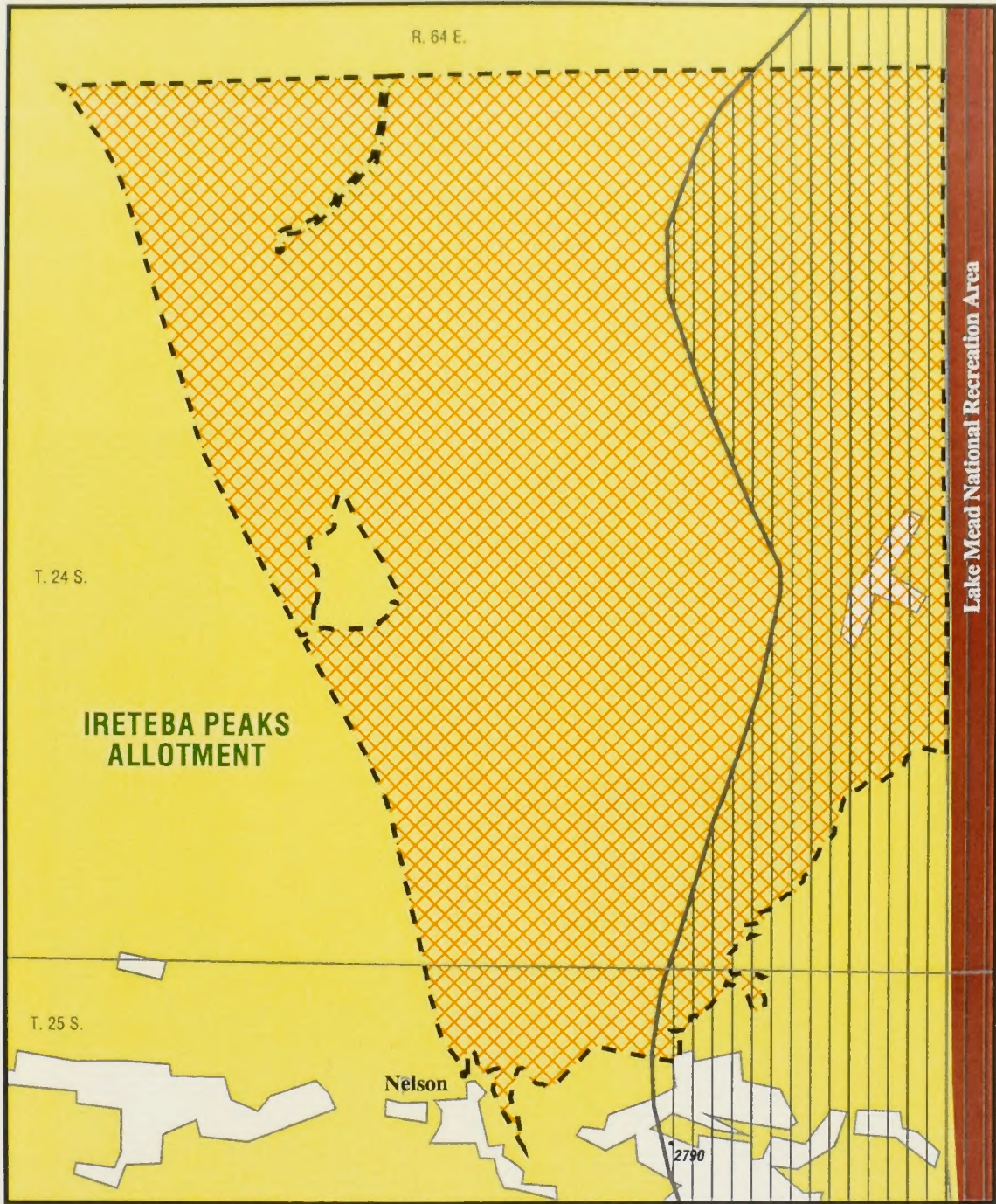
- BLM
- Private Land
- Other Agency

- Well
- Powerline
- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Pipeline
- Road
- Telephone Line



NV-050-423

El Dorado Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



Federally Listed
Threatened
and
Endangered
Species

● Observation Site

NONE ON THIS MAP

- BLM
- Private Land
- Other Agency

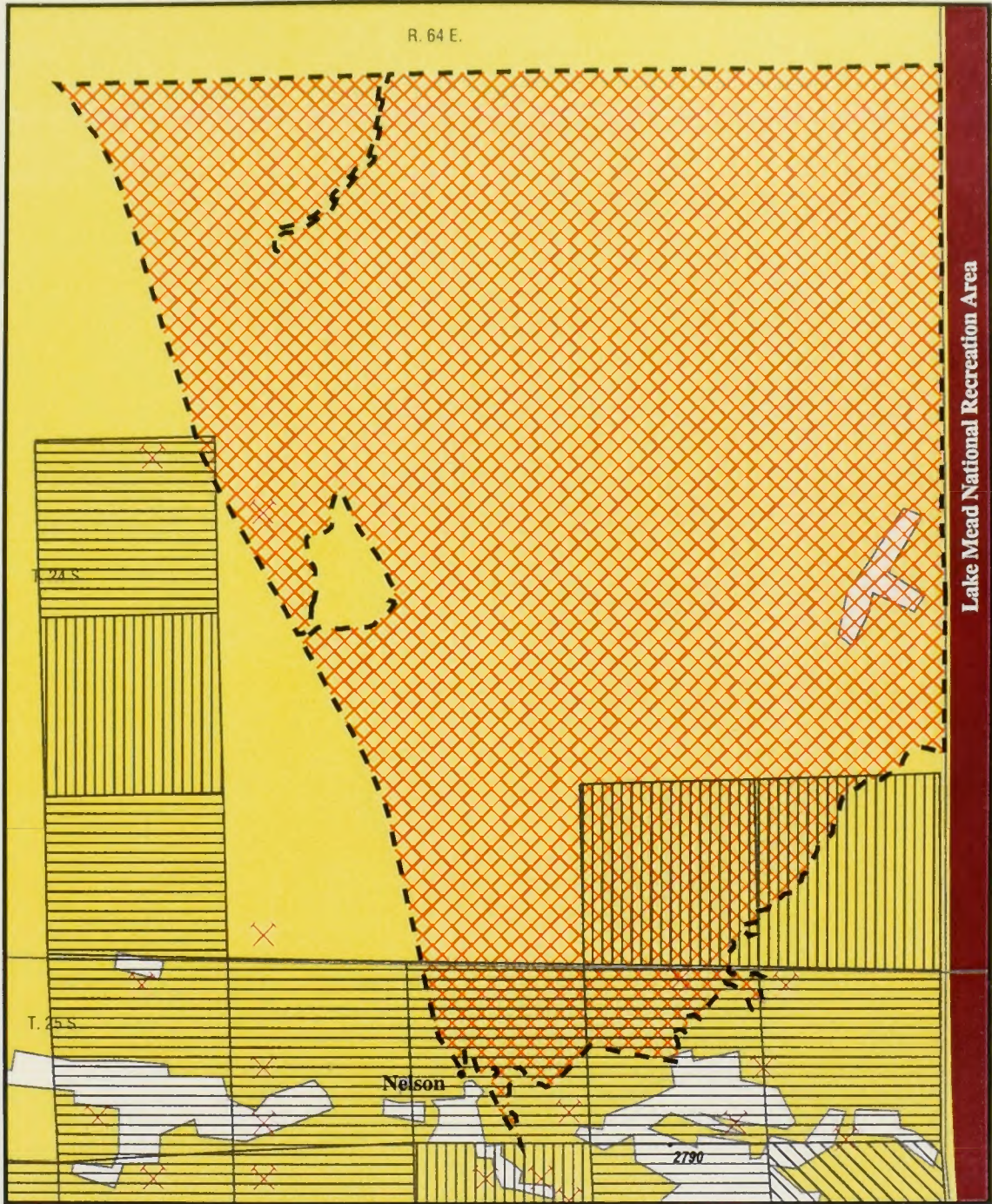
□□ El Dorado HMA


- - Wilderness Study Area Boundary
- ××× Recommended Non-Suitable






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


El Dorado Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS





 Mining Operations 1 0 1 Miles

Mining Claim Density - 3-97

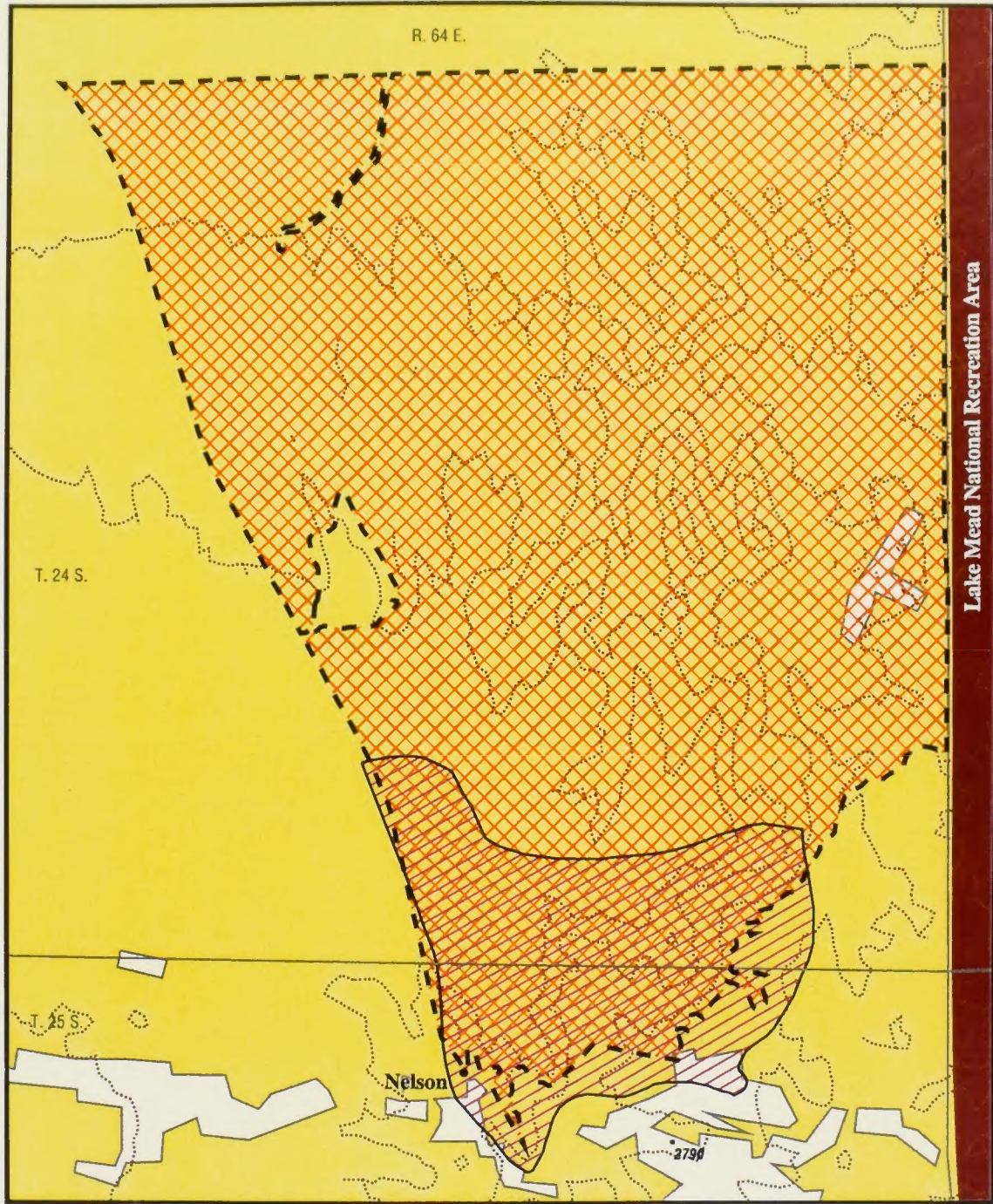
-  1-5 Claims
-  6-35 Claims
-  36 or more Claims

-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable



El Dorado Wilderness Study Area MINERAL POTENTIAL




Lake Mead National Recreation Area


1 0 1 Miles




CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 High - Gold, Silver, Copper, Lead, Zinc, Mercury

- - Wilderness Study Area Boundary

 Recommended Non-Suitable

-  BLM
-  Private Land
-  Other Agency



NV-050-423

NORTH MCCULLOUGH MOUNTAINS WILDERNESS STUDY AREA

1. THE STUDY AREA - 47,166 acres

North McCullough Mountains Wilderness Study Area (WSA) (NV-050-425) is located in the south central portion of Clark County, Nevada, less than 15 miles south of Las Vegas. The entire WSA is comprised of public land with no private inholdings. The WSA is roughly rectangular in shape, approximately 9 to 10 miles on the north-south axis and 7 to 8 miles on the east-west axis. The eastern boundary is located at the base of an escarpment, slightly west of a large utility corridor. The southeastern boundary is the legal subdivision of lands identified for State selection in the Eldorado Valley Act Lands (EVAL). A drainage immediately to the north of the McCullough Pass utility corridor identifies the southern boundary. Dirt roads, of varying quality, parallel the western boundary in Hidden Valley. The northern boundary is slightly south of the Black Mountain communication site and access road.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 47,166 acres recommended for nonwilderness

The recommendation for the WSA is to release all 47,166 acres for uses other than wilderness because of resource and manageability concerns. The quality of the wilderness values was a key consideration in the recommendation. Although the WSA has wilderness values, these values are not considered to be of a high enough quality, in comparison to similar WSA's in the Las Vegas area, to merit the area's inclusion in the National Wilderness Preservation system. This area's potential value is for dispersed recreation use adjacent to a rapidly expanding urban area.

The WSA generally appears natural but there are several signs of man, primarily vehicle trails due to off-highway vehicle (OHV) travel. The majority of the WSA is easily accessible to vehicles from Hidden Valley on the west central portion of the WSA and the Las Vegas valley on the northwest side. Five and one-half miles of unimproved vehicle ways occur in the WSA. Scattered vehicle tracks occur in the western end, near Hidden Valley, and in many of the drainages and low hills into the WSA. One exploratory drill pad is within the WSA. Access to the central portion of the WSA by OHVs is almost unrestricted by natural features.

Solitude opportunities are due to topography, remoteness and lack of human activity and are not due to any intrinsic values unique to the area. A Communication site, utility corridors, active sand and gravel operations, air traffic from McCarran International, and resort and subdivisions proposals on private land nearby, currently affect lands around the WSA.

There are no significant wildlife species or habitats, or scientific and educational values in the area that would benefit from wilderness designation. The WSA does support an undisturbed desert plant community of black grama grass and a cholla forest. There are several cultural features including the Sloan Petroglyphs which is listed on the National Register of Historical Places. These features will receive special protection under existing BLM laws and regulations from any surface disturbing activity.

The WSA has minimal potential for mineral development. However, the edge of the WSA has high favorability for salable quantities of sand and gravel. One sand and gravel operation has been developed in Hidden Valley and continues to provide high quality silica sand. A desire and need has been expressed to expand the operation, possibly into the WSA. Both Hidden Valley and Lava Valley have excellent potential for additional sand and gravel operations. High quality roads would access these operations. Urban expansion demands from the Las Vegas valley will encourage development.

At the present time, there is little threat to the existing naturalness of the area. There are no known or

projected activities, and no valid rights of others in the WSA. The eastern ridgeline is protected due to topography and other physical constraints. Therefore, even without wilderness designation, the quality and level of values now found in the WSA are not expected to significantly change.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The WSA is predominantly natural. It contains the north half of the north-south trending McCullough Range. The massive, rounded to flat-topped volcanic peaks have a steep east-facing escarpment and gradual western slope. Black basalt flows are exposed on the ridges, peaks and western slopes.

The east escarpment consists of formations of reddish-brown andesite breccia. The WSA contains some valley land on the western fringe and a broad two-mile-wide central valley separating the main ridgeline from the rugged Sutor Hills. No springs occur in the WSA. Desert plants of the creosote bush community, including barrel cactus, scattered Joshua trees and several species of cholla and prickly pear, dominate.

Unlike the other WSAs in Clark County, the North McCulloughs are volcanic in origin. Examples of lava flows, ash falls and glassy zones are clearly displayed. The andesite flows of the rugged east face form particularly scenic features. The ridgeline offers excellent views of the Eldorado and Jean Dry Lakes, numerous ranges and the Las Vegas Valley. The WSA supports an undisturbed plant community which combines plants of the Mojave and Sonoran Desert regions and the Great Basin. Of particular interest are black grama grass, not known to occur elsewhere in Nevada, and large stands of teddy bear cholla. Bighorn sheep inhabit the WSA in all but the driest months.

Five and one-half miles of way were found in the WSA. Scattered vehicle use occurs in the western end, Hidden Valley, and its tributaries. One abandoned mine, consisting of a shaft and collapsed shack and an old bladed drill pad can also be found. A communication site and active mine are located outside the WSA but near the boundary. Powerlines and substations are within a few miles of the east and south boundaries, and suburban development from Henderson and Las Vegas continue to grow closer.

B. Solitude: This WSA offers outstanding opportunities for solitude. The rugged east face of the escarpment and the Sutor Hills offer outstanding opportunities for solitude because of the excellent topographic screening. Twisting canyons, peaks and pinnacles screen visitors. Rounded peaks of the ridge, a broad central valley, Lava Valley, Hidden Valley and the lower end of its tributaries do not provide adequate screening. There is no vegetative screening in the WSA. There is light, periodic travel both on the boundary roads and interior ways and washes. Boulder City, Henderson and Las Vegas Valley are visible and audible from portions of the WSA on the north, west and east sides. Although, outside the traffic control area (TCA), overflights from McCarran International Airport pass directly over the WSA. However, overflights are infrequent and tend to be localized to the west edge of the WSA and at an altitude of more than 4,000 feet.

C. Primitive and Unconfined Recreation: Recreation opportunities similar to the other mountain ranges in the region are present in this WSA. Primitive recreation opportunities abound because of the diversity of possible activities; backpacking, rock scrambling, nature study, photography, hunting and horseback riding, and high quality dayhiking. Canyons on the east face and high points of the range provide numerous destinations and challenge levels. The area is easily accessible yearlong to the residents of Southern Nevada.

D. Special Features: Unlike the other WSAs in Clark County, the North McCulloughs are volcanic in origin. Examples of lava flows, ash falls and glassy zones are clearly displayed. Andesite flows of the rugged east face form particularly scenic features. Ridges offer excellent views of the Eldorado and Jean Dry Lakes, numerous ranges and the Las Vegas Valley. The WSA supports an undisturbed plant

community which combines plants of the Mojave and Sonoran Desert regions and the Great Basin. Of particular interest are black grama grass, not known to occur elsewhere in Nevada, and large stands of teddy bear cholla. Bighorn sheep inhabit the WSA in all but the driest months.

Desert tortoise (Gopherus agassizii), listed by the U.S. Fish and Wildlife Service (FWS) as a threatened species on April 2, 1990, has been identified within the WSA in the bajada areas.

4. MANAGEABILITY

The study area is capable of being managed as wilderness but there will be some manageability concerns. There are 150 acres of pre-FLPMA and 500 acres of post-FLPMA mining claims in the WSA. There are no pre-FLPMA oil and gas leases. Approximately 83 percent (39,148) of the WSA is incumbered by 29 leases.

OHV use in Hidden Valley would be impossible to eliminate because of the easy access to Hidden Valley and the flat terrain. Access into Sutor Hills is a concern due to an accessible wash into the area. Five and one-half miles of unimproved vehicle ways occur in the WSA.

The WSA is bordered on the southeast by the EVAL lands. Future development of these lands is of concern.

5. ENERGY AND MINERAL RESOURCE VALUES

The WSA has minimal potential for mineral development. However, the edges of the WSA has moderate to high potential for nonmetallic minerals (sand and gravel). There is low potential for energy resources.

6. SUMMARY OF WSA SPECIFIC COMMENTS

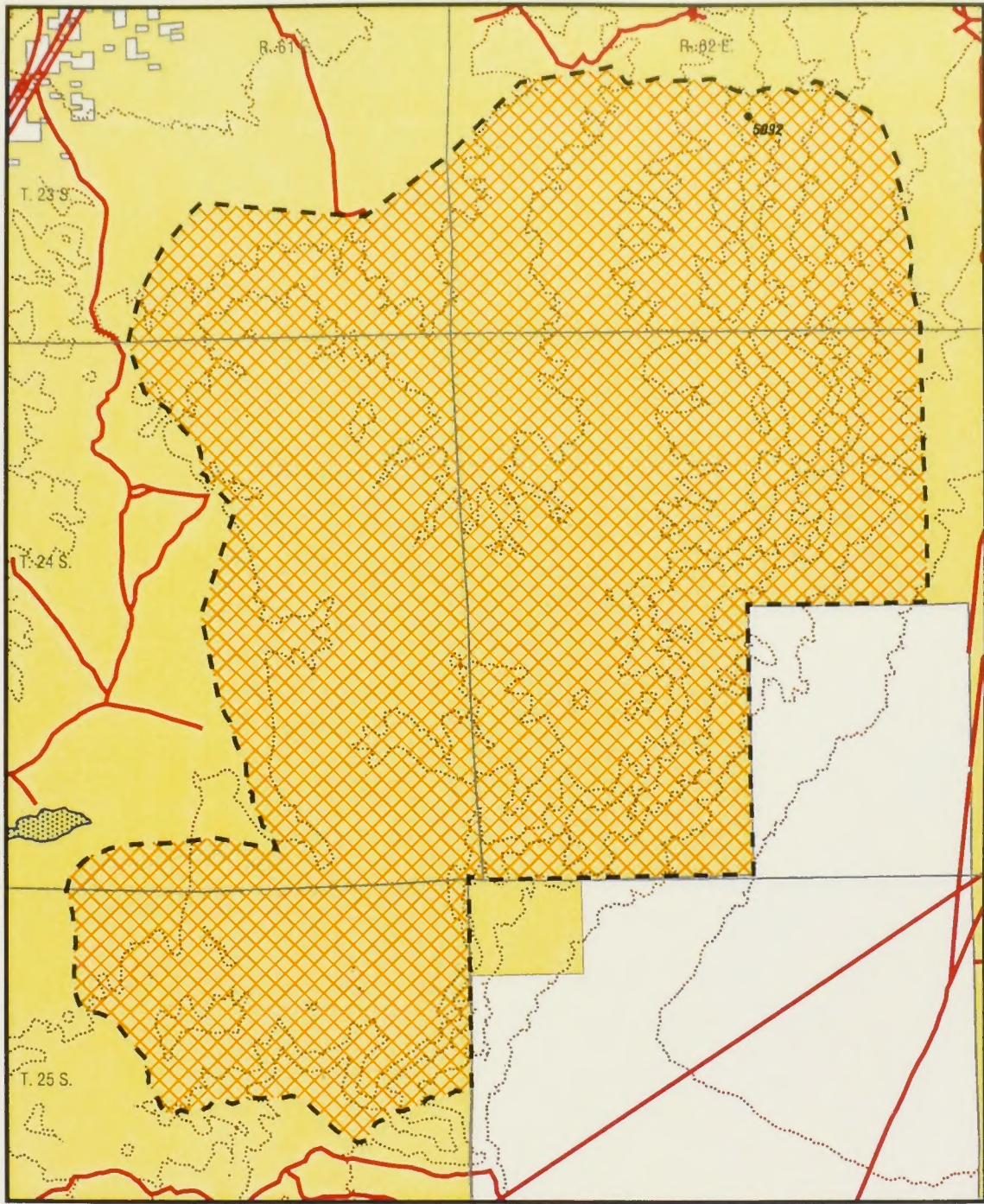
During formal public review of the draft EIS, a total of 27 written comments specifically addressing this WSA were received. In general, 17 commentors supported wilderness designation for all or part of the WSA. Ten commentors and one oral testimony supported no wilderness. Most comments which specifically mentioned the North McCullough Mountains WSA and supported wilderness designation, touched on high wilderness values, unspoiled biological and cultural resource values, and wildlife habitat potential. Comments opposing wilderness centered around making the area available for wildlife enhancement projects, lack of significant wilderness characteristics and recreation opportunities, speculative mineral resource potential and potential impacts to energy and mineral exploration and development.

Clark County Department of Comprehensive Planning supported the no wilderness recommendation although it did not directly comment on the North McCullough Mountains WSA.

The Governor of Nevada, as well as the Nevada Department of Conservation and Natural Resources, Division of State Lands, State Divisions of Minerals, and Department of Wildlife and Agriculture supported the no wilderness recommendation.

The Environmental Protection Agency supported the proposed action and recommended that the final recommendation include a statement that water and air quality will be best protected under wilderness designation.

North McCullough Mountains Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



— Road

1 0 1 Miles

☁ Dry Lake

CONTOUR INTERVAL 200 METERS (656 FEET)

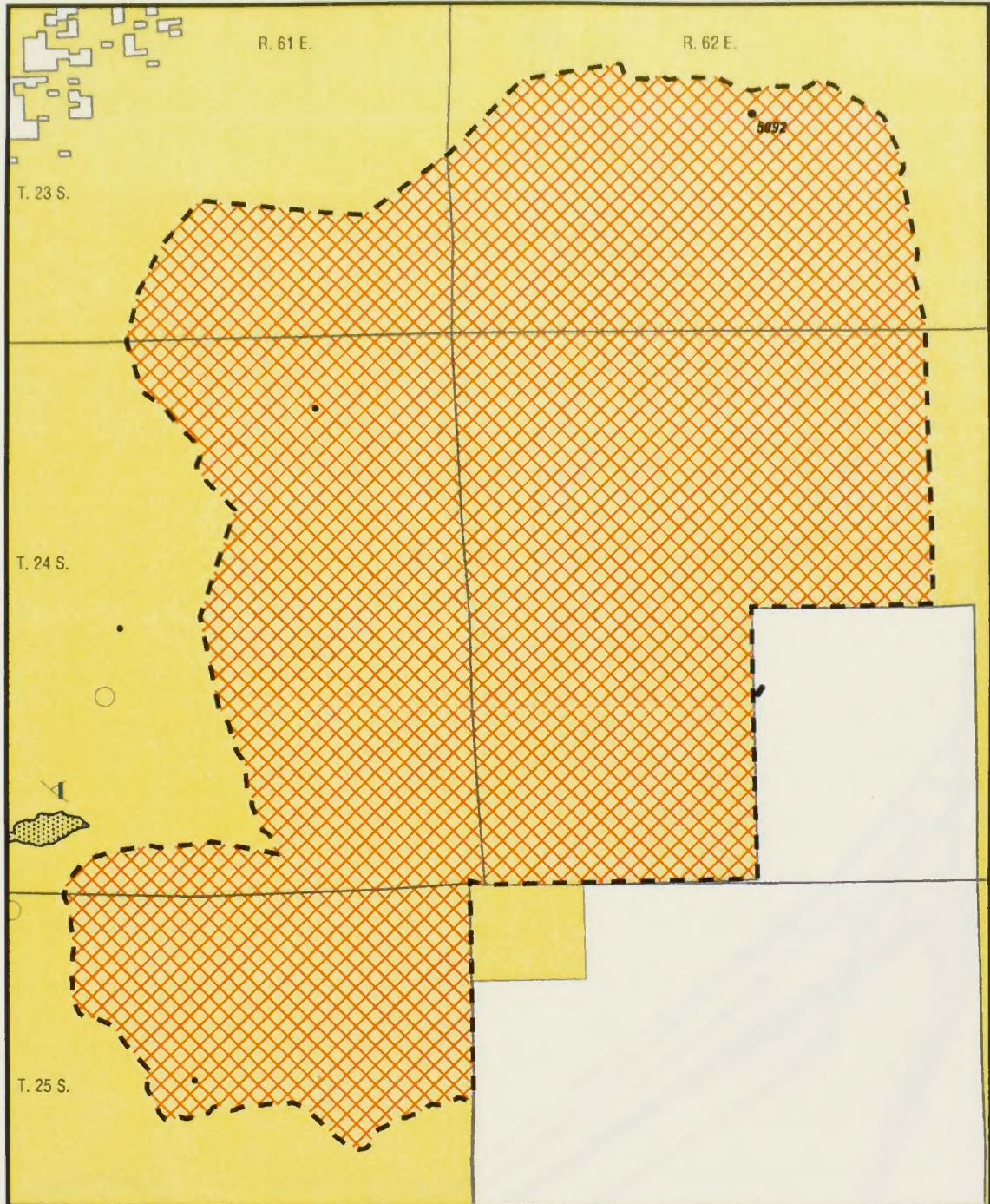
■ BLM
□ Private Land

-- Wilderness Study Area Boundary
⊗ Recommended Non-Suitable







NV-050-425

North McCullough Mountains Wilderness Study Area DEVELOPMENTS AND DISTURBANCES




1 0 1 Miles

 Dry Lake

-  Well
-  Reservoir
-  Other

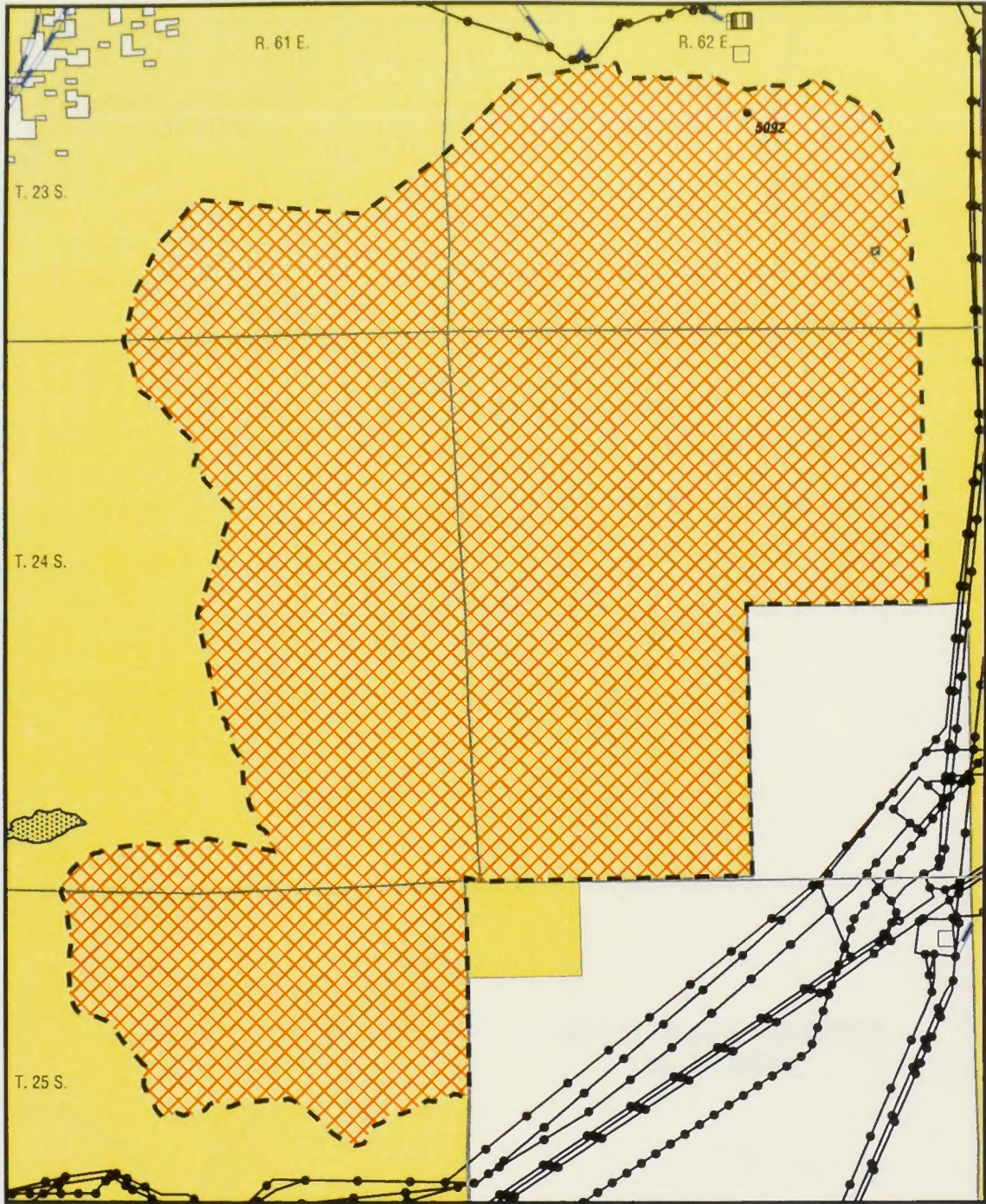
 BLM
 Private Land

-- Wilderness Study Area Boundary
 Recommended Non-Suitable












NV-050-425

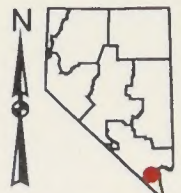
North McCullough Mountains Wilderness Study Area RIGHTS-OF-WAY



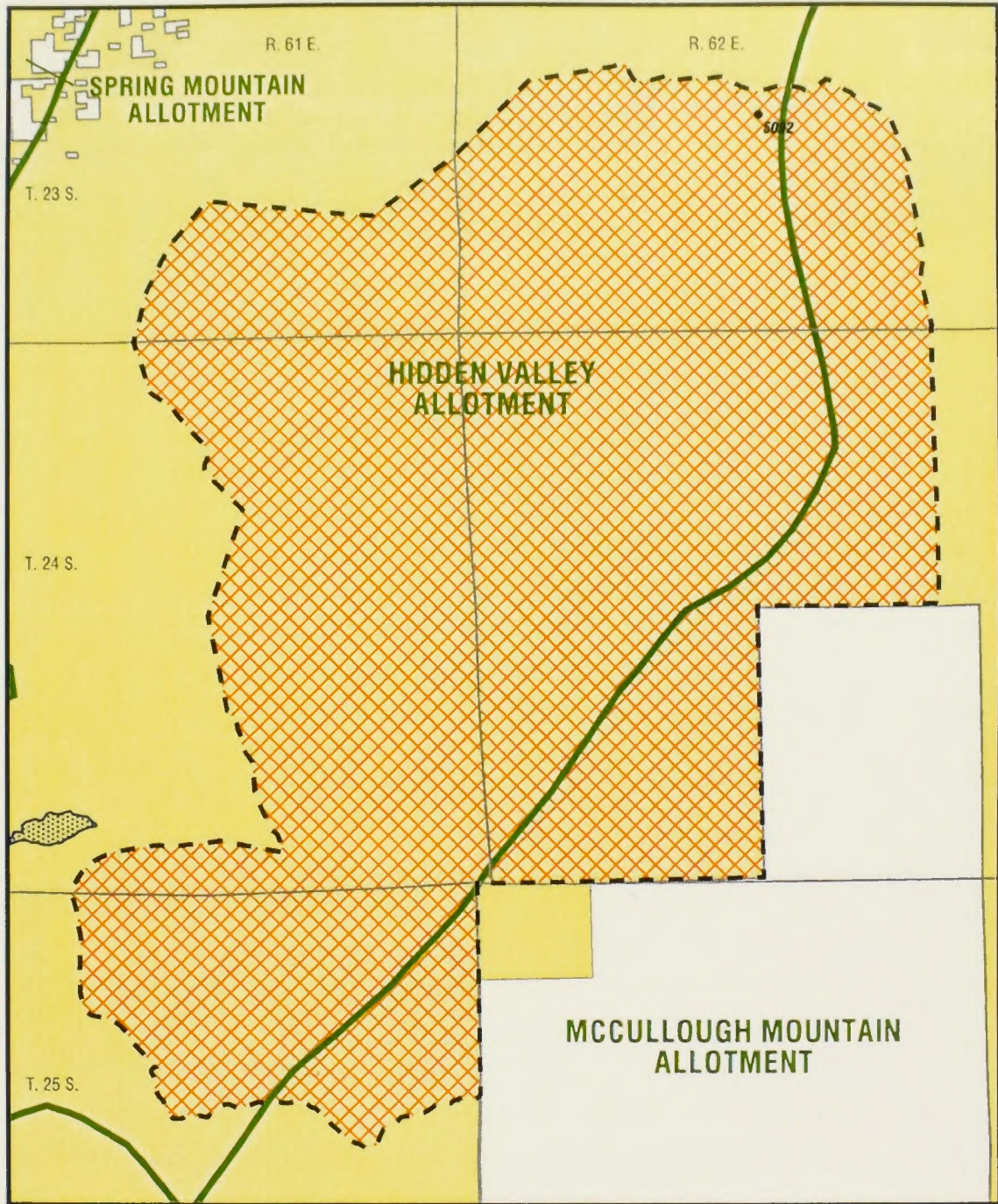
1 0 1 Miles

 Dry Lake


-  BLM
-  Private Land
-  Flood Control
-  Road
-  Powerline
-  Telephone Line
-  Wilderness Study Area Boundary
-  Recommended Non-Suitable




North McCullough Mountains Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



1 0 1 Miles


 Dry Lake


**Federally Listed
Threatened
and
Endangered
Species**

 Observation Site
NONE ON THIS MAP

 BLM
 Private Land

NO HMA ON THIS MAP

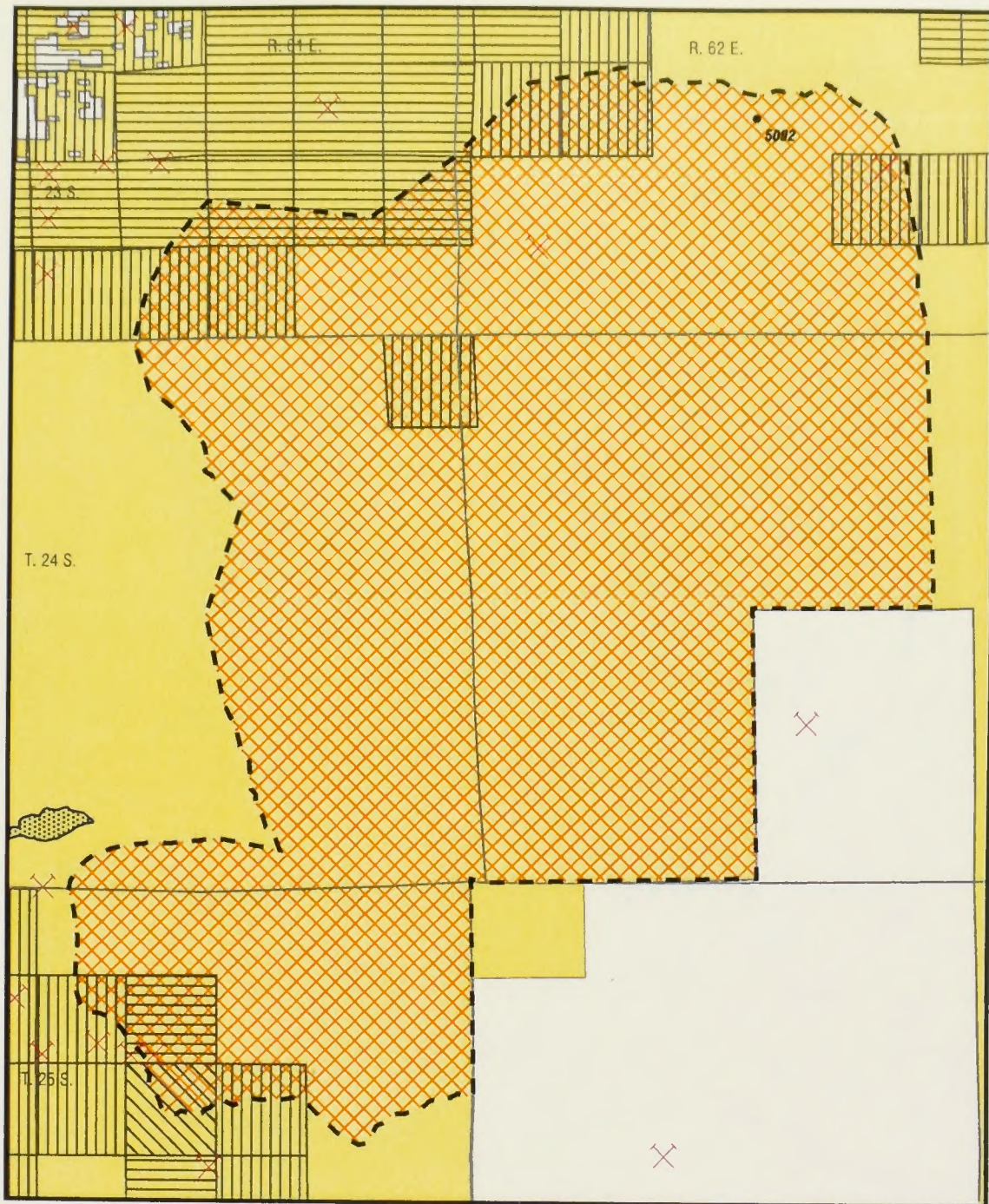
 Allotment
Boundary


-- Wilderness Study Area Boundary
 Recommended Non-Suitable




NV-050-425

North McCullough Mountains Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS






 Mining Operations



1 0 1 Miles

 Dry Lake

Mining Claim Density - 3/97

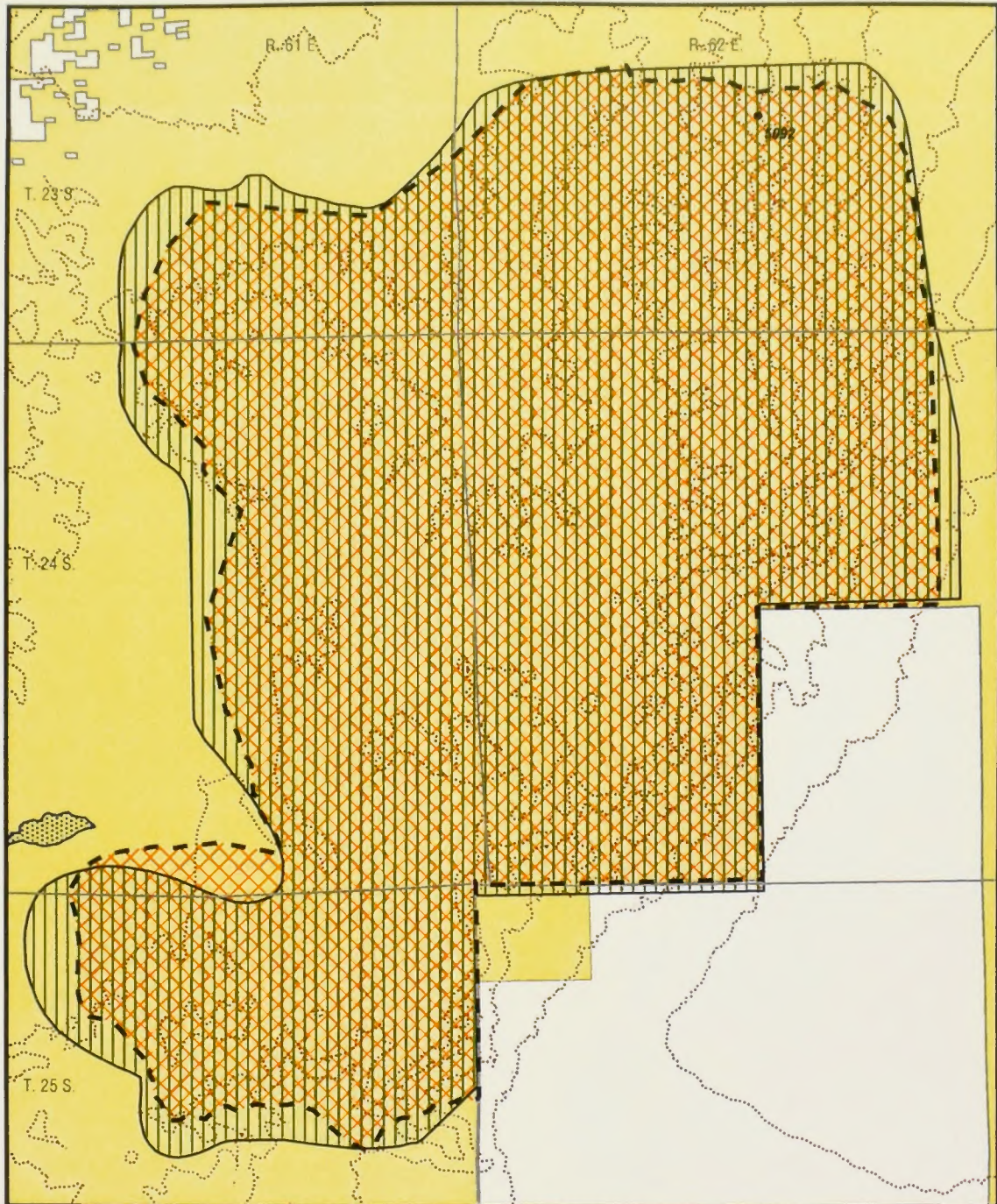
-  1-5 Claims
-  6-35 Claims
-  36 or more Claims

-  BLM
-  Private Land


-  Wilderness Study Area Boundary
-  Recommended Non-Suitable



North McCullough Mountains Wilderness Study Area MINERAL POTENTIAL




1 0 1 Miles


 Dry Lake

CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 Low - Gold, Silver, Lead, Zinc, Sand, Manganese, Tungsten, Gravel, Oil, Pumice, Perlite, Gas

 BLM
 Private Land

-- Wilderness Study Area Boundary
 Recommended Non-Suitable



NV-050-425

SOUTH McCULLOUGH MOUNTAINS WILDERNESS STUDY AREA

I. THE STUDY AREA - 56,623 acres

The South McCullough Mountains Wilderness Study Area (WSA) (NV-050-435) is located approximately 35 miles south of Las Vegas. The WSA contains approximately 56,623 acres of BLM land, with no split estate or private inholdings.

The northeast corner of the WSA begins approximately 2,000 feet west of powerline R/W Nev 066156 on the township line, which is the southern boundary of the Eldorado Valley Act Lands (EVAL), runs west approximately two and one-half miles along the township line and then runs north on the common line between R.61E. and R.62 E. for approximately one and one-half miles. The north boundary then extends west up a wash and across a low saddle before dropping into a wash on the west side of the mountain. Two dry washes on the west side of the main portion of the mountain clearly identify the northwest WSA boundary. At the southern end of the northwest boundary, the boundary turns northwest along the shoulder of a jeep trail for approximately two miles to the north section line of T.26S., R.60E., Sections 25 and 26. A jeep trail and dry wash are the west boundary. From this point the access road into Railroad Spring is cherry-stemmed 25 feet on both sides of the road centerline, for approximately three miles to range improvements near the spring source. The southern boundary is identified by washes and point to point topographic features. The southeast boundary is a series of point to point features, section lines and the shoulder of the road from Pine Spring to where the road intersects a line parallel to powerline right-of-way Nev 066156 and 2,000 feet west of the powerline centerline. The eastern boundary is a line parallel to R/W Nev 066156, 2,000 feet west of the centerline, from the Pine Spring road north to the south boundary of the EVAL lands. Approximately mid-way on the eastern boundary a 40 acre private parcel and the access road is cherry-stemmed with a series of peak to peak lines.

2. RECOMMENDATION AND RATIONALE - 19,558 acres recommended for wilderness 37,065 acres recommended for nonwilderness

The recommendation for this WSA is to designate 19,558 acres as wilderness and release 37,065 acres for uses other than wilderness. The recommendation emphasizes outstanding opportunities for solitude, easy access to a high diversity of primitive and unconfined recreation, and limited conflicts with other actual or potential uses of the area while maintaining access to portions of the WSA with moderate mineralization potential. The recommendation would add and protect an area of diverse natural and cultural values.

The area recommended for uses other than wilderness comprise three parcels, encompassing the eastern and western bajadas and the southern mountainous portions of the WSA. The recommendation emphasizes maintaining access, to the area not recommended for designation, for mineral exploration and extraction, off-highway vehicle (OHV) use, and other uses other than wilderness. Numerous mining claims are located within the southern portion and it is projected that if the area were not designated, mineral development would eventually occur. Large bajadas form most of the area recommended for uses other than wilderness and is characterized by a lack of topographic relief and low growing desert shrubs. Few secluded or isolated locales are available in which a visitor could be screened and opportunities for primitive and unconfined recreation are less diverse. A lack of natural barriers make the eastern and western bajadas suitable for OHV use. Management of these areas for existing and potential OHV use is considered more appropriate than for their wilderness values.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The WSA is virtually free of obvious human impacts. The mountain range consists of an undulating crest flanked with rocky outcrops and occasional cliffs. The central ridge is divided by

numerous draws and drainages into many separate summits. A pinyon-juniper forest occupies the steep canyons and gullies of the west slope and the upper reaches of the long canyons on the east. The southern portion of the WSA is blanketed with taller shrubs and joshua trees. The unobtrusive landscape projects a sense of remoteness with little influence of outside human activities. Internal man-made features are limited to two old mine tunnels and four developed springs. These imprints are substantially unnoticeable except within their immediate vicinity and do not detract from the area's natural character.

The sloping bajadas that comprise the northeast and southwest portions of the area are wide open expanses consisting of low desert shrubs and joshua trees. The southern mountainous area is a jumble of rounded peaks and shallow ridges that slope into wide drainages. This area is covered with pinyon and juniper trees and low growing desert shrubs. The open landscape provides wide open vistas, occasionally interrupted by the few man-made features that exist within the area.

Several outside influences that includes roads, a tin shack, water troughs, corrals, a mining site, a communication site, and power lines directly affect the natural quality of the area not recommended for wilderness designation. The eye is drawn to the endless series of ranges and dry lakes; the powerline and other intrusions are overlooked. The primitive nature of the spring access roads and the screening of the springs limit their influence.

B. Solitude: Within the area recommended for wilderness, outstanding opportunities for solitude exist. The numerous summits, draws and ridges that divide the central ridge provide excellent screening. The side canyons and slopes are heavily forested with pinyon and juniper trees which give additional cover. Those portions of the area containing rocky peaks, drainages and outcrops offer secluded locales in which to retreat. Although roads and a powerline are seen from within portions of the recommended area, a sense of remoteness from human activities is maintained.

Opportunities for solitude exist, but are limited, within the area recommended for nonwilderness. The sloping bajadas of the northeast and southwest provide minimal topographic or vegetative screening or cover. The washes on the southeastern bajada offer more opportunities for solitude, with the joshua trees and taller shrubs providing better screening and cover. The southern portion provides the best opportunities for solitude in this part of the WSA, as the deep, gently rolling terrain densely forested with pinyon and juniper trees, offers good cover and a number of isolated pockets and locales.

C. Primitive and Unconfined Recreation: Primitive recreation opportunities are outstanding in the area recommended for wilderness because of the variety of activities available. Year-round easy access, scenic views, diverse topography and vegetation, and the availability of nearby water enhances dayhiking, backpacking, rock scrambling, wildlife viewing, limited hunting and horseback riding.

Fewer primitive recreational opportunities are found within the area recommended for nonwilderness. Visitors could utilize a limited portion of the area for hiking, camping and horseback riding; interesting features and challenging terrain are less available here.

D. Special Features: Numerous signs of aboriginal habitation have been found in the recommended area, indicating long-term exploitation of the upland resources. Identified site types include habitation sites at rock shelters, rock art panel, campsites, a wickiup site, pinenut caches, and lithic scatters. These cultural values would be further protected from the impacts of development by wilderness designation.

Living resources like bighorn sheep, Gambel's quail, chukar and other upland bird species are present in the WSA and would benefit from wilderness designation. These solitude-dependent species offer excellent subjects for nature study, photography, and wildlife viewing.

Desert tortoise (*Gopherus agassizii*), listed by the U.S. Fish and Wildlife Service as a threatened species

on April 2, 1990, has been identified within the WSA in the bajada areas.

4. MANAGEABILITY

The entire WSA can reasonably be managed as wilderness to preserve values now present in the area. The area is a solid block of public land with no private inholdings, State lands or rights-of-way. An estimated 124 post-FLPMA mining load claims, one pre-FLPMA load claim, and 60 post-FLPMA placer claims are located within the WSA. Only the one pre-FLPMA claim has valid existing rights. One oil and gas lease encumbers approximately 320 acres in an area not recommended for wilderness.

Wilderness designation of the areas recommended for uses other than wilderness would pose a critical manageability problem (OHV use). OHV travel for hunting, camping, and sightseeing currently occurs along the bajadas, cherrystemmed portions of the area and the way. No natural barriers to these uses are present in the portions recommended for non-wilderness; such motorized recreational activities are projected to continue and increase.

5. ENERGY AND MINERAL RESOURCE VALUES

Throughout the WSA there is a low to moderate potential for silver, gold, lead, copper, zinc, lanthanum and other rare-earth elements, uranium, thorium, niobium, tungsten and copper with 24 percent of the study area having an unknown resource potential for the same minerals as well as zinc. The entire study area has no resource potential for oil and gas and coal, as well as a low resource potential for these nonmetallic commodities: dimension stone; sand and gravel; pegmatite minerals such as feldspar and mica; and geothermal resources.

An estimated 124 post-FLPMA mining load claims, one pre-FLPMA load claim, and 60 post-FLPMA placer claims are located within the WSA. Only the one pre-FLPMA claim has valid existing rights. One 320 acre oil and gas lease is located in the northeast in a portion not recommended for wilderness.

Neither non-energy mineral resource or energy resource development is projected to occur within the area recommended for wilderness designation. Mineral development for metallic minerals is projected to eventually occur within the southern portion of the area not recommended for wilderness.

6. SUMMARY OF WSA SPECIFIC COMMENTS

Out of the 29 comments received, 24 commentors supported wilderness designation for all or part of the WSA. Five commentors supported no wilderness for the South McCullough Mountains WSA. Most comments touch on high wilderness values and the dozens of unique supplementary values. A utility company wanted to protect and preserve the integrity of their facilities located near the WSA.

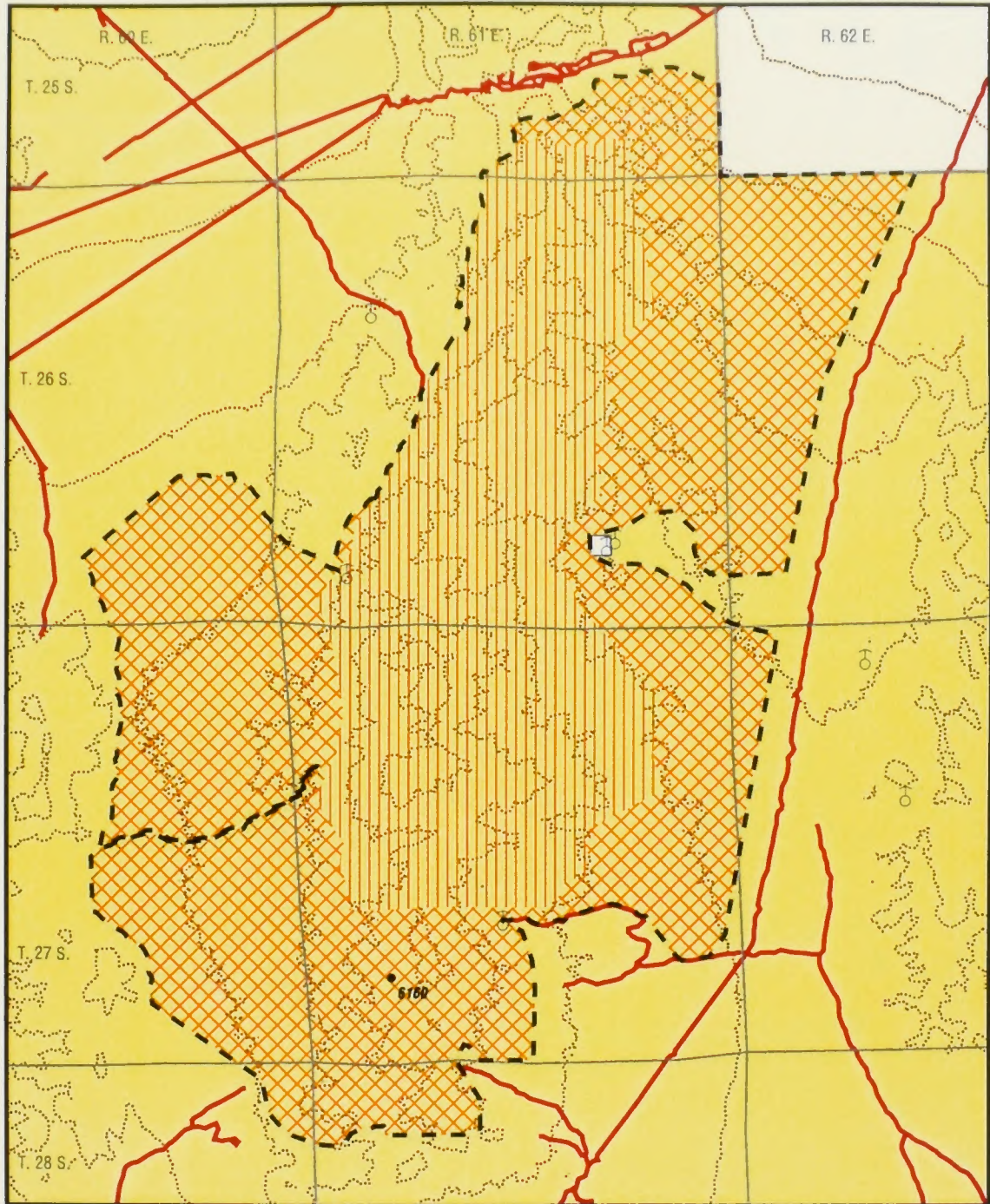
The Clark County Department of Comprehensive Planning generally agreed with the recommended wilderness designations contained within the Preferred Alternative in the Clark Draft EIS.



The Governor of Nevada did not support the Bureau's preliminary Preferred Alternative recommendation of no wilderness. In response to the Governor's comments the Bureau amended the Preferred Alternative recommending 19,558 acres for wilderness designation. The Governor concurred with the final recommendation. The State Division of Minerals and Department of Wildlife recommended the no wilderness designation.

The U.S. Air Force stated they support alternatives that do not restrict military overflights. The EPA supported the proposed action and recommended that the final recommendation include a statement to the effect that water and air quality would best be protected under wilderness designation.

South McCullough Mountains Wilderness Study Area

WSA BOUNDARIES AND LAND OWNERSHIP






 Road
 Spring

1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

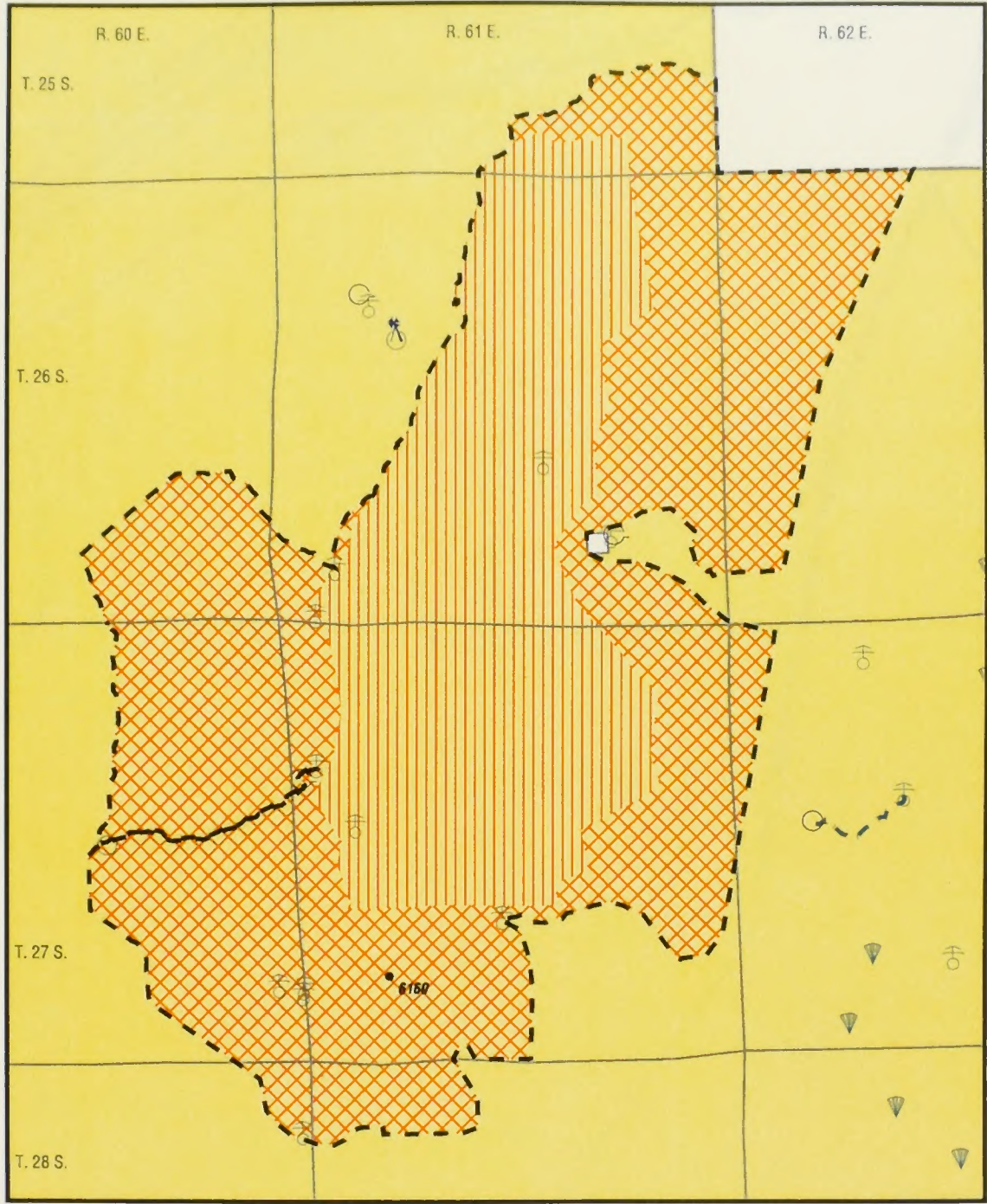
 BLM
 Private Land

 Wilderness Study Area Boundary
 Recommended Non-Suitable
 Recommended Suitable



NV-050-435

South McCullough Mountains Wilderness Study Area DEVELOPMENTS AND DISTURBANCES

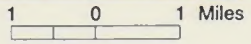


1 0 1 Miles

- BLM
- Private Land
- Recommended Non-Suitable
- Recommended Suitable
- Wilderness Study Area Boundary
- Well
- Dev. Spring
- Windmill
- Pipeline
- Guzzler
- Corral



South McCullough Mountains Wilderness Study Area RIGHTS-OF-WAY

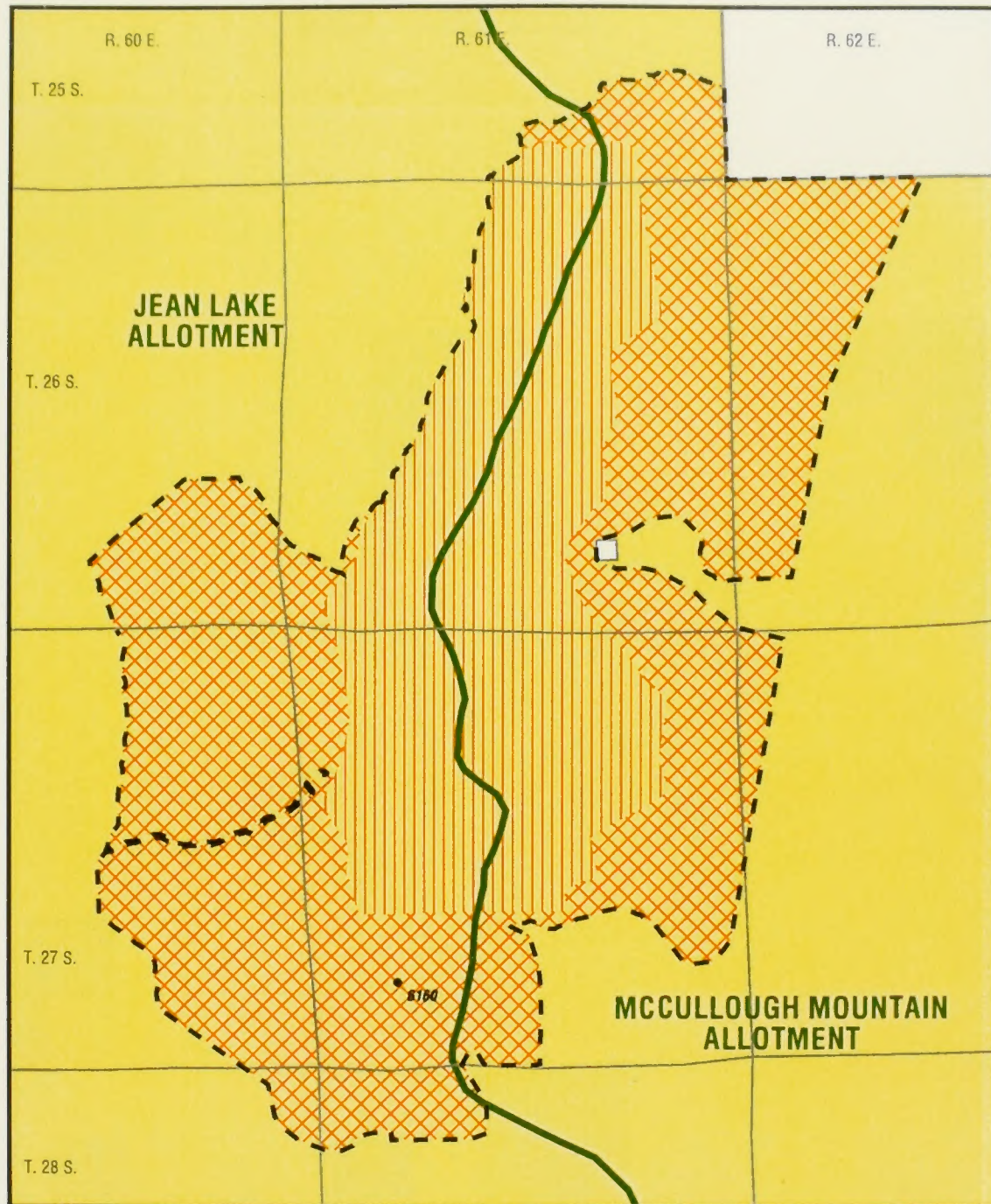


- Road
- Powerline
- Telephone Line
- Windmill
- Communication Site
- Rain Gauge
- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable

- BLM
- Private Land



South McCullough Mountains Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



1 0 1 Miles

Federally Listed
Threatened
and
Endangered
Species

● Observation Site
NONE ON THIS MAP

■ BLM
□ Private Land

NO HMA ON THIS MAP

■ Allotment
Boundary

-- Wilderness Study Area Boundary
××× Recommended Non-Suitable
||| Recommended Suitable



NV-050-435

South McCullough Mountains Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations

1 0 1 Miles

Mining Claim Density - 3/97

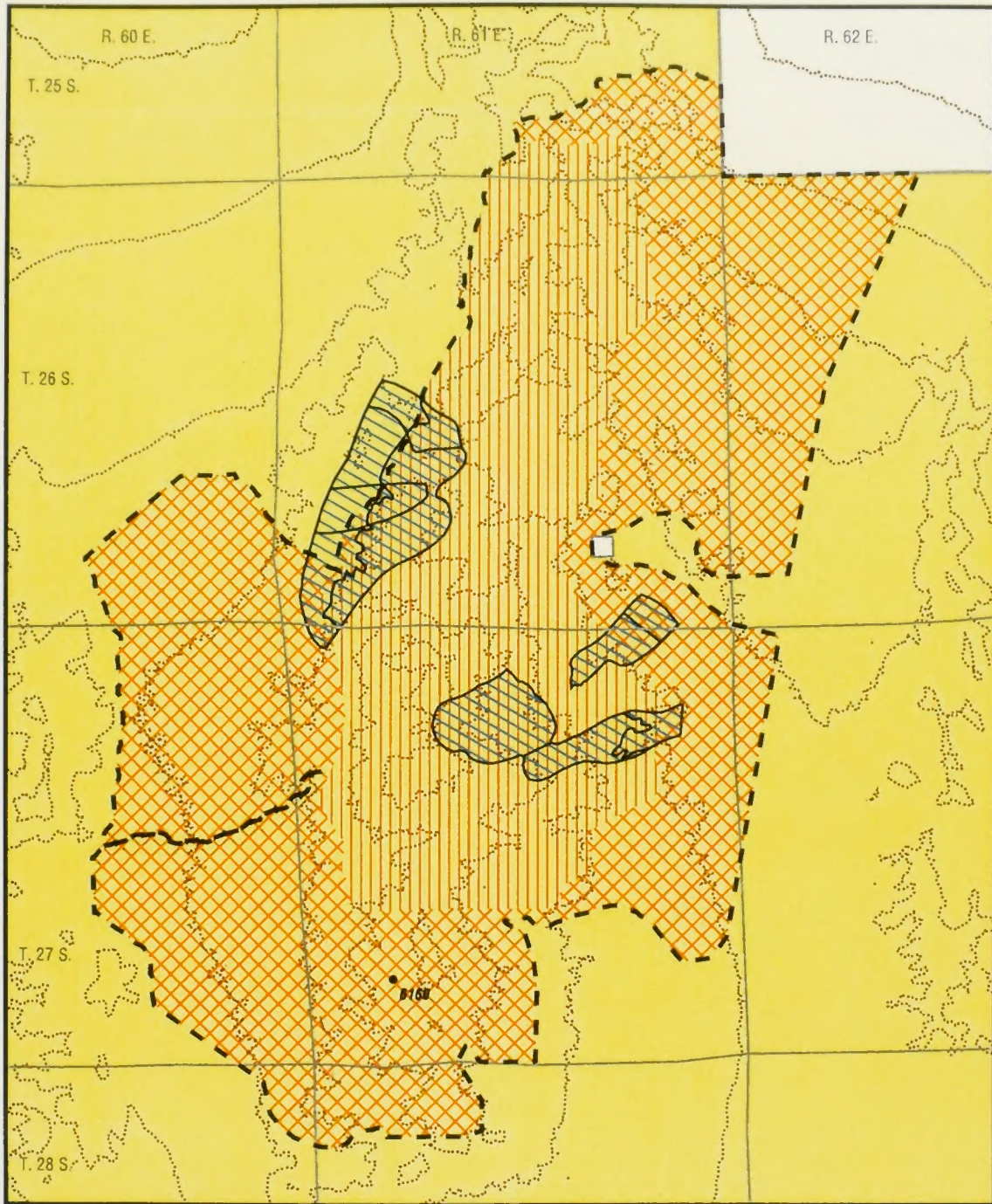
- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

- BLM
- Private Land

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- Recommended Suitable




South McCullough Mountains Wilderness Study Area MINERAL POTENTIAL



1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 Medium - Silver, Gold, Lead, Zinc, Tungsten, Copper, Lantharium, REE, Uranium, Thorium, Norium

-- Wilderness Study Area Boundary

 Recommended Non-Suitable

 Recommended Suitable

 BLM
 Private Land



NV-050-435

IRETEBA PEAKS WILDERNESS STUDY AREA

1. THE STUDY AREA - 14,994 acres

The Ireteba Peaks Wilderness Study Area (WSA) (NV-050-438) is located south of the old mining town of Nelson in Clark County, Nevada, approximately one hour's drive south of Las Vegas, Nevada. The study area contains approximately 14,994 acres of public land.

The northern boundary of the study area is the south edge of a powerline right-of-way. A common boundary with the Lake Mead National Recreation Area (LMNRA) is the east boundary. The western and southern boundaries follow along the base of the mountain and a drainage.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 14,994 acres recommended for nonwilderness

The recommendation is to not designate this WSA as wilderness, but to release the area for uses other than wilderness. It is based upon a determination of potential resource conflicts, manageability concerns and the fact that the area possessing the highest wilderness values would not be of a sufficient size to stand alone as wilderness without designation of the contiguous LMNRA lands. Restoring the lands to multiple resource management would allow for future reconsideration, under Section 202 of the Federal Land Policy and Management Act, of this area as a portion of the much larger area within the LMNRA, should the National Park Service (NPS) recommend that area for wilderness designation.

Wilderness values, intrinsic to the Ireteba Peaks WSA, are centered along the narrow ridgeline and canyons on the east face of the mountains. This core area is only about four miles long and a mile wide. Canyons on the east slope, although relatively deep, are very short and offer limited wilderness experiences. Due to the rugged character of the small portion of the study area possessing the highest wilderness values, most hiking and primitive recreational use would be centered on the narrow ridge or in one canyon along the northern portion of the study area and extending onto the broad open bajada of the LMNRA. The western face is distinctly lacking in wilderness values due to the relatively steep slopes dropping quickly into the bajada.

The El Dorado Mining District is adjacent to the northern portion of the WSA. Designation of the WSA as wilderness could significantly impact future development of mineral resources and exploration within an area with proven mineral resource potential. BLM concurred with the State of Nevada that the highest and best use for this area is mineral development. There has been a recent resurgence of interest in development of mining claims around the St. Louis Mine in the southwest portion of the study area. Development of the Rockefeller Mine on the southeast side of the study area, and expansion of mineral development at the Aztec Mine near the northeast boundary of the study area, would significantly impair wilderness values in the northeast, southwest, and southeast portions of the WSA and detract from solitude and wilderness experience over a relatively large area. The combined affects of these external activities would be a significant impact to wilderness.

Much of the eastern portion of the WSA, and the broad open bajada on the southern flanks of the WSA affords easy and unrestricted off-highway vehicle (OHV) access to the core of the WSA, from the Rockefeller Mine and the powerline road to the north. Although delineation of the boundary would be relatively easy on the west and north edge of the study area, identification of a recognizable boundary on the south and implementation of a vehicle closure would be nearly impossible, due to a distinct lack of clearly identifiable natural features to be used in developing a manageable boundary.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The majority of the Ireteba Peaks WSA is in a natural condition and generally lacks any internal influence of the presence of man. In an area of nearly 15,000 acres, the only man-made intrusion within the study area is a short way less than one-half mile in length. This feature is primarily visible from within its immediate vicinity. External activities having a limited impact on the WSA, within the immediate viewshed of the activity, are the Rockefeller Mine (one-half mile from the southeast edge of the study area), the St. Louis Mine (an inactive mine one-quarter mile west of the southwest corner of the WSA), and the powerline on the north boundary. Topographic screening lessens the impact of these external activities.

B. Solitude: Adequate opportunities for solitude are available throughout the WSA due to the size and configuration of the area. The east side of the study area offers outstanding opportunities for solitude in the numerous, deep, narrow canyons, and extremely rugged terrain. Vegetative screening is generally limited. Opportunities for solitude are available on the west side of the WSA, however, activities external to the study area would diminish the quality and opportunity for solitude.

C. Primitive and Unconfined Recreation: Recreational opportunities in the WSA are good and quite varied. Most recreational use would be concentrated in the granite boulders on the north end of the study area, along the knifelike ridge and in the narrow canyons on the eastern flank of the Ireteba Mountains. Hiking and backpacking opportunities would most likely be concentrated in the canyons leading into the LMNRA or on the peaks and ridges offering spectacular views of Lake Mojave, the Colorado River and into Arizona.

Wildlife related recreational activities such as bird watching, nature studies, photography, and hunting are available in the WSA. Desert wildlife, including desert tortoise, bighorn sheep and wild burros, can be seen. Herds of wild burros are also found in the area. Colorful landscapes, diverse geologic formations and outstanding scenic vistas provide excellent subject matter for photography. Populations of bighorn sheep and Gambel's quail make the WSA attractive to hunters.

D. Special Features: The WSA contains several supplemental values, not the least of which is its proximity to the LMNRA. Broad, uninterrupted vistas across the LMNRA and the Colorado River into Arizona are spectacular from the ridges and peaks in the WSA. Unique geologic features enhance scenic qualities of the study area.

Desert tortoise are found in the southern and western portions of the study area. The desert tortoise (Gopherus agassizii) was listed as a threatened species by the U.S. Fish and Wildlife Service (FWS) on April 2, 1990. A total of 1,800 acres of the study area have been identified as tortoise habitat.

Ecologically, the area supports populations of Gambel's quail, bighorn sheep and wild burros. Two sensitive plant species (Penstemon bicolor ssp. bicolor and Penstemon bicolor ssp. roseus) have been identified in the study area.

4. MANAGEABILITY

The WSA is capable of being managed as wilderness, however, there would be some concerns associated with OHV management along the northern edge of the study area, and access for mineral development on the southern end. Much of the study area lacks physical barriers for OHV travel and the potential for this form of recreational activity is high, particularly in the southern and eastern portions.

The WSA is contiguous along its eastern boundary to the LMNRA. The LMNRA Final Environmental Impact Statement-General Management Plan (GMP) released in July, 1986 identified these lands as meeting the criteria of the Wilderness Act of 1964.

5. ENERGY AND MINERAL RESOURCE VALUES

Approximately six percent (900 acres) of the WSA is considered to have moderate favorability for the occurrence of metallic minerals; the remaining portion is considered to have low favorability. The WSA is classified as having low favorability for non-metallic minerals and moderate favorability for the occurrence of uranium. There are no known deposits of these resources in the study area. The entire WSA has a low favorability for the occurrence of sand and gravel. No material sites occur within the study area at present. There are no known oil and gas or geothermal deposits in the WSA.

The El Dorado Mining District is near the north end of the WSA and the Searchlight Mining District is adjacent to the southern end. The area to the north of the WSA was actively mined in the late 1800's up to 1942. Significant amounts of gold, silver, and copper were produced within the mining district in the first half of the century. There are no mining claims or oil and gas leases located within the WSA.

6. SUMMARY OF WSA SPECIFIC COMMENTS

Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. One of the oral comments supported the preferred alternative (no wilderness) for the study area. The other comments did not specifically mention the WSA, but, generally opposed wilderness from the position of restricting personal rights and unknown mineral potential.

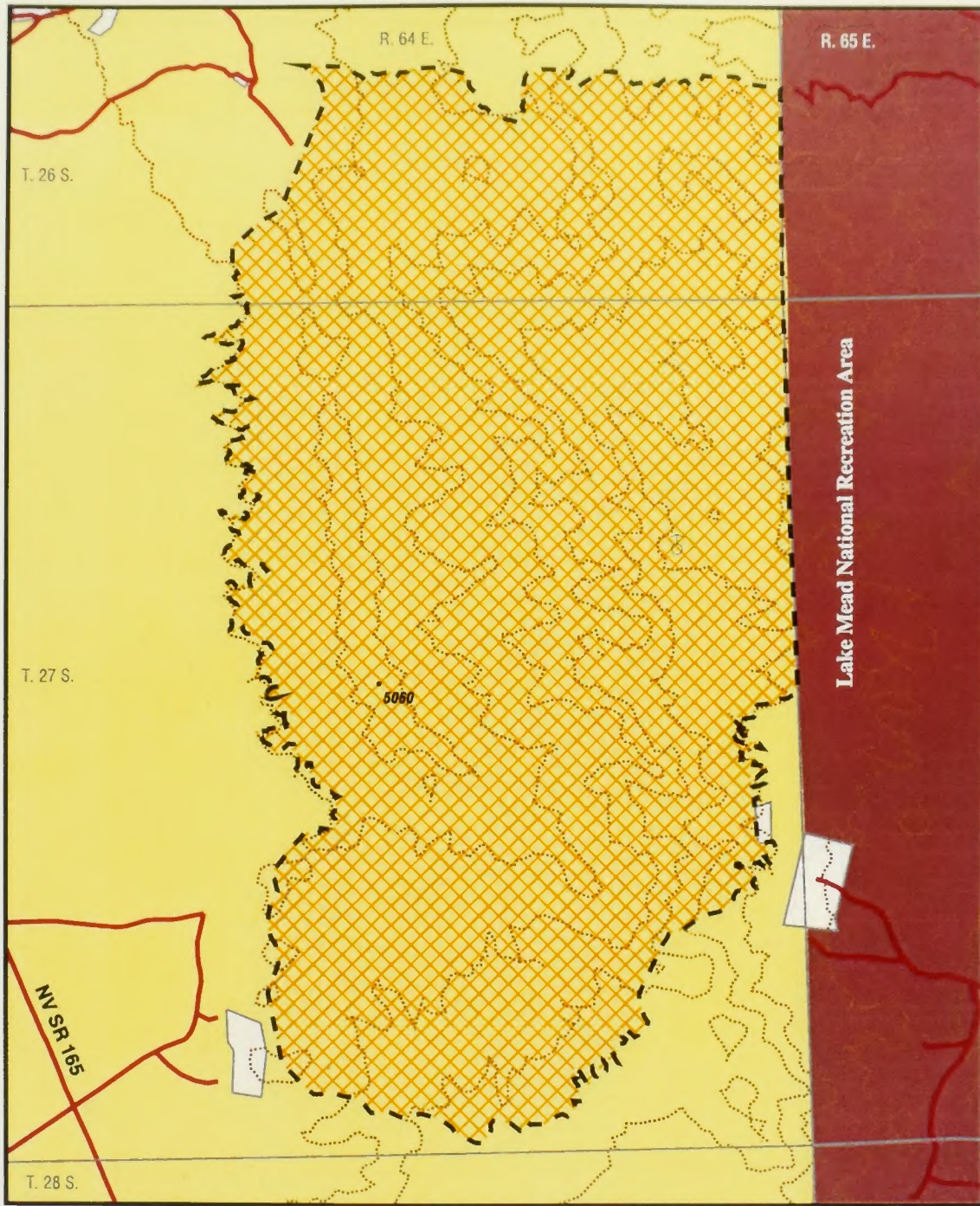
Of the 35 written comments, five commentors supported the preferred alternative not to designate the area wilderness. Two of the five comments also identified the option for a modified partial wilderness alternative for the east portion of the study area not accessible to OHVs. Two comments supported a modified partial wilderness alternative that would include the east side of the WSA (9,570 acres) and the upper portion of the drainage system into the LMNRA proposed wilderness area. The subjects of the comments opposed to wilderness designation centered upon unknown wilderness potential and historic OHV use of the area.

No comments were received from Clark County.

The Governor's consensus review of the recommendation for this study area was included in a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS and the recommendation is to release the entire WSA for uses other than wilderness. Comments from other state agencies also concurred with the recommendation.

There were no comments received from Federal agencies specifically directed towards this study area and none took a position on the recommendation for any WSA. The Environmental Protection Agency referred to mineral potential in all WSAs without rendering a statement or position on wilderness designation. The NPS mentioned unknown cultural resources as a reason for recommending the area for wilderness designation. The FWS identified wilderness designation as a method of protecting the threatened desert tortoise. Bureau of Mines comments were not specific.

Ireteba Peaks Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



— Road
○ Spring

1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

Lake Mead National Recreation Area

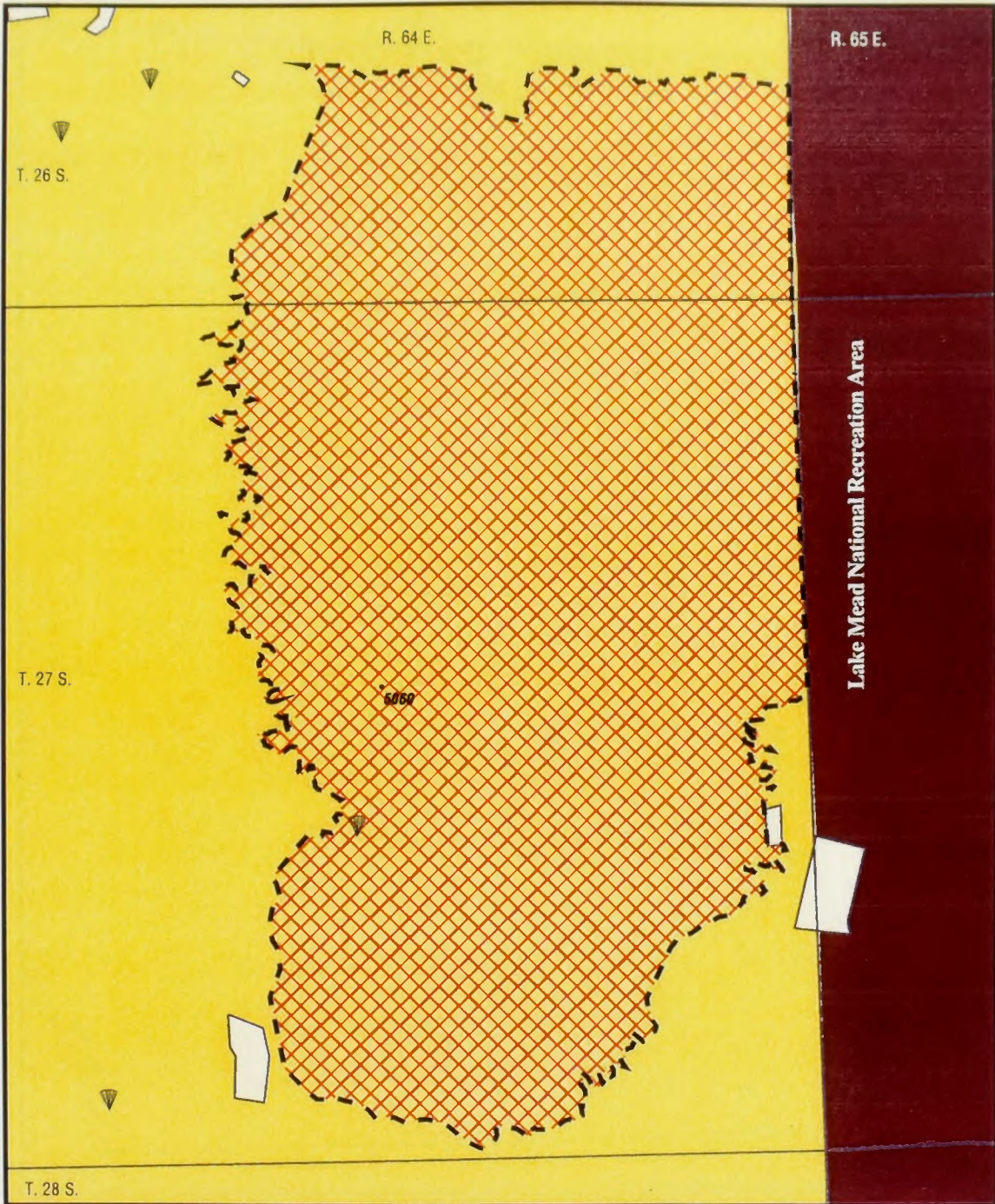
■ BLM
□ Private Land
■ Other Agency

- - Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-438

Ireteba Peaks Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



1 0 1 Miles

◆ Guzzler

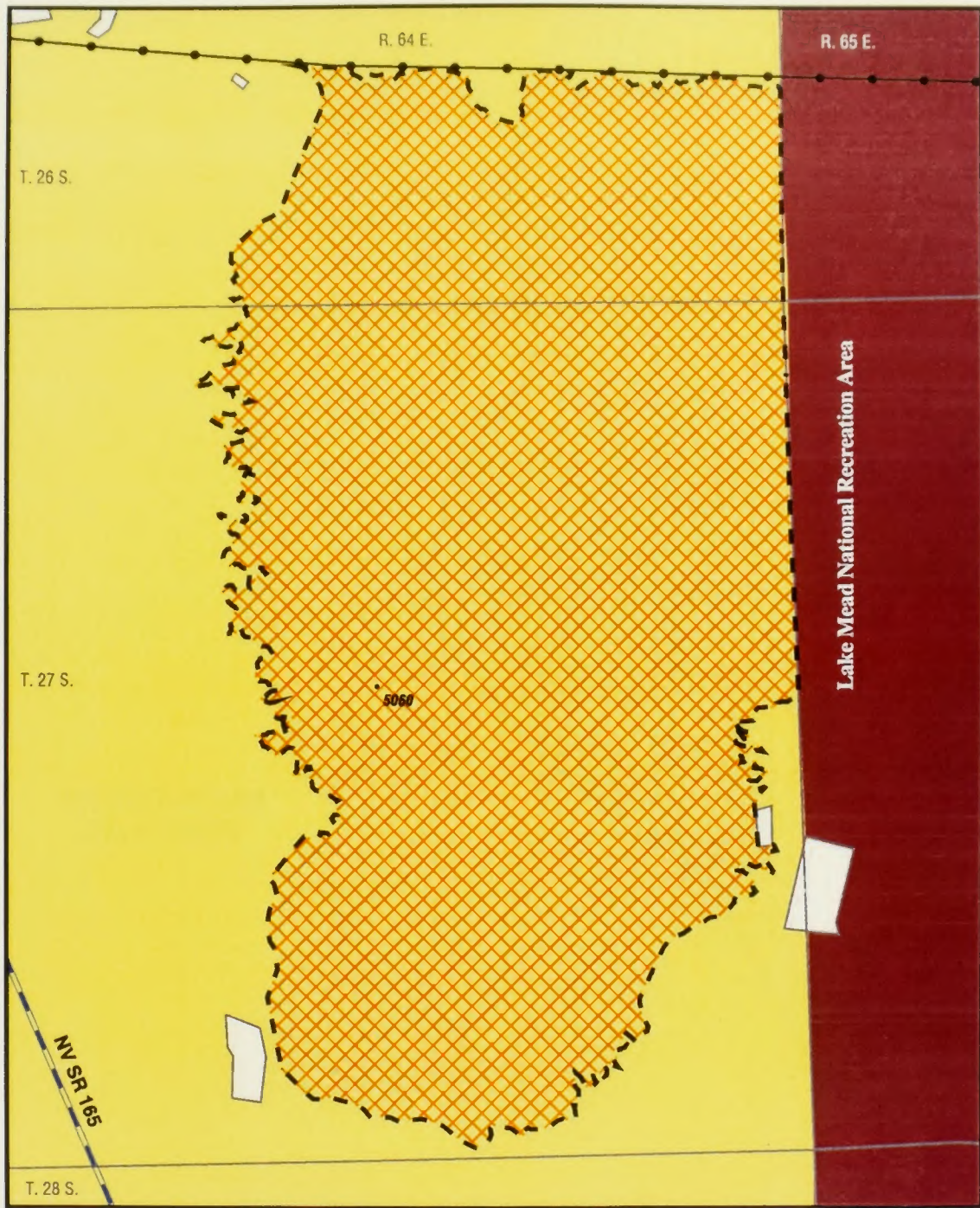
- BLM
- Private Land
- Other Agency

- - Wilderness Study Area Boundary
- XXXX Recommended Non-Suitable

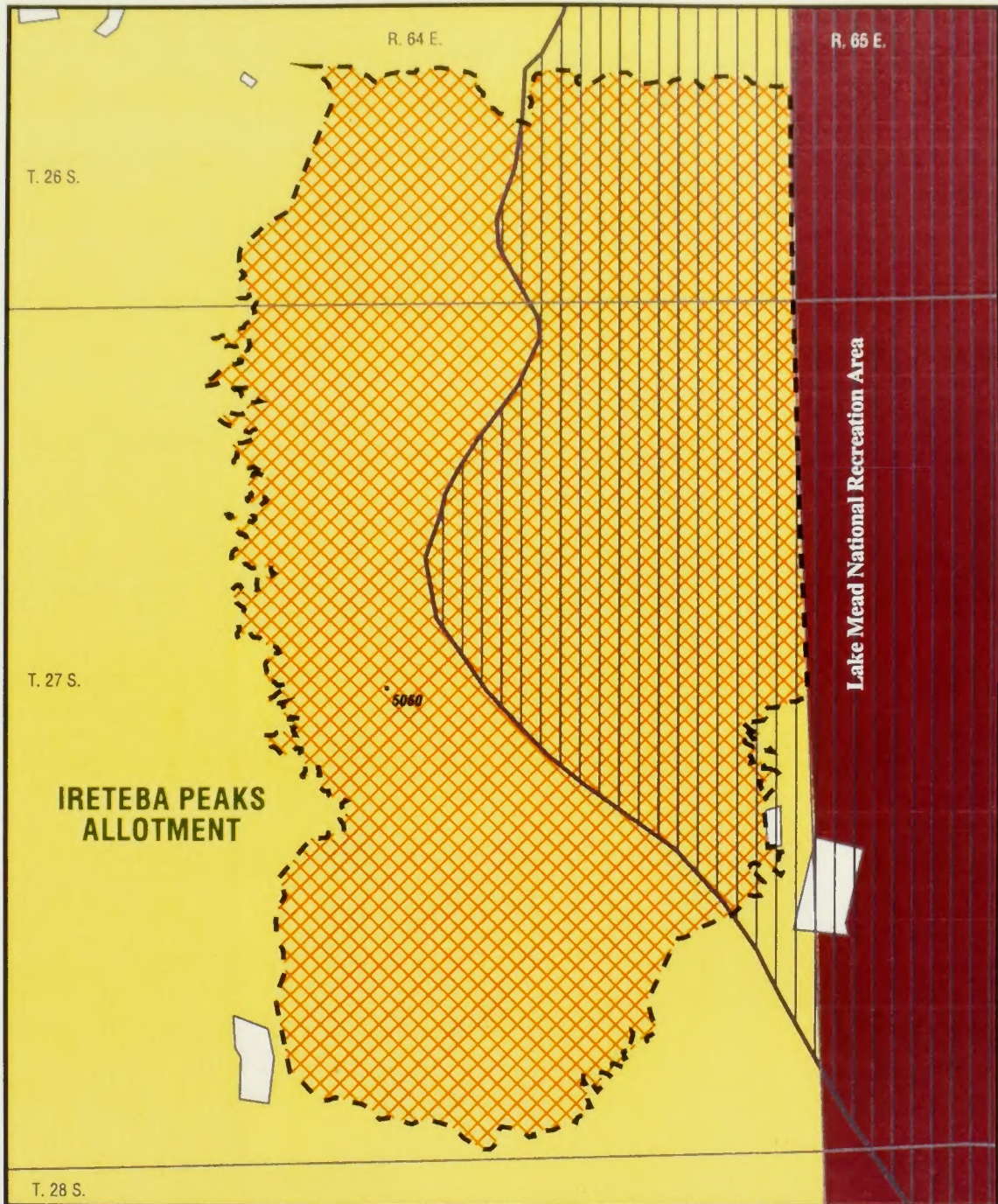


NV-050-438

Ireteba Peaks Wilderness Study Area RIGHTS-OF-WAY



Ireteba Peaks Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



**Federally Listed
Threatened
and
Endangered
Species**

● Observation Site
NONE ON THIS MAP

■ BLM
□ Private Land
■ Other Agency

1 0 1 Miles

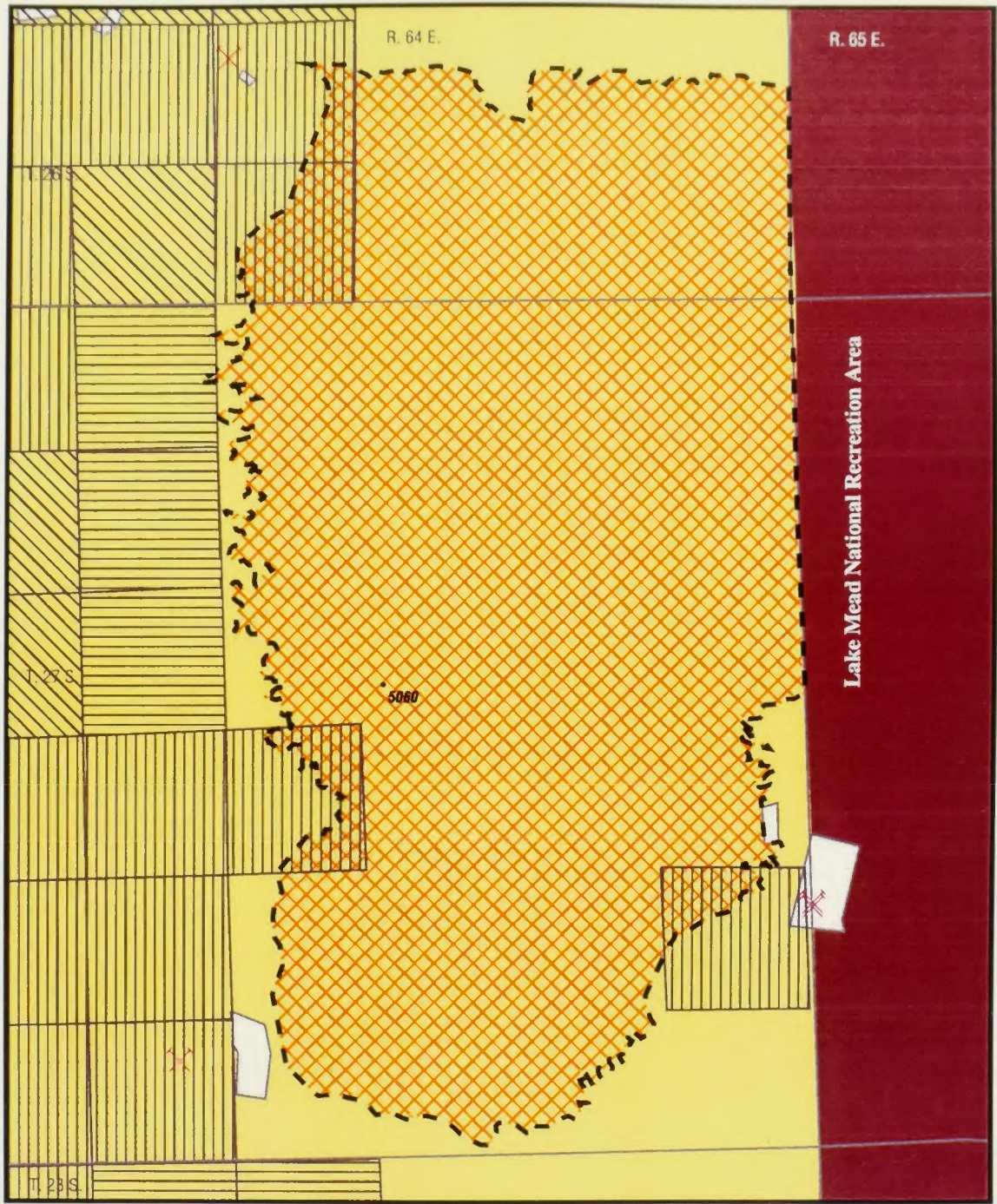
□□□□ El Dorado HMA

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-438

Ireteba Peaks Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations

1 0 1 Miles

Mining Claim Density - 3/97

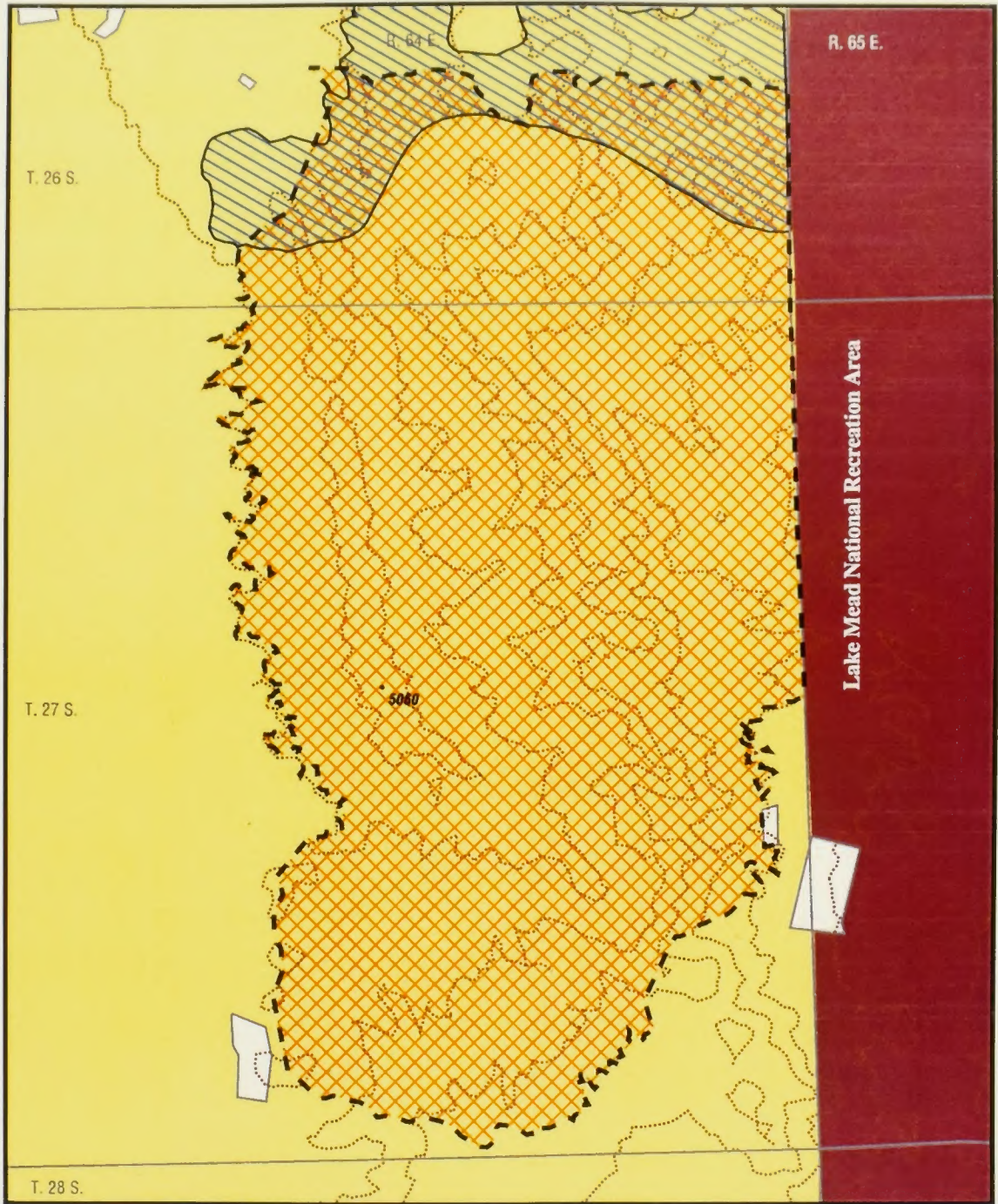
- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable




Ireteba Peaks Wilderness Study Area MINERAL POTENTIAL








1 0 1 Miles

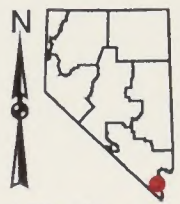
CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 Medium - Gold, Silver, Copper, Molybdenum, Tungsten, Lead, Zinc

-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable



NV-050-438

RESTING SPRINGS WILDERNESS STUDY AREA

1. THE STUDY AREA - 3,850 acres

Resting Springs Wilderness Study Area (WSA) (NV-050-460), is approximately 15 miles west of Pahrump and nearly 60 miles west of Las Vegas, along the California-Nevada border, in Nye County, Nevada. Access is via Ash Meadows Road several miles to the east. Except for the western boundary, which is the Nevada-California border, the boundaries of the WSA are poorly defined. Boundaries meander along the base of the foothills of the Resting Spring Range, set back from the effects of the Ash Meadows and Stewart Valley Roads. The 3,850 acre WSA is divided into two unequal parts by a maintained dirt road which branches off the Ash Meadows Road. The northern portion is 1,050 acres and the southern portion is 2,800 acres.

Resting Spring Range WSA (CDCA 145) is contiguous to the California Desert Conservation Area's (CDCA), Resting Spring Range WSA #145 which covers 89,772 acres in California. During the 1980 Wilderness Inventory it was determined that the Nevada WSA did not meet wilderness criteria for size, solitude and primitive recreation, except when considered in conjunction with the California WSA. California BLM has recommended that the CDCA Resting Spring Range WSA be designated nonwilderness.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 3,850 acres recommended for nonwilderness

The recommendation for this WSA is to release all 3,850 acres for uses other than wilderness. This recommendation is because of the areas low quality wilderness values, lack of special features, its easy accessibility, potential for conflicts with other actual or potential uses, and the overwhelming public support for nonwilderness designation of this area.

Designating the Resting Springs WSA wilderness would add an area in relatively pristine condition but lacking diverse natural and cultural values. By itself, the WSA does not offer outstanding opportunities for solitude. Its small size, narrow shape, bisecting road, lack of vegetative screening and minimal topographic screening provided by relatively gentle terrain limit the ability of a user to find seclusion.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: No significant intrusions have been found in the WSA other than several bladed spots immediately adjacent to the road which divides the unit in two. The road, technically outside the WSA, is the most significant sign of human activity and affects naturalness in its immediate vicinity.

The ranches, roads, mines and other developments of Ash Meadows, two miles to the north, and Stewart Valley, two miles to the southeast, are visible from the high points of the WSA. However, they do not have a significant impact on naturalness within the WSA.

B. Solitude: By itself, the WSA does not offer outstanding opportunities for solitude. Its small size, narrow shape, bisecting road, lack of vegetative screening and the minimal topographic screening provided by the relatively gentle terrain limit the ability of a user to find seclusion. The WSA is never more than one and one-quarter miles wide. Lands immediately adjacent to the boundaries are not developed at present. Should they be, solitude opportunities within the WSA would be severely affected. The road which bisects the WSA lessens opportunities for solitude in the immediate vicinity. This particularly affects the northern portion which is only 1,050 acres.

Some topographic screening is available in the foothills and broad washes which make up the WSA. The

creosote bush, blackbrush and other desert shrubs covering the area afford no vegetative screening. Only a limited number of visitors could find seclusion in the area.

C. Primitive and Unconfined Recreation: The WSA is within 250 miles of nine metropolitan areas. However, it is more than a three hour drive from all of them except Las Vegas. Most visitors from the other metropolitan areas would not consider this close enough for a weekend. The WSA is not big enough to attract vacationers by itself. However, it is in an area of other attractions including Death Valley National Monument, 40 miles to the west, and numerous California WSAs in addition to the contiguous WSA. The WSA is one and one-half miles from the Ash Meadows Road which connects Ash Meadows with Death Valley Junction and Pahrump. It is accessible with high clearance vehicles via the road which divides the unit.

The entire WSA is accessible to dayhikers and horseback riders, but it lacks special attractions. The landforms and plant life are not diverse or particularly scenic, and the hills are not high enough to be challenging. The most desirable destination for a dayhike is the climb up Shadow Mountain to the south in the California WSA. The area is not suited for backpacking because of its small size and narrow configuration. The visitor would have some opportunity to see wild horses.

By itself, the Resting Spring Range WSA does not offer outstanding opportunities for primitive recreation. It is too small, its configuration is restrictive, and it lacks diverse and scenic attractions.

D. Special Features: There are no identified special features in the WSA.

4. MANAGEABILITY

The small northern unit is not manageable as wilderness and neither is much of the southern unit because of accessibility. Drawing the boundary back to the steepest foothills of Shadow Mountain would eliminate much of the problem and create a better defined boundary. However, it would reduce the size of the WSA to where it would not be suitable for designation without designating the adjacent Resting Spring Range WSA.

Large, driveable washes penetrate all parts of the WSA. At least 80 percent of the small northern unit is affected. Most of these washes drain towards the well-traveled, nearby, Ash Meadows Road. Use of these washes seems to be minimal at present but, is anticipated to increase over time as the Pahrump area grows. Since there are no natural barriers to off-highway vehicle (OHV) use, extensive artificial barriers or regular patrols would eventually be necessary to retain wilderness values.

With the exception of the southwest boundary, which follows the California/Nevada State line, boundaries are impossible to locate on the ground. The north east and southern boundaries do not follow any physical or manmade features and cannot be identified on the ground easily.

Post-FLPMA mining claims cover the entire northern unit and several hundred acres of the north end of the southern unit.

5. ENERGY AND MINERAL RESOURCE VALUES

The WSA is largely composed of Precambrian and Cambrian marine sediments which have been displaced by normal faults, usually less than one mile in length. The Furnace Creek fault zone, over 18 miles long, terminates southward at the southwestern flank of Shadow Mountain. Another major normal fault passes through Stewart Valley and bounds the Resting Spring Range on its eastern flank. Quaternary alluvial fan deposits cover much of the lower slopes. Miocene tufaceous lake beds occur north of the WSA and in small areas inside the north boundary.

Zeolites have been produced from the altered tuffs deposited in the alkaline lake beds just north of the WSA. The nearest mining district is the Johnnie District 15 miles to the northeast of the WSA where gold was mined from veins in the lower Cambrian Wood Canyon formation. The Nopah silver-lead-zinc mine and the Baxter silver-lead prospect several miles to the south of the WSA are the only other known prospects in the region.

The entire WSA is classified as having a low favorability for metallic and nonmetallic mineral resources due to the geology of the area.

The WSA has no favorability for uranium based on a lack of source rocks. It also has no favorability for oil and gas for the same reason. No oil and gas or thermal leases or applications are in the WSA. The WSA has a low favorability for geothermal resources.

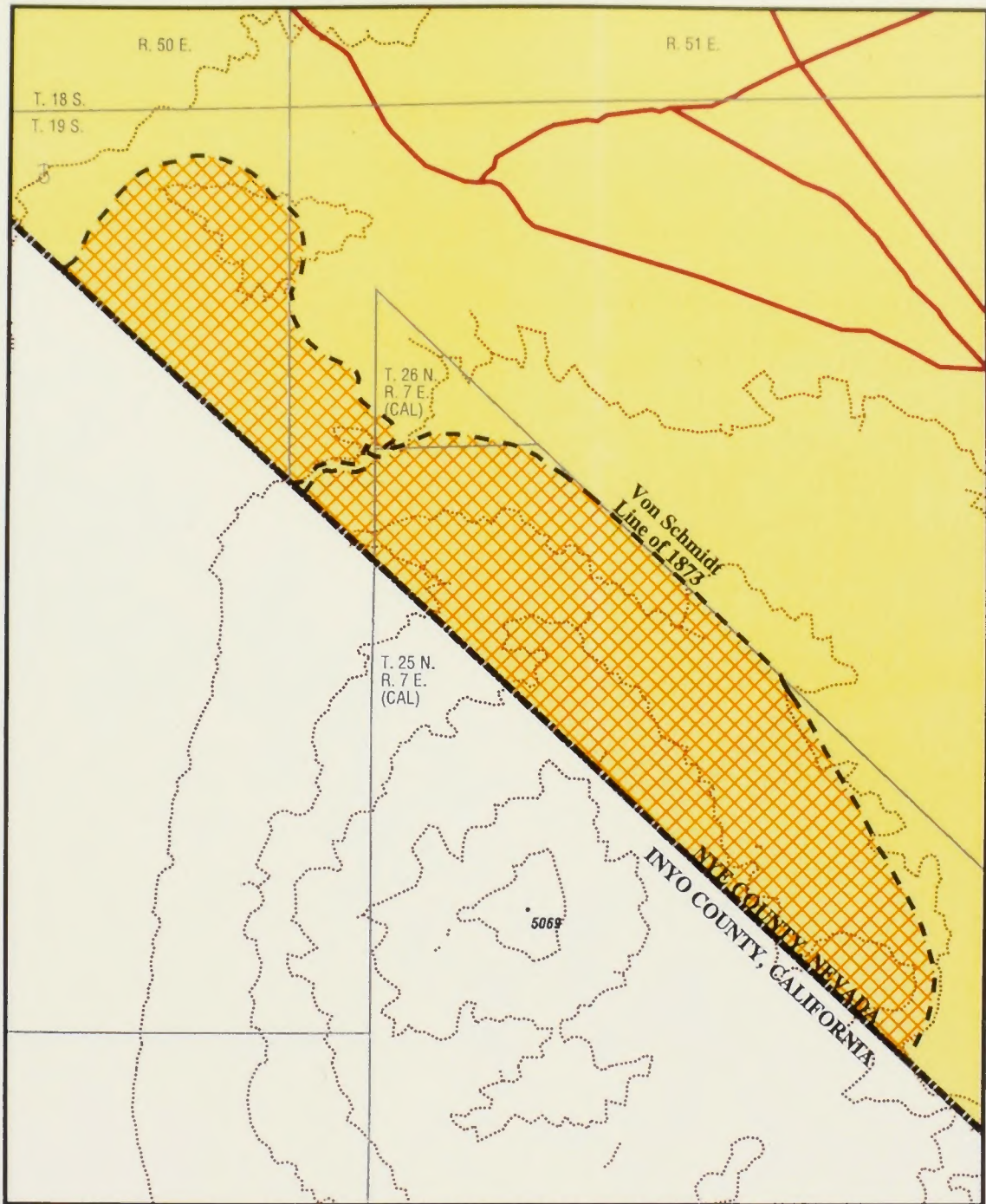
6. SUMMARY OF WSA SPECIFIC PUBLIC COMMENTS

Nine comments were received on the Resting Spring WSA during the initial wilderness inventory in 1979. Six agreed with further study of the area and three disagreed. Six specific comments on this WSA and 2,327 general comments, stating the unit met wilderness criteria, were received during the intensive inventory in 1980. The general comments were in response to a mailing by a coalition of Nevada conservation groups seeking support for a number of areas. A few of the specific comments discussed wilderness values, but the remainder mentioned inadequate size, lack of outstanding opportunities or competing resource values.

One specific comment was received from Atlantic Richfield/Anaconda opposing wilderness designation. In addition, three general comments were opposed to any wilderness in the Esmeralda-So. Nye RMP area.

The Governor of Nevada recommended that the area not be designated wilderness.

Resting Springs Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



— Road
○ Spring

1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

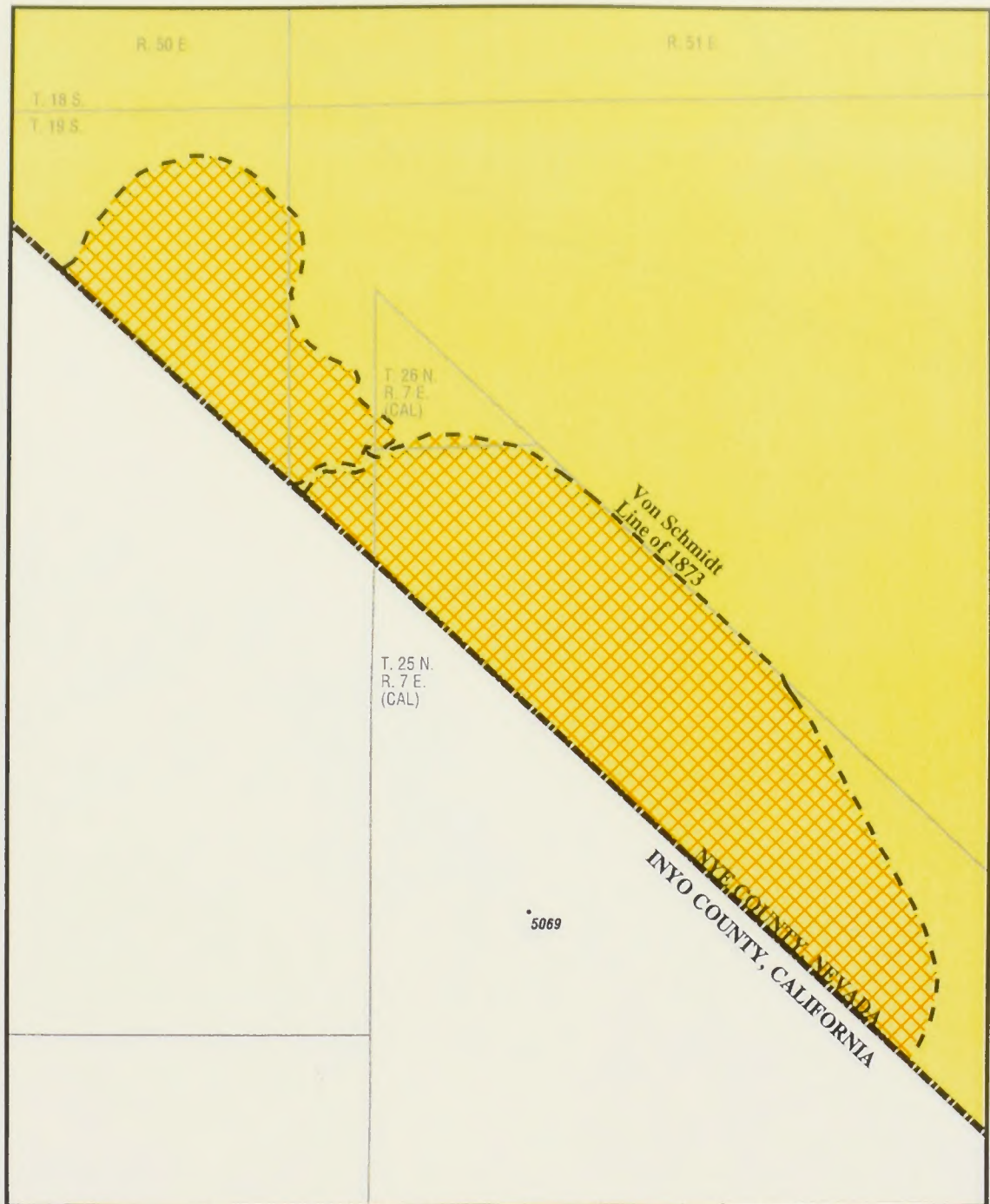
■ BLM
□ Private Land

-- Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-460


Resting Springs Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



1 0 1 Miles

NO DEVELOPMENTS OR DISTURBANCES ON THIS MAP

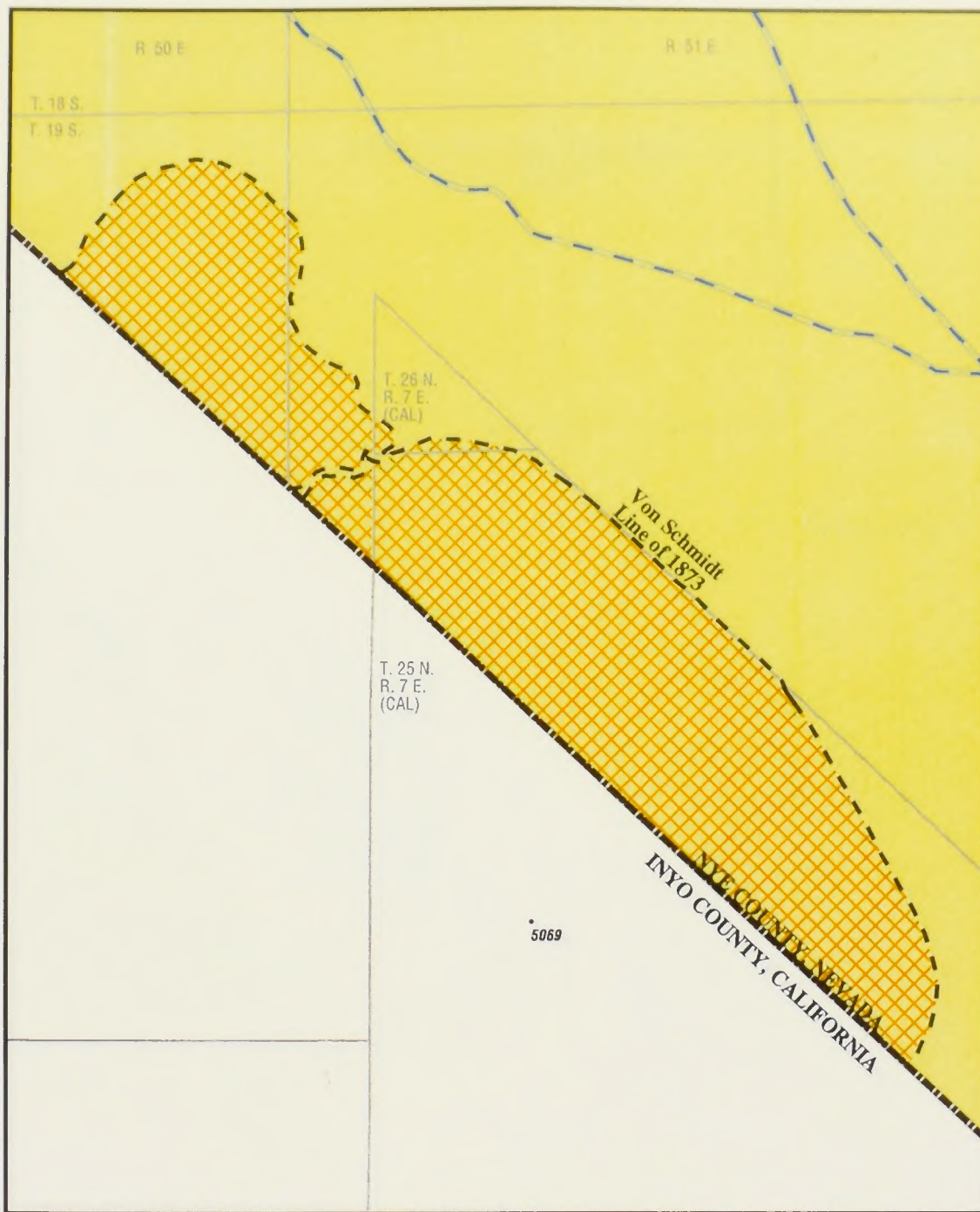
 BLM
 Private Land

-- Wilderness Study Area Boundary
 Recommended Non-Suitable





NV-050-460

Resting Springs Wilderness Study Area RIGHTS-OF-WAY



 Road

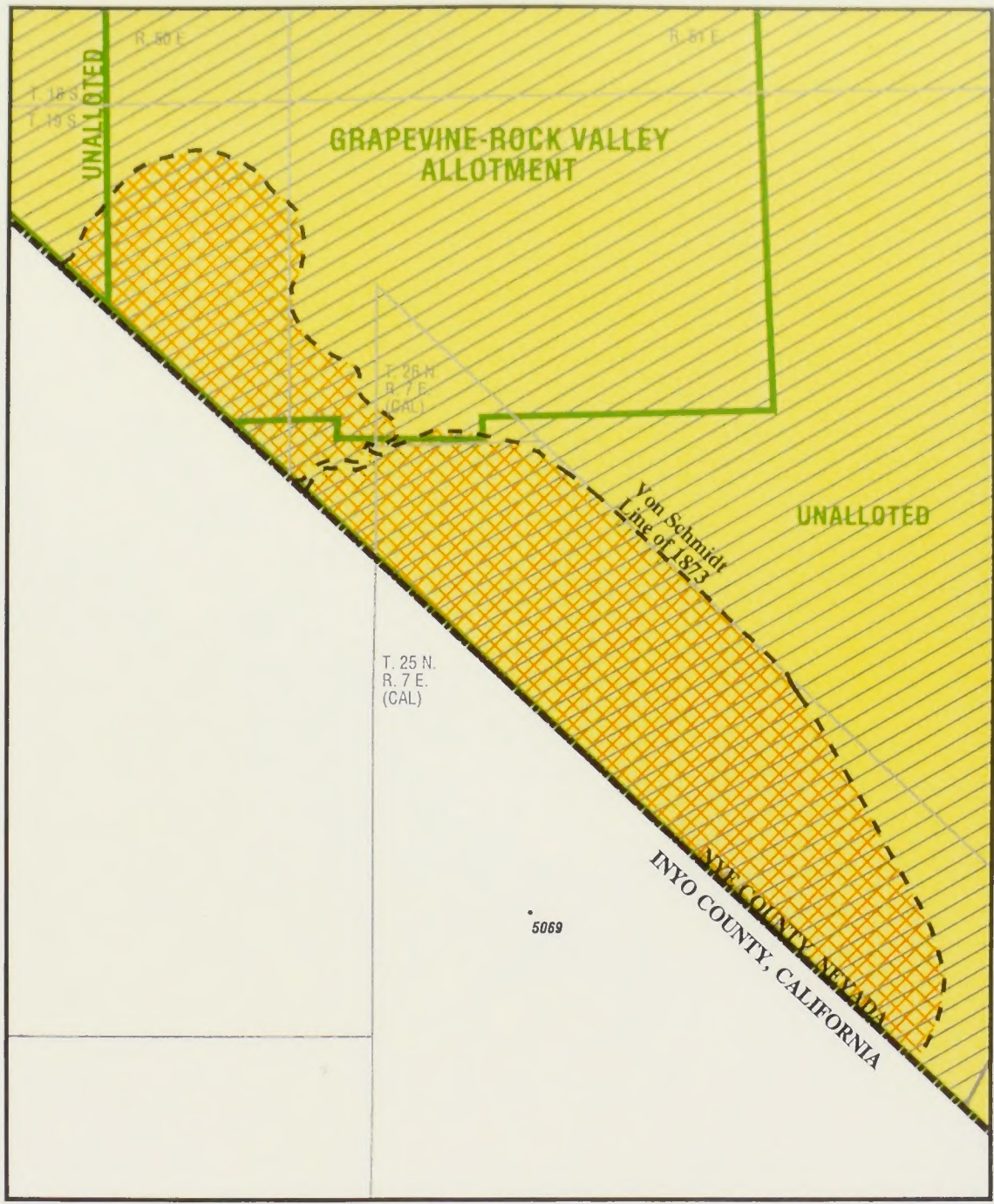
 BLM
 Private Land

 Wilderness Study Area Boundary
 Recommended Non-Suitable



NV-050-460

Resting Springs Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCENCES



**Federally Listed
Threatened
and
Endangered
Species**

● Observation Site
NONE ON THIS MAP

■ BLM
□ Private Land

▨ Ash Meadows HMA

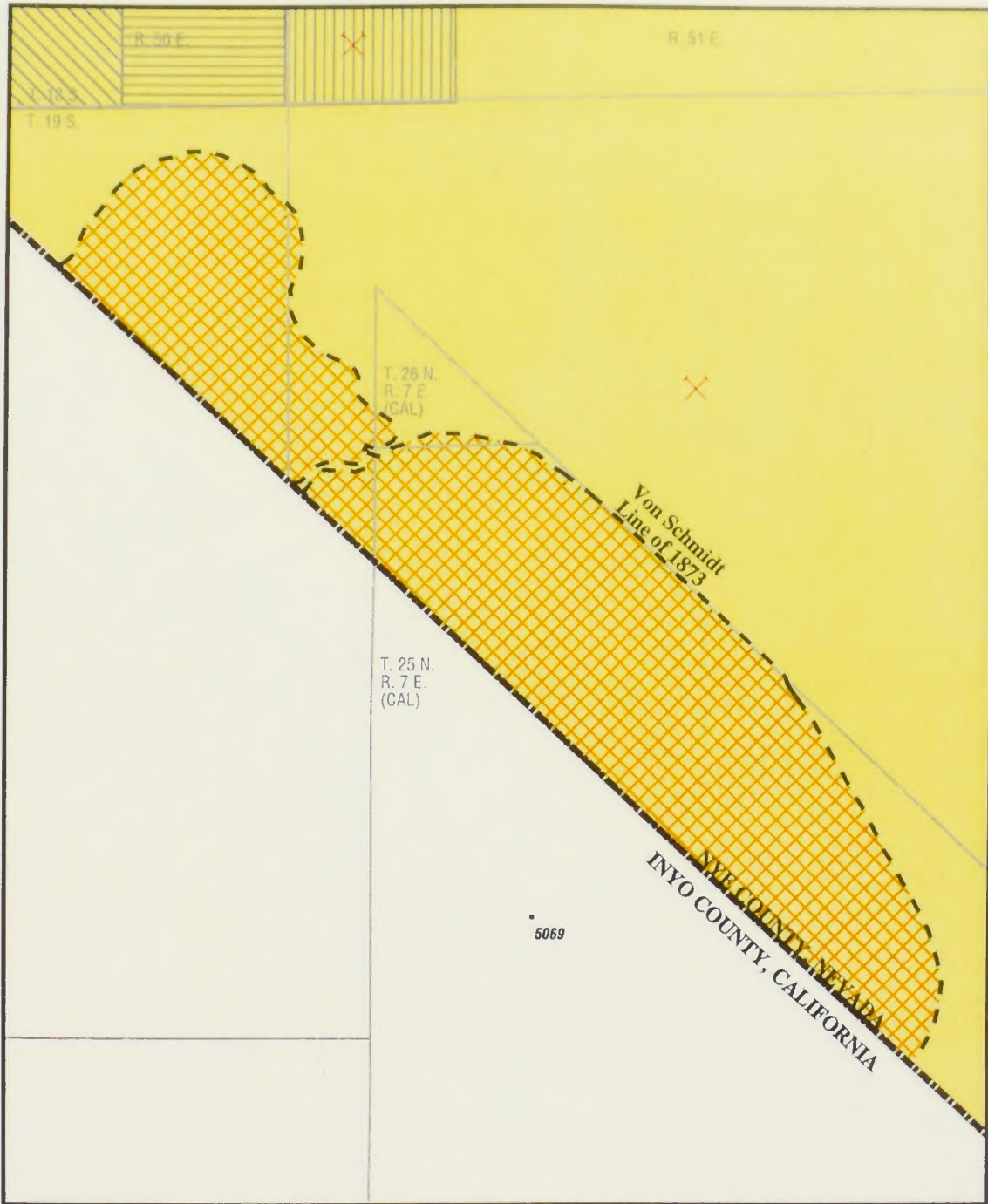
↗ Allotment
Boundary

- - Wilderness Study Area Boundary
XXXX Recommended Non-Suitable



NV-050-460

Resting Springs Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS



Mining Operations 1 0 1 Miles

Mining Claim Density - 3/97

- 1-5 Claims
- 6-35 Claims
- 36 or more Claims

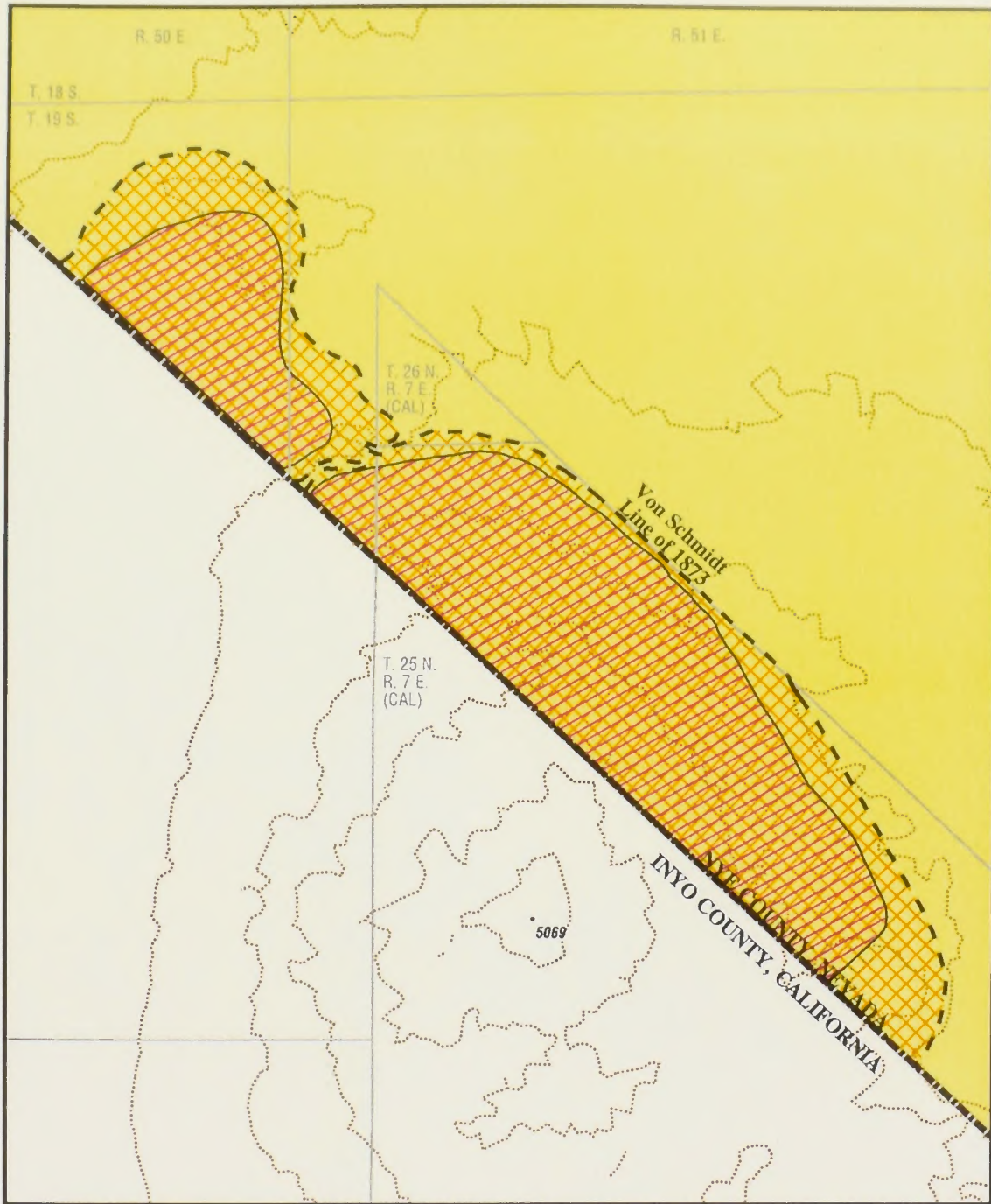
- BLM
- Private Land

- Wilderness Study Area Boundary
- Recommended Non-Suitable



NV-050-460

Resting Springs Wilderness Study Area MINERAL POTENTIAL





1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 High - Clay

 BLM
 Private Land

 Wilderness Study Area Boundary
 Recommended Non-Suitable



NV-050-460

NELLIS ABC WILDERNESS STUDY AREA

1. THE STUDY AREA - 5,718 acres

The Nellis ABC Wilderness Study Area (WSA) (NV-050-04R-15) is located at the northern end of Las Vegas Valley. The study area is divided into three small sub-areas separated by roads. All three sections of this WSA will be considered as one. Sub-area A encompasses 1,971 acres, B has 2,713 and C has 1,024 acres for a combined total of 5,718 acres. The WSA was originally inventoried as part of a 13,400 acre parcel. The study area comprises the natural portion of the original parcel which was contiguous to the Desert National Wildlife Range (DNWR) area recommended for wilderness.

The area is bound on the west by private land; to the east by the Nellis Small Arms Range; to the north by the DNWR; and to the south by man-made features (earthen dikes).

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 5,718 acres recommended for nonwilderness

The recommendation for this WSA is to release the entire 5,718 acres for uses other than wilderness. Lack of wilderness values, the area's small size and the reduction of conflicts with utility and rail line developments were key considerations in the recommendation.

The WSA generally appears natural, but outstanding opportunities for solitude and primitive recreation are lacking. The area's small size and lack of topographic or vegetative screening limits opportunities for solitude. Outstanding opportunities for primitive types of recreation are unavailable as interesting destinations and focal points of interest are absent from the study area.

The no wilderness recommendation for the WSA would also emphasize making the area available for utility and rail line development. The expansion and growth of the Las Vegas Valley has sparked the need for utility expansion. In addition, the Department of Energy has identified a route through the WSA for development of a rail line to the potential Yucca Mountain repository. The values of both these potential developments outweigh the WSA's wilderness values.

Over the long-term naturalness within the WSA would be diminished by the increase in motorized recreational activity and the development of potential utilities and a rail line.

Desert tortoise (Gopherus agassizii), a special feature identified in the area, would not receive added protection afforded from wilderness designation.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The WSA is in a natural condition. It consists of a flat bajada sloping gently south from the Sheep Range. It is highly eroded, creating a deeply rutted but uniform terrain. Off-highway vehicle (OHV) use is the primary intrusive feature.

B. Solitude: The WSA provides less than outstanding opportunities for solitude. The low-growing vegetation and open landscape provide minimal screening for visitors and there are few secluded locales.

C. Primitive and Unconfined Recreation: The study area's small size, irregular configuration and lack of variety and interesting features does not permit a visitor an outstanding opportunity or limited opportunities for horseback riding and sightseeing.

D. **Special Features:** The desert tortoise (Gopherus agassizii), listed by the U.S. Fish and Wildlife Service as a threatened species on April 2, 1990, has been identified within the WSA. All of the study area has been identified as tortoise habitat.

4. MANAGEABILITY

Nellis ABC is capable of being managed as wilderness, but there will be some manageability concerns associated with the one oil and gas lease. However, any rights associated with the lease are not expected to be exercised. There would be management concerns dealing with the WSA's small size and OHV accessibility.

5. ENERGY AND MINERAL RESOURCE VALUES

The entire WSA was rated as having moderate potential for nonmetallic minerals (sand and gravel). There are no mining claims, prospects or mines located within the study area.

Although an oil and gas lease almost covers one section within the WSA, it was rated as having low potential. There is moderate potential for geothermal resources throughout the study area.

6. SUMMARY OF WSA SPECIFIC COMMENTS

In 1986, the area was reinstated in the wilderness study process as a result of an April 1985 decision in Sierra Club vs Watt concerning certain lands that were deleted from wilderness review in 1982 and 1983. As a result of the court case, the area was reinventoried to document wilderness characteristics.

Six public comments were received pertaining to the decision of the original inventory of the WSA. All six comments disagreed with the decision that the area be approved as a WSA. The comments cited that the area lacked opportunities for solitude and primitive recreation.

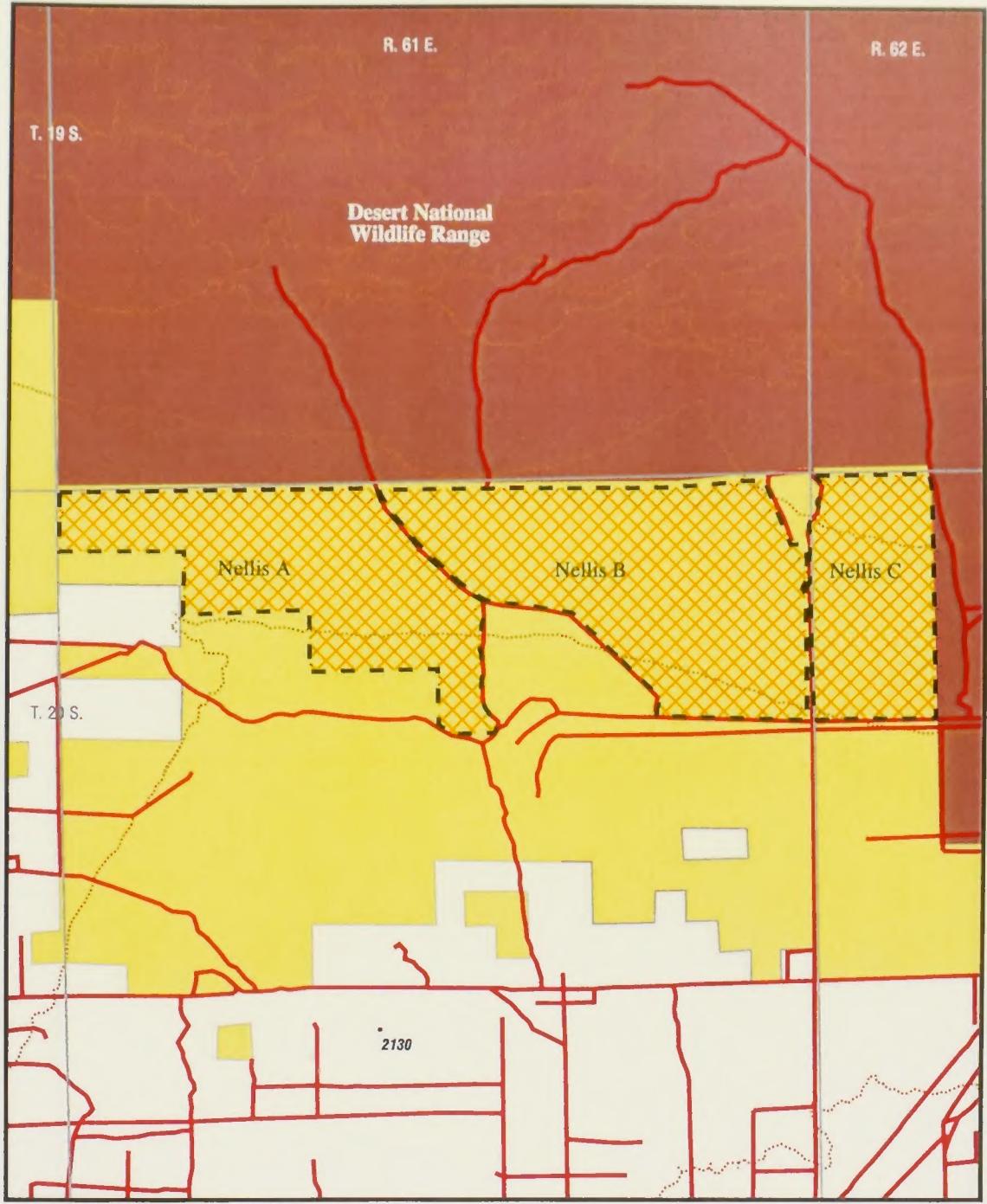
Two public hearings were held during the public review period on the Draft EIS. The first was in Las Vegas, Nevada, on August 3, 1988. Oral statements were presented by 22 people. Six oral statements were presented at the second hearing at Reno, Nevada on August 4, 1988. One of the oral comments supported the Proposed Action (No Wilderness) for the study area. The other comments did not mention the WSA.

Of the 36 written comments, six supported the Proposed Action and none proposed All Wilderness. The subjects of the comments were potential rail rights-of-way, race courses and mineral resources.

In a letter from the Clearinghouse of the State of Nevada, dated September 7, 1988, the Director of the Clearinghouse said, "...the State concurs with the recommendation presented in the document." The document referred to is the Draft Nevada Contiguous Lands Wilderness EIS.

No comments were received from Clark County or the cities of Las Vegas and North Las Vegas.

Nellis A B C Wilderness Study Area WSA BOUNDARIES AND LAND OWNERSHIP



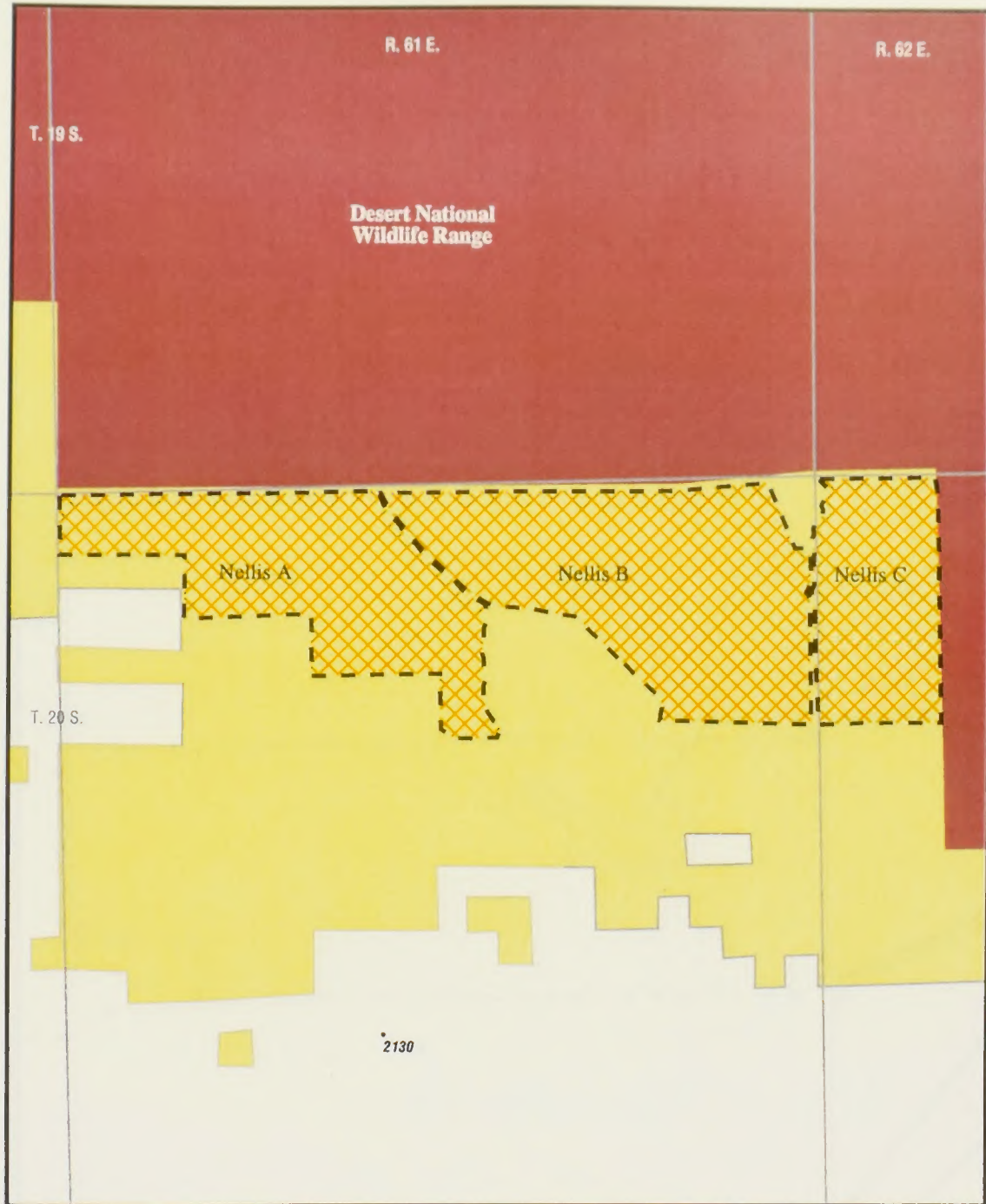
Road
1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable

NV-050-4R-15

Nellis A B C Wilderness Study Area DEVELOPMENTS AND DISTURBANCES



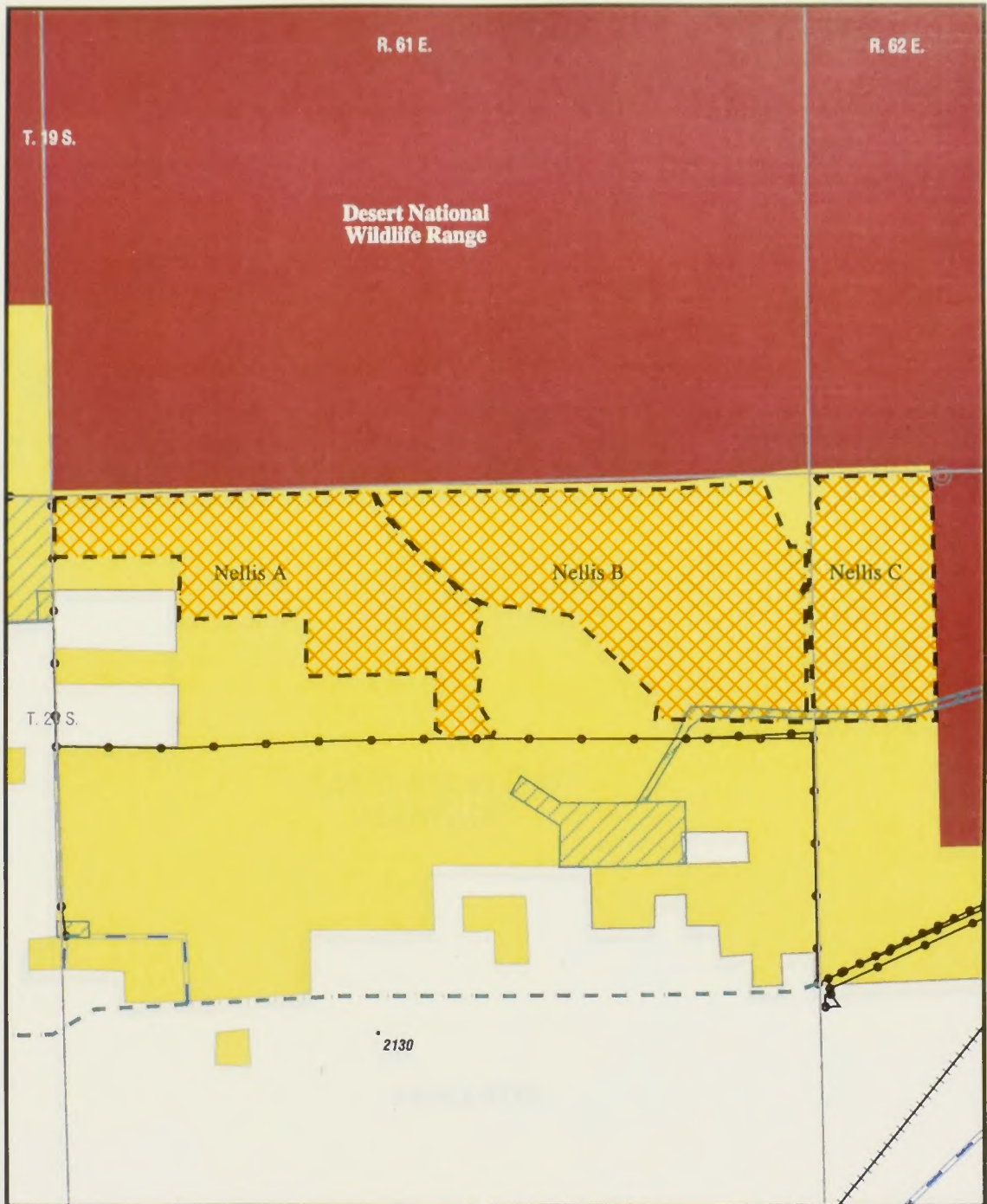
NO DEVELOPMENTS OR DISTURBANCES ON THIS MAP

- BLM
- Private Land
- Other Agency

- Wilderness Study Area Boundary
- Recommended Non-Suitable



Nellis A B C Wilderness Study Area RIGHTS-OF-WAY



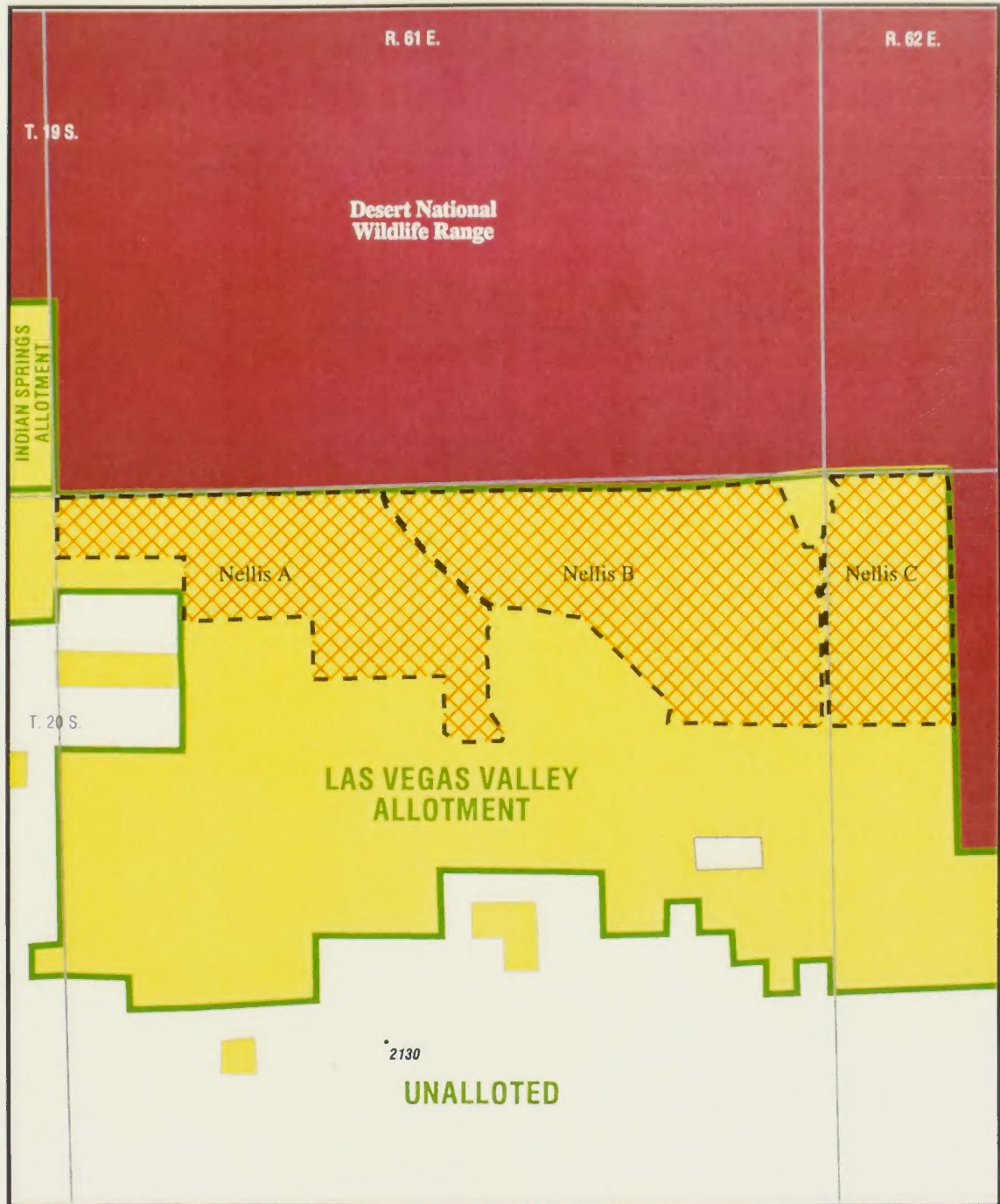
1 0 1 Miles

- Yellow square: BLM
- White square: Private Land
- Red square: Other Agency

- Circle with dot: Rain Gauge
- Diagonal hatched square: Flood Control
- Solid line with dots: Powerline
- Dashed line with dots: Telephone Line
- Dashed line: Pipeline
- Blue line: Road
- Black line with cross-ticks: Railroad
- Dashed line: Wilderness Study Area Boundary
- Yellow cross-hatched square: Recommended Non-Suitable



Nellis A B C Wilderness Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



1 0 1 Miles

Federally Listed
Threatened
and
Endangered
Species

● Observation Site
NONE ON THIS MAP

BLM
 Private Land
 Other Agency

NO HMA ON THIS MAP

**Allotment
Boundary**


- - Wilderness Study Area Boundary
 XXXX Recommended Non-Suitable



NV-050-4R-15




Nellis A B C Wilderness Study Area MINING CLAIM DENSITY AND OPERATIONS





 Mining Operations

1 0 1 Miles

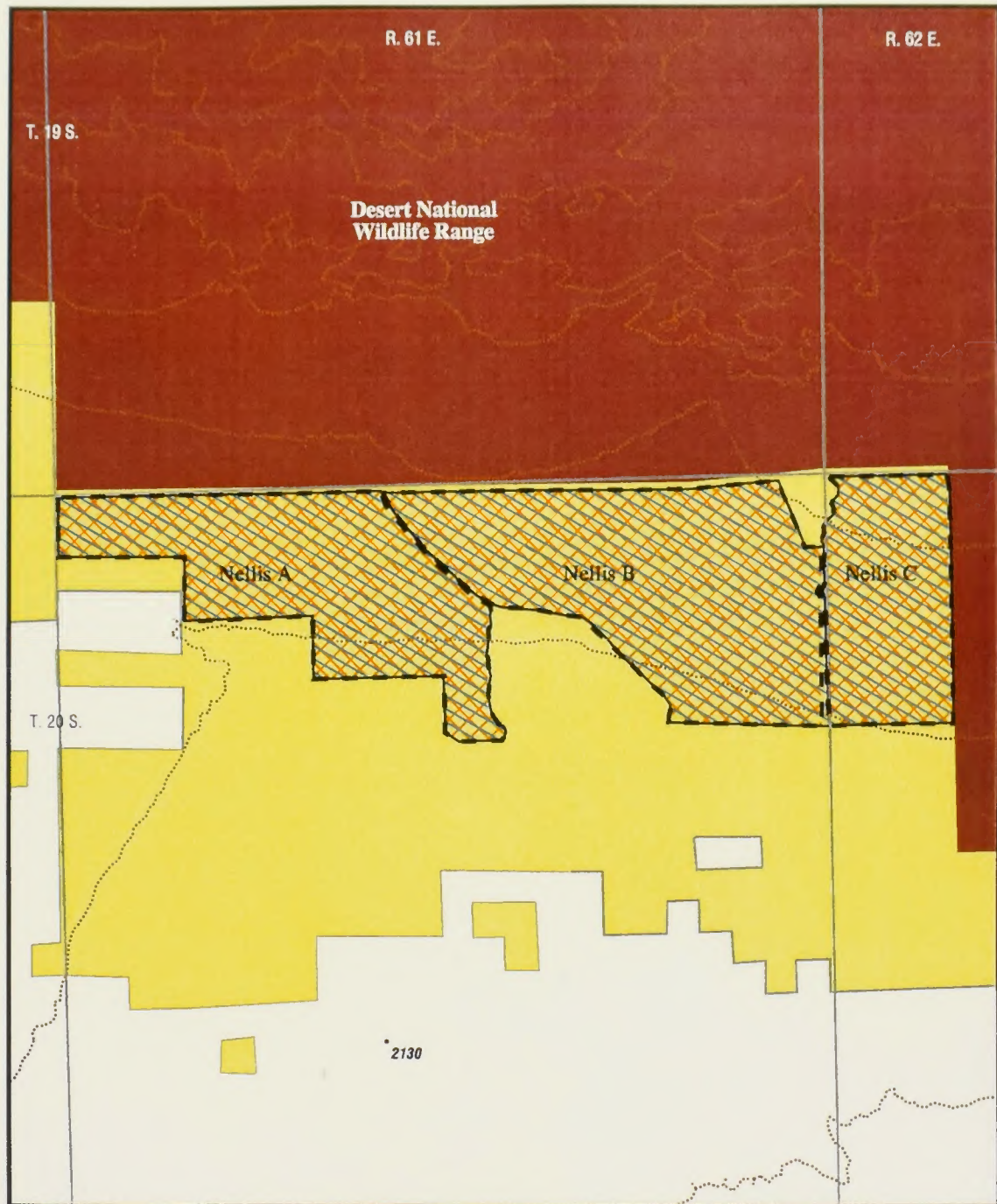
NO MINING CLAIMS ON THIS MAP

-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable







Nellis A B C Wilderness Study Area MINERAL POTENTIAL





1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

Mineral Potential

 Medium - Gold, Silver, Lead, Zinc, Oil, Gas

-  BLM
-  Private Land
-  Other Agency

-  Wilderness Study Area Boundary
-  Recommended Non-Suitable



VIRGIN MOUNTAIN INSTANT STUDY AREA

1. THE STUDY AREA - 6,560 acres

Virgin Mountain Instant Study Area (ISA) is located approximately 4 miles south of Mesquite, Nevada, in a portion of the Virgin Mountains. The ISA boundary is the same as the Virgin Mountain Natural Area which encompasses 6,560 acres of BLM land.

The western boundary of the ISA extends along the Section line from the northwest corner of Section 24 to the southwest corner of Section 25, T.15S., R.70E. The southern boundary extends along the Section lines from the southwest corner of Section 25, T.15S., R.70E. to the southeast corner of Section 27, T.15S., R.71E. The eastern boundary extends along the Nevada/Arizona State line from the southeast corner of Section 27 to the northeast corner of Section 22, T.15S., R.71E. The northern boundary bares west from the northeast corner of Section 22 to the northwest corner of Section 21, T.15S., R.71E. then north one-quarter mile to the northeast corner of the south one-half of the south one-half of Section 17, T.15S., R.71E. The northern boundary then continues west to the northwest corner of the south one-half of the south one-half of Section 17, T.15S., R.71E. then south to the northwest corner of Section 20, T.15S., R.71E. The northern boundary then bares west from the northwest corner of Section 20, T.15S., R.71E. to the northwest corner of Section 24, T.15S., R.70E.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 6,560 acres recommended for nonwilderness

The recommendation for this ISA is to not designate it wilderness but to release all 6,560 acres for uses other than wilderness, primarily because of a lack of wilderness character.

3. WILDERNESS CHARACTERISTICS

A. Naturalness: The area does not appear natural due to mining related activity, access roads, ways, trails, and extensive range improvements in the form of cattle guards, earthen dams, pipelines, and water troughs. These intrusions tend to dominate the area. Although this area appears to lack wilderness character, it should be looked at as a possible Area of Critical Environmental Concern (ACEC).

B. Solitude: The topography consists of steep canyon walls, ridges, and jagged rock outcrops at the highest elevations. These characteristics offer areas of outstanding screening properties. A wide variety of vegetative species including creosote, black brush, yucca species, oak species, manzanita, pinyon pine, juniper, ponderosa pine, white fir, Arizona cypress, and Douglas fir can be found throughout the study area. Where height and density is sufficient to provide the necessary screening, outstanding opportunities for solitude can be found.

C. Primitive and Unconfined Recreation: The ISA provides opportunities for hiking, backpacking, horseback riding, hunting, nature studies, camping and sightseeing. Traveling from the lower elevations to the top of the Virgin Mountains gives the hiker an opportunity to experience a variety of environments, topographic features, scenic views, and physical challenges. Excellent scenic views, both within the ISA and panoramas of the outlying country, are provided. The sweeping panorama from the top of the Virgin Peak Ridge provides a magnificent view of the outlying deserts and mountains.

D. Special Features: The area contains signs of early man in the form of lithic scatter, shelter caves, petroglyphs, and campsites. Ecological, geological, and other features of scientific, educational, scenic, or historical value can be found. The scenic Virgin Peak Ridge, reaching an elevation of 6,650 feet is characterized by pinyon/juniper forests, exposed rock formations, rugged topography, and springs.

4. MANAGEABILITY

Due to its location, the study area is capable of being managed as wilderness. Because the perimeter of the ISA is located on Section lines, the boundary can not be easily identified.

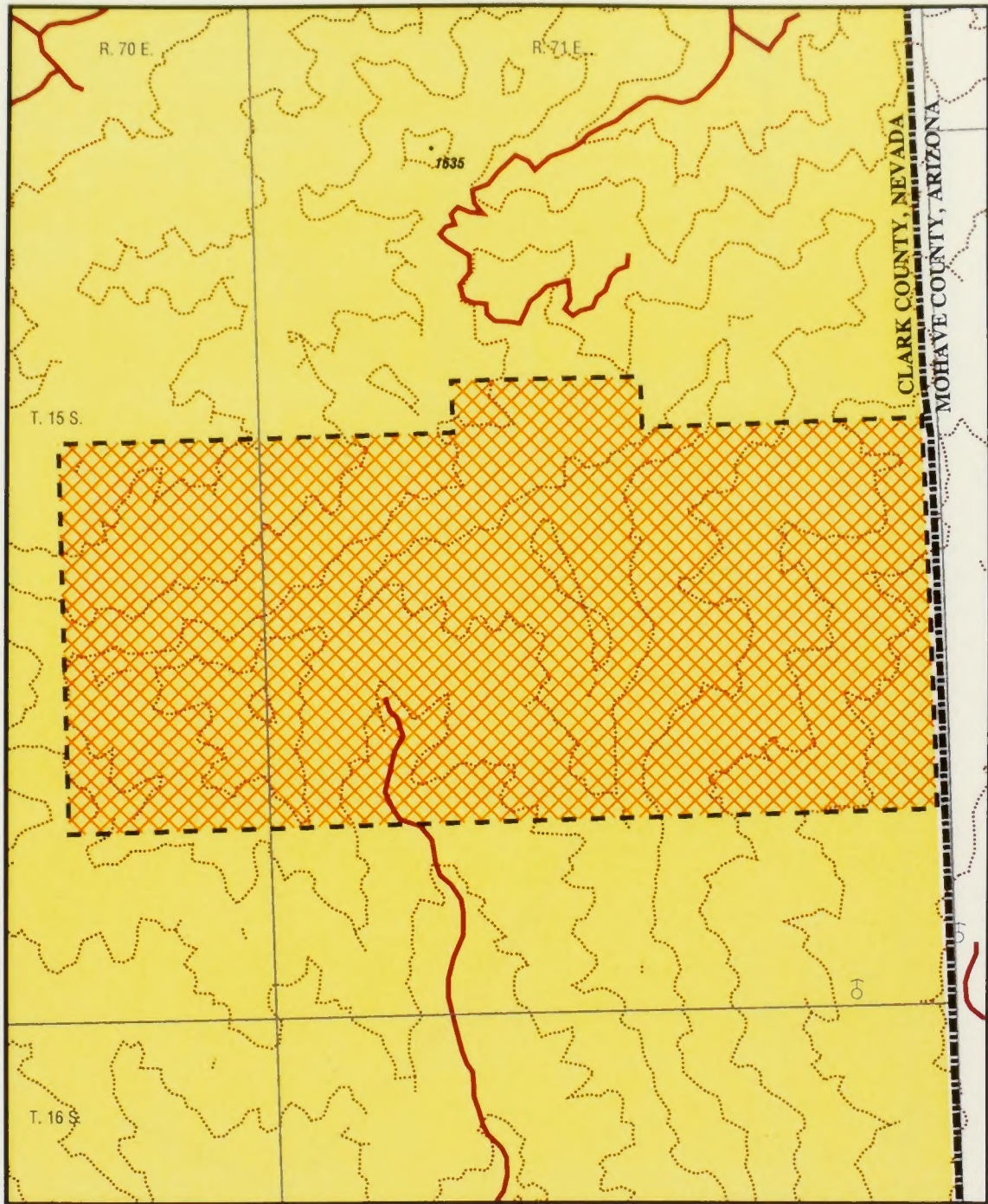
5. ENERGY AND MINERAL RESOURCE VALUES

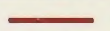

6. SUMMARY OF ISA SPECIFIC COMMENTS

Of the 11 comment letters received, 4 supported designation of the Virgin Mountains ISA as wilderness and 7 were opposed to designation. The primary reason for opposition to wilderness designation was interference with mineral development.




Virgin Mountain Instant Study Area ISA BOUNDARIES AND LAND OWNERSHIP



 Road
 Spring

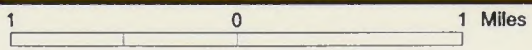
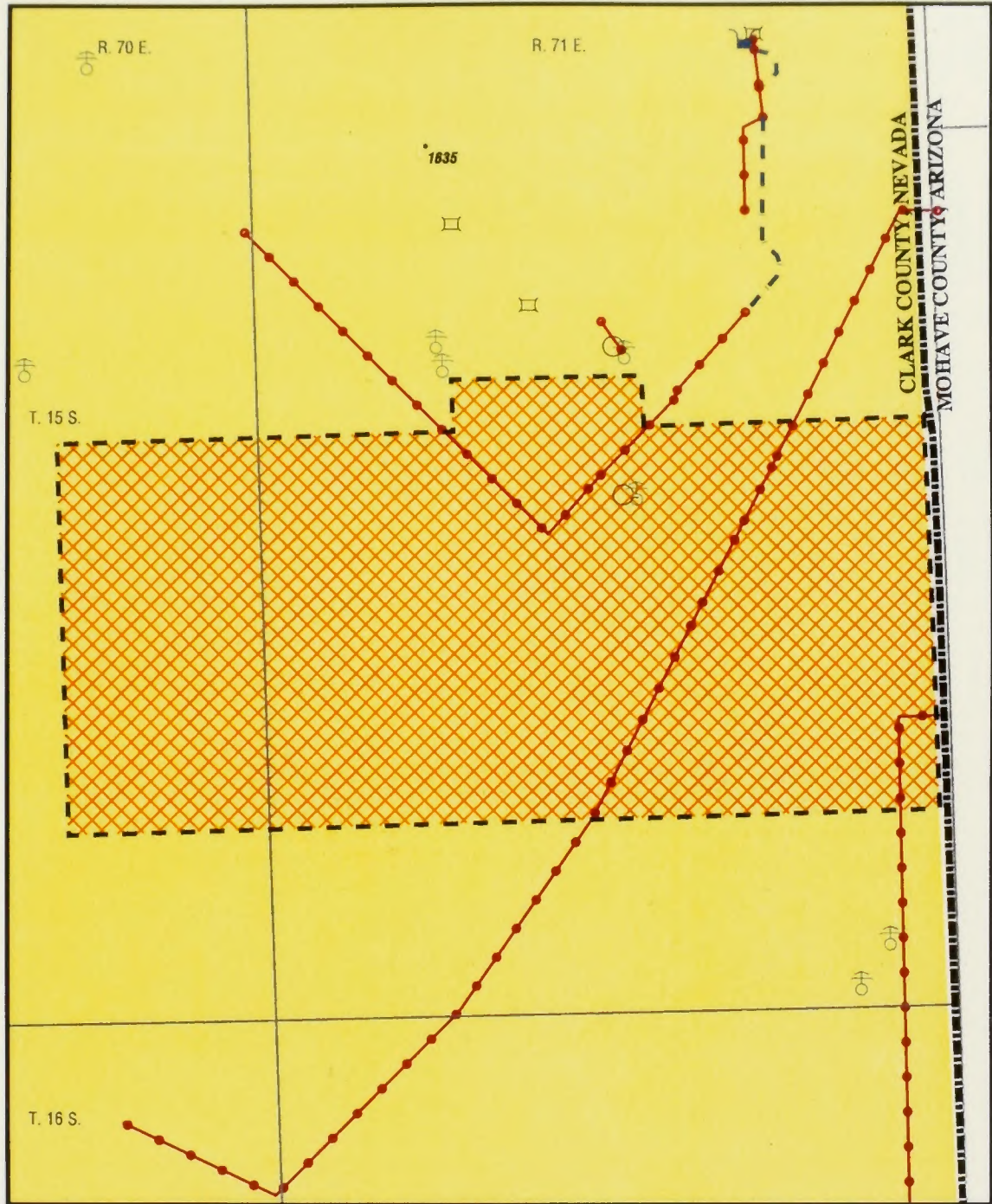
1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

 BLM
 Private Land

-- Instant Study Area Boundary
 Instant Study Area



Virgin Mountain Instant Study Area DEVELOPMENTS AND DISTURBANCES



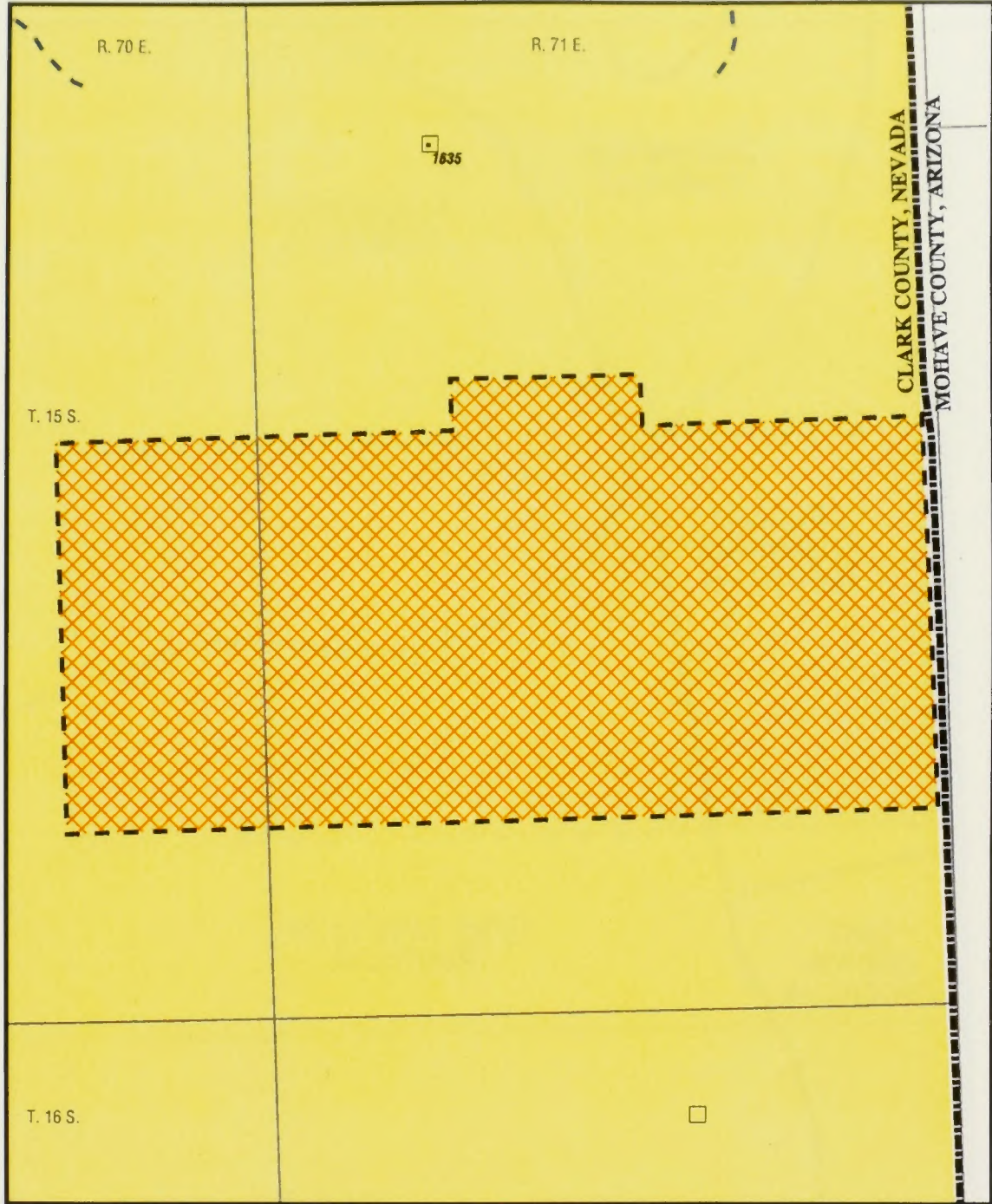
- ⊕ Dev. Spring
- Corral
- ⊖ Trough
- ⊠ Cattleguard
- - - Pipeline
- Fence

- BLM
- Private Land

- - Instant Study Area Boundary
- ⊗ Instant Study Area





Virgin Mountain Instant Study Area RIGHTS-OF-WAY



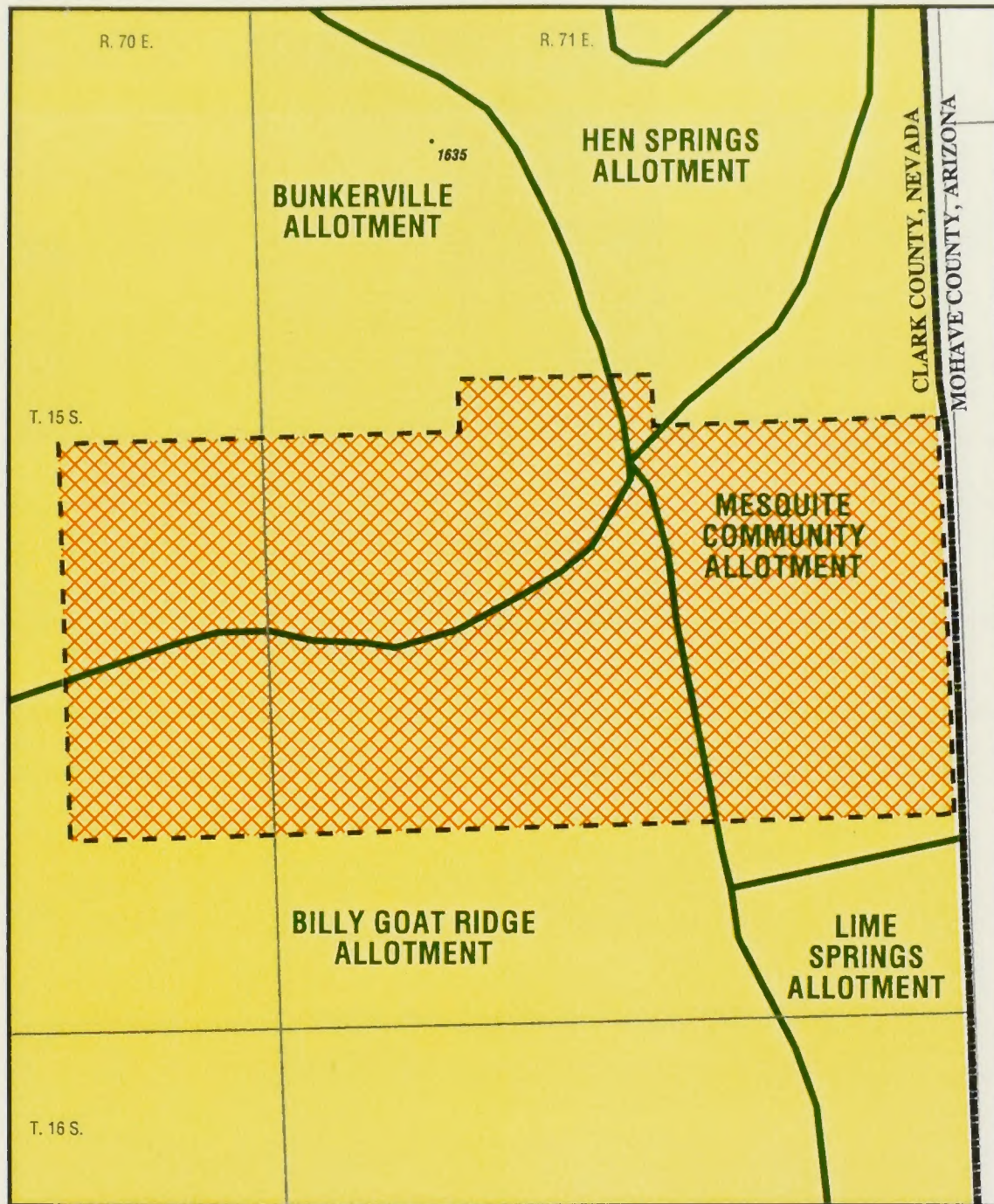
1 0 1 Miles

 BLM
 Private Land

 Communication Site
- - - Pipeline
- - Instant Study Area Boundary
 Instant Study Area



Virgin Mountain Instant Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



Federally Listed
Threatened
and
Endangered
Species

● Observation Site
NONE ON THIS MAP

■ BLM
□ Private Land

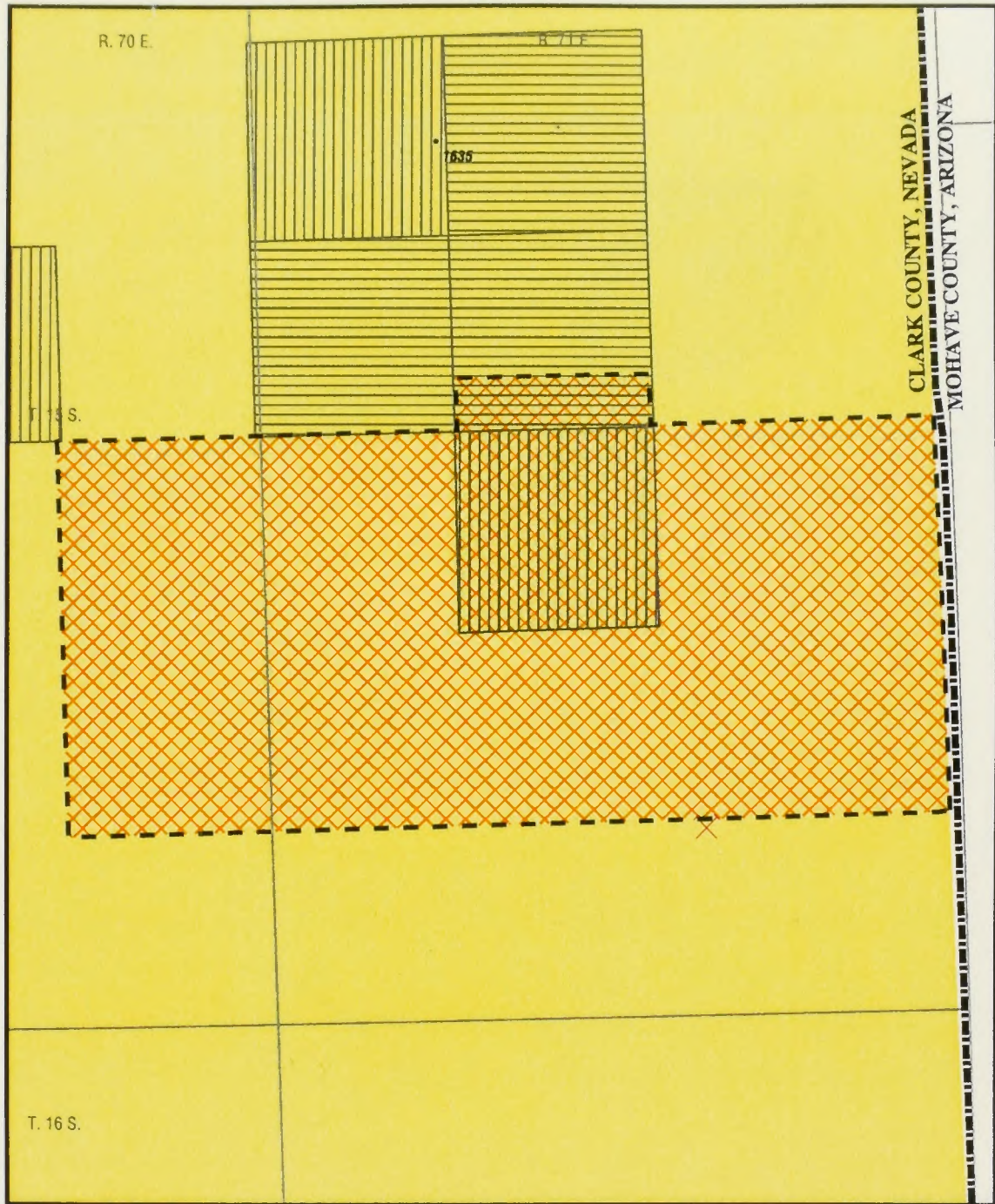
NO HMA ON THIS MAP


■ Allotment
Boundary

- - Instant Study Area Boundary
■ Instant Study Area






Virgin Mountain Instant Study Area MINING CLAIM DENSITY AND OPERATIONS





 Mining Operations 1 0 1 Miles

Mining Claim Density - 3/97

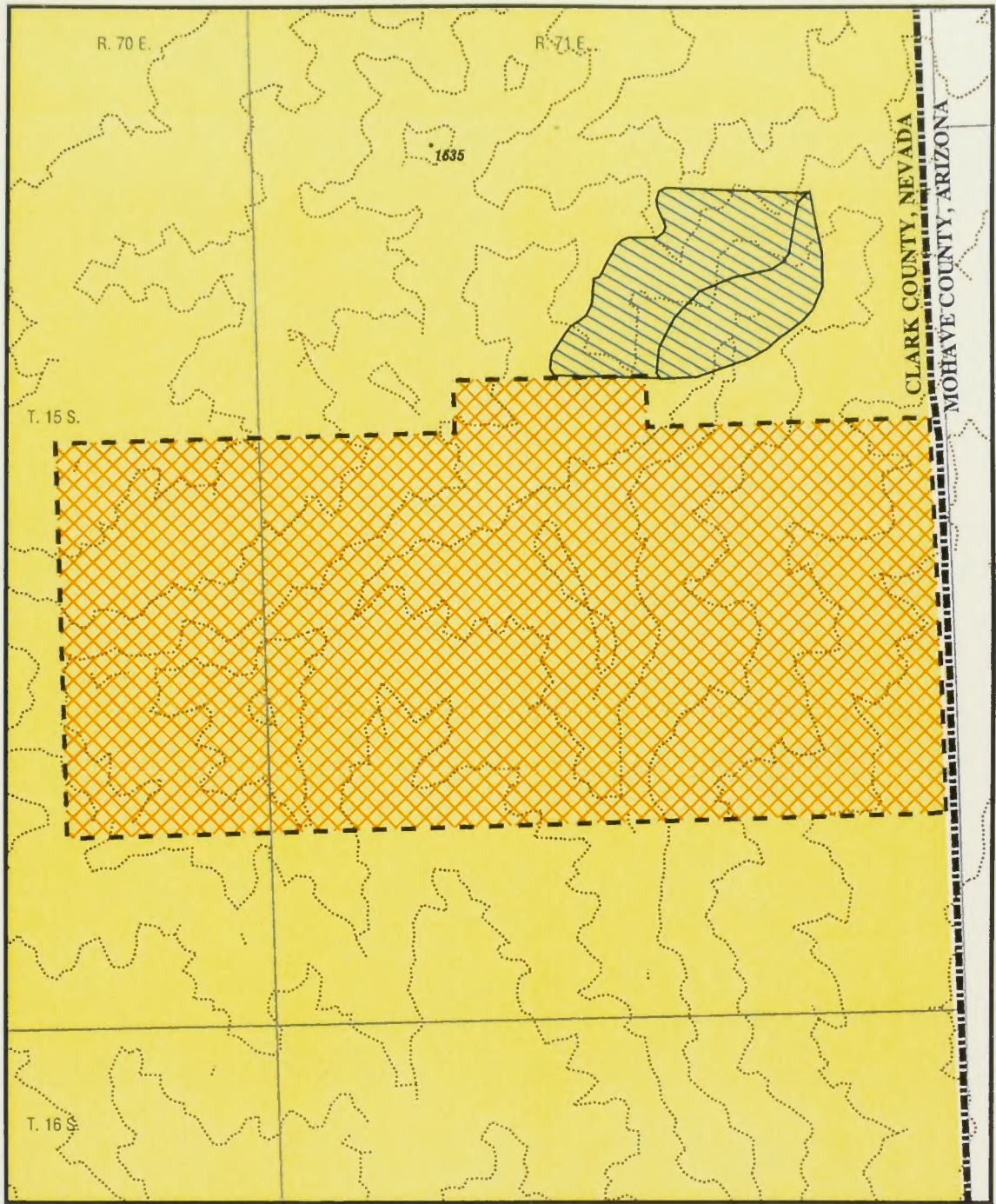
-  1-5 Claims
-  6-35 Claims
-  36 or more Claims

-  BLM
-  Private Land






-  Instant Study Area Boundary
-  Instant Study Area



Virgin Mountain Instant Study Area MINERAL POTENTIAL



1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

- Mineral Potential**
-  **Medium - Tungsten**
 -  **Instant Study Area Boundary**
 -  **Instant Study Area**
-  **BLM**
-  **Private Land**



SUNRISE MOUNTAIN INSTANT STUDY AREA

1. THE STUDY AREA - 29,475 acres

Sunrise Mountain Instant Study Area (ISA) is located on the east side of the Las Vegas Valley and includes Frenchman and Sunrise Mountains. Also included inside the ISA boundary is the Sunrise Mountain Natural Area (SMNA). The ISA contains approximately 29,475 acres. Of this, 28,665 acres is BLM lands, 560 acres is for water and power resources and 250 acres are private holdings. The 10,240 acre SMNA is contained within the boundary of the ISA.

The entire ISA boundary follows Section and Subsection lines. The west boundary runs along the eastern side of Sections 14, 23, 26 of T.20S., R.62E. with a jog around private holdings in Section 35 and then continues along the eastern side of Section 1, T.21S., R.62E. The boundary then heads in a northeasterly direction on Subsection lines within Section 1, T.21S., R.62E. and then in a northern direction along the western side of Section 6, T.21S., R.63E., and Sections 31 and 30 of T.20S., R.63E. The boundary then heads due east along the southern side of Sections 19, 20, 21 and 22 of T.20S., R.63E, jogs south around Section 26, T.20S., R.63E. and then along the southern side of Section 24, T.20S., R.63E. From this point the boundary heads due north along the eastern side of Section 24, T.20S., R.63E. and then due west along the northern side of Sections 13, 14, 15 and 16, T.20S., R.63E. The boundary line then heads due north along the west side of Section 16, T.20S., R.63E., jogs west along the southern side of Section 7, T.20S., R.63E. to the middle of that Section and then heads north to the bottom of Section 5, T.20S., R.63E. where it heads due west along the southern side of Sections 5 and 6, T.20S., R.63E. The boundary then stairsteps in a southwest direction through Section 12, T.20S., R.62E.

2. RECOMMENDATION AND RATIONALE - 0 acres recommended for wilderness 29,475 acres recommended for nonwilderness

The recommendation for this WSA is to not designate it wilderness but to release all 29,475 acres for uses other than wilderness, primarily because of a lack of wilderness character.

3. WILDERNESS CHARACTERISTICS

A. **Naturalness:** A major paved highway accessing the Lake Mead National Recreation Area, numerous roads, powerlines, communication sites, and various structures clearly leave the unit in an unnatural condition

B. **Solitude:** The Sunrise Mountain ISA clearly does not offer outstanding opportunities for solitude.

C. **Primitive and Unconfined Recreation:** The Sunrise Mountain ISA clearly does not offer outstanding opportunities for primitive and unconfined recreation.

D. **Special Features:** Gypsum Cave, located in the northeastern corner of the ISA, contains some of the earliest evidence of man in Nevada and the western United States.

A Threatened and Endangered (T&E) plant, Arctomecon californica or bearpoppy, is located in the northeastern portion of the ISA and the eastern end of the SMNA. It typically prefers gypsum soils, which are common to this area. Another T&E plant, Agave utahensis var. eborispina or century plant, is believed to grow at the central western edge of the SMNA.

4. MANAGEABILITY

Because of easy accessibility of most of the area, and the difficulty with identifying the boundary, this ISA would be very difficult to manage as wilderness. The entire ISA boundary follows Section and Subsection lines.

5. ENERGY AND MINERAL RESOURCE VALUES

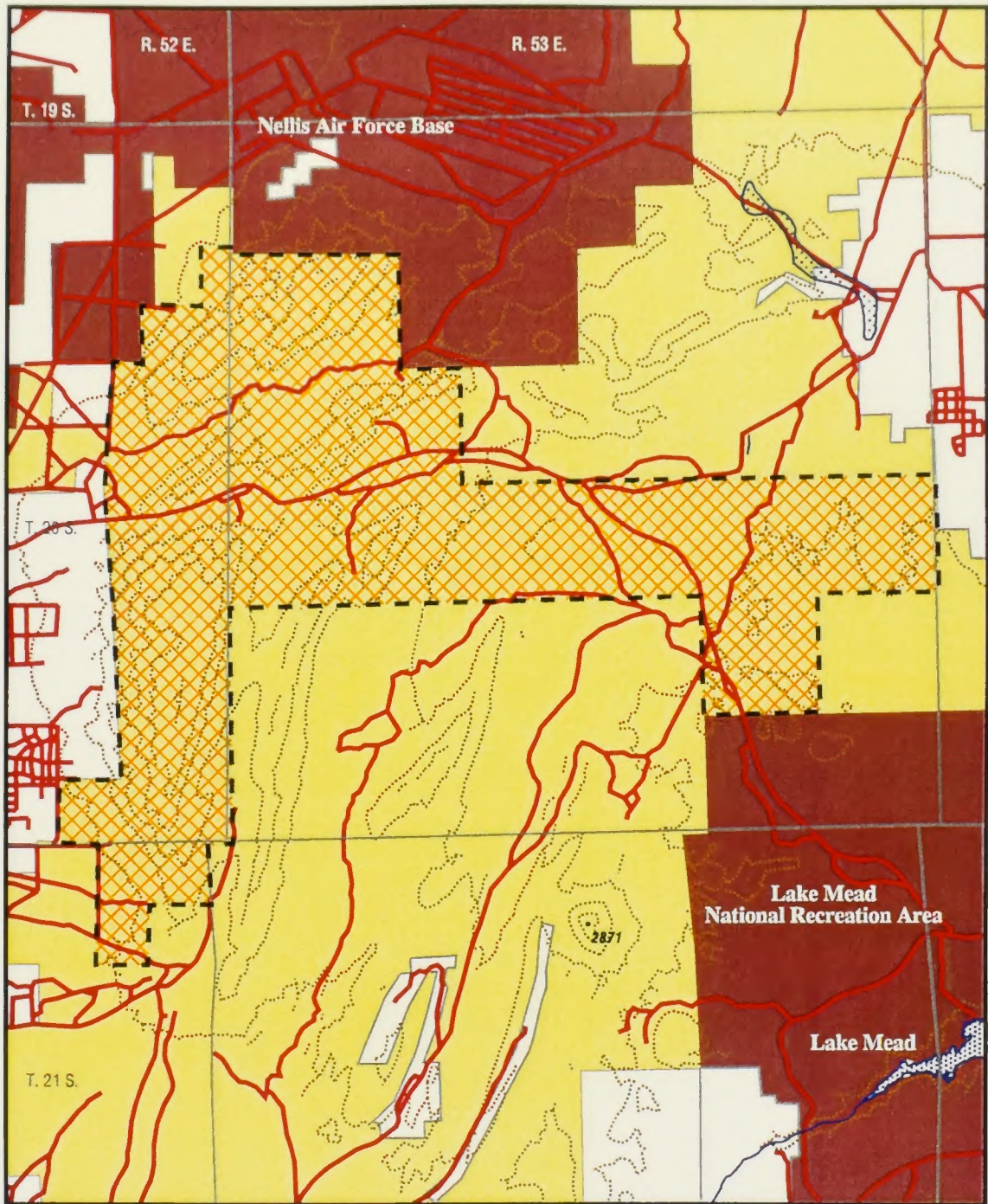
Within the Sunrise Mountain ISA, there are several areas that are used for rockhounding. Within these areas agate, jasper, and amethystine can be found. The ISA also contains 82 lode claims and 7,140 acres of placer claims.

6. SUMMARY OF ISA SPECIFIC COMMENTS

This area was evaluated with other units in the Statewide Initial Wilderness Inventory. During the public comment period, news releases and a Federal Register Notice were used to inform the various publics of the review period, the opportunity for comment, and locations of meetings. The story was carried widely in Southern Nevada Newspapers. Several local radio stations and one TV station covered the comment period. Both the Lincoln and Esmeralda County Commissions as well as the Lincoln County Conservation District Board were briefed. Several local organizations such as the Southern Nevada Conservation Council, Nevada Public Land Users Association, and the Sierra Club were briefed. An open house was conducted at the Las Vegas District Office relating to the District recommendations, and Statewide summary meetings were also conducted in Las Vegas, Reno, Battle Mountain and Ely.

The only comment received on the Sunrise Mountain ISA noted that resource values other than wilderness are significant in the area.

Sunrise Mountain Instant Study Area ISA BOUNDARIES AND LAND OWNERSHIP



— Road

1 0 1 Miles

CONTOUR INTERVAL 200 METERS (656 FEET)

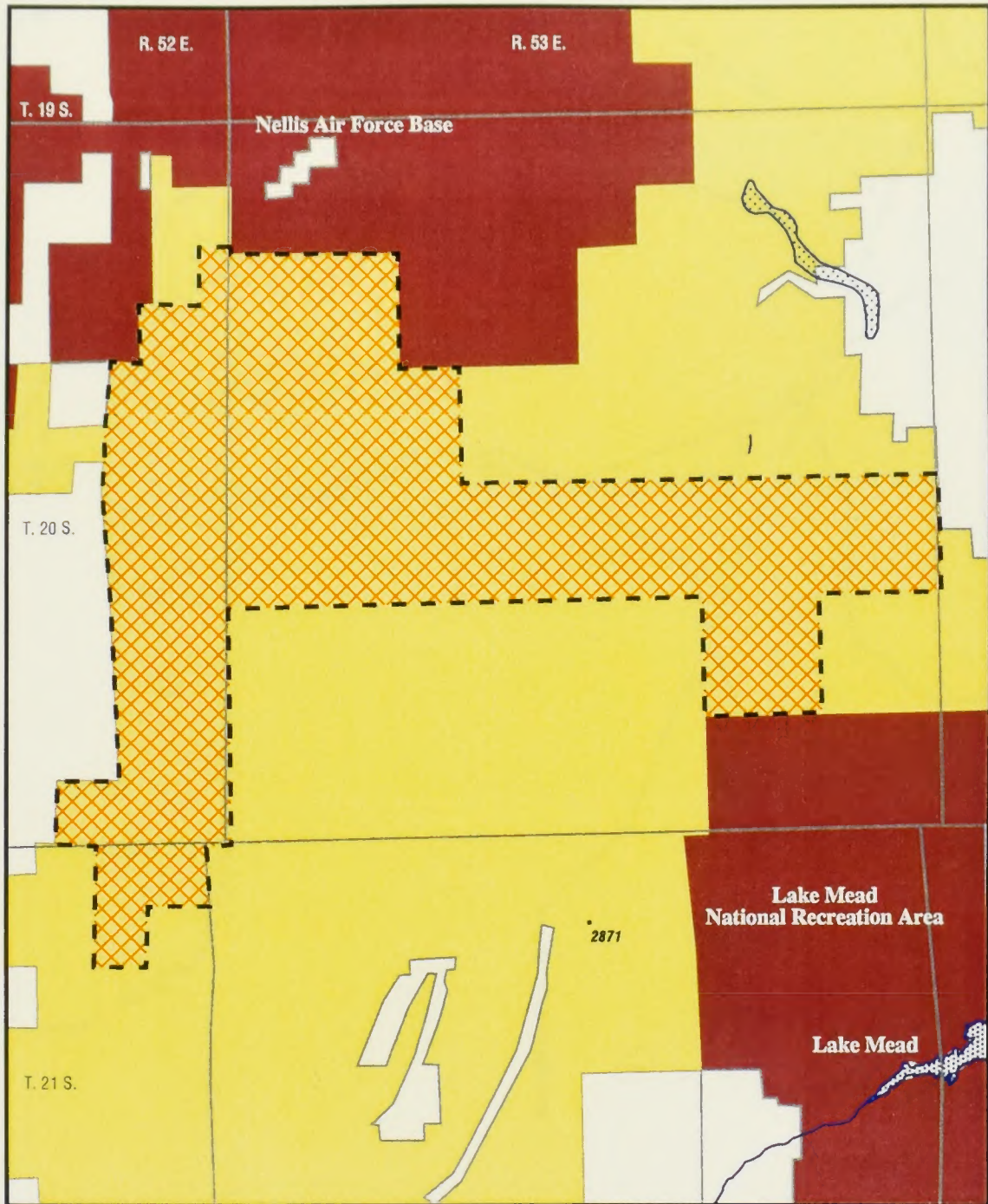
☞ Lake
☞ Wash

■ BLM
□ Private Land
■ Other Agency




--- Instant Study Area Boundary
☒ Instant Study Area





Sunrise Mountain Instant Study Area DEVELOPMENTS AND DISTURBANCES



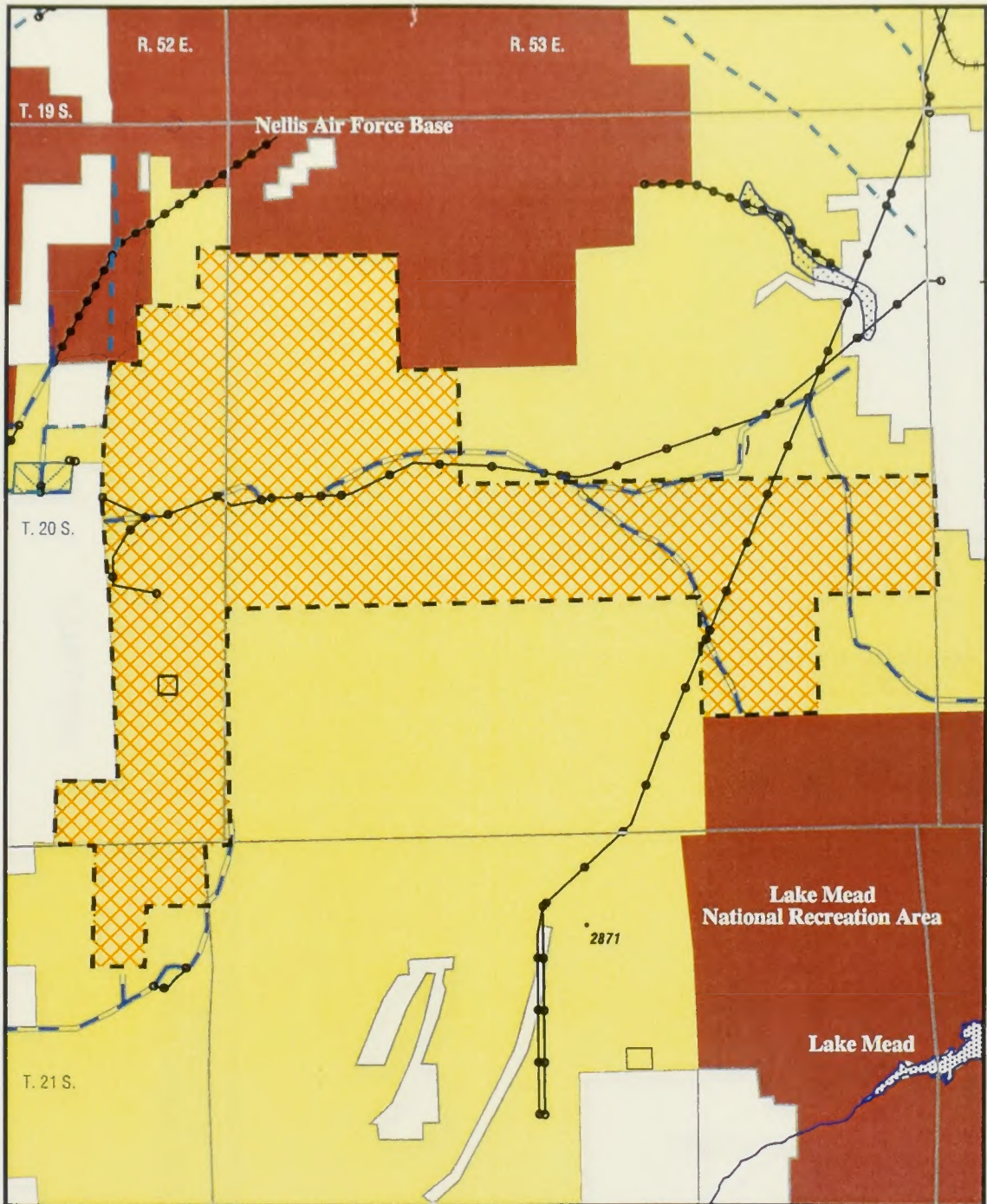
NO DEVELOPMENTS OR DISTURBANCES ON THIS MAP

-  BLM
-  Private Land
-  Other Agency

-  Instant Study Area Boundary
-  Instant Study Area



Sunrise Mountain Instant Study Area RIGHTS-OF-WAY



1 0 1 Miles

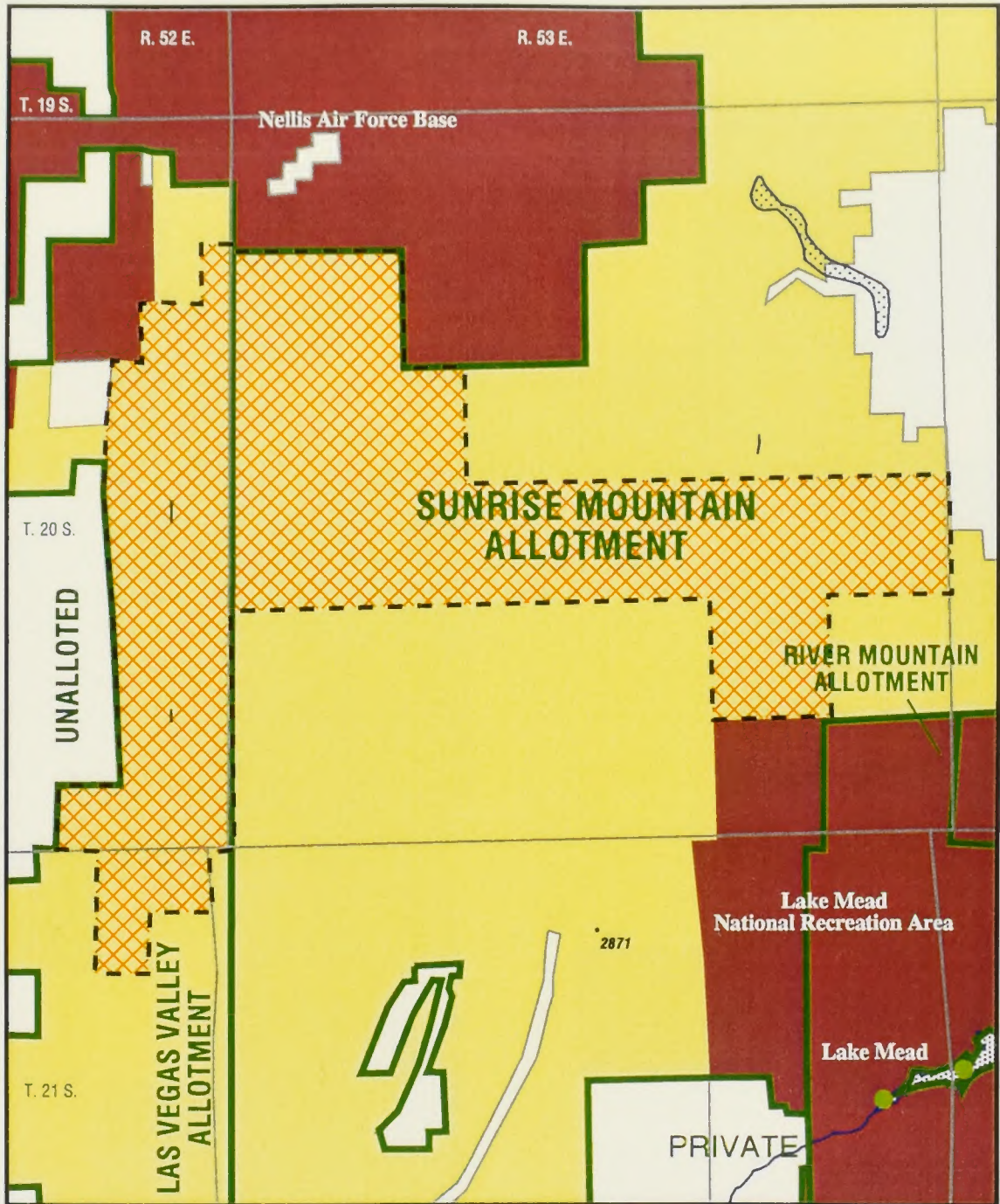
- BLM
- Private Land
- Other Agency

- Pipeline
- Road
- Railroad
- Powerline
- Telephone Line
- Communication Site
- Flood Control
- Reservoir
- Well
- Instant Study Area Boundary
- Instant Study Area

Lake Wash



Sunrise Mountain Instant Study Area ALLOTMENT AND HMA BOUNDARIES, T&E OCCURRENCES



Federally Listed
Threatened
and
Endangered
Species

● Observation Site
- Razorback Sucker,
Least Tern

■ BLM
□ Private Land
■ Other Agency

NO HMA ON THIS MAP

↗ Allotment
Boundary

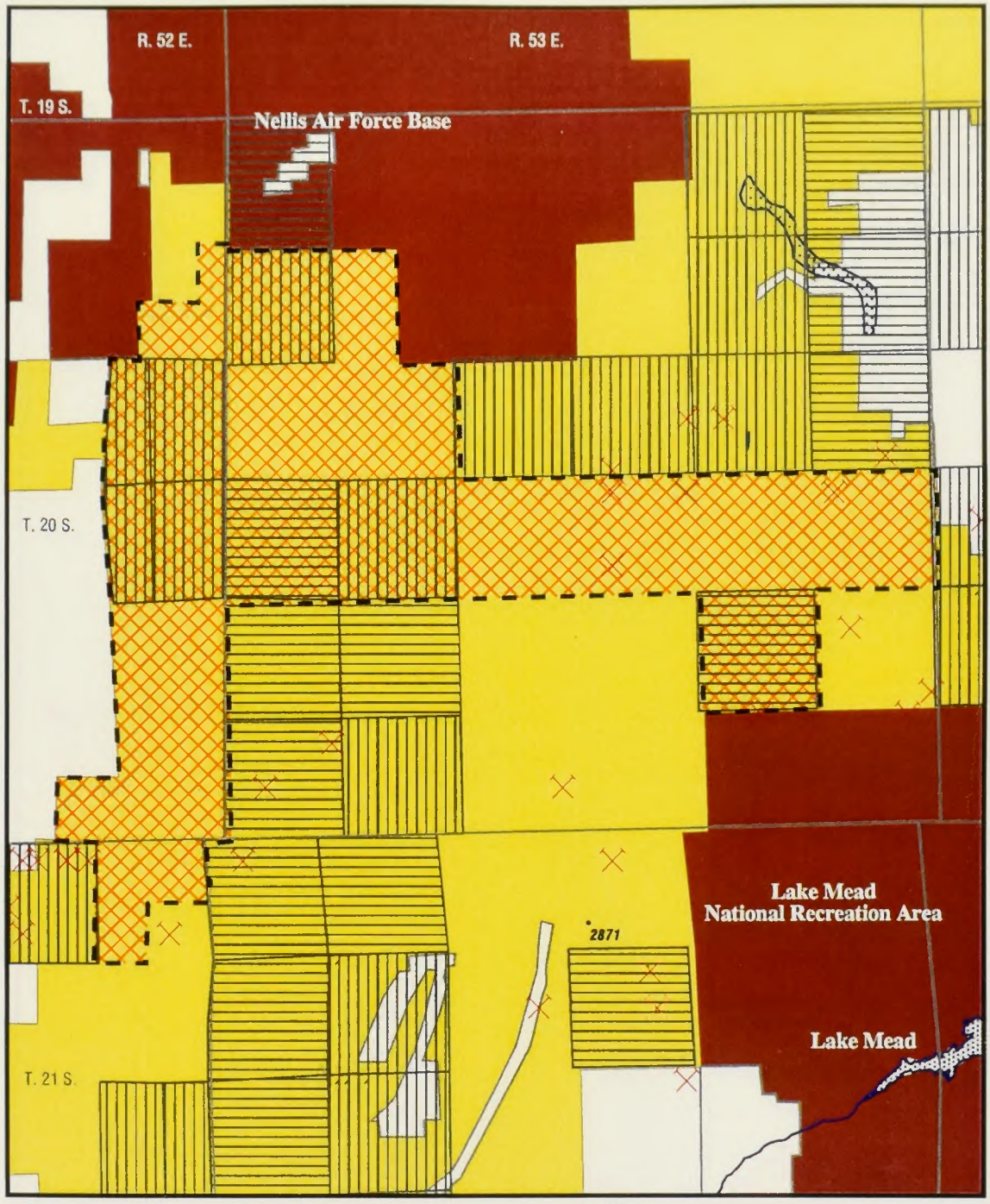
- - Instant Study Area Boundary


⊗ Instant Study Area

☁ Lake
Wash




Sunrise Mountain Instant Study Area MINING CLAIM DENSITY AND OPERATIONS









 Mining Operations



1 0 1 Miles

 Lake Wash

Mining Claim Density - 3/97

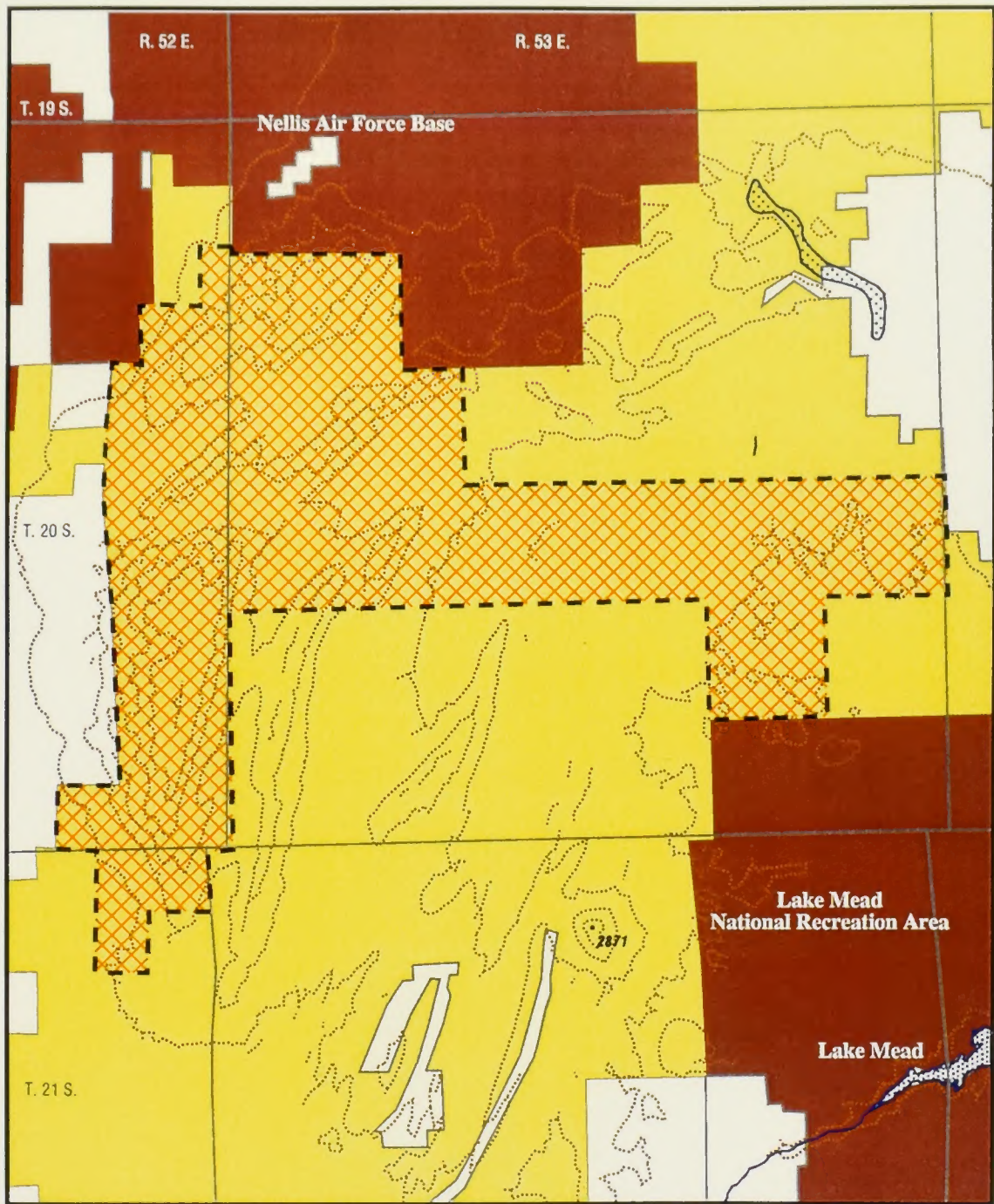
-  1-5 Claims
-  6-35 Claims
-  36 or more Claims

-  BLM
-  Private Land
-  Other Agency

-  Instant Study Area Boundary
-  Instant Study Area






Sunrise Mountain Instant Study Area MINERAL POTENTIAL





1 0 1 Miles
CONTOUR INTERVAL 200 METERS (656 FEET)

 Lake Wash
 Lake Mead

NO HIGH OR MEDIUM MINERAL POTENTIAL IS IDENTIFIED ON THIS MAP.

 BLM
 Private Land
 Other Agency

 Instant Study Area Boundary
 Instant Study Area



