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APPENDIX A

Fluid Leaseable Minerals Operating Procedures

Supplemental Program Guidance for Energy and Mineral Resources is contained in BLM Manual Section 1624. BLM Manual Section 1624.21.A. (Fluid Minerals, Determinations, Resource Management Planning) states,

"The following fluid mineral resource related determinations are required in every resource management plan unless one of the exceptions discussed in BLM Manual Section 1620.06 applies."

None of those exceptions apply.

Management Direction

Since all fluid (energy) mineral leases are issued by the Nevada State Office (NSO), the Division of Mineral Resources (NV-920) within NSO will provide appropriate management direction in accordance with BLM Manual Section 1624.2 (Fluid Minerals). BLM Manual Section 1624.21.A.2. (Fluid Minerals, Determinations, Resource Management Planning, Management Direction) states,

"Provide management direction on the following:"

Existing Leases

BLM Manual Section 1624.21.A.2.a. (Fluid Minerals, Determinations, Resource Management Planning, Management Direction, Existing Leases) states,

"Identify the extent to which areas currently under lease will be open when leases expire. Note that existing leases may contain stipulations that are either too restrictive or not restrictive enough in terms of the goals and objectives established in the plan. Although lease terms cannot be modified by the RMP, the plan should establish the basis for working with existing leaseholders in the event that voluntary conformance can be obtained."

Lease Stipulations

BLM Manual Section 1624.21.A.2.b. (Fluid Minerals, Determinations, Resource Management Planning, Management Direction, Lease Stipulations) states,

"Identify the lease stipulations that will be employed in areas that are open to leasing. A determination that lands are available for leasing represents a commitment to allow surface use for development under standard lease terms and conditions unless stipulations constraining development are attached to leases. In some areas, even a single well might cause unacceptable impacts and surface use would have to be prohibited or severely constrained. In other areas a single well might not cause unacceptable impacts but, at some greater level of activity, cumulative impacts could become a matter of concern. The RMP should include a list of the stipulations that will be used to prevent unacceptable impacts in either case. The plan should state that while the actual wording of the stipulations may be adjusted at the time of leasing, the protection standards described will be maintained."

Stipulation Waivers

BLM Manual Section 1624.21.A.2.c. (Fluid Minerals, Determinations, Resource Management Planning, Management Direction, Stipulation Waivers) states,

"In accordance with BLM Manual Section 3101, stipulations are to include a provision for waiver. The RMP should describe the circumstances within which waivers would be considered. The RMP should also identify any stipulations that will not be waived without further public review."

Geophysical Exploration

BLM Manual Section 1624.21.A.2.d. (Fluid Minerals, Determinations, Resource Management Planning, Management Direction, Geophysical Exploration) states,

"Identify whether the planning determinations concerning leasing and development also apply to geophysical exploration. Major differences should be described."

Constraints

1. All activities will be subject to the regulations of 43 CFR 3150 as well as any other special stipulations which the Authorized Officer deems appropriate.
2. All applicants for fluid (energy) leasable mineral actions must submit plans for all proposed activities, to include site rehabilitation, to the Authorized Officer prior to issuance of any authorization.
3. All applicants must post a bond for the purposes of insuring reclamation and compliance with environmental terms and conditions.
4. All activities must comply with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act.

APPENDIX B

LOCATABLE MINERALS

Resource Management Planning

Supplemental Program Guidance for Energy and Mineral Resources is contained in BLM Manual Section 1624. BLM Manual Section 1624.31.A. (Locatable Minerals, Determinations, Resource Management Planning) states,

"The following locatable minerals related determinations are required in every resource management plan unless one of the exceptions discussed in BLM Manual Section 1620.06 applies."

None of those exceptions apply.

Management Direction

Since all locatable mineral actions are monitored by the Las Vegas District Office (LVDO), the Stateline Resource Area (NV-054) within LVDO will provide appropriate management direction in accordance with BLM Manual Section 1624.3 (Locatable Minerals). BLM Manual Section 1624.31.A.2. (Locatable Minerals, Determinations, Resource Management Planning, Management Direction) states,

"In areas which will be open to the operation of the mining laws, identify any terms, conditions, or other special considerations, if any, that may constrain mining activities. Such constraints may apply to major portions of the resource area, to specific areas within the resource area, or to general types of operations conducted under the mining laws. Where possible, the boundaries of these constraint areas should be described in the text and portrayed on a map. The identification of project or site-specific constraints should usually be deferred to activity or site-specific planning."

Constraints

1. All activities will be subject to the constraints listed below as well as any other special stipulations which the Authorized Officer deems appropriate.
2. All applicants for locatable mineral actions requiring an approved plan of operations must submit plans for all proposed activities, to include site rehabilitation, to the Authorized Officer prior to all of the following:
 - a. Environmental review of any proposed activity;
 - b. Issuance of any letter of authorization;
 - c. Approval of any plan of operations.
3. For all plans of operations, a site specific environmental assessment, exploration/mining plan, and reclamation plan must be prepared by the operator and then be approved by the Authorized Officer.
4. All operators must post a bond for the purpose of insuring reclamation.
5. All activities must comply with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act.

6. In accordance with BLM Manual Section 3060.14 (Mineral Reports -- Preparation and Review, Mineral Land (Mineral-in-Character)), all lands with a level of potential of "M" or "H" and a level of certainty of "D" (see BLM Manual Section 3031 (Energy and Mineral Resource Assessment), Illustration 3) for the occurrence of locatable minerals will be regarded as mineral lands (mineral-in-character). All lands that are mineral-in-character for locatable minerals are not subject to entry under the agricultural land laws.
7. "Claimant" means any person, corporation, partnership, association, or other entity which holds a Claim and/or operates without a Claim under the authority of the mining laws within the Stateline Resource Area.
8. "Operator" means the Claimant, its contractors, subcontractors, lessees, assignees, and/or the employees of any of them. All Claimants may operate Claims under any name they choose, however, related business ventures will be viewed as the same Operator for the purpose of enforcing all terms and conditions.
9. "Claim" means any unpatented lode mining claim, placer mining claim, mill site, or tunnel site located under the authority of the mining laws within the Stateline Resource Area, whether or not the surface estate is Federally owned.
10. "Mine" means the site of any Claim for a locatable mineral situated on Federal mineral estate within the Stateline Resource Area, whether or not the surface estate is Federally owned, as well as all authorized routes of ingress to the site and egress from it.
11. "POO" means any properly approved plan of operations within the Stateline Resource Area, whether or not the surface estate is Federally owned.
12. The Operator of a Mine will conform to all Federal and State laws and regulations. Copies of all permits, variances, easements, etc. issued to the Operator must be submitted to the Authorized Officer within ten (10) days of their issuance.
13. If the Operator violates any term or condition herein described, the Authorized Officer will issue a notice of noncompliance, specifying in what respects the Operator has failed to comply and the actions required to bring the Operator into compliance. If the Operator fails to remedy all violations within fifteen (15) days after receipt of the notice of noncompliance, the Authorized Officer may take appropriate action to obtain a court order enjoining the Operator from the continuation of such operations until such time as all terms and conditions have been met.
14. The Operator shall be liable for any damages suffered, costs, and/or expenses incurred by the United States arising out of any operations under any Authorization whenever such damages, costs, and/or expenses result from any unauthorized, wrongful, or negligent act of the Operator.
15. POOs for locatable minerals shall not be transferred, assigned, traded, sold, or disposed of in any other fashion.
16. Upon termination of the POO, any improvements such as road surfacing, culverts, and bridges which have become a permanent part of a public road shall not be removed. However, the Operator will remove and dispose of all waste in an authorized disposal site. The term "waste", as used herein, includes, but is not limited to, garbage, trash, solid waste, human waste, petroleum products, back haul debris, and equipment. No waste or any other material will be buried in the Mine.

17. The hauling any kind of waste and/or debris into the Mine or onto adjacent public lands is prohibited. The Operator is required to keep the Mine clear of waste and debris and to dispose of it in a properly authorized disposal site. The Operator will be liable for all costs to remove any waste and/or debris.
18. The Operator will not supply water from a Mine to livestock unless a Section 4 permit under the Taylor Grazing Act is approved by the Authorized Officer.
19. The Operator will avoid the disturbance or removal of section corners, bench marks, monuments, or other types of survey markers. Where excavation or road building may require removal or relocation, the Operator will contact the Authorized Officer for written instructions prior to such removal or relocation.
20. When antiquities or other cultural objects of historic or scientific interest, including, but not limited to, historic or prehistoric ruins, artifacts, and vertebrate or invertebrate fossils are discovered, the Operator will immediately cease all operations. The cultural items will be left intact and the Operator will immediately notify the Authorized Officer in order that the cultural resources can be inspected, documented, and/or salvaged.
21. Prior to starting operations each day on any Mine which has not been totally enclosed by tortoise proof fencing and cattle guards, the Operator will make an inspection to determine if any desert tortoises are present. The inspection will be conducted as follows:
 - a. Around and under all equipment;
 - b. In and around all disturbed areas to include stockpiles and reject materials areas;
 - c. In and around all routes of ingress and egress;
 - d. In and around all other areas where the operation might expand to during that day.

If a tortoise is discovered during this inspection or later in the day, the Operator will immediately cease all operations and will immediately notify the Authorized Officer. The tortoise will be left unharmed and will not be touched. Operations will remain stopped until approval to proceed is granted by the Authorized Officer.

22. Prior to the environmental review of any plans of operation, all Operators must submit both an exploration/mining plan and a reclamation plan to the Authorized Officer. A cultural resources inventory must be submitted for all portions of the Mine that have not been previously inventoried. A biological assessment must be submitted if the Mine is within any known or suspected desert tortoise habitat. The exploration/mining plan and reclamation plan may be combined into one document. Prior to the issuance of any Authorization, both the exploration/mining plan and the reclamation plan must be approved by the Authorized Officer, the cultural resources inventory must be approved by the Nevada State Historic Preservation Office, and the biological assessment must be approved by the U. S. Fish and Wildlife Service. The exploration/mining and reclamation plans shall include, but not be limited to, the following:
 - a. Appropriate maps, or aerial photographs, and cross sections, with a scale no smaller than 1:24,000 (1 inch = 2,000 feet), showing the following:
 - 1) Area encompassed by the proposed Mine;
 - 2) Area to be physically disturbed;
 - 3) Existing or proposed roads, trails, and ways;
 - 4) Locations of existing bodies of surface water;
 - 5) Locations of existing topographic, cultural, and drainage features;
 - 6) Locations of existing and abandoned mines;
 - 7) Locations of shafts, tunnels, pits, waste dumps, and surface facilities;

- 8) Locations of proposed exploration trenches and drill holes;
- 9) Typical structural cross sections;
- 10) Typical mining sequence with appropriate time frames.

b. Descriptions of the following:

- 1) Location of the Mine and description of minerals proposed to be mined;
- 2) All public lands (surface and/or mineral estates) which are expected to be affected by the Mine;
- 3) Existing land uses within and adjacent to the Mine;
- 4) Geology, physiography, hydrology, vegetation, and other relevant physical factors;
- 5) Distribution, abundance, and habitat of fish and wildlife, especially threatened or endangered species;
- 6) Proposed methods of exploration and types of equipment which are expected to be used;
- 7) Quantity of water which is expected to be used;
- 8) Quantity and types of hazardous and/or toxic materials (e.g. explosives, chemicals, petroleum, etc.) which are expected to be used;
- 9) Quantity and types of pollutants which are expected to enter into any receiving waters;
- 10) All expected uses of water, hazardous materials, and toxic materials.
- 11) All drainages into and/or away from the Mine;
- 12) All proposed measures for the isolation, removal, and/or control of toxic materials;
- 13) All proposed measures for the prevention and/or control of the following:
 - a) Fire;
 - b) Air pollution;
 - c) Soil erosion;
 - d) Subsidence;
 - e) Landslides;
 - f) Flooding;
 - g) Water runoff;
 - h) Pollution of surface and/or ground water;
 - i) Damage to fish, wildlife, and/or their habitat;
 - j) On-site and off-site damage to other natural resources and/or public lands (surface and/or mineral estates);
 - k) Hazards to public health and/or safety, including specific actions necessary to meet all applicable laws and regulations.
- 14) All proposed measures for the preservation and protection of other resources, including the following:
 - a) Cultural features;
 - b) Ecological values;
 - c) Natural features;
 - d) Recreational values;
 - e) Scenic values.

c. Statement of proposed operating methods, including the following:

- 1) Description of all proposed roads and vehicular trails;
- 2) Description of equipment, mining methods, mining sequence, production rate, estimated recovery factors, and stripping ratios;
- 3) Locations and acreages of all lands to be affected;
- 4) Sizes and locations of all structures and other facilities which are expected to be constructed;

- 5) Design for the necessary impoundment, treatment, and/or control of all runoff water and/or drainage from all workings, in order to prevent the pollution of receiving waters;
- 6) Proposed method of abandonment in order to protect any unmined recoverable reserves;
- 7) Proposed method to fill in, fence, protect, or close all surface openings, excavations, workings, and wells which the Authorized Officer deems to be a potential hazard to humans or animals;
- 8) Estimated timetable for each phase of the work and for final completion of all activities.

d. Statement of the proposed manner and the schedule for completion of the reclamation of the areas which are planned to be disturbed by the Mine, including the following:

- 1) Appropriate maps or aerial photographs, with a scale no smaller than 1:24,000 (1 inch = 2,000 feet), showing the topography of the Mine upon completion of all mining or related activities;
- 2) Unless modified in writing by the Authorized Officer, the narrative will contain the estimated time schedule and proposed reclamation methods for the grading, backfilling, soil replacement, and revegetation of areas to be affected by the Mine, including the following:
 - a) Measures for backfilling exploration trenches and plugging drill holes;
 - b) Measures for soil preparation, fertilizer application, mulching, and managing topsoil;
 - c) Measures for controlling sediment and overland water flow;
 - d) Measures for shaping, grading, backfilling, soil stabilization, compacting, and contouring the surface;
 - e) Measures for selecting vegetative species and mixtures of shrubs, trees, tree seedlings, grasses, forbs, and/or legumes to be planted;
 - f) Measures for seeding and/or planting grasses, forbs, legumes, trees, and/or shrubs;
 - g) Measures for watering all newly planted grasses, forbs, legumes, trees, and/or shrubs.
 - h) Vegetative species and methods for planting, including the following:
 - (1) Amounts and species of grasses, forbs, and/or legumes per acre;
 - (2) Numbers, species, and spacing of trees, tree seedlings, and/or shrubs;
 - (3) Combinations of grasses, forbs, legumes, trees, and/or shrubs.

APPENDIX C

SALEABLE MINERAL (MINERAL MATERIALS) ACTIONS PREFERRED ALTERNATIVE

Resource Management Planning

Supplemental Program Guidance for Energy and Mineral Resources is contained in BLM Manual Section 1624. BLM Manual Section 1624.41.A. (Mineral Materials, Determinations, Resource Management Planning) states,

"The following mineral materials related determinations are required in every resource management plan unless one of the exceptions discussed in BLM Manual Section 1620.06 applies."

None of those exceptions apply.

Management Direction

Since all locatable mineral actions are monitored by the Las Vegas District Office (LVDO), the Stateline Resource Area (NV-054) within LVDO will provide appropriate management direction in accordance with BLM Manual Section 1624.4 (Mineral Materials). BLM Manual Section 1624.41.A.2. (Mineral Materials, Determinations, Resource Management Planning, Management Direction) states,

"In areas which will be open to mineral materials disposal, identify any terms, conditions, or other special considerations, if any, that may constrain disposal activities. Such constraints may apply to major portions of the resource area, specific areas within the resource area, or to general types of operations. Where possible, the boundaries of these constraint areas should be described in the text and portrayed on a map. The identification of project or site-specific constraints should usually be deferred to activity or site-specific planning."

Constraints

General

1. All activities will be subject to the constraints listed below as well as any other special stipulations which the Authorized Officer deems appropriate.
2. "Holder" means any person, corporation, partnership, association, agency (Federal, State, County, and/or Local), municipality, or other entity which holds a mineral materials contract, free use permit, material site right-of-way, or letter of authorization to sample and test mineral materials within the Stateline Resource Area. All applicants may obtain Authorizations under any name they choose, however, related business ventures will be viewed as the same Holder for the purpose of enforcing all terms and conditions.
3. "Operator" means the holder, its contractors, subcontractors, and/or the employees of any of them.
4. "Material Site" means the site of any Authorization for a mineral material located on Federal mineral estate within the Stateline Resource Area, whether or not the surface estate is Federally owned, as well as all authorized routes of ingress to the site and egress from it.

5. "Authorization" means any mineral materials contract, free use permit, material site right-of-way, or letter of authorization to sample and test mineral materials issued within the Stateline Resource Area for the purpose of exploring or removing portions of the Federal mineral estate, whether of not the surface estate is Federally owned, as well as all authorized routes of ingress and egress to and from the Material Site.
6. All applicants for saleable mineral (mineral materials) actions must submit plans for all proposed activities, to include site rehabilitation, to the Authorized Officer prior to environmental review or issuance of any authorization.
7. For all activities, a site specific environmental assessment, exploration/mining plan, and reclamation plan must be prepared by the applicant and then be approved by the Authorized Officer.
8. Prior to the issuance of any material contract, free use permit, material site right-of-way, or letter of authorization to conduct sampling and testing, all applicants must pay a fee as determined by the Authorized Officer for the cost of reclamation unless they have written authorization from the Authorized Officer to perform interim and/or final reclamation in lieu of paying reclamation charges.
9. All applicants who perform interim and/or final reclamation in lieu of paying reclamation charges must post a bond for the purpose of insuring reclamation. The bond amount will be determined by the Authorized Officer. No bond is required of those applicants who pay a fee for the cost of reclamation.
10. All activities must comply with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act.
11. Prior to the issuance of any material contract, free use permit, material site right-of-way, or letter of authorization to conduct sampling and testing, all applicants must pay a Section 7 fee for the on-site mitigation of desert tortoise habitat. The fee amount will be determined by the Authorized Officer.
12. Mineral appraisal of the mineral material to be offered for sale or free use must be prepared by a qualified mineral appraiser and then be approved by a technical reviewer and acknowledged by management.
13. In accordance with BLM Manual Section 3060.14 (Mineral Reports -- Preparation and Review, Mineral Land (Mineral-in-Character)), all lands with a level of potential of "M" or "H" and a level of certainty of "D" (see BLM Manual Section 3031 (Energy and Mineral Resource Assessment), Illustration 3) for the occurrence of saleable minerals (mineral materials) will be regarded as mineral lands (mineral-in-character). All lands that are mineral-in-character for locatable minerals are not subject to entry under the agricultural land laws.
14. For all activities, only the saleable mineral estate, or the applicable portion thereof (i.e. sand and gravel, cinders, stone, clay, etc.), must be in Federal ownership. The surface estate does not have to be Federally owned. No consent is required in order to enter onto patented (non-Federal) surface estate in order to remove Federal mineral estate. The Federal mineral estate may be mined with or without the consent of the surface estate owner. It may also be mined over the vehement objection of the surface estate owner.
15. The Operator of a Material Site will conform to all Federal, State, County, and Local laws, ordinances, and regulations. Copies of all permits, variances, easements, etc. issued to the Operator must be submitted to the Authorized Officer within ten (10) days of their issuance.

16. The Operator shall notify the Authorized Officer within one (1) working day of the start of the following activities:
 - a. Movement of equipment into the Material Site;
 - b. Commencement of operations;
 - c. Termination of operations;
 - d. Removal of equipment from the Material Site.
17. If the Operator violates any term or condition herein described, the Authorized Officer may, through written notice, suspend any further operations of the Holder pursuant to any Authorization, except such operations as may be necessary to remedy any violations. If the Holder fails to remedy all violations within fifteen (15) days after receipt of the suspension notice, the Authorized Officer may, by written notice, cancel the Authorization and take appropriate action to recover all damages suffered by the United States by reason of such violations, including application of any advance payments and any performance and/or reclamation bonds toward payment of such damages.
18. If the Operator extracts or removes any mineral materials during any period of suspension of its Authorization, or if it extracts any such materials after the expiration of its Authorization, or after the cancellation of its Authorization, or in excess of the amount of its Authorization, such extraction or removal shall be deemed both a willful trespass and a criminal trespass. The willful trespass will render the Holder liable for the actual value of the materials at the time of conversion (sale or final use by the Operator). The criminal trespass will render the Holder liable to criminal sanctions under the laws of the United States to include fines and/or imprisonment.
19. If the Operator violates any term or condition herein described, the Authorized Officer may, through written notice as previously described, refuse to issue any additional Authorization to the Holder after the final resolution of the subject violation.
20. The Holder shall be liable for any damages suffered, costs, and/or expenses incurred by the United States arising out of any operations under any Authorization whenever such damages, costs, and/or expenses result from any breach of contract or wrongful or negligent act of the Operator. The Holder shall pay the United States for such damages, costs, and/or expenses within thirty (30) days after a written demand therefor by the Authorized Officer. Failure to make payment within this period will result in the denial of any application for an additional Authorization to the Holder until payment is received.
21. If not in default, the Operator shall have the right, within thirty (30) after expiration of the Authorization, to remove its equipment, improvements, and/or other personal property from the Material Site. However, any improvements such as road surfacing, culverts, and bridges which have become a permanent part of a public road shall not be removed. Any equipment, improvements, and/or other personal property remaining in the Material Site or on adjacent public lands at the end of the thirty (30) day removal period shall become the property of the United States unless additional time for their removal has been granted in writing by the Authorized Officer.
22. Contracts or free use permits may not be assigned without the approval of the Authorized Officer. Material site rights-of-way may not be assigned as only the Nevada Department of Transportation is authorized to hold them, and then only for use on federally aided highway projects.
23. The Operator shall have the right to extract and remove mineral materials until the termination of the Authorization, notwithstanding any subsequent appropriation or disposition of all or part of the lands under the general land laws, including the mining and leasing laws.

24. Upon termination of the Authorization, the Operator will remove and dispose of all waste in an authorized disposal site. The term "waste", as used herein, includes, but is not limited to, garbage, trash, solid waste, human waste, petroleum products, back haul debris, and equipment. No waste or any other material will be buried in the Material Site.
25. The hauling or backhauling of any kind of waste, materials, and/or debris into the Material Site or onto adjacent public lands is prohibited. The Operator is required to keep the Material Site clear of all waste, materials, and debris and to dispose of it in a properly authorized disposal site. The hauling/backhauling of any waste, materials, or debris into the Material Site or onto adjacent public lands by the Operator will be cause for the Authorized Officer to immediately order the suspension and/or cancellation of the Authorization to the Holder and issue a notice of trespass. The Holder will be liable for all costs to remove any waste, materials, and/or debris.
26. Except for stockpiles of crushed or screened materials, the Operator will keep the Material Site reasonably level and uniform during the term of the Authorization. Stockpiles must be removed on or before the termination of the Authorization. Upon termination of the Authorization, all stockpiles and all other unsevered and/or unremoved mineral materials become the property of the United States unless additional time for their removal has been granted in writing by the Authorized Officer.
27. Except within designated community pits and common use areas, overburden which was removed and reject material which resulted from materials processing operations will not be left in piles upon the termination of the Authorization. Upon cessation of operations, these materials will be returned to the Material Site and utilized in its reclamation.
28. Night watchmen, mobile homes, recreational vehicles, house trailers, non-operational vehicles, storage areas, repair areas, salvage areas, asphalt hot plants, concrete batch plants, materials recycling plants, and water wells are not allowed within any Material Site unless approval is granted in writing by the Authorized Officer. Persons, animals, materials, manufactories, or equipment not directly related to either the reclamation of the Material Site or the exploration, development, extraction, processing, or transportation of mineral materials are not allowed within any Material Site unless approval is granted in writing by the Authorized Officer.
29. The Operator will not supply water from a Material Site to livestock unless a Section 4 permit under the Taylor Grazing Act is approved by the Authorized Officer.
30. The Operator will avoid the disturbance or removal of section corners, bench marks, monuments, or other types of survey markers. Where excavation or road building may require removal or relocation, the Operator will contact the Authorized Officer for written instructions prior to such removal or relocation.
31. The Operator will grade all vertical cuts of three (3) feet or greater to a slope ratio (horizontal to vertical) of three to one (3 to 1) upon termination of the Authorization or upon cessation of operations for more than five (5) days.
32. Not later than the 10th of each month, or the first business day thereafter if the 10th falls on a weekend or holiday, the Holder will submit to the Authorized Officer an itemized report for the previous month of all mineral materials removed pursuant to the Authorization. Unless modified in writing by the Authorized Officer, the report will include the following:
 - a. Names, addresses, and telephone numbers of the Holder, its contractors, and subcontractors;

- b. Volumes and/or weights of all types of mineral materials removed from the Material Site by the Operator to include detailed volumes and/or weights for the Holder and each of its contractors and subcontractors;
- c. Volumes and/or weights of all types of mineral materials sold by the Operator to include detailed volumes and/or weights for the Holder and each of its contractors and subcontractors;
- d. Names, addresses, telephone numbers, dates of purchases, types of materials purchased, and volumes and/or weights purchased for all mineral materials purchased from the Operator;
- e. Volumes and/or weights of all types of mineral materials not sold by the Operator;
- f. Final disposition of all types of mineral materials not sold by the Operator to include the following:
 - 1) Transfer or utilization of mineral materials:
 - a) If the material was transferred, list each party to whom a transfer was made including their name, address, and telephone number.
 - b) If the material was utilized, list the legal description of each parcel of land where the material was utilized. This description must include township, range, meridian, section, and legal subdivision.
 - 2) Description of each type of material transferred and/or utilized;
 - 3) Volume and/or weight of each type of material transferred and/or utilized;
 - 4) Description of how each material was transferred and/or utilized;
 - 5) Explanation as to why each material was transferred and/or utilized;
 - 6) Citation of the legal authority under which each transfer and/or utilization was made;
 - 7) Name of the party who made each transfer and/or utilization;
 - 8) Date upon which each transfer and/or utilization occurred.

33. When antiquities or other cultural objects of historic or scientific interest, including, but not limited to, historic or prehistoric ruins, artifacts, and vertebrate or invertebrate fossils are discovered, the Operator will immediately cease all operations. The cultural items will be left intact and the Operator will immediately notify the Authorized Officer in order that the cultural resources can be inspected, documented, and/or salvaged.

34. Prior to starting operations each day on any Material Site which has not been totally enclosed by tortoise proof fencing and cattle guards, the Operator will make an inspection to determine if any desert tortoises are present. The inspection will be conducted as follows:

- a. Around and under all equipment;
- b. In and around all disturbed areas to include stockpiles and reject materials areas;
- c. In and around all routes of ingress and egress;
- d. In and around all other areas where the operation might expand to during that day.

If a tortoise is discovered during this inspection or later in the day, the Operator will immediately cease all operations and will immediately notify the Authorized Officer. The tortoise will be left unharmed and will not be touched. Operations will remain stopped until approval to proceed is granted by the Authorized Officer.

35. Prior to the environmental review of any application which is not a BLM motion, all applicants must submit both an exploration/mining plan and a reclamation plan to the Authorized Officer. A cultural resources inventory must be submitted for all portions of the Material Site that have not been previously inventoried. A biological assessment must be submitted if the Material Site is within any known or suspected desert tortoise habitat. The exploration/mining plan and reclamation plan may be combined into one document. Prior to the issuance of any Authorization, both the

exploration/mining plan and the reclamation plan must be approved by the Authorized Officer, the cultural resources inventory must be approved by the Nevada State Historic Preservation Office, and the biological assessment must be approved by the U. S. Fish and Wildlife Service. The exploration/mining and reclamation plans shall include, but not be limited to, the following:

- a. Appropriate maps, or aerial photographs, and cross sections, with a scale no smaller than 1:24,000 (1 inch = 2,000 feet), showing the following:
 - 1) Area encompassed by the Material Site application;
 - 2) Area to be physically disturbed;
 - 3) Existing or proposed roads, trails, and ways;
 - 4) Locations of existing bodies of surface water;
 - 5) Locations of existing topographic, cultural, and drainage features;
 - 6) Locations of existing and abandoned mines;
 - 7) Locations of shafts, tunnels, pits, waste dumps, and surface facilities;
 - 8) Locations of proposed exploration trenches and drill holes;
 - 9) Typical structural cross sections;
 - 10) Typical mining sequence with appropriate time frames.
- b. Descriptions of the following:
 - 1) Location of the Material Site and volume of material proposed to be removed from it;
 - 2) All public lands (surface and/or mineral estates) which are expected to be affected by the Material Site;
 - 3) Existing land uses within and adjacent to the Material Site;
 - 4) Geology, physiography, hydrology, vegetation, and other relevant physical factors;
 - 5) Distribution, abundance, and habitat of fish and wildlife, especially threatened or endangered species;
 - 6) Proposed methods of exploration and types of equipment which are expected to be used;
 - 7) Quantity of water which is expected to be used;
 - 8) Quantity and types of hazardous and/or toxic materials (e.g. explosives, chemicals, petroleum, etc.) which are expected to be used;
 - 9) Quantity and types of pollutants which are expected to enter into any receiving waters;
 - 10) All expected uses of water, hazardous materials, and toxic materials.
 - 11) All drainages into and/or away from the Material Site;
 - 12) All proposed measures for the isolation, removal, and/or control of toxic materials;
 - 13) All proposed measures for the prevention and/or control of the following:
 - a) Fire;
 - b) Air pollution;
 - c) Soil erosion;
 - d) Subsidence;
 - e) Landslides;
 - f) Flooding;
 - g) Water runoff;
 - h) Pollution of surface and/or ground water;
 - i) Damage to fish, wildlife, and/or their habitat;
 - j) On-site and off-site damage to other natural resources and/or public lands (surface and/or mineral estates);
 - k) Hazards to public health and/or safety, including specific actions necessary to meet all applicable laws and regulations.
 - 14) All proposed measures for the preservation and protection of other resources, including the following:
 - a) Cultural features;

- b) Ecological values;
 - c) Natural features;
 - d) Recreational values;
 - e) Scenic values.
- c. Statement of proposed operating methods, including the following:
- 1) Description of all proposed roads and vehicular trails;
 - 2) Description of equipment, mining methods, mining sequence, production rate, estimated recovery factors, and stripping ratios;
 - 3) Locations and acreages of all lands to be affected;
 - 4) Sizes and locations of all structures and other facilities which are expected to be constructed;
 - 5) Design for the necessary impoundment, treatment, and/or control of all runoff water and/or drainage from all workings, in order to prevent the pollution of receiving waters;
 - 6) Proposed method of abandonment in order to protect any unmined recoverable reserves;
 - 7) Proposed method to fill in, fence, protect, or close all surface openings, excavations, workings, and wells which the Authorized Officer deems to be a potential hazard to humans or animals;
 - 8) Estimated timetable for each phase of the work and for final completion of all activities.
- d. Statement of the proposed manner and the schedule for completion of the reclamation of the areas which are planned to be disturbed by the Material Site, including the following:
- 1) Appropriate maps or aerial photographs, with a scale no smaller than 1:24,000 (1 inch = 2,000 feet), showing the topography of the Material Site upon completion of all mining or related activities;
 - 2) Unless modified in writing by the Authorized Officer, the narrative will contain the estimated time schedule and proposed reclamation methods for the grading, backfilling, soil replacement, and revegetation of areas to be affected by the Material Site, including the following:
 - a) Measures for backfilling exploration trenches and plugging drill holes;
 - b) Measures for soil preparation, fertilizer application, mulching, and managing topsoil;
 - c) Measures for controlling sediment and overland water flow;
 - d) Measures for shaping, grading, backfilling, soil stabilization, compacting, and contouring the surface;
 - e) Measures for selecting vegetative species and mixtures of shrubs, trees, tree seedlings, grasses, forbs, and/or legumes to be planted;
 - f) Measures for seeding and/or planting grasses, forbs, legumes, trees, and/or shrubs;
 - g) Measures for watering all newly planted grasses, forbs, legumes, trees, and/or shrubs.
 - h) Vegetative species and methods for planting, including the following:
 - (1) Amounts and species of grasses, forbs, and/or legumes per acre;
 - (2) Numbers, species, and spacing of trees, tree seedlings, and/or shrubs;
 - (3) Combinations of grasses, forbs, legumes, trees, and/or shrubs.
36. Holder shall prepare maps which show mineral production from the lands under Authorization as follows:
- a. All maps shall be appropriately marked with reference to Government land marks or lines and elevations with reference to sea level. Vertical projections and cross sections shall

accompany plan views. Maps shall be based on accurate surveys and certified by a professional engineer, professional land surveyor, or other professionally qualified person. All excavations in each separate bed or deposit shall be shown in such a manner that the production of minerals for any reporting period can be accurately ascertained.

- b. Maps showing the existing operation and all production, drawn to a scale acceptable to the Authorized Officer, shall be submitted by the Holder prior to the receipt of any Authorization, at the end of each reporting period during any Authorization, upon the termination of any Authorization, and at all other times as required by the Authorized Officer. Production maps shall show surface boundaries, Authorization boundaries, and topography.
- c. In the event of the failure by the Holder to furnish any required maps, the Authorized Officer shall cause the Material Site to be surveyed and maps to be prepared. The costs of making the survey and preparing the maps shall be charged to and promptly paid by the Holder.
- d. If the Authorized Officer believes any map submitted by a Holder to be incorrect, he/she will cause a survey to be made. If the survey shows the map submitted by the Holder to be substantially incorrect, in whole or in part, the cost of making the survey and preparing the map shall be charged to and promptly paid by the Holder.

Community Pit and Common Use Area Disposals

1. Authorized Officer will designate an area to be a community pit or a common use area.
2. No contract within a community pit or common use area will be issued for less than a purchase price (value of the mineral materials) of \$20. All fees to mitigate the destruction of tortoise habitat and, unless waived, fees for the cost of reclamation are expenses in addition to the purchase price. These fees plus the purchase price comprise the total purchase price.

Noncompetitive Mineral Material Contracts

1. Authorized Officer must receive a written request for a mineral materials sale.
2. No sale outside of a community pit or common use area will be made for less than a purchase price (value of the mineral materials) of \$2,000. All fees to mitigate the destruction of tortoise habitat are expenses in addition to the purchase price. These fees plus the purchase price comprise the total purchase price.
3. At the time of sale, the Authorized Officer must receive a deposit from the applicant of not less than ten (10) percent of the total purchase price. The deposit will serve as the first installment, equal to ten (10) percent of the total purchase price of the contract. This installment will be retained by the Authorized Officer as additional security. It shall be applied to the payment of the last installment required, in order to make the total payment by the applicant equal to the total purchase price of the contract.
4. Authorized Officer must receive a performance bond valued at not less than \$500 or twenty (20) percent of the total purchase price, whichever is greater, for the purpose of insuring performance of the contract.
5. Authorized Officer must receive the second installment, equal to ten (10) percent of the total purchase price of the contract, prior to commencement of any removal operations thereunder. If this payment is not received within sixty (60) days after the date the contract was issued, the

contract will be terminated and the purchaser will forfeit the ten (10) percent bid deposit as liquidated damages.

6. Authorized Officer must receive each subsequent installment, equal to ten (10) percent of the total purchase price of the contract, prior to the removal of the mineral material.
7. Authorized Officer must receive the total purchase price not later than 60 days before the expiration of the contract.

Competitive Mineral Material Contracts

1. Authorized Officer must receive a written request for a mineral material sale.
2. Competitive sale must be advertised in a local newspaper on the same day each week for not less than two consecutive weeks.
3. No sale outside of a community pit or common use area will be made for less than a purchase price (value of the mineral materials) of \$2,000. All fees to mitigate the destruction of tortoise habitat are expenses in addition to the purchase price. These fees plus the purchase price comprise the total purchase price.
4. Prior to the sale, the Authorized Officer must receive sealed bids which must include deposits of not less than ten (10) percent of the total purchase price. The deposit of the successful bidder will serve as the first installment, equal to ten (10) percent of the total purchase price of the contract. This installment will be retained by the Authorized Officer as additional security. It shall be applied to the payment of the last installment required, in order to make the total payment by the successful bidder equal to the total purchase price of the contract.
5. No sooner than one week after the last newspaper advertisement inviting bids for the mineral material, the Authorized Officer will conduct a sale by written sealed bids.
6. Authorized Officer must receive a performance bond valued at not less than \$500 or twenty (20) percent of the total purchase price, whichever is greater, for the purpose of insuring performance of the contract.
7. Authorized Officer must receive the second installment, equal to ten (10) percent of the total purchase price of the contract, prior to commencement of any removal operations thereunder. If this payment is not received within ninety (90) days after the date the applicant was declared the successful bidder, the contract will be terminated and the purchaser will forfeit the ten (10) percent bid deposit as liquidated damages.
8. Authorized Officer must receive each subsequent installment, equal to ten (10) percent of the total purchase price of the contract, prior to the removal of the mineral material.
9. Authorized Officer must receive the total purchase price not later than 60 days before the expiration of the contract.

Free Use Permits

1. Authorized Officer must receive a written request for a free use permit.

2. Authorized Officer may waive the bond requirement for governmental entities. However, no bond waiver will be issued to any governmental entity found to be in default regarding the reclamation of any previously permitted free use permit area.

Material Site Rights-of-Way

1. Authorized Officer must receive a written notice of a proposed appropriation of a Material Site as filed by the Department of Transportation under 23 U.S.C. 317. Refer to 43 CFR 23.5(f).
2. Authorized Officer shall cause a technical examination to be made assessing the prospective effects of the proposed exploration and/or surface mining operations upon the environment. Refer to 43 CFR 23.5(a)(1).
3. Reclamation bonds will not be required of Federal, State, or other governmental agencies. Where the exploration or mining is actually performed for those agencies by a contractor who would have to post a bond if he were the applicant, those agencies shall require the contractor to furnish a bond payable to the United States. The bond amount will be determined by the Authorized Officer. Refer to 43 CFR 23.9(d).

Material Sampling and Testing

1. Authorized Officer must receive a written request for a letter of Authorization.
2. A letter of Authorization to sample and test mineral material does not give a Holder any preference right to a sales contract or a free use permit.
3. Letters of Authorization will expire not later than one (1) year after their date of issuance.
4. Not later than sixty (60) days after the expiration of its letter of Authorization, the operator must furnish the Authorized Officer with a signed copy of its records for all drill holes and trenches made within the material site. The records shall be in a form which will allow the positions, directions, and depths of the holes and trenches to be located on a map. The records shall include copies of the analyses of all samples and a log of all strata penetrated and conditions encountered.

APPENDIX D

SOLID (NON-ENERGY) LEASABLE MINERALS

Resource Management Planning

Supplemental Program Guidance for Energy and Mineral Resources is contained in BLM Manual Section 1624. BLM Manual Section 1624.51.A. (Non-Energy Leasable Minerals, Determinations, Resource Management Planning) states,

"The following non-energy leasable mineral determinations are required in every resource management plan unless one of the exceptions discussed in BLM Manual Section 1620.06 applies."

None of those exceptions apply.

Management Direction

All prospecting permits and leases are received, analyzed and issued or denied pursuant to 43 CFR 3500. BLM Manual Section 1624.51.A.2. (Non-Energy Leasable Minerals, Determinations, Resource Management Planning, Management Direction) states,

"In areas which will be open to non-energy mineral exploration, leasing and development, identify any terms, conditions, or other special considerations, if any, that may restrict non-energy mineral activities. Such constraints may apply to major portions of the resource area, specific areas within the resource area, or to general types of operations. Where possible, the boundaries of these constraint areas should be described in the text and portrayed on a map. The identification of project or site-specific constraints should usually be deferred to activity or site-specific planning."

Constraints

1. All activities will be subject to the regulations of 43 CFR 3500 including any other special stipulations which the Authorized Officer deems appropriate.
2. All applicants for solid (non-energy) leasable mineral actions must submit plans for all proposed activities, to include site rehabilitation, to the Authorized Officer prior to environmental review or issuance of any authorization.
3. All applicants must post a bond for the purposes of insuring rents and royalty and compliance with environmental terms and conditions, including reclamation. The bond amount will be determined by the Authorized Officer.
4. All activities must comply with Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act.

APPENDIX E

ACEC NOMINATION EVALUATION

NAME: Ash Meadows

LOCATION: T17-18S, R50E, Nye County, NV

SIZE: 4,518-7,296 acres

NOMINATED BY: USFWS-Desert Range Complex, USFWS-Reno, Howard Booth, UNLV-Biological Sciences, Sierra Club (only lands within current boundary) & BLM.

RATIONALE: Federally listed threatened and endangered species, and candidate species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **Yes; special status species**
3. Natural process or system? **Yes; unique riparian habitat, springs and meadows**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Thirteen threatened, endangered or candidate species occur on public lands outside the Ash Meadows National Wildlife Refuge (NWR), of which seven are endemic. There are no similar resources within the planning area with which to make a comparison. Some portions of Death Valley National Monument support similar resources. Ash Meadows NWR supports a total of 25 endemic species.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Seven endemic species on public lands; large acreage of riparian and meadow habitat surrounded by desert; some species are restricted to a single spring.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered Species Act of 1973, as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The nominated area meets both the relevance and importance criteria. Special management attention

is needed to protect and preserve the large number of sensitive biological resources found in this unique area.

ACEC NOMINATION EVALUATION

NAME: Big Dune LOCATION: Amargosa Valley, Nye Co, NV.
SIZE: About 1,680 acres NOMINATED BY: USFWS-Reno, Nature Conservancy, NORA (Nevada Outdoor Recreation Association), Sierra Club and BLM.

RATIONALE: Endemic, candidate species

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **Yes; candidate species unique to the area**
3. Natural process or system? **Yes; dune ecosystems**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Three candidate species which are endemic to Big Dune.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for four candidate species, three of which are endemic to Big Dune. Big Dune is one of only three dune ecosystems in the planning area.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102 (a)(8) of FLPMA and Bureau Manual 6840.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

This area meets the relevance and importance criteria. Due to the extremely limited extent of the ecosystem and lack of other similar ecosystems in the planning are, special management attention is needed to protect and preserve both the biological values and the scenic integrity of the area.

ACEC NOMINATION EVALUATION

NAME: Sunrise-Frenchman Mtns., LOCATION: East of Las Vegas, Clark Co., NV.
Rainbow Garden and Gypsum Cave

SIZE: 33,000 acres NOMINATED BY: UNLV-Geosciences, Nature Conservancy, NORA
and Sierra Club

RATIONALE: Geological values (educational, scientific and recreational), candidate and sensitive plant
and animal species and cultural/historic

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; scenic and cultural**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **Yes; geological features**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Gypsum Cave is eligible for the National Register of Historic Places and is regionally to nationally significant. Frenchman Mountain exposes strata of the Grand Canyon in an easily accessible area. The area is used for university research and field trips.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **The Sunrise Mtn./Frenchman Mtn. complex is a visual landmark from Las Vegas and is one of the most photographed mountains in aviation photography due to its proximity to Nellis Air Force Base. Exposure of Paleozoic and Mesozoic strata similar to the geology of the Grand Canyon. Proximity to Las Vegas results in heavy use by the public (OHV, target shooting, illegal trash dumping, etc.).**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Yes. Proximity to Las Vegas results in heavy use by recreationists, including target shooting, drinking, illegal trash dumping, etc.**
5. Poses a significant threat to human life and safety or to property? **Potentially dangerous due to amount of illegal activities and high visitation.**

RECOMMENDATION

The area meets the relevance and importance criteria, and due to its "landmark" status in the Las Vegas area and the types and amount of public use of the area, special management attention is required in order to resolve ongoing problems and preserve the geological and scenic integrity of the area.

ACEC NOMINATION EVALUATION

NAME: Toquop Wash

LOCATION: North of Mesquite, Clark Co., NV.

SIZE: Unspecified

NOMINATED BY: Nature Conservancy

RATIONALE: Habitat for *Astragalus triquetrus* and *Eriogonum viscidulum*, both category 2 candidate plant species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; low density & uncategorized desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for a threatened species (desert tortoise).**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for two candidate plant species and desert tortoise. Of the two candidate species, *Eriogonum viscidulum* is limited in distribution while *Astragalus triquetrus* is more widely distributed (NV and AZ).**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102 (a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria to a limited extent. Existing laws and regulations, including the Endangered Species Act and the National Historic Preservation Act, provide an adequate level of protection to the values in the area.

ACEC NOMINATION EVALUATION

NAME: Virgin and Muddy River LOCATION: Virgin & Muddy Rivers, Clark Co., NV.

SIZE: Unspecified NOMINATED BY: USFWS-Reno

RATIONALE: These rivers provide habitat for threatened and endangered species, including the endangered Virgin River round-tail chub, Moapa dace and woundfin minnow.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **Yes; threatened and endangered fish**
3. Natural process or system? **Yes; riparian habitat**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for endangered fish species. Moapa National Wildlife Refuge is located on the Muddy River and Overton Wildlife Management Area (State of Nevada) is located on the Virgin River.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Riparian and aquatic habitats are very sensitive to changes in stream flow, salinity and erosion. Habitat for endangered and candidate fish species. Also historical habitat for the southwestern otter, a category 2 candidate species. Riparian habitat is rare in the resource area and provides habitat for a large number of plant and animal species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, Section 102(a)(8) of FLPMA applies to the Virgin River floodplain. The Muddy River is primarily owned by private, state or other federal agencies and thus would not fall under FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

Public lands along the Virgin River provide potential habitat for the endangered fish and are riparian in nature; these lands therefore meet the relevance and importance criteria, and special management

attention is warranted to protect those values.

There are no public lands along the Muddy River that provide potential habitat for the endangered fishes, and the potential for riparian habitat is extremely limited due to the small acreage of public lands and the land ownership pattern; these lands do not meet the relevance and importance criteria and special management attention is not warranted.

ACEC NOMINATION EVALUATION

NAME: Goodsprings Valley LOCATION: Near Goodsprings, Clark Co., NV.

SIZE: Unspecified NOMINATED BY: Nature Conservancy

RATIONALE: Sensitive plants and animals, threatened and endangered species

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; historical mining district**
2. Fish and wildlife resource? **None unique to the area; desert tortoise and gila monster habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for the desert tortoise, a federally listed, threatened species.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Category 2 and uncategorized desert tortoise habitat.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered Species Act of 1973, as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The portion of the area that is Category 2 desert tortoise habitat meets the relevance and importance criteria and warrants special management attention in order to ensure the continued existence of the desert tortoise. The remainder of the area does not meet the relevance and importance criteria and therefore does not warrant special management attention.

ACEC NOMINATION EVALUATION

NAME: Crystal Pass LOCATION: South Spring Mountains, near Goodsprings, Clark Co.,
NV

SIZE: Unspecified NOMINATED BY: NORA

RATIONALE: Geological features

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known; possibly historic values**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **Yes; formation of crystals**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Some crystals found in the area are uncommon but don't appear to be more than locally significant.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Yes. Hewett (1931) recognized cerargyrite (AgCl) and iodyrite (AgI), both found at Crystal Pass, as being uncommon.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

Although the area meets the relevance and importance criteria to a limited extent, there are no unique values present in the area, and special management attention is not warranted.

ACEC NOMINATION EVALUATION

NAME: Gold Butte Native American Sites LOCATION: Gold Butte Area, Clark Co., NV

SIZE: Seven sites of various sizes NOMINATED BY: Moapa Band of Paiutes

RATIONALE: Significance to the Moapa Band of Paiutes

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural significance to Moapa Band of Paiutes**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **Vegetation used as food and medicine by the Moapa Band of Paiutes**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **The values present in the nominated areas are of significance only to the Moapa Band of Paiutes.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Most of the areas identified are located around springs and riparian habitat which is rare in the planning area and sensitive to disturbance.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The areas meet the relevance and importance criteria to a limited extent, and special management attention is warranted to protect the riparian habitat and other vegetation in the areas.

ACEC NOMINATION EVALUATION

NAME: Whitney Pockets

LOCATION: Gold Butte, Clark Co., NV

SIZE: Unspecified

NOMINATED BY: Sierra Club, Moapa Band of Piutes

RATIONALE: Cultural, scenic and geological values

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural and historic values**
2. Fish and wildlife resource? **None unique to the area; gila monster and desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Yes, the area is category 1 desert tortoise habitat and contains significant cultural and historical resources.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Yes, category 1 desert tortoise habitat, cultural and historic sites.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to protect and preserve the cultural and biological values of the area.

ACEC NOMINATION EVALUATION

NAME: Virgin Mountains

LOCATION: Virgin Mountains, Clark Co., NV

SIZE: Unspecified

NOMINATED BY: Howard Booth and Sierra Club

RATIONALE: Designated Natural Area, riparian habitat, scenic, remnant ponderosa pine and white fir community, wildlife habitat and both Great Basin and Colorado Plateau vegetation.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; potential peregrine falcon habitat**
3. Natural process or system? **Yes; pinyon-juniper/mixed conifer ecosystem unique to the area in Nevada**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Occurrence of conifer vegetation type within the Mojave Desert ecosystem is restricted to a few mountain ranges, and this one is the only mountain range administered entirely by the BLM. Part of the Virgin Mountains are a designated Natural Area and as such is regionally significant.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Designated natural area of 6,560 acres, relic stand of ponderosa pine and white fir, southern most stand of douglas fir in Nevada, and the only occurrence of Arizona cypress known in Nevada. All these rare or remnant vegetation types are vulnerable to loss by fire, disease or insects.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA. The area is currently managed under IMP- all designated natural areas are currently Instant Study Areas (Section. 603 (a)). In addition, Bureau manual 1623.3 requires that all designated natural areas be designated as ACEC's.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria, and special management attention is warranted to preserve the unique biological resources of the area.

ACEC NOMINATION EVALUATION

NAME: Virgin Mountain (Whitney Pockets area, south toward Bitter Ridge) LOCATION: South of Virgin Mountains, Clark Co., NV

SIZE: Unspecified

NOMINATED BY: Nature Conservancy

RATIONALE: Candidate plants and animals

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; historic and cultural values**
2. Fish and wildlife resource? **None unique to the area; gila monster and desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for a federally listed threatened species and significant cultural and historical values.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Cultural resources and historic sites; category 1 desert tortoise habitat; Habitat for California Bear Poppy, *Arctomecon californica*, and gila monster, *Heloderma suspectum*, both candidate species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to help ensure that the cultural and biological values are protected.

ACEC NOMINATION EVALUATION

NAME: Virgin Valley scenic area LOCATION: South of Mesquite, Clark Co., NV

SIZE: Unspecified NOMINATED BY: NORA

RATIONALE: Geology, scenery, cactus and succulents and Devil's Throat sinkhole

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural values**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **Geological process resulting in Devil's Throat sinkhole**
4. Natural hazard? **Yes, Devil's Throat sinkhole**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Category 1 and 2 desert tortoise habitat (a threatened species). Sinkholes are uncommon in desert regions.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Category 1 and 2 desert tortoise habitat and Devil's Throat sinkhole.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Devil's Throat sinkhole is approximately 165 feet deep and 80 feet in diameter and is located in a relatively flat area. Presently, the sinkhole is fenced to prevent vehicular access.**
5. Poses a significant threat to human life and safety or to property? **If an individual fell or drove into the sinkhole, the probability of serious injury or death would be high.**

RECOMMENDATION

The area meets the relevance and importance criteria, and special management attention is warranted to both protect the scenic, cultural, geological, and biological values of the area, and to ensure public safety and welfare due to the presence of a natural hazard.

ACEC NOMINATION EVALUATION

NAME: Gold Butte Scenic Area LOCATION: South of Mesquite, Clark Co., NV. Area runs from the Saint Thomas Gap Road south to Lake Mead NRA.

SIZE: Unspecified (>90,000 acres) NOMINATED BY: NORA

RATIONALE: Scenery, vegetation and springs

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; historic values**
2. Fish and wildlife resource? **None unique to the area; low to moderate density desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for a threatened species.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Historical sites and desert tortoise habitat.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

Portions of the area meet the relevance and importance criteria and special management attention is needed to protect biological and cultural values. The remainder of the area does not warrant special management attention.

ACEC NOMINATION EVALUATION

NAME: Bitter Ridge

LOCATION: SW end of the Virgin Mountain range, near Overton Arm of Lake Mead, Clark Co., NV

SIZE: 17,920 acres

NOMINATED BY: National Park Service, Lake Mead

RATIONALE: Scenic and wildlife values

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural resources**
2. Fish and wildlife resource? **None unique to the area; low density desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Desert tortoise habitat and significant cultural values.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a threatened species, sensitive species, and cultural values.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

Portions of the area meet the relevance and importance criteria and special management attention is needed to protect and preserve the values within that area.

ACEC NOMINATION EVALUATION

NAME: Joshua Tree Natural area LOCATION: S. Eldorado and N. Piute Valleys, Clark Co., NV

SIZE: Unspecified NOMINATED BY: NORA

RATIONALE: Scenic values and Mojave Desert ecosystem.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Yes; threatened species habitat.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Yes; Category 1 and 2 desert tortoise habitat.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under section 102.(a)(8) of FLMPA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

A portion of the area meets the relevance and importance criteria and warrants special management attention to protect the biological values of that area.

ACEC NOMINATION EVALUATION

NAME: Desert View Natural Environment Area LOCATION: Lee Canyon Road NW of Las Vegas,
Clark Co., NV.

SIZE: Unspecified NOMINATED BY: NORA, Nature Conservancy

RATIONALE: Mojave Desert vegetation, potential habitat for candidate animals, habitat for candidate plants, and the area is shown on several maps as a designated natural area.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat and potential gila monster habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **The area was nominated as a "Natural Area" during the last planning phase and has been shown on most BLM maps as a "Natural Environment Area", but records indicate that the area was never officially designated.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **The area is habitat for a threatened species (desert tortoise) and several candidate species. The candidate plant species mentioned by the nominator are; Rosy King's Sandwort, Arenaria kingii var. rosea, Clokey's milk-vetch, Astragalus aequalis, and Half-ring pod milk-vetch, Astragalus mohavensis var. hemigyus. The first two species occur in Clark County, the third species, half-ring pod milk vetch, is apparently relatively rare in Nevada.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, Section 102(a)(8) of FLPMA. The area does not qualify under Bureau Manual 1623.3 as it was never formally designated as a natural area although it is shown as such on several maps.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The portion of the area that is Category 2 desert tortoise habitat meets the relevance and importance criteria and warrants special management attention to protect the biological values of that area. The remainder of the nominated area does not meet the relevance criteria, and existing laws and regulations, including the Endangered Species Act, provide an adequate level of protection.

ACEC NOMINATION EVALUATION

NAME: Indian Springs

LOCATION: Near Indian Springs, Clark Co., NV.

SIZE: Unspecified

NOMINATED BY: Nature Conservancy

RATIONALE: Sensitive and candidate plant species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **None known.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Yes. Habitat for a threatened species (desert tortoise) and two category 2 candidate plant species. Merriam bear poppy, Arctomecon merriami is widely distributed and is found on the Desert Natl. Wildlife Refuge where it is well protected. Half-ring pod milk-vetch, Astragalus mohavensis var.hemigyus, is fairly rare in Nevada and the type locality is Indian Springs. This species also occurs in California.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The portion of the area that is Category 2 desert tortoise habitat meets the relevance and importance criteria and warrants special management attention.

ACEC NOMINATION EVALUATION

NAME: Highland Range

LOCATION: NW of Searchlight, Clark Co., NV

SIZE: Unspecified

NOMINATED BY: City of Boulder City, Nature Conservancy

RATIONALE: Habitat for sensitive and candidate plant and animal species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **None known.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **A cause for concern is the low numbers of bighorn the range currently supports. The habitat is good and much of the range is watered by several springs. The area should support a larger resident herd. Competition with livestock around waters may be a factor. The riparian habitat around the springs is degraded. The mountain range is also high in scenic value. The Highland Range was designated as crucial bighorn sheep habitat and is shown on BLM maps as the "highland Range Bighorn Habitat Area".**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes. under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria to a limited extent. The values present in the area are not unique, however, and existing laws and regulations provide an adequate level of protection for the biological values of the area.

ACEC NOMINATION EVALUATION

NAME: Arrow Canyon, Hidden Wash and Pahranaagat Wash. LOCATION: N end of the Arrow Canyon Range, Clark Co.

SIZE: Unspecified NOMINATED BY: NORA, Howard Booth, Sierra Club

RATIONALE: Cultural and geological resources

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Arrow Canyon is regionally significant in the Great Basin Region for cultural resources. It is eligible for the national register of historic places. It is also significant for paleontological resources, including the type locality for many species.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Slot canyon, petroglyphs, displays numerous layers of Paleozoic carbonates and paleontological resources. Habitat for the desert tortoise, a threatened species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to protect the cultural, geological, and biological resources of the area.

ACEC NOMINATION EVALUATION

NAME: River Mountains

LOCATION: North of Boulder City, Clark Co.

SIZE: 10,880 acres

NOMINATED BY: Natl. Park Service-Lake Mead, City of Boulder City, City of Henderson and BLM

RATIONALE: Habitat for a sensitive species (desert bighorn)

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **This range supports one of the highest density herds of bighorn sheep in southern Nevada. Three hundred and forty-one bighorn, from this herd, have been transplanted into 18 different mountain ranges in four states.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Population pressures from Henderson, Boulder City and Las Vegas are placing an increasing demand on the area. There is a potential for adverse impacts to the River Mountain bighorn sheep herd and its habitat from increased human use of the area.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria. Based on the area's importance to Nevada's overall desert bighorn management program, including providing transplant and reintroduction stock for unoccupied desert bighorn habitat both in Nevada and other states, and its proximity to the most populated area in Nevada, special management attention is warranted.

ACEC NOMINATION EVALUATION

NAME: Keyhole Canyon

LOCATION: E. side of Eldorado Mtns, Clark Co., NV

SIZE: Unspecified

NOMINATED BY: Howard Booth and Sierra Club

RATIONALE: Scenic, geologic and cultural values

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Keyhole canyon is on the National Register of Historic Places.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Significant cultural resources occur in the area and are being impacted. The area is heavily used by a variety of recreationists, including rock climbers and OHV enthusiasts, and the area is also close to the mining area of Nelson, making it subject to mining related impacts.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria, and based on the high level of use of the area and potential for future impacts, special management attention is warranted to protect the values of the area.

ACEC NOMINATION EVALUATION

NAME: Cholla Forest

LOCATION: E. of Searchlight, Clark Co., NV

SIZE: 19,200 acres

NOMINATED BY: Natl. Park Service-Lake Mead

RATIONALE: Occurrence of teddy bear cholla, Opuntia bigelovii

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **Disjunct plant community is representative of the Sonoran Desert**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **This may be the northernmost extension of Opuntia bigelovii; and may also be the densest stand of Bigelow cholla in Nevada.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Unusually dense stand of teddy bear cholla; May be the densest stand of Bigelow cholla in Nevada. Habitat for desert tortoise, a threatened species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria. Based on the areas location adjacent to a heavily used National Recreation Area and two areas historic mining areas, special management attention is warranted to preserve this unique resource.

ACEC NOMINATION EVALUATION

NAME: Newberry Mountains

LOCATION: NW of Laughlin, Clark Co., NV

SIZE: 26,240

NOMINATED BY: Natl. Park Service-Lake Mead

RATIONALE: Scenic values

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Spirit Peak, which is culturally significant to the Chemehuevi Indians is immediately adjacent to the proposed ACEC. Spirit Peak is regionally significant as a traditional lifeway candidate. This sacred mountain of the Mohave is also known as Avikwame. It is regarded as the place of creation for all the Yuman groups contiguous to the Lower Colorado River. In addition, it is sacred to the Diegueno and Kamia.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **The area supports an isolated stand of pinyon-juniper which, although uncommon, is found in widely scattered locations throughout the Mojave desert. Habitat for desert bighorn sheep, a sensitive species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria to a limited extent, but no critical resources or values unique to the area are known. Existing laws and regulations provide an adequate level of protection for the values in the area, and therefore special management attention is not warranted.

ACEC NOMINATION EVALUATION

NAME: North McCullough Mountains LOCATION: S. of Las Vegas, Clark Co., NV

SIZE: Unspecified NOMINATED BY: Nature Conservancy

RATIONALE: Candidate, rare and sensitive plants and animals

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes, cultural**
2. Fish and wildlife resource? **None unique to the area; potential gila monster habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **The Sloan Petroglyph National Historic Register site.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **The North McCulloughs are volcanic in origin and exhibit many good examples of volcanism. This mountain range also supports some sonoran desert plants. The North McCulloughs supports a herd of desert bighorn sheep.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria to a limited extent. Existing laws and regulations, including the National Historic Preservation Act, provide an adequate level of protection for the area and therefore, special management attention is not needed.

ACEC NOMINATION EVALUATION

NAME: Old Spanish Trail/Mormon Trail LOCATION: S. Pahrump Valley, Nye Co., NV

SIZE: Unspecified NOMINATED BY: NORA

RATIONALE: Cultural and historic values

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; historic and cultural resources**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Stump springs cultural site is eligible for the National Register of Historic Places. Five miles of the Old Spanish Trail/Mormon Trail in Pahrump Valley is eligible for the National Register of Historic Places (eligible section begins at Stump Spring and runs east for five miles).**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Significant cultural and historical resources and habitat for a threatened species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

Portions of the area meet the relevance and importance criteria and warrant special management attention to preserve the integrity of the cultural resources; the remainder of the area is adequately protected by existing laws and regulations.

ACEC NOMINATION EVALUATION

NAME: Buffington Pockets LOCATION: Muddy Mountains, Clark Co., NV

SIZE: Unspecified NOMINATED BY: NORA

RATIONALE: Cultural sites, scenic, geology and vegetation

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural resources**
2. Fish and wildlife resource? **None unique to the area; potentially desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **A series of cultural sites in this area potentially could qualify as an archeological district. Some sites may be eligible for the National Register of Historic Places.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Cultural sites and habitat for a threatened species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA. This site is within the portion of the Muddy Mountain WSA which is recommended as not suitable.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

Portions of the area meet the relevance and importance criteria to a limited extent. Existing laws and regulations, including the National Historic Preservation Act, provide an adequate level of protection and therefore, special management attention is not needed.

ACEC NOMINATION EVALUATION

NAME: Southwest Boundary Area LOCATION: Gale Hills, Muddy Mountains
(Gale Hills and West End Wash)

SIZE: Unspecified NOMINATED BY: Sierra Club

RATIONALE: Scenic and geological values.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; low density desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **None known.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a threatened species and fragile soils.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, Section 102(a)(8). Partially within the Muddy Mountain WSA, but the majority of the nominated area is outside of the recommended suitable portion of the WSA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The values of the area do not meet the relevance criteria, but the importance criteria is met to a limited extent. Existing laws and regulations, including the Endangered Species Act, provide an adequate level of protection the values of the area, and therefore special management attention is not warranted.

ACEC NOMINATION EVALUATION

NAME: Hidden Valley

LOCATION: Muddy Mountains, Clark Co., NV

SIZE: Unspecified

NOMINATED BY: Howard Booth and Sierra Club

RATIONALE: Eligible for the National Register of Historic Places, cultural sites, bighorn sheep habitat, geology and scenic values.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural resources**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Preliminary data indicates that Hidden Valley is a potential cultural district with several sites which are eligible for the National Register of Historic Places.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Significant cultural resources.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLMPA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The values of the area meet both the relevance and importance criteria, and special management attention is needed to protect the integrity of the area and its cultural resources.

ACEC NOMINATION EVALUATION

NAME: Echo Basin Scenic Area LOCATION: E. of Las Vegas, Muddy Mountains, Clark Co.,
NV

SIZE: Unspecified NOMINATED BY: NORA

RATIONALE: Geological formations and scenic values.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; low density desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Has potential for an archeological district, but more surveys are needed for a conclusive analysis.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a threatened species**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, Section 102(a)(8). This area is partially within the portion of the Muddy Mountain WSA that was recommended as non-suitable.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The values of the area do not conclusively meet the relevance criteria, and even though the importance criteria is met to a limited extent, existing laws and regulations, including the Endangered Species Act and the National Historic Preservation Act, provide an adequate level of protection for the values of the area.

ACEC NOMINATION EVALUATION

NAME: White Basin Scenic Corridor LOCATION: E. of Las Vegas, Muddy Mountains, Clark Co., NV

SIZE: Unspecified NOMINATED BY: NORA

RATIONALE: Geology and rare or candidate plants

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Possibly historic/cultural values**
2. Fish and wildlife resource? **None unique to the area; low density desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Preliminary data indicates that the area has the potential of qualifying as an archeological district. The Bitter Springs Trail Backcountry Byway traverses the area.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **At least one candidate plant species, *Arctomecon californica*, occurs in the area, although it is not unique to the area. The area contains highly erodible, cryptogamic soils and provides habitat for the desert tortoise, a threatened species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The values of the area do not conclusively meet the relevance criteria, and the importance criteria is met to a limited extent. Existing laws and regulations, including the Endangered Species Act and the National Historic Preservation Act, provide an adequate level of protection for the values of the area and special management attention is not warranted.

ACEC NOMINATION EVALUATION

NAME: Valley of Fire-BLM (White Basin) LOCATION: E. of Las Vegas, Muddy Mtns., Clark Co., NV

SIZE: Unspecified NOMINATED BY: NORA

RATIONALE: Geological, scenic, cultural and riparian habitat.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat and potentially gila monster habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **None known.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Highly erodible, cryptogamic soils, cultural sites, low density tortoise habitat, scenic viewshed, and at least one category 2 candidate plant species, *Arctomecon californica*.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, Section 102(a)(8). Outside of the Muddy Mountain WSA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area does not conclusively meet the relevance criteria and meets the importance criteria to a limited extent. Existing laws and regulations, including the Endangered Species Act and the National Historic Preservation Act, provide adequate protection for the values of the area.

ACEC NOMINATION EVALUATION

NAME: Bowl of Fire/Bitter Spring Valley LOCATION: E. of Las Vegas, Muddy Mts, Clark Co., NV

SIZE: 40,960 acres NOMINATED BY: National Park Service-Lake Mead,
Nature Conservancy

RATIONALE: Protect scenic values from Northshore Road, Candidate plant species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **None known; Potentially an archeological district.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Low density tortoise habitat, cultural and historic sites, scenic viewshed, highly erodible soils, and habitat for California Bear Poppy, *Arctomecon californica*, and ring-stem, *Anulocaulis leiosolenus*. Viewshed from Lake Mead area.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, Section 102(a)(8). The area nominated is partially within the portion of the Muddy Mountain WSA which was recommended as nonsuitable for wilderness.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria to a limited extent, but existing laws and regulations, including the Endangered Species Act and the National Historic Preservation Act, provide and adequate level of protection for the area.

ACEC NOMINATION EVALUATION

NAME: Red Rocks Canyon Recreation Lands (RRCRL) LOCATION: W. of Las Vegas, Clark Co., NV

SIZE: Approximately 62,000 acres NOMINATED BY: BLM

RATIONALE: Ten separate ACEC nominations were submitted for Red Rocks. Rather than have several small ACECs scattered throughout Red Rocks, it would be easier to designate the entire area. The entire recreation area is a special management area and as such qualifies as an ACEC according to Bureau policy.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; scenic, cultural and historic values**
2. Fish and wildlife resource? **None unique to the area; Forty-five species of mammals, more than 100 species of birds and 30 species of reptiles and amphibians**
3. Natural process or system? **Yes; several different plant communities and at least 7 endemic plant species**
4. Natural hazard? **Yes; cliffs up to 3,000 feet of vertical relief**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Approximately 1/2 million people visit Red Rocks annually. Brownstone Canyon is on the National Register of Historic Places. Red Rocks is an internationally recognized rock climbing area. The escarpment is potentially suitable nesting habitat for the peregrine falcon, an endangered species. Expansion of Las Vegas is putting increasing demands on the area.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Numerous cultural sites; Diverse flora and fauna including one threatened species and several candidate species; Potential nesting habitat for peregrine falcon, an endangered species; Relic stands of ponderosa pine and possibly white fir.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) and Section 103.(a) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **The proximity to Las Vegas and the high number of visitors increases the potential for accidents, violence and unlawful actions. Many visitors attempt to climb the cliffs, requiring search and rescue efforts by Bureau Rangers.**

5. Poses a significant threat to human life and safety or to property? **Red Rocks receives an extremely high level of visitation because of its proximity to the largest population center in Nevada; when combined with the terrain, the result is a very high potential accidental injury or death.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to protect and preserve the scenic, biological, cultural, and geologic values of the area.

ACEC NOMINATION EVALUATION

NAME: Pine Creek Canyon

LOCATION: RRCRL

SIZE: Unspecified

NOMINATED BY: NORA, Howard Booth, Sierra Club, Walter Barbuck

RATIONALE: Relic stands of ponderosa pine, riparian habitat, rare and endemic plants and animals, designated natural area and current heavy use by visitors.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; scenic, historic and possibly cultural values**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **Yes; relict ponderosa pine stand**
4. Natural hazard? **Yes; cliffs up to 3,000 feet of vertical relief**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **The area is a designated Research Natural Area.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **The lowest elevational occurrence of ponderosa pine in the Las Vegas District, riparian habitat, and historical/cultural sites.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA. Bureau Manual 1623.3 requires that all designated natural areas be designated as ACECs.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **The proximity to Las Vegas and the high number of visitors increases the potential for accidents, violence and unlawful actions. Many visitors attempt to climb the cliffs, requiring search and rescue efforts by Bureau Rangers.**
5. Poses a significant threat to human life and safety or to property? **Red Rocks receives an extremely high level of visitation because of it's proximity to the largest population center in Nevada; when combined with the terrain, the result is a very high potential accidental injury or death.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to protect and preserve the scenic, biological, cultural, and geologic values of the area.

ACEC NOMINATION EVALUATION

NAME: Brownstone Canyon

LOCATION: RRCRL

SIZE: Unspecified

NOMINATED BY: NORA, Sierra Club, Howard Booth

RATIONALE: Cultural Resources, wildlife habitat, eligible for the National Register of Historic Places, remnant stands ponderosa pines and current heavy use and abuse by visitors.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural and scenic values**
2. Fish and wildlife resource? **None unique to the area; potential gila monster habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **Yes; cliffs up to 3,000 feet of vertical relief**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Brownstone Canyon is on the National Register of Historic Places.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Cultural resources, heavy use by recreationists, and uncommon vegetative communities.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Yes, heavy visitation and natural hazards.**
5. Poses a significant threat to human life and safety or to property? **Red Rocks receives an extremely high level of visitation because of it's proximity to the largest population center in Nevada; when combined with the terrain, the result is a very high potential accidental injury or death.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to protect and preserve the scenic, biological, cultural, and geologic values of the area.

ACEC NOMINATION EVALUATION

NAME: Calico Basin

LOCATION: RRCRL

SIZE: Unspecified

NOMINATED BY: Nature Conservancy, NORA

RATIONALE: Rare and candidate plant and animal spp., geology and riparian habitat.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; scenic and possibly cultural values**
2. Fish and wildlife resource? **None unique to the area; potentially gila monster habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **Yes; cliffs up to 3,000 feet of vertical relief**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Calico Basin is located within the Red Rock Canyon Recreation Area. Approximately 1/2 million people visit Red Rocks annually. Red Rocks is an internationally recognized rock climbing area. The escarpment is potentially suitable nesting habitat for the peregrine falcon, an endangered species. Expansion of Las Vegas is putting increasing demands on the area.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **High visitor use and proximity of private property to wildlife habitat and riparian systems; habitat for alkali mariposa lily, *Calochortus striatus*, a category 2 candidate species which appears to be uncommon in Nevada.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Yes, high visitor use and natural hazards.**
5. Poses a significant threat to human life and safety or to property? **Red Rocks receives an extremely high level of visitation because of its proximity to the largest population center in Nevada; when combined with the terrain, the result is a very high potential accidental injury or death.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to protect and preserve the scenic, biological, cultural, and geologic values of the area.

ACEC NOMINATION EVALUATION

NAME: Red Rock Canyon Joshua Forest LOCATION: RRCRL

SIZE: Unspecified NOMINATED BY: NORA

RATIONALE: Mojave Desert flora and scenic values

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; scenic values**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **Yes; cliffs up to 3,000 feet of vertical relief**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **The area is located within the Red Rock Canyon Recreation Area. Approximately 1/2 million people visit Red Rocks annually. Red Rocks is an internationally recognized rock climbing area. The escarpment is potentially suitable nesting habitat for the peregrine falcon, an endangered species. Expansion of Las Vegas is putting increasing demands on the area.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **High visitor use and proximity of private property to wildlife habitat and riparian systems; desert tortoise habitat.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Yes, high visitor use and natural hazards.**
5. Poses a significant threat to human life and safety or to property? **Red Rocks receives an extremely high level of visitation because of it's proximity to the largest population center in Nevada; when combined with the terrain, the result is a very high potential accidental injury or death.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to protect and preserve the scenic, biological, cultural, and geologic values of the area.

ACEC NOMINATION EVALUATION

NAME: First Creek

LOCATION: RRCRL

SIZE: Unspecified

NOMINATED BY: NORA

RATIONALE: Riparian habitat, Mojave Desert flora and scenic values

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; scenic and possibly cultural values**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **Yes; cliffs up to 3,000 feet of vertical relief**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **First Creek is located within the Red Rock Canyon Recreation Area. Approximately 1/2 million people visit Red Rocks annually. Red Rocks is an internationally recognized rock climbing area. The escarpment is potentially suitable nesting habitat for the peregrine falcon, an endangered species. Expansion of Las Vegas is putting increasing demands on the area.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **High visitor use and proximity of private property to wildlife habitat and riparian systems; desert tortoise habitat.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Yes, high visitor use and natural hazards.**
5. Poses a significant threat to human life and safety or to property? **Red Rocks receives an extremely high level of visitation because of its proximity to the largest population center in Nevada; when combined with the terrain, the result is a very high potential accidental injury or death.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to protect and preserve the scenic, biological, cultural, and geologic values of the area.

ACEC NOMINATION EVALUATION

NAME: Blue Diamond Hill

LOCATION: RRCRL

SIZE: Various unspecified sizes

NOMINATED BY: Nature Conservancy, Howard Booth, Sierra Club

RATIONALE: Habitat for category 1 plant species, geology (cave), vandalism of cave fossils and scenic values compatible with Red Rocks.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; Blue Diamond Hill screens the Red Rocks area from Las Vegas**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **None known.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for many-jointed whipple cholla, *Opuntia whipplei* var. *multigeniculata*, a category 1 candidate species; limestone cave; many fossils; Blue Diamond Hill is part of the viewshed of Red Rocks.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Yes, high visitor use.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria due to its location as a visual screen between the largest population center in Nevada and one of BLM's most visible and highly used recreation areas. Existing laws and regulations do not adequately protect the scenic values of the area and therefore, special management attention is warranted.

ACEC NOMINATION EVALUATION

NAME: Rocky Gap-Red Rock Summit

LOCATION: RRCRL

SIZE: Unspecified

NOMINATED BY: Howard Booth

RATIONALE: Historic values, riparian habitat, remnant stands of ponderosa pine, abuse by OHV enthusiasts, lack of ranger patrol and wildlife habitat.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; historic, cultural and scenic values**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Rocky Gap-Red Rock Summit is located within the Red Rock Canyon Recreation Area. Approximately 1/2 million people visit Red Rocks annually. Red Rocks is an internationally recognized rock climbing area. The escarpment is potentially suitable nesting habitat for the peregrine falcon, an endangered species. Expansion of Las Vegas is putting increasing demands on the area.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Scenic values; geology; riparian habitat, and wildlife habitat.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Yes, high visitor use.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The values of the area meet the relevance and importance criteria to a limited extent, but in and of themselves do not warrant special management attention. Taken in the greater context of the Red Rock Canyon Recreation Lands, however, the area does warrant special management attention.

ACEC NOMINATION EVALUATION

NAME: Rainbow and Bootleg Springs

LOCATION: RRCRL

SIZE: Unspecified

NOMINATED BY: Howard Booth and Sierra Club

RATIONALE: Perennial springs with riparian habitat, wildlife habitat, cultural sites and damage to springs and riparian habitat via OHV and camping.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural and scenic values**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **None known.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Riparian habitat; cultural values; perennial spring provides water for many wildlife species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The values of the area meet the relevance and importance criteria to a limited extent, but in and of themselves do not warrant special management attention. Taken in the greater context of the Red Rock Canyon Recreation Lands, however, the area does warrant special management attention.

ACEC NOMINATION EVALUATION

NAME: Oak Creek Canyon

LOCATION: RRCRL

SIZE: Unspecified

NOMINATED BY: Howard Booth and Sierra Club

RATIONALE: Scenic values, riparian habitat, wildlife habitat, Mojave Desert flora, potential interpretive area, riparian habitat and extensive impacts from current heavy use by visitors.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; scenic values**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **Yes; cliffs up to 3,000 feet of vertical relief**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Oak Creek is located within the Red Rock Canyon Recreation Area. Approximately 1/2 million people visit Red Rocks annually. Red Rocks is an internationally recognized rock climbing area. The escarpment is potentially suitable nesting habitat for the peregrine falcon, an endangered species. Expansion of Las Vegas is putting increasing demands on the area.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Riparian habitat, wildlife habitat and heavy use by visitors.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Yes, heavily used day use and camping area.**
5. Poses a significant threat to human life and safety or to property? **Red Rocks receives an extremely high level of visitation because of it's proximity to the largest population center in Nevada; when combined with the terrain, the result is a very high potential accidental injury or death.**

RECOMMENDATION

The area meets the relevance and importance criteria and special management attention is needed to protect and preserve the scenic, biological, cultural, and geologic values of the area.

ACEC NOMINATION EVALUATION

NAME: Desert Tortoise Management Areas LOCATION: Various

SIZE: Various

NOMINATED BY: USFWS-Reno, Sierra Club, NORA

RATIONALE: Habitat for a federally listed, threatened species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat considered "essential" for the continued existence of the desert tortoise in Nevada.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a federally listed, threatened species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered Species Act of 1973, as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The areas meet the relevance and importance criteria, and although the Endangered Species Act provides an adequate level of protection for the biological values of the area, special management attention is needed to ensure the "recovery" of the desert tortoise.

ACEC NOMINATION EVALUATION

NAME: Tortoise Management Areas (TMA) LOCATION: Various

SIZE: Six TMAs of 60,000-187,000 acres NOMINATED BY: BLM
Total approximately 757,000 acres

RATIONALE: Habitat for a federally listed, threatened species

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; some areas include cultural and/or historic values**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat considered "essential" for the continued existence of the desert tortoise in Nevada.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a federally listed, threatened species.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered Species Act of 1973, as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The areas meet the relevance and importance criteria, and although the Endangered Species Act provides an adequate level of protection for the biological values of the area, special management attention is needed to ensure the "recovery" of the desert tortoise.

ACEC NOMINATION EVALUATION

NAME: Las Vegas-Goodsprings-Ivanpah TMA LOCATION: SW Las Vegas Valley south through Goodsprings and Ivanpah valleys to the CA border

SIZE: Approximately 170,000 acres NOMINATED BY: BLM

RATIONALE: Habitat for a federally listed, threatened species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for a federally listed, threatened species.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a threatened species; URDS has been documented in the population; rapid rate of habitat loss due to the expansion of Las Vegas, Jean and Stateline.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered Species Act of 1973, as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria, and although the Endangered Species Act provides an adequate level of protection for the biological values of the area, special management attention is needed to ensure the "recovery" of the desert tortoise.

ACEC NOMINATION EVALUATION

NAME: Mormon Mesa TMA LOCATION: NE Clark County, north of I-15.

SIZE: Approximately 93,000 acres NOMINATED BY: BLM

RATIONALE: Habitat for a federally listed, threatened species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for a federally listed, threatened species. This area is part of the Mormon Mesa-Beaver Dam Slope genetic subunit.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a federally listed, endangered species; some evidence of URDS in the population.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered Species Act of 1973, as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria, and although the Endangered Species Act provides an adequate level of protection for the biological values of the area, special management attention is needed to ensure the "recovery" of the desert tortoise.

ACEC NOMINATION EVALUATION

NAME: Piute Valley TMA

LOCATION: S. Eldorado Valley and Piute Valley to the CA border, Clark Co., NV

SIZE: Approximately 187,000 acres NOMINATED BY: BLM

RATIONALE: Habitat for a federally listed, threatened species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **This is the only TMA in Nevada which supports the Piute genetic subunit. This subunit is characterized by rapid rates of population declines in both Nevada and California. URDS has been documented in California populations and has resulted in high mortality.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a federally listed, threatened species; A die-off occurred in this population between 1979 and 1983. This population is probably more vulnerable to change or disturbance than healthy tortoise populations.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered species Act of 1973, as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria, and although the Endangered Species Act provides an adequate level of protection for the biological values of the area, special management attention is needed to ensure the "recovery" of the desert tortoise.

ACEC NOMINATION EVALUATION

NAME: Arrow Canyon TMA

LOCATION: Between the Arrow Canyon Range and the Desert National Game Range

SIZE: Approximately 60,000 acres

NOMINATED BY: BLM

RATIONALE: Habitat for a federally listed, threatened species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural values**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **This area in Nevada supports a high density tortoise population which appears to be healthy with the limited data which is available.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a federally listed, threatened species; cultural sites; migration route for bighorn sheep; high scenic values.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered species Act of 1973, as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria, and although the Endangered Species Act provides an adequate level of protection for the biological values of the area, special management attention is needed to ensure the "recovery" of the desert tortoise.

ACEC NOMINATION EVALUATION

NAME: Pahrump Valley TMA

LOCATION: Pahrump Valley, Nye Co., NV

SIZE: Approximately 102,000 acres

NOMINATED BY: BLM

RATIONALE: Habitat for a threatened species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural and historic values**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for a federally listed, threatened species; Old Spanish Trail/Mormon Trail is eligible for National Register of Historic Places.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a federally listed, threatened species; cultural and historic sites.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered species Act of 1973, as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria, and although the Endangered Species Act provides an adequate level of protection for the biological values of the area, special management attention is needed to ensure the "recovery" of the desert tortoise.

ACEC NOMINATION EVALUATION

NAME: Gold Butte TMA

LOCATION: N. of Lake Mead and E. of Virgin River, Clark Co., NV.

SIZE: Approximately 145,000 acres NOMINATED BY: BLM

RATIONALE: Habitat for a threatened species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural and scenic values**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for a federally listed, threatened species; Mormon Mesa-Beaver Dam Slope genetic unit.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for a federally listed, threatened species; limited data available indicates very low recruitment in this tortoise population; adjacent to habitat in Arizona; Moderately high density tortoise population; many cultural sites.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered Species Act of 1973 as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria, and although the Endangered Species Act provides an adequate level of protection for the biological values of the area, special management attention is needed to ensure the "recovery" of the desert tortoise.

ACEC NOMINATION EVALUATION

NAME: Critical gila monster habitat LOCATION: unspecified
SIZE: Unspecified NOMINATED BY: NORA
RATIONALE: Category 3 candidate species and state listed rare reptiles.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Unable to assess**
2. Fish and wildlife resource? **None unique to the area; potentially gila monster habitat**
3. Natural process or system? **Unable to assess**
4. Natural hazard? **Unable to assess**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Habitat for the only poisonous lizard in the United States and one of only two species world wide.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **The gila monster is considered rare in Nevada and is unique in that it is the only poisonous lizard in the United States.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA. However, the gila monster is a category 3 candidate species and no critical habitat is defined for candidate species. In addition, the Bureau does not have good data on the distribution of gila monsters within the district. Gila monsters have been sighted at Red Rocks and Whitney Pockets both areas which have been proposed as ACECs. Sufficient gila monster habitat should be included in other ACEC nominations to cover the intent of this nomination. If future inventories identify areas which are crucial to the survival of the species in Nevada, additional ACECs could be nominated at that time.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Unable to assess.**
5. Poses a significant threat to human life and safety or to property? **Unable to assess.**

RECOMMENDATION

The area does not conclusively meet the relevance and importance criteria, nor is the nomination sufficiently defined to allow a definitive analysis of an area. Furthermore, the federal status of the gila

monster is such that no foreseeable danger to the continued existence of gila monster exists. As stated above, vast areas of gila monster habitat will be protected under the umbrella of the desert tortoise ACECs, and therefore, further special management attention is not warranted.

ACEC NOMINATION EVALUATION

NAME: Mesquite Valley

LOCATION: Mesquite Valley, near Sandy, Nye Co., NV

SIZE: Unspecified

NOMINATED BY: Nature Conservancy

RATIONALE: Category 2 candidate plant species.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known on public lands in the area**
2. Fish and wildlife resource? **None unique to public lands in the area**
3. Natural process or system? **None unique to public lands in the area**
4. Natural hazard? **None known on public lands in the area**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **None known on public lands in the area.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for two candidate plant species, *Arctomecon merriami* and *Eriogonum bifurcatum*. Both species are fairly common and more widely distributed than once thought.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **No. The area indicated on the map included with the ACEC nomination was private land and does not fall under the mandates of FLPMA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known on public lands in the area.**
5. Poses a significant threat to human life and safety or to property? **Not known for public lands in the area.**

RECOMMENDATION

The nominated area is located on private lands, and is therefore not eligible for ACEC consideration.

ACEC NOMINATION EVALUATION

NAME: Park Service Buffer LOCATION: All public lands adjacent to National Park Service Lands.

SIZE: Unspecified NOMINATED BY: National Park Service-Western Region

RATIONALE: Protect National park boundaries.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Unable to assess**
2. Fish and wildlife resource? **Unable to assess**
3. Natural process or system? **Unable to assess**
4. Natural hazard? **Unable to assess**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Unable to assess.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Unable to assess.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Unable to assess.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Unable to assess.**
5. Poses a significant threat to human life and safety or to property? **Unable to assess.**

RECOMMENDATION

The area nominated was not specific enough to allow for an analysis of the values, if any, of the "buffer lands".

ACEC NOMINATION EVALUATION

NAME: Yucca Mountain

LOCATION: E. of Beatty, Nye Co., NV

SIZE: 4,255 acres

NOMINATED BY: State of Nevada, Agency for Nuclear Projects,
Nuclear Waste Project Office

RATIONALE: Habitat for a federally listed, threatened species, volcanic origin, potential impacts to ground water

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area; desert tortoise habitat**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **The area has been designated by Congress as the only site to be studied for the nation's first long-term high-level nuclear waste repository.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Habitat for the desert tortoise, a threatened species, and part of the groundwater basin for the Ash Meadows area and Amargosa River.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLMPA.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **Not known.**

RECOMMENDATION

The area meets the relevance and importance criteria to a limited extent, but existing laws and regulations, including the Endangered Species Act, provide an adequate level of protection for the biological and cultural values of the area, and special management attention is not warranted to protect the area for further study for a nuclear waste repository.

ACEC NOMINATION EVALUATION

NAME: Colorado River Frontage LOCATION: Between Laughlin and the Fort Mohave Indian Reservation.

SIZE: 3-4 miles NOMINATED BY: Sierra Club

RATIONALE: Riparian and wildlife habitat, rapid growth of Laughlin

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **None known**
2. Fish and wildlife resource? **None unique to the area**
3. Natural process or system? **None unique to the area**
4. Natural hazard? **Yes; flood prone area**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **None known.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Riparian habitat and fisheries; heavy visitor use demands on the Colorado River.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **No. This area is withdrawn by the Bureau of Reclamation (Secretarial order 10-16-1931, PL 31-522-1953).**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **The area is subject to periodic flooding.**
5. Poses a significant threat to human life and safety or to property? **Potentially during flooding.**

RECOMMENDATION

The area is located on public lands withdrawn by the Bureau of Reclamation and are therefore not eligible for ACEC consideration.

ACEC NOMINATION EVALUATION

NAME: Fort Piute

LOCATION: California Desert District

SIZE: Undetermined

NOMINATED BY: Howard Booth

RATIONALE: Historic area, riparian habitat, threatened by OHV and pumping of water from the aquifer.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Not applicable**
2. Fish and wildlife resource? **Not applicable**
3. Natural process or system? **Not applicable**
4. Natural hazard? **Not applicable**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Not applicable.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Not applicable.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Not applicable.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Not applicable.**
5. Poses a significant threat to human life and safety or to property? **Not applicable.**

RECOMMENDATION

The area is located outside of the planning area and is therefore not eligible for ACEC consideration in this RMP.

ACEC NOMINATION EVALUATION

NAME: Areas of Critical Mineral Potential LOCATION: Various

SIZE: Various NOMINATED BY: American Borate; Miners and Prospectors
Assn. of Southern Nevada

RATIONALE: Strategic, industrial and precious metals with high economic importance.

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Unable to assess**
2. Fish and wildlife resource? **Unable to assess**
3. Natural process or system? **Geologic/mineralization (including sand and gravel, and gypsum).**
4. Natural hazard? **Unable to assess**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Possibly in the case of strategic minerals. More specific information is needed to make a determination.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Unable to assess.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Unable to assess.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Unable to assess.**
5. Poses a significant threat to human life and safety or to property? **Unable to assess.**

RECOMMENDATION

The area nominated was not specific enough to allow for an analysis. BLM is legally required to identify and manage ACECS, the concept of which is to ensure the continued integrity of significant biological, cultural, scenic, recreational, and geologic values in a specified area; this protection is usually achieved by restricting, or eliminating, mineral exploration and development and other surface disturbing activities in the ACEC. It would appear that the intention of nominating and designating an "Area of Critical Mineral Potential" would be to ensure that the area is available for mineral exploration and development, however, the public lands are available for mineral exploration and development unless specifically withdrawn or closed. The two concepts appear to be in direct conflict.

ACEC NOMINATION EVALUATION

NAME: Riparian Areas

LOCATION: Various

SIZE: Various

NOMINATED BY: BLM

RATIONALE: Uncommon, often disjunct, vegetation type associated with water and extremely critical to a wide variety of wildlife species; important to water quantity and quality

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Yes; cultural and historic**
2. Fish and wildlife resource? **Yes; threatened and endangered species endemic to some areas**
3. Natural process or system? **Riparian ecosystems**
4. Natural hazard? **None known**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Riparian areas and associated aquatic habitat along the Virgin River, Muddy River, and Ash Meadows either support, or potentially could support, populations of threatened and endangered plant and animal species.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **This habitat type is extremely restricted in desert environments and its importance to native wildlife populations is way out of proportion to the small acreage involved. Any disturbance in these areas carries with it the potential to irrevocably alter the riparian and aquatic habitat.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Yes, under Section 102(a)(8) of FLPMA and the Endangered Species Act of 1973 as amended.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **None known.**
5. Poses a significant threat to human life and safety or to property? **None known.**

RECOMMENDATION

Riparian areas and associated aquatic habitat meet the relevance and importance criteria, and special management attention is warranted to ensure their continued existence.

ACEC NOMINATION EVALUATION

NAME: Milo Hurst Property LOCATION: A portion of T.22 N., R.59 E., Section 7, NW $\frac{1}{4}$ SE $\frac{1}{4}$
(in the vicinity of Blue Diamond)

SIZE: Unknown NOMINATED BY: Dr. Larry Butler, and Penelope and Neil
Ingraham

RATIONALE: Proximity to Red Rock Canyon; "buffer zone; water conservation; local history, and natural
hazard area (rock slides)

RELEVANCE (must contain one or more of the following):

1. Significant historic, cultural, or scenic value? **Not applicable**
2. Fish and wildlife resource? **Not applicable**
3. Natural process or system? **Not applicable**
4. Natural hazard? **Not applicable**

IMPORTANCE (characterized by one or more of the following):

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource? **Not applicable.**
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change? **Not applicable.**
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA? **Not applicable.**
4. Has qualities which warrant highlighting in order to satisfy public or management concerns about safety and public welfare? **Not applicable.**
5. Poses a significant threat to human life and safety or to property? **None known.**

RECOMMENDATION

The nominated area is currently private property and therefore the BLM has no jurisdiction regarding current or future land uses of the nominated area.

APPENDIX F

SPECIES LIST FOR CLARK AND SOUTHERN NYE COUNTIES

I. BIRDS

Gaviidae (Loons)

Common loon	<u>Gavia immer</u>
Red-throated loon	<u>Gavia stellata</u>

Podicipedidae (grebes)

Western Grebe	<u>Aechmophorus occidentalis</u>
Horned Grebe	<u>Podiceps auritus</u>
Eared grebe	<u>Podiceps nigricollis</u>
Pied-billed grebe	<u>Podilymbus podiceps</u>

Pelecanidae (pelicans)

White pelican	<u>Pelecanus erythrorhynchos</u>
Brown pelican	<u>Pelecanus occidentalis</u>

Phalacrocoracidae (cormorants)

Double-crested cormorant	<u>Phalacrocorax auritus</u>
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Ardeidae (herons and bitterns)

Great blue heron	<u>Ardea herodias</u>
Green-backed heron	<u>Butorides striatus</u>
Little-blue heron	<u>Egretta caerulea</u>
Louisiana heron	<u>Egretta tricolor</u>
Black-crowned night heron	<u>Nycticorax nycticorax</u>
American bittern	<u>Botaurus lentiginosus</u>
Common egret	<u>Casmerodius albus</u>
Snowy egret	<u>Egretta thula</u>
Least bittern	<u>Ixobrychus exilis</u>
Cattle egret	<u>Bubulcus ibis</u>

Threskiornithidae (ibises and spoonbills)

Wood ibis	<u>Mycteria americana</u>
White-faced ibis	<u>Plegadis chihi</u>

Anatidae (Swans, ducks and geese)

Trumpeter swan	<u>Cygnus columbianus</u>
Canada goose	<u>Branta canadensis</u>
White-fronted goose	<u>Anser albifrons</u>
Snow goose	<u>Chen caerulescens</u>
Ross' goose	<u>Chen rossii</u>
Mallard	<u>Anas platyrhynchos</u>
Gadwall	<u>Anas strepera</u>
Pintail	<u>Anas acuta</u>
Green-winged teal	<u>Anas crecca</u>
Blue-winged teal	<u>Anas discors</u>

Cinnamon teal	<u>Anas cyanoptera</u>
American wigeon	<u>Anas americana</u>
Northern shoveler	<u>Spatula clypeata</u>
Wood duck	<u>Aix sponsa</u>
Redhead	<u>Aythya americana</u>
Ring-necked duck	<u>Aythya collaris</u>
Canvasback	<u>Aythya valisineria</u>
Greater scaup	<u>Aythya marila</u>
Lesser scaup	<u>Aythya affinis</u>
Common goldeneye	<u>Bucephala clangula</u>
Barrow's goldeneye	<u>Bucephala islandica</u>
White-winged scoter	<u>Melanitta fusca</u>
Surf scoter	<u>Melanitta perspicillata</u>
Bufflehead	<u>Bucephala albeola</u>
Ruddy duck	<u>Oxyura jamaicensis</u>
Common merganser	<u>Mergus merganser</u>
Red-breasted merganser	<u>Mergus serrator</u>
Hooded merganser	<u>Lophodytes cucullatus</u>
Fulvous whistling duck	<u>Dendrocygna bicolor</u>

Cathartidae (American vultures)

Turkey Vulture	<u>Cathartes aura</u>
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Accipitridae (hawks, kites, harriers and eagles)

Northern goshawk	<u>Accipiter gentilis</u>
Sharp-shinned hawk	<u>Accipiter striatus</u>
Cooper's hawk	<u>Accipiter cooperii</u>
Red-tailed hawk	<u>Buteo jamaicensis</u>
Swainson's hawk	<u>Buteo swainsoni</u>
Rough-legged hawk	<u>Buteo lagopus</u>
Ferruginous hawk	<u>Buteo regalis</u>
Red-shouldered hawk	<u>Buteo lineatus</u>
Northern harrier	<u>Circus cyaneus</u>
Golden eagle	<u>Aquila chrysaetos</u>
Bald eagle	<u>Haliaeetus leucocephalus</u>
Osprey	<u>Pandion haliaetus</u>

Falconidae (falcons)

Prairie falcon	<u>Falco mexicanus</u>
American kestrel	<u>Falco sparverius</u>
Peregrine falcon	<u>Falco peregrinus</u>
Merlin	<u>Falco columbarius</u>

Phasianidae (quail, partridge and pheasant)

Gambel's Quail	<u>Callipepla gambelii</u>
Chukar	<u>Alectoris chukar</u>

Meleagrididae (turkey)

Turkey	<u>Meleagris gallopavo</u>
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Gruidae (Cranes)

Sandhill crane Grus canadensis

Rallidae (rails, coots, and gallinules)

Virginia rail Rallus limicola
Sora rail Porzana carolina
American coot Fulica americana
Common moorhen Gallinula chloropus

Charadriidae (plovers, turnstones and surfbirds)

Snowy plover Charadrius alexandrinus
Killdeer Charadrius vociferus
Black-bellied plover Pluvialis squatarola
Ruddy turnstone Arenaria interpres
Semipalmated plover Charadrius semipalmatus

Scolopacidae (snipe and sandpipers)

Long-billed curlew Numenius americanus
Whimbrel Numenius phaeopus
Spotted sandpiper Actitis macularia
Willet Catoptrophorus semipalmatus
Greater yellowlegs Tringa melanoleuca
Lesser yellowlegs Tringa flavipes
Baird's sandpiper Calidris bairdii
Dunlin Calidris alpina
Least sandpiper Calidris minutilla
Long-billed dowitcher Limnodromus scolopaceus
Stilt sandpiper Calidris himantopus
Western sandpiper Calidris mauri
Marbled godwit Limosa fedoa
Sanderling Calidris alba

Recurvirostridae (avocets and stilts)

American avocet Recurvirostra americana
Black-necked stilt Himantopus mexicanus
Wilson's phalarope Phalaropus tricolor

Laridae (gulls and terns)

Herring gull Larus argentatus
California gull Larus californicus
Ring-billed gull Larus delawarensis
Bonaparte's Gull Larus philadelphia
Forster's tern Sterna forsteri
Least tern Sterna antillarum
Caspian tern Sterna caspia
Black tern Chlidonias niger

Columbidae (pigeons and doves)

Band-tailed pigeon	<u>Columba fasciata</u>
White-winged dove	<u>Zenaida asiatica</u>
Mourning dove	<u>Zenaida macroura</u>
Ground dove	<u>Columbina passerina</u>
Inca dove	<u>Columbina inca</u>
Rock dove	<u>Columba livia</u>
Cuculidae (cuckoos and roadrunners)	
Yellow-billed cuckoo	<u>Coccyzus americanus</u>
Roadrunner	<u>Geococcyx californianus</u>
Tytonidae (owls)	
Barn owl	<u>Tyto alba</u>
Screech owl	<u>Otus kennicottii</u>
Great Horned owl	<u>Bubo virginianus</u>
Burrowing owl	<u>Athene cunicularia</u>
Long-eared owl	<u>Asio otus</u>
Short-eared owl	<u>Asio flammeus</u>
Northern Saw whet owl	<u>Aegolius acadicus</u>
Flammulated owl	<u>Otus flammeolus</u>
Northern pygmy owl	<u>Glaucidium gnoma</u>
Caprimulgidae (goatsuckers)	
Poor-will	<u>Phalaenoptilus nuttallii</u>
Common nighthawk	<u>Chordeiles minor</u>
Lesser nighthawk	<u>Chordeiles acutipennis</u>
Apodidae (swifts)	
White-throated swift	<u>Aeronautes saxatalis</u>
Vaux's swift	<u>Chaetura vauxi</u>
Trochilidae (hummingbirds)	
Black-chinned hummingbird	<u>Archilochus alexandri</u>
Costa's hummingbird	<u>Calypte costae</u>
Calliope hummingbird	<u>Stellula calliope</u>
Anna's hummingbird	<u>Calypte anna</u>
Broad-tailed hummingbird	<u>Selasphorus platycercus</u>
Rufous hummingbird	<u>Selasphorus rufus</u>
Alcedinidae	
Belted kingfisher	<u>Ceryle alcyon</u>
Picidae (woodpeckers)	
Northern flicker	<u>Colaptes auratus</u>
Gila woodpecker	<u>Melanerpes uropygialis</u>
Lewis woodpecker	<u>Melanerpes lewis</u>
Yellow-bellied sapsucker	<u>Sphyrapicus varius</u>
Red-breasted sapsucker	<u>Sphyrapicus ruber</u>

Williamson's sapsucker	<u>Sphyrapicus thyroideus</u>
Ladder-backed woodpecker	<u>Picoides scalaris</u>
Hairy woodpecker	<u>Picoides villosus</u>
Mimidae (mockingbirds and thrashers)	
Bendire's thrasher	<u>Toxostoma bendirei</u>
LeConte's thrasher	<u>Toxostoma lecontei</u>
Crissal thrasher	<u>Toxostoma dorsale</u>
Sage thrasher	<u>Oreoscoptes montanus</u>
Mockingbird	<u>Mimus polyglottos</u>
Muscicapidae (thrushes and bluebirds)	
Robin	<u>Turdus migratorius</u>
Hermit thrush	<u>Catharus guttatus</u>
Swainson's thrush	<u>Catharus ustulatus</u>
Western bluebird	<u>Sialia mexicana</u>
Mountain bluebird	<u>Sialia currucoides</u>
Townsend's solitaire	<u>Myadestes townsendi</u>
Sylviidae (gnatcatchers and kinglets)	
Black-tailed gnatcatcher	<u>Polioptila melanura</u>
Blue-gray gnatcatcher	<u>Polioptila caerulea</u>
Ruby-crowned kinglet	<u>Regulus calendula</u>
Golden-crowned kinglet	<u>Regulus satrapa</u>
Motacillidae (water pipit)	
Water pipit	<u>Anthus spinoletta</u>
Bombycillidae (waxwings)	
Cedar waxwing	<u>Bombycilla cedrorum</u>
Ptilonotidae (phainopepla)	
Phainopepla	<u>Phainopepla nitens</u>
Laniidae (shrikes)	
Loggerhead shrike	<u>Lanius ludovicianus</u>
Sturnidae (starling)	
Starling	<u>Sturnus vulgaris</u>
Vireonidae (vireos)	
Bell's vireo	<u>Vireo bellii</u>
Gray vireo	<u>Vireo vicinior</u>
Solitary vireo	<u>Vireo solitarius</u>
Warbling vireo	<u>Vireo gilvus</u>
Hutton's vireo	<u>Vireo huttoni</u>

Emberizidae (warblers)

Orange-crowned warbler	<u>Vermivora celata</u>
Virginia's warbler	<u>Vermivora virginiae</u>
Lucy's warbler	<u>Vermivora luciae</u>
Yellow warbler	<u>Dendroica petechia</u>
Yellow-rumped warbler	<u>Dendroica coronata</u>
Black-throated gray warbler	<u>Dendroica nigrescens</u>
Nashville warbler	<u>Vermivora ruficapilla</u>
Townsend warbler	<u>Dendroica townsendi</u>
Hermit warbler	<u>Dendroica occidentalis</u>
Northern waterthrush	<u>Seiurus noveboracensis</u>
MacGillivray's warbler	<u>Oporornis tolmiei</u>
Yellowthroat	<u>Geothlypis trichas</u>
Yellow-breasted chat	<u>Icteria virens</u>
Wilson's warbler	<u>Wilsonia pusilla</u>
American redstart	<u>Setophaga ruticilla</u>
Painted redstart	<u>Myioborus pictus</u>
Black and White warbler	<u>Mniotilta varia</u>

Ploceidae (old world sparrows)

House sparrow	<u>Passer domesticus</u>
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Icteridae (meadow larks, blackbirds, and orioles)

Western meadow lark	<u>Sturnella neglecta</u>
Yellow-headed blackbird	<u>Xanthocephalus xanthocephalus</u>
Red-winged blackbird	<u>Agelaius phoeniceus</u>
Scott's oriole	<u>Icterus parisorum</u>
Brewer's blackbird	<u>Euphagus cyanocephalus</u>
Brown-headed cowbird	<u>Molothrus ater</u>
Great-tailed grackle	<u>Quiscalus mexicanus</u>
Hooded oriole	<u>Icterus cucullatus</u>

Thraupidae (tanagers)

Western tanager	<u>Piranga ludoviciana</u>
Hepatic tanager	<u>Piranga flava</u>
Summer tanager	<u>Piranga rubra</u>

Fringillidae (grosbeaks, finches, sparrows and buntings)

Black-headed grosbeak	<u>Pheucticus melanocephalus</u>
Blue grosbeak	<u>Guiraca caerulea</u>
Indigo bunting	<u>Passerina cyanea</u>
Lazuli bunting	<u>Passerina amoena</u>
Evening grosbeak	<u>Coccothraustes vespertinus</u>
Cassin's finch	<u>Carpodacus cassinii</u>
House finch	<u>Carpodacus mexicanus</u>
Pine siskin	<u>Carduelis pinus</u>
American goldfinch	<u>Carduelis tristis</u>
Lesser goldfinch	<u>Carduelis psaltria</u>
Red crossbill	<u>Loxia curvirostra</u>
Green-tailed towhee	<u>Pipilo chlorurus</u>

Rufous-sided towhee
Abert's towhee
Lark bunting
Savannah sparrow
Grasshopper sparrow
Vesper sparrow
Lark sparrow
Black-throated sparrow
Sage sparrow
Dark-eyed junco
Tree sparrow
Chipping sparrow
Brewer's sparrow
Blacked-chinned sparrow
White-crowned sparrow
Golden-crowned sparrow
Fox sparrow
Lincoln's sparrow
Song sparrow
Swamp sparrow

pipilo erythrophthalmus
Pipilo aberti
Calamospiza melanocorys
Passerculus sandwichensis
Ammodramus savannarum
Poocetes gramineus
Chondestes grammacus
Amphispiza bilineata
Amphispiza belli
Junco hyemalis
Spizella arborea
Spizella passerina
Spizella breweri
Spizella pusilla
Zonotrichia leucophrys
Zonotrichia atricapilla
Passerella iliaca
Melospiza lincolni
Melospiza melodia
Melospiza georgiana

Tryannidae (tyrant flycatchers)

Western kingbird
Cassin's kingbird
Ash-throated flycatcher
Olive-sided flycatcher
Western wood pewee
Black phoebe
Say's pheobe
Vermillion flycatcher
Brown-crested flycatcher

Tyrannus verticalis
Tyrannus vociferans
Myiarchus cinerascens
Contopus borealis
Contopus sordidulus
Sayornis nigricans
Sayornis saya
Pyrocephalus rubinus
Myiarchus tyrannulus

Empidonax flycatchers

Gray flycatcher
Dusky flycatcher
Western flycatcher
Hammond's flycatcher
Willow flycatcher

Empidonax wrightii
Empidonax oberholseri
Empidonax difficilis
Empidonax hammondii
Empidonax traillii

Alaudidae (larks)

Horned lark

Eremophila alpestris

Hirundinidae (swallows)

Tree swallow
Violet-green swallow
Purple martin
Cliff swallow
Northern rough-winged swallow
Bank swallow
Barn swallow

Tachycineta bicolor
Tachycineta thalassina
Progne subis
Hirundo pyrrhonota
Stelgidopteryx serripennis
Riparia riparia
Hirundo rustica

Corvidae (jays, crows and magpies)

Scrub jay	<u>Aphelocoma coerulescens</u>
Pinyon jay	<u>Gymnorhinus cyanocephalus</u>
Steller's jay	<u>Cyanocitta stelleri</u>
Clark's nutcracker	<u>Nucifraga columbiana</u>
Common raven	<u>Corvus corax</u>
American crow	<u>Corvus brachyrhynchos</u>

Paridae (titmice, verdins and chickadees)

Plain titmouse	<u>Parus inornatus</u>
Mountain chickadee	<u>Parus gambell</u>
Verdin	<u>Auriparus flaviceps</u>
Bushtit	<u>Psaltiriparus minimus</u>

Certhiidae (creepers)

Brown creeper	<u>Certhia americana</u>
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Sittidae (nuthatches)

White-breasted nuthatch	<u>Sitta carolinensis</u>
Red-breasted nuthatch	<u>Sitta canadensis</u>
Pygmy nuthatch	<u>Sitta pygmaea</u>

Troglodytidae (wrens)

House wren	<u>Troglodytes aedon</u>
Rock wren	<u>Salpinctes obsoletus</u>
Bewick's wren	<u>Thryomanes bewickii</u>
Marsh wren	<u>Cistothorus palustris</u>
Canyon wren	<u>Catherpes mexicanus</u>
Cactus wren	<u>Campylorhynchus brunneicapillus</u>
Winter wren	<u>Troglodytes troglodytes</u>

II. REPTILES

LIZARDS

Banded Gecko	<u>Coleonyx variegatus</u>
Gilbert's Skink	<u>Eumeces gilberti</u>
Western Skink	<u>Eumeces skiltonianus</u>
Desert Iguana	<u>Dipsosaurus dorsalis</u>
Zebra-tailed lizard	<u>Callisaurus draconoides</u>
Collared lizard	<u>Crotaphytus collaris</u>
Chuckwalla	<u>Sauromalus obesus</u>
Gila monster	<u>Heloderma suspectum</u>
Long-nosed leopard lizard	<u>Gambelia wislizenii</u>
Desert spiny lizard	<u>Sceloporus magister</u>
Western fence lizard	<u>Sceloporus occidentalis</u>
Eastern fence lizard	<u>Sceloporus undulatus*</u>
Sagebrush lizard	<u>Sceloporus graciosus</u>
Side-blotched lizard	<u>Uta stansburiana</u>
Desert horned lizard	<u>Phrynosoma platyrhinos</u>
Desert night lizard	<u>Xantusia vigilis</u>
Western whiptail	<u>Cnemidophorus tigris</u>
Long-tailed brush lizard	<u>Urosaurus graciosus</u>
Tree lizard	<u>Urosaurus ornatus</u>

SNAKES

Ringneck snake	<u>Diadophis punctatus</u>
Striped whipsnake	<u>Masticophis taeniatus</u>
Coachwhip	<u>Masticophis flagellum</u>
Western patch-nosed snake	<u>Salvadora hexalepis</u>
Spotted leaf-nosed snake	<u>Phyllorhynchus decurtatus</u>
Western shovel-nosed snake	<u>Chionactis occipitalis</u>
Black-headed snake	<u>Tantilla planiceps</u>
Racer	<u>Coluber constrictor</u>
Glossy snake	<u>Arizona elegans</u>
Gopher snake	<u>Pituophis melanoleucus</u>
Common kingsnake	<u>Lampropeltis getulus</u>
Long-nosed snake	<u>Rhinocheilus lecontei</u>
Western ground snake	<u>Sonora semiannulata</u>
Night snake	<u>Hypsiglena torquata</u>
Western blind snake	<u>Leptotyphlops humilis</u>
Sonoran Mountain kingsnake	<u>Lampropeltis pyromelana</u>
Speckled rattlesnake	<u>Crotalus mitchelli</u>
Mojave rattlesnake	<u>Crotalus scutulatus</u>
Sidewinder	<u>Crotalus cerastes</u>
Western diamondback	<u>Crotalus atrox</u>
Western garter snake	<u>Thamnophis elegans</u>
Sonora lyre	<u>Trimorphodon biscutatus lambda</u>

TORTOISES AND TURTLES

Desert tortoise	<u>Gopherus agassizi</u>
Texas softshell turtle	<u>Trionyx spiniferus</u>

III. AMPHIBIANS

TOADS

Great Basin spadefoot	<u>Scaphiopus intermontanus</u>
Southwestern toad	<u>Bufo microscaphus microscaphus</u>
Red-spotted toad	<u>Bufo punctatus</u>
Great-Plains toad	<u>Bufo cognatus</u>
Woodhouse's toad	<u>Bufo woodhousei</u>
Western toad	<u>Bufo boreas</u>

FROGS

Vegas Valley leopard frog	<u>Rana pipiens fisheri</u> Possibly extinct
Bullfrog	<u>Rana catesbeiana</u>
Pacific treefrog	<u>Hyla regilla</u>
Leopard frog	<u>Rana pipiens</u>

IV. MAMMALS

Bovidae (mountain sheep)

Desert bighorn sheep	<u>Ovis canadensis nelsoni</u>
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Cervidae (deer and elk)

Mule deer	<u>Odocoileus hemionus hemionus</u>
Rocky mountain elk	<u>Cervus canadensis</u>

Canidae (coyote, foxes, wolves)

Coyote	<u>Canis latrans</u>
Kit fox	<u>Vulpes macrotis</u>
Gray fox	<u>Urocyon cinereoargenteus</u>

Felidae (cats)

Bobcat	<u>Lynx rufus</u>
Mountain lion	<u>Felis concolor</u>

Mustelidae (skunks, racoons, weasels, otters, badgers)

Spotted skunk	<u>Spilogale gracilis</u>
Striped skunk	<u>Mephitis mephitis</u>
Badger	<u>Taxidea taxus</u>
Southwestern otter	<u>Lutra canadensis sonora</u>

Procyonidae (racoons)

Racoon	<u>Procyon lotor</u>
Ringtail	<u>Bassariscus astutus</u>

Rodentia (squirrels, rats and mice)

Round-tailed ground squirrel	<u>Citellus tereticaudus</u>
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Townsend's ground squirrel	<u>Citellus townsendii</u>
Rock squirrel	<u>Citellus variegatus</u>
Cliff chipmunk	<u>Eutamias dorsalis</u>
Plamer's chipmunk	<u>Eutamias palmeri</u>
Panamint chipmunk	<u>Eutamias panamintinus</u>
White-tailed antelope ground squirrel	<u>Ammospermophilus leucurus</u>
Golden-mantled ground squirrel	<u>Citellus lateralis</u>
Geomyidae (pocket gophers)	
Botta's pocket gopher	<u>Thomomys bottae</u>
Heteromyidae (kangaroo rats, kangaroo mice, pocket mice)	
Merriam's kangaroo rat	<u>Dipodomys merriami</u>
Desert kangaroo rat	<u>Dipodomys deserti</u>
Panamint kangaroo rat	<u>Dipodomys panamintinus</u>
Great basin pocket mouse	<u>Perognathus parvus</u>
Long-tailed pocket mouse	<u>Perognathus formosus</u>
Little pocket mouse	<u>Perognathus longimembris</u>
Castoridae (beaver)	
Beaver	<u>Castor canadensis</u>
Cricetidae (rats, mice, lemmings and voles)	
Bushy-tailed woodrat	<u>Neotoma cinerea</u>
Desert woodrat	<u>Neotoma lepida</u>
Western harvest mouse	<u>Reithrodontomys megalotis</u>
Canyon mouse	<u>Peromyscus crinitus</u>
Cactus mouse	<u>Peromyscus eremicus</u>
Deer mouse	<u>Peromyscus maniculatus</u>
Brush mouse	<u>Peromyscus boylii</u>
Pinon mouse	<u>Peromyscus truei</u>
Southern grasshopper mouse	<u>Onychomys torridus</u>
Muskrat	<u>Ondatra zibethicus</u>
Ash Meadows vole	<u>Microtus montanus nevadensis</u> possibly extinct
Muridae (Old World Rats and Mice)	
House mouse	<u>Mus musculus</u>
Norway rat	<u>Rattus norvegicus</u>
Erethizontidae (porcupines)	
Porcupine	<u>Erethizon dorsatum</u>
Lagomorpha (rabbits and hares)	
Black-tailed jackrabbit	<u>Lepus californicus</u>
Desert cottontail	<u>Sylvilagus audubonii</u>
Nuttall's cottontail	<u>Sylvilagus nuttallii</u>
Chiroptera (bats)	

Big brown bat
Leaf-nosed bat
Yuma myotis
Long-eared myotis
Fring-tailed myotis
Long-legged myotis
California myotis
Small-footed myotis
Silver-haired bat
Western pipistrell
Red bat
Hoary bat
Spotted bat
Townsend's big-eared bat
Mexican big-eared bat
Pallid bat
Mexican free-tailed bat
Pocketed free-tailed bat
Big free-tailed bat
Western mastiff bat

Soricidae (Shrews)
Inyo shrew
Desert shrew

Eptesicus fuscus pallidus
Macrotus californicus
Myotis yumanensis
Myotis evotis chrysonotus
Myotis thysanodes thysanodes
Myotis volans interior
Myotis californicus pallidus
Myotis subulatus
Lasionycteris noctivagans
Pipistrellus hesperus hesperus
Lasiurus borealis
Lasiurus cinereus
Euderma maculatum
Plecotus townsendi
Plecotus phyllotis
Antrozous pallidus pallidus
Tadarida brasiliensis
Tadarida femorosacca
Tadarida macrotis
Eumops perotis

Sorex tenellus
Notiosorex crawfordi

V. FISHES

Species	Distribution	Status
Clupeidae (herring and shad)		
Threadfin shad <u>Dorosoma petenense atchafalayae</u>	Colorado River drainage	introduced
Salmonidae (salmon and trout)		
Rainbow trout <u>Oncorhynchus mykiss</u>	Colorado River drainage	introduced
Lahontan cutthroat trout <u>Oncorhynchus clarki</u> ssp.	Colorado River drainage	introduced
Catostomidae (suckers)		
Razorback sucker <u>Xyrauchen texanus</u>	Lake Mead and Mohave	category 1
Flannel-mouth sucker <u>Catostomus latipinnis</u>	Colorado River drainage	native
Meadow Valley Wash desert sucker <u>Catostomus clarki</u> ssp.	Muddy River	category 2
Catfish		
Channel catfish <u>Ictalurus punctatus</u>	Colorado River drainage	introduced
Black bullhead catfish <u>Ictalurus melas</u>	Colorado River drainage	introduced
Centrarchidae (sunfishes)		
Largemouth bass <u>Micropterus salmoides</u>	Colorado River drainage	introduced
Bluegill sunfish <u>Lepomis macrochirus</u>	Colorado River drainage	introduced
Green sunfish <u>Lepomis cyanellus</u>	Colorado River drainage	introduced
Black crappie <u>Pomoxis nigromaculatus</u>	Colorado River drainage	introduced

Species	Distribution	Status
Percichthyidae (temperate basses)		
Striped bass <u>Morone saxatilis</u>	Colorado River drainage	introduced
Cyprinodontidae (killifish, springfish, and pupfish)		
Ash Meadows Amaragosa pupfish <u>Cyprinodon nevadensis mionectes</u>	Ash Meadows	endangered
Warm spring pupfish <u>Cyprinodon nevadensis pectoralis</u>	Ash Meadows	endangered
Devils Hole pupfish <u>Cyprinodon diabolis</u>	Ash Meadows	endangered
Moapa White River springfish <u>Crenichthys baileyi moapae</u>	Muddy River	category 2
Pahrump killifish <u>Empetrichthys latos</u>	Corn Creek springs Spring Mountain State Park	endangered
Poeciliidae (livebearers)		
Mosquito fish <u>Gambusia affinis</u>	Colorado River drainage	introduced
Shortfin molly <u>Poecilia mexicana</u>	Colorado River drainage	introduced
Black mollies <u>Mollienesia latipinna</u>	Colorado River drainage	introduced
Guppies <u>Lebistes reticulatus</u>	Colorado River drainage	introduced
Swordtails <u>Xiphophorus helleri</u>	Colorado River drainage	introduced
Platys <u>Xiphophorus maculatus</u>	Colorado River drainage	introduced
Cyprinidae (minnows)		
Fathead minnow <u>Pimephales promelas**</u>	Colorado River drainage	introduced
Moapa roundtail chub <u>Gila robusta</u> spp.	Colorado River drainage	category 2

Species	Distribution	Status
Colorado River roundtail chub <u>Gila robusta robusta</u>	Colorado River drainage	native
Virgin River roundtail chub <u>Gila robusta seminuda</u>	Virgin River	endangered
Bonytail chub <u>Gila elegans</u>	Lake Mohave	endangered
Red shiner <u>Notropis lutrensis</u> **	Colorado River drainage	introduced
Golden shiner <u>Notemigonus crysoleucas</u> **	Colorado River drainage	introduced
Speckled dace <u>Rhinichthys osculus</u>	Colorado River drainage	native
Moapa Speckled dace <u>Rhinichthys osculus moapae</u>	Muddy River	category 2
Ash Meadows speckled dace <u>Rhinichthys osculus nevadensis</u>	Ash Meadows	endangered
Meadow Valley Wash speckled dace <u>Rhinichthys osculus</u> spp.	Muddy River	category 2
Moapa dace <u>Moapa coriacea</u>	Muddy River	endangered
Asiatic carp <u>Cyprinus carpio</u>	Colorado River drainage	introduced
Goldfish <u>Carassius auratus</u>	Colorado River drainage	introduced
Virgin spinedace <u>Lepidomeda mollispinis mollispinis</u>	Virgin River	category 2
Big Spring spinedace <u>Lepidomeda mollispinis pratensis</u>	Ash Meadows	threatened
Woundfin <u>Plagopterus argentissimus</u>	Virgin River	endangered
Grass carp <u>Ctenopharyngodon idella</u> Val.	Colorado River drainage	introduced

APPENDIX G

Table G-1. Federally listed species.

Species that probably occur on BLM managed lands in the Stateline Resource Area

Threatened	Desert tortoise, <i>Gopherus agassizii</i>
Endangered	Woundfin minnow, <i>Plagopterus argentissimus</i>
Endangered	Virgin River roundtail chub, <i>Gila robusta seminuda</i>
Endangered	Ash Meadows Amargosa pupfish, <i>Cyprinodon nevadensis mionectes</i>
Endangered	Warm springs pupfish, <i>Cyprinodon nevadensis pectoralis</i>
Endangered	Ash Meadows speckled dace, <i>Rhinichthys osculus nevadensis</i>
Threatened	Ash Meadows naucorid, <i>Ambrysus amargosus</i>
Endangered	Peregrine falcon, <i>Falco peregrinus anatum</i>

Species that occur on state, private and other Federal lands and probably do not occur on BLM managed lands in Stateline Resource Area

Endangered	Moapa dace, <i>Moapa coriacea</i>
Endangered	Bald eagle, <i>Haliaeetus leucocephalus</i>
Endangered	Bonytail chub, <i>Gila elegans</i>
Endangered	Pahrump killifish, <i>Empetrichthys latos latos</i>
Endangered	Devil's Hole pupfish, <i>Cyprinodon diabolis</i>

(Source: USFWS, Reno Field Station, informal consultation, 1990)

Table G-2. Candidate species that occur on BLM and adjacent lands.

<u>Species that are known to occur on BLM land</u>	<u>Category</u>
Oasis Valley springsnail, <i>Pyrgulopsis micrococcus</i>	Category 2
Sportinggoods tryonia snail, <i>Tryonia angulata</i>	Category 1
Giuliani's dune scarab beetle, <i>Pseudocotalpa giulianii</i>	Category 2
Big Dune aphodius scarab beetle, <i>Aphodius</i> sp.	Category 2
Large aegialian scarab beetle, <i>Aegialia magnifica</i>	Category 2
Rullen's miloderes weevil, <i>Miloderes rulleni</i>	Category 2
Spotted bat, <i>Euderma maculata</i>	Category 2
Virgin spindace, <i>Lepidomeda mollispinis mollispinis</i>	Category 2
Ferruginous hawk, <i>Buteo regalis</i>	Category 2
Arizona Southwestern toad, <i>Bufo microscaphus microscaphus</i>	Category 2
<u>Species that occur on adjacent private, federal or state land and may occur on BLM land or be affected by BLM authorized actions</u>	
<u>Invertebrates</u>	
Amargosa naucorid bug, <i>Pelocoris shoshone</i>	Category 2
Moapa Warm Springs riffle beetle, <i>Stenelimis calida moapa</i>	Category 2
Devil's Hole warm springs riffle beetle, <i>Stenelimis calida calida</i>	Category 2
Moapa pebblesnail, <i>Fluminicola avernalis</i>	Category 2
Crystal spring springsnail, <i>Pyrgulopsis cristalis</i>	Category 1
Fairbanks springsnail, <i>Pyrgulopsis fairbanksensis</i>	Category 1
Elongate-gland springsnail, <i>Pyrgulopsis isolatus</i>	Category 1
Distal-gland springsnail, <i>Pyrgulopsis nanus</i>	Category 1
Median-gland Nevada springsnail, <i>Pyrgulopsis pisteri</i>	Category 1
Ash Meadows pebblesnail, <i>Pyrgulopsis erythropoma</i>	Category 1
Grated tryonia, <i>Tryonia clathrata</i>	Category 2
Point of Rocks Tryonia snail, <i>Tryonia elata</i>	Category 1
Amargosa tryonia snail, <i>Tryonia variegata</i>	Category 2
Minute tryonia snail, <i>Tryonia ericae</i>	Category 1
Virile Amargosa snail, undescribed	Category 1
Spring Mountain blue butterfly, <i>Plejebus shasta charlestonensis</i>	Category 2
Morand's checkerspot butterfly, <i>Euphydryas anicia morandi</i>	Category 2
Carole's silverspot butterfly, <i>Speyeria zerene carolae</i>	Category 2
MacNeill sooty wing skipper, <i>Hesperopsis graciellae</i>	Category 2
<u>Fish</u>	
Moapa roundtailed chub, <i>Gila robusta</i> ssp.	Category 2
Moapa speckled dace, <i>Rhinichthys osculus moapae</i>	Category 2
Moapa White River springfish, <i>Crenichthys baileyi moapa</i>	Category 2
Razorback sucker, <i>Xyrauchen texanus</i>	Category 1
Meadow Valley Wash speckled dace, <i>Rhinichthys osculus</i> spp.	Category 2
Meadow Valley Wash desert sucker, <i>Catostomus clarki</i> spp.	Category 2
(Source: USFWS, Reno Field Station, informal consultation, 1990).	

Table G-2. Continued.

Birds

Snowy plover, *Charadrius alexandrinus nivosus*

Category 2

Mountain plover, *Charadrius montanus*

Category 2

White-faced ibis, *Plegadis chihi*

Category 2

Long-billed curlew, *Numenius americanus*

Category 2

Mammals

Ash Meadows vole, *Microtus montanus nevadensis*

Category 2

Palmer's chipmunk, *Eutamias palmeri*

Category 2

Southwestern Otter *Lutra canadensis sonorae*

Category 2

(Source: USFWS, Reno Field Station, Informal consultation, 1990).

APPENDIX H

WILD AND SCENIC RIVERS ELIGIBILITY, CLASSIFICATION, AND SUITABILITY

STUDY PROCESS

The wild and scenic river study process has three steps:

1. Determine if the river segment(s) is eligible for wild and scenic river designation.
2. Determine the potential classification of the river segment(s) as wild, scenic, recreational, or any combination thereof.
3. Conduct a suitability study/legislative EIS to determine if the river segment(s) is suitable for designation to the Wild and Scenic Rivers System.

Specific study procedures are found in BLM Manual 8351 and in the final revised U.S. Department of Agriculture and Interior guidelines found in *Federal Register* Vol. No. 173, September 7, 1982. The guidance recommends that all three steps be completed during the RMP process. If circumstances make this impossible, the study/EIS step may be deferred for up to 5 years. Minimum determination in an RMP involving a potential wild and scenic river must include decisions on eligibility and classification.

This appendix completes the first two steps of the process for the Virgin River. The Stateline Resource Area has elected to defer the suitability study for the Virgin River due to the abbreviated RMP schedule and the intensive coordination which would be required. Funding limitations also influenced this decision.

The suitability study/legislative EIS for the Virgin River will be a joint effort involving the BLM Cedar City District, Utah, the BLM Arizona Strip District, and the BLM Las Vegas District, Nevada.

STUDY CRITERIA

To be eligible for inclusion in the national system, a river segment must be free-flowing. The river and its adjacent land area must possess at least one outstandingly remarkable value. Length or flow of an eligible river segment are not specifically defined and are considered sufficient if they sustain or compliment the outstandingly remarkable values for which the river would be designated. The minimum study corridor includes the river and the adjacent lands to .025 miles from the river's edges. A wider corridor may be studied if inclusion could facilitate resource management in the river area. If a river segment is determined to be non-eligible during the planning process, further study should be discontinued. Planning records must document the basis for the non-eligibility determination.

A river segment's potential classification depends on the condition of the river and adjacent lands at the time of the study. The Wild and Scenic Rivers Act specifies three classifications for eligible rivers: wild, scenic and recreational.

To be classified wild, a river must be free of impoundments and generally inaccessible except by trail. Watersheds or shorelines must be essentially primitive and the waters unpolluted.

To be classified scenic, a river segment must be free of impoundments, with shorelines or watersheds still largely primitive. Shorelines should be largely undeveloped, but accessible by some roads. The area must not show substantial evidence of human activity.

To be classified recreational, a river segment may be readily accessible by road or railroad and may have some development along the shoreline. The river segment may also have undergone some

INTERIM MANAGEMENT

BLM guidance provides for interim protection of a river segment after it is determined eligible and subsequently classified as wild, scenic, and/or recreational. Management activities will not be allowed to damage the existing eligibility, classification, or suitability. The outstandingly remarkable values of the river area must be protected and, to the extent practicable, enhanced. The free-flowing characteristics of the river segment cannot be modified.

VIRGIN RIVER OVERVIEW

The following sections address the eligibility and classification steps of a study on the Virgin River in Nevada for potential Wild and Scenic River designation. The river was on the 1982 National Rivers Inventory but was later removed from that list. Public interest expressed during the RMP process indicated that the river should be studied for potential designation. The Nevada section is classified as recreational.

Introduction

The Virgin River flows through three states, originating north and east of Zion National Park and flowing through southwestern Utah, the Virgin River Gorge in Arizona, and finally into Lake Mead in Nevada. The total river segment covers 76 miles, from just above Hurricane, Utah to Lake Mead. This eligibility and classification determination covers only the 30 miles in Nevada. Although the river was removed from the National Rivers Inventory (NRI), the values for which it was originally included are considered in this eligibility and classification process. The Virgin River was identified as having outstandingly remarkable scenic, geologic, fisheries, and wildlife values.

ADMINISTRATION

The Nevada section of the Virgin River has been determined non-navigable. The river bed, use on the river, and the area within the corridor included in this study are controlled by the landowner. Of the approximately 30 miles of river in Nevada, 16 miles are under BLM administration, 11 miles are privately owned, and 3 miles are state-owned.

RIVER DESCRIPTION

The Virgin River traverses lands valuable for agricultural uses, as well as important riparian habitat. The roundfin minnow, an endangered species, and the Virgin River chub, a candidate for endangered status, are found in the river. This riparian corridor also provides important habitat for waterfowl, upland game, nongame, and other fish. These adjacent lands possess opportunities for nature study, interpretation, hunting, and non-consumptive recreational activities.

The river corridor to be studied consists of the river itself and a strip of land 0.25 miles from the high water mark on each side of the river. The corridor starts where the river crosses the Arizona-Nevada state line and ends where the river enters the Lake Mead National Recreation Area. The 30 mile section has been divided into three segments:

1. Arizona-Nevada state line (Mile 0) to the bridge at Riverside (approximately 14 river miles).
2. The Riverside Bridge to the Overton State Wildlife Management Area (approximately 10 river miles).
3. The Overton State Wildlife Management Area to the Lake Mead National Recreation Area border (approximately 6 river miles).

This segment of the Virgin River lies between the municipalities of Mesquite and Riverside, Nevada. The segment runs through approximately 4 miles of private land used for agriculture and approximately 10 miles of BLM administered land; 5 of which are within the boundaries of the Virgin River Recreation Lands. The recreation lands were designated to preserve waterfowl habitat and rare and unusual plants along the river, as well as developing wildlife and recreational values. The shoreline is primarily sandy and includes riparian vegetation. There are several access points scattered along the shoreline, human development (houses and agricultural fields) is visible as well as several diversions that feed water to nearby fields.

Segment 2

This segment of the Virgin River lies between the municipality of Riverside, Nevada and the Overton State Wildlife Management Area. The segment runs through approximately 5 miles of private land used for agriculture and approximately 5 miles of BLM administered land; 4 of which are within the boundaries of the Virgin River Recreation Lands. The shoreline is primarily sandy and includes riparian vegetation. There are several access points scattered along the shoreline, human development (houses and agricultural fields) is visible as well as several diversions that feed water to nearby fields.

Segment 3

This segment of the Virgin River lies between the Overton State Wildlife Management Area and Lake Mead National Recreation Area. The segment runs through approximately 3 miles of land managed by the State of Nevada Division of Wildlife and approximately 3 miles of private land used for agriculture. There are several access points scattered along the shoreline, human development (houses and agricultural fields) is visible as well as several diversions that feed water to nearby fields.

ELIGIBILITY

The river meets the definition of a free-flowing stream from the Arizona-Nevada state line to the Lake Mead National Recreation Area. All three segments have outstandingly remarkable desert aquatic riparian values. Therefore, all three segments are determined eligible for inclusion in the Wild and Scenic Rivers System.

POTENTIAL CLASSIFICATION

All three segments meet the recreation criteria because of bridges, river channel modifications access points and noticeable human developments.

INTERIM MANAGEMENT

Interim management for the Virgin River will require that the potential classification as determined in this document be considered when an action is proposed that may affect these classifications. Especially important is segment 1 from the Arizona-Nevada state line to the Riverside bridge because of the human population growth and related demands on natural resources.

APPENDIX I

PUBLIC LAND CLASSIFICATIONS

Recreation and Public Purposes Classifications

<u>Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
Nye County -				
T. 13 S., R. 47 E.				
Nev-057750 (Lease)	sec. 26, S½S½; sec. 35, NE¼NE¼, NW¼NW¼, S½.	Waste Site Buffer Zone	560	Public Land Laws 1872 Mining Law
T. 16 S., R. 49 E.				
N-45126 (Lease)	sec. 16, NW¼NE¼.	Comm. Park	40	Public Land Laws 1872 Mining Law
N-20003 (Classification)	sec. 9, S½SE¼SW¼SE¼.	Not Specific	5	Public Land Laws 1872 Mining Law
Clark County -				
T. 16 S., R. 56 E.				
N-38127 (Lease)	sec. 8, Lot 8.	Church	2.22	Public Land Laws 1872 Mining Law
N-25225 (Lease)	sec. 8, Lot 7.	VFW Post	2.23	Public Land Laws 1872 Mining Law
Nev-064225 (Lease)	sec. 15, W¼SW¼SW¼, sec. 16, E¼SE¼SE¼.	Sanitary Landfill	40	Public Land Laws 1872 Mining Law
N-41004 (Lease)	sec. 8, Lot 6.	Park/Complex	40	Public Land Laws 1872 Mining Law
T. 24 S., R. 56 E.				
N-16178 (Lease)	sec. 36, Lot 6.	Park/Comm Center	8.04	Public Land Laws 1872 Mining Law
T. 24 S., R. 57 E.				
N-7838 (Lease)	sec. 27, SE¼SW¼SW¼, SW¼SE¼SW¼.	Sanitary Landfill	20	Public Land Laws 1872 Mining Law
T. 22 S., R. 58 E.				
Nev-066747 (Lease)	sec. 12, SW¼NE¼.	Disposal Site	40	Public Land Laws 1872 Mining Law
T. 23 S., R. 58 E.				
		Goodsprings		

N-47565 (Lease)	sec. 26, SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$. T. 18 S., R. 59 E.	Fire Station	2.5	Public Land Laws 1872 Mining Law
N-41567 (Lease)	sec. 23, SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$; sec. 32, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$; sec. 33, SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$.	School Site	30	Public Land Laws 1872 Mining Law
N-41568 (Lease)	sec. 28, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$. T. 22 S., R. 59 E.	School Site	30	Public Land Laws 1872 Mining Law
N-10151 (Classification)	sec. 7, S $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$.	Horse Corrals	45	Public Land Laws 1872 Mining Law
N-36627 (Classification)	sec. 9, N $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$. T. 19 S., R. 60 E.	Horse/Burro Adopt. Center	120	Public Land Laws 1872 Mining Law
N-36876 (Lease)	sec. 2, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$,S $\frac{1}{2}$; sec. 3, Lots 3,4, S $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$; sec. 4, Lots 1,2, SE $\frac{1}{4}$ NE $\frac{1}{4}$; sec. 11, NW $\frac{1}{4}$.	State Park	1,360.89	Public Land Laws 1872 Mining Law
N-37057 (Lease)	sec. 5, Lot 4.	Fire Station	2.5	Public Land Laws 1872 Mining Law
N-37125 (Lease)	sec. 5, SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$.	Park Site	10	Public Land Laws 1872 Mining Law
N-37056 (Lease)	sec. 13, N $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$.	Fire Station	5	Public Land Laws 1872 Mining Law
N-37108 (Lease)	sec. 13, E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$.	Park Site	35	Public Land Laws 1872 Mining Law
N-37109 (Lease)	sec. 24, W $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$.	Park Site	20	Public Land Laws 1872 Mining Law
N-37111 (Lease)	sec. 28, SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$.	Park Site	10	Public Land Laws 1872 Mining Law
N-41567-11 (Lease)	sec. 21, W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$.	School Site	20	Public Land Laws 1872 Mining Law
N-37055 (Lease)	sec. 17, SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$.	Fire Station	2.5	Public Land Laws 1872 Mining Law
N-37123 (Lease)	sec. 17, N $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$.	Park Site	7.5	Public Land Laws 1872 Mining Law
N-37122 (Lease)	sec. 20, W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$.	Park Site	20	Public Land Laws 1872 Mining Law

T. 20 S., R. 60 E.

N-7301-F (Lease)	sec. 33, Lots 2,3,30,31.	School Site	20	Public Land Laws 1872 Mining Law
N-37126 (Lease)	sec. 33, Lots 4,5,6.	Park Site	15	Public Land Laws 1872 Mining Law
N-48675 (Lease)	sec. 33,	Lot 43.	School Site	5Public Land Laws 1872 Mining Law
N-50889 (Lease)	sec. 9, NW¼NE¼SE¼.	School Site	10	Public Land Laws 1872 Mining Law
N-50827 (Lease)	sec. 10, NW¼NE¼NE¼NW¼, N½SW¼NE¼NE¼NW¼, N½NW¼NE¼NW¼, N½S½NW¼NE¼NW¼, N½NE¼NW¼NW¼, NE¼NW¼NW¼NW¼.	Park Site	18.75	Public Land Laws 1872 Mining Law
N-36901 (Lease)	sec. 10, NE¼NE¼NE¼NW¼.	Library Site	2.5	Public Land Laws 1872 Mining Law
N-37053 (Lease)	sec. 15, N½NE¼NE¼NW¼.	Fire Station	5	Public Land Laws 1872 Mining Law
N-41565-12 (Lease)	sec. 22, NE¼NW¼.	School Site	40	Public Land Laws 1872 Mining Law
N-37129 (Lease)	sec. 22, SE¼NW¼NW¼, NE¼SW¼NW¼.	Park Site	20	Public Land Laws 1872 Mining Law
N-37128 (Lease)	sec. 27, NW¼SE¼NW¼.	Park Site	10	Public Land Laws 1872 Mining Law
N-37127 (Lease)	sec. 28, E½NW¼NE¼.	Park Site	20	Public Land Laws 1872 Mining Law
Nev-054655 (Lease)	sec. 29, E½.	Park Site	320	Public Land Laws 1872 Mining Law

T. 21 S., R. 60 E.

N-37119 (Lease)	sec. 3, Lots 72,73,97.	Park Site	15.86	Public Land Laws 1872 Mining Law
N-7301-E (Lease)	sec. 10, SE¼NE¼SW¼.	School Site	10	Public Land Laws 1872 Mining Law
N-29498 (Lease)	sec. 11, Lots 127,128,128,130.	Park Site	10	Public Land Laws 1872 Mining Law
N-20095 (Lease)	sec. 12, Lots 91,92.	School Site	5	Public Land Laws 1872 Mining Law
N-7301-B (Lease)	sec. 13, W½SE¼NE¼SW¼.	School Site	5	Public Land Laws 1872 Mining Law
N-29499 (Lease)	sec. 23, W½NE¼NE¼NE¼, NW¼NE¼NE¼.	Park Site	15	Public Land Laws 1872 Mining Law

N-41568-07 (Lease)	sec. 16, SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$.	School Site	10	Public Land Laws 1872 Mining Law
N-41279 (Lease)	sec. 16, NW $\frac{1}{4}$, N $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$.	Park Site	310	Public Land Laws 1872 Mining Law
N-21490 (Lease)	sec. 17, NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$.	Reservoir Site	15	Public Land Laws 1872 Mining Law
N-7301-I (Lease)	sec. 24, SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$.	School Site	10	Public Land Laws 1872 Mining Law
N-7301-N (Lease)	sec. 26, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$.	School Site	10	Public Land Laws 1872 Mining Law
T. 21 S., R. 61 E.				
N-44619 (Lease)	sec. 13, W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$.	School Site	5	Public Land Laws 1872 Mining Law
N-7301-D (Classification)	sec. 13, W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$.	School Site	5	Public Land Laws 1872 Mining Law
N-29566 (Lease)	sec. 13, Lot 20.	Church School Site	5.22	Public Land Laws 1872 Mining Law
N-13084 (Lease)	sec. 32, NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ S $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$.	Golf Course	140	Public Land Laws 1872 Mining Law
N-36712 (Classification)	sec. 32, Lot 4.	Geriatric Center	5	Public Land Laws 1872 Mining Law
T. 22 S., R. 61 E.				
N-39788 (Classification)	sec. 7, E $\frac{1}{2}$ SE $\frac{1}{4}$.	Veterans Cemetery	80	Public Land Laws 1872 Mining Law
N-7473 (Lease)	sec. 7, NW $\frac{1}{4}$ SE $\frac{1}{4}$.	Park Site	40	Public Land Laws 1872 Mining Law
N-7301-G (Classification)	sec. 14, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$.	School Site	10	Public Land Laws 1872 Mining Law
N-36900 (Classification)	sec. 14, NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$.	Library Site	2.5	Public Land Laws 1872 Mining Law
N-10138 (Lease)	sec. 17, N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$.	Transfer Station	1.25	Public Land Laws 1872 Mining Law
T. 23 S., R. 61 E.				
N-43395 (Lease)	sec. 5, All; sec. 8, W $\frac{1}{2}$; sec. 15, All; sec. 16, All; sec. 17, All;			

	sec. 21, N $\frac{1}{2}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 22, N $\frac{1}{2}$, E $\frac{1}{2}$ SW $\frac{1}{4}$.	National Guard Armory Complex	3,883.24	Public Land Laws 1872 Mining Law
N-50714 (Classification)	sec. 11, NE $\frac{1}{4}$.	Driver Trng Course	160	Public Land Laws 1872 Mining Law
N-37028 (Lease)	sec. 13, S $\frac{1}{2}$ SW $\frac{1}{4}$.	Shooting Range	80	Public Land Laws 1872 Mining Law
Nev-046208 (Lease)	sec. 1, SE; sec. 12, E $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$.	Sanitary Landfill	720	Public Land Laws 1872 Mining Law
N-10405 (Lease)	sec. 28, S $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$.	School Site	5	Public Land Laws 1872 Mining Law
Nev- 066584 (Classification)	sec. 28, S $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$.	Not Specific	5	Public Land Laws 1872 Mining Law
	T. 21 S., R. 63 E.			
N-24417 (Lease)	sec. 25, E $\frac{1}{2}$ E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 36, NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$.	Sludge Disposal(2)	30	Public Land Laws 1872 Mining Law
Nev-060170 (Lease)	sec. 28, S $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$; sec. 29, S $\frac{1}{2}$ SE $\frac{1}{4}$.	Disposal Site	140	Public Land Laws 1872 Mining Law
	T. 22 S., R. 63 E.			
N-48691 (Classification)	sec. 9, NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$.	School Site	10	Public Land Laws 1872 Mining Law
	T. 28 S., R. 63 E.			
N-21747 (Lease)	sec. 22, Lot 22, S $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 27, Lots 1,2. (actual R&PP area is within the above legal description)	Well Site and Roadside Park	56	Public Land Laws 1872 Mining Law
	T. 25 S., R. 64 E.			
N-21096 (Classification)	sec. 8, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$.	Pet Cemetery	5	Public Land Laws 1872 Mining Law
	T. 14 S., R. 66 E.			
N-2156 (Classification)	sec. 31, Lot 46.	Not Specific	20.40	Public Land Laws 1872 Mining Law
N-24441 (Lease)	sec. 19, W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$.	Sanitary Landfill	20	Public Land Laws 1872 Mining Law
N-43028 (Lease)	sec. 34, SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$.	Library/Court Wing	10	Public Land Laws 1872 Mining Law
N-48674 (Lease)	sec. 34, N $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$.	School Site	12.5	Public Land Laws 1872 Mining Law

	T. 16 S., R. 66 E.			
N-3836 (Classification)	sec. 26, E $\frac{1}{2}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$; sec. 35, All.	State Park	1,080	Public Land Laws 1872 Mining Law
N-4202 (Classification)	sec. 12, E $\frac{1}{2}$ E $\frac{1}{2}$; sec. 13, E $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 24, E $\frac{1}{2}$;			
	T. 17 S., R. 66 E.			
	sec. 11, All; sec. 12, Lots 2,3, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$; sec. 13, Lots 4,5,6,7,12,13,14,15; sec. 14, All; sec. 23, All; sec. 24, Lots 3,4,5,6,7,8; sec. 25, Lot 1; sec. 26, Lots 1,2,3,4,5,6,7,8,9,10,11.			
	T. 15 S., R. 67 E.			
	sec. 31, E $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$; sec. 32, All; sec. 33, W $\frac{1}{2}$.			
	T. 16 S., R. 67 E.			
	sec. 4, Lots 3,4, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$; sec. 5, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, W $\frac{1}{2}$ W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$; sec. 6, All; sec. 7, All; sec. 8, All; sec. 9, W $\frac{1}{2}$; sec. 16, W $\frac{1}{2}$; sec. 17, All; sec. 18, All; sec. 19, All; sec. 20, All; sec. 21, All; sec. 28, All; sec. 29, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$.	State Park	12,454.79	Public Land Laws 1872 Mining Law
	T. 32 S., R. 66 E.			
N-39878 (Lease)	sec. 8, NE $\frac{1}{4}$ NE $\frac{1}{4}$.	Sanitary Landfill	40	Public Land Laws 1872 Mining Law
N-41262 (Lease)	sec. 15, S $\frac{1}{2}$ NW $\frac{1}{4}$.	School Site	80	Public Land Laws 1872 Mining Law
N-50460 (Classification)	sec. 15, NE $\frac{1}{4}$.	Sewage Facility	160	Public Land Laws 1872 Mining Law
N-50031 (Classification)	sec. 15, N $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$.	Sewage Facility	70	Public Land Laws 1872 Mining law
N-30016 (Classification)	sec. 15, SE $\frac{1}{4}$.	Sewage Facility	160	Public Land Laws 1872 Mining Law

N-46521 (Classification)	sec.14, N½.	Park/Golf Course	160	Public Land Laws 1872 Mining Law
N-37132 (Classification)	sec.14, SW¼.	Sewage Facility	160	Public Land Laws 1872 Mining Law
N-36589 (Classification)	sec. 14, SE¼.	Sewage Facility	160	Public Land Laws 1872 Mining Law
N-36905 (Classification)	sec. 15, SW¼SW¼SW¼.	Fire Station	10	Public Land Laws 1872 Mining Law
	T. 15 S., R. 67 E.			
N-36866 (Lease)	sec. 26, N½NE¼, E½NW¼, E½NW¼NW¼, SW¼NW¼NW¼.	Fairgrounds	190	Public Land Laws 1872 Mining Law
	T. 16 S., R. 68 E.			
N-11193 (Classification)	sec. 6, SW¼SW¼NE¼, NW¼NW¼SE¼.	Sanitary Landfill	20	Public Land Laws 1872 Mining Law
N-37137 (Lease)	sec. 20, NW¼NW¼,SE¼NW¼.	Sewage Facility	80	Public Land Laws 1872 Mining Law
	T. 13 S., R. 71 E.			
N-616 (Lease)	sec. 8, NE¼NE¼; sec. 9, NW¼NW¼.	Mesquite Disposal Site	80	Public Land Laws 1872 Mining Law

Small Tract Classifications

<u>Classifying Document or Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
	Clark County -			
BLM Order 02-18-1963	T. 25 S., R. 59 E. sec. 11, W½SW¼SW¼SE¼.	Public Sale	5	Public Land Laws 1872 Mining Law
Nev-028671	T. 20 S., R. 60 E. sec. 28, E½SW¼NE¼SE¼.	Public Sale	5	Public Land Laws 1872 Mining Law
Nev-049805	T. 22 S., R. 60 E. sec. 32, N½.	Public Sale	160	Public Land Laws 1872 Mining Law
N-12575	T. 28 S., R. 63 E. sec. 27, Lot 7. (within)	Car Wrecking Yard Lease	5	Public Land Laws 1872 Mining Law

Airport Lease Classifications

<u>Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
Nye County -				
Nev-057637 (Lease)	T. 15 S., R. 49 E. sec. 13, SW¼SW¼, S½SE¼SW¼; sec. 24, All; sec. 25, N½N¼.	Lathrop Wells Arpt	860	All
Nev-046697 (Lease)	T. 18 S., R. 50 E. sec. 25,	NW¼NW¼, S½N¼, S¼.	Ash Meadows Arpt520	All
N-19646 (Lease)	T. 17 S., R. 52 E. sec. 8, W½SE¼NW¼, W½E¼SW¼.	Public Airport	60	All
Clark County -				
N-13238 (Lease)	T. 25 S., R. 56 E. sec. 1, Lots 1,2,3,4,5,6. T. 25 S., R. 57 E. sec. 6, Lots 10,11; sec. 7, Lots 4,5; sec. 8, Lots 6,7.	Sandy Valley Airport	266.37	All
N-5826 (Lease)	T. 23 S., R. 61 E. sec. 10, S½SE¼NE¼NE¼, S½NE¼SE¼NE¼, SE¼SE¼NE¼; sec. 11, W½NW¼.	Sky Harbor Airport	100	All
Nev-065340 (Lease)	T. 29 S., R. 63 E. sec. 2, Lots 2,18,19,20, SE¼NE¼, SW¼SE¼, E¼SE¼; (within) sec. 11, E¼; (within) sec. 14, N½NE¼. (within)	Searchlight Airport	184	All
N-43266 (Lease)	T. 13 S., R. 71 E. sec. 3, Lots 6,7,8,9,10, 11,12, SW¼NW¼, W½SW¼; sec. 4, Lots 5,12, SE¼NE¼, E¼SE¼.	Mesquite Airport	516.45	All

N-43317
(Lease)

T. 30 S., R. 63 E.

sec. 25, N½.

Kidwell
Airport

320

All

**Acres Unsuitable For Classification Under
The Desert Land Entry Act Or Carey Act**

<u>Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
Nye County -				
T. 24 N., R. 8 E.				
N-22835	sec. 6, Lots 1,2,15, S½NE¼, N½SE¼, SE¼SE¼.	Agricultural Use	311.49	None
N-22855	sec. 8, Lot 1, NE¼, E½NW¼, NW¼NW¼.	Agricultural Use	308.38	None
T. 16 S., R. 48 E. (BLM Orders dated 01-31-1983 and 02-07-1983)				
N-23764	sec. 4, N½;			
N-23727	sec. 5, E½;			
N-22409				
N-23208	sec. 6, All;			
N-23726				
N-23728				
N-22191	sec. 9, N½;			
N-24005	sec. 12, All;			
N-24007				
N-22973	sec. 13, W½;			
N-23860	sec. 14, W½NE¼, W½;			
N-23913				
N-24001				
N-23207	sec. 16, SW¼NE¼, NW¼, NW¼SW¼, N½SE¼, SE¼SE¼;			
N-23208				
N-23861				
N-23912	sec. 17, S½;			
N-23902	sec. 20, NE¼, E½NW¼, NW¼SW¼, NW¼SE¼, SE¼SE¼;			
N-24099	sec. 21, W½;			
N-24091	sec. 27, N½NW¼, SW¼NE¼, NW¼SE¼, SE¼SE¼.	Agricultural Use	4,516.16	None
T. 17 S., R. 48 E.				
N-23042	sec. 2, E½.	Agricultural Use	320	None

T. 15 S., R.49 E.

(BLM Orders dated 10-10-1979, 01-31-1983, 02-07-1983, 04-26-1983, 05-05-1983, 05-17-1983 and 06-10-1983)

N-21874	sec. 4, W½;			
N-22828	sec. 7, All;			
N-26963				
N-37943				
N-26305	sec. 9, S½;			
N-26247	sec. 10, S½;			
N-26245	sec. 11, S½;			
N-27096	sec. 12, S½;			
N-27068	sec. 13, N½;			
N-37944	sec. 14, S½;			
N-27605	sec. 15, All;			
N-37946				
N-37945	sec. 16, All;			
N-37947				
N-23773	sec. 21, N½;			
N-23765	sec. 22, All;			
N-23772				
N-22885	sec. 23, NW¼, S½;			
N-22886				
N-23047				
N-22886	sec. 26, N½, SW¼;			
N-22906				
N-22888	sec. 27, E½NW¼, NE¼, S½;			
N-22308				
N-22309				
N-24598				
N-22308	sec. 34, All;			
N-22309				
N-22887				
N-22309	sec. 35, All;			
N-22845				
N-22846				
N-22828	sec. 36, All.	Agricultural Use	8,430.78	None
N-22844				

T. 16 S., R. 49 E.

N-22696	sec. 3, S½;			
N-22695	sec. 7, E½;			
N-22697	sec. 10, W½;			
N-23038	sec. 14, S½;			
N-23027	sec. 15, S½, SE¼NW¼;			
N-23025	sec. 16, All;			
N-22975	sec. 17, All;			
N-22971	sec. 21, N½;			
N-21979	sec. 22, N½;			
N-23023	sec. 23, W½;			
N-23045	sec. 27, E½;			
N-24019	sec. 32, W½.	Agricultural Use	4,572.97	None

T. 17 S., R. 49 E.

N-23332	sec. 2, Lots 1,2, S½NE¼, SE¼.	Agricultural Use	318.37	None
N-23031	sec. 5, Lots 3,4, S½NW¼, SW¼.	Agricultural Use	320.69	None
N-23102	sec. 5, Lots 1,2, S½NE¼, SE¼.	Agricultural Use	320.55	None

	T. 15 S., R. 50 E.			
N-27933	sec. 8, W½.	Agricultural Use	320	None
N-27081	sec. 23, N½.	Agricultural Use	320	None
	T. 18 S., R. 50 E.			
N-22818	sec. 26, Lots 4,5,6,7,8,9,10, NE¼SW¼.	Agricultural Use	333.98	None
N-22819	sec. 34, Lots 1,3, N½N½, SW¼NE¼, SE¼NW¼.	Agricultural Use	320.53	None
	T. 16 S., R. 52 E.			
N-26197	sec. 12, W½.	Agricultural Use	320	None
N-26092	sec. 13, W½.	Agricultural Use	320	None
	T. 18 S., R. 52 E.			
N-24427	sec. 7, Lots 1,2, NE¼, E½NW¼.	Agricultural Use	319.72	None
	T. 18 S., R. 53 E.			
N-27626	sec. 8, W½.	Agricultural Use	320	None
N- 24178	sec. 30, W½E½, E½W½.	Agricultural Use	320	None
	Clark County -			
	T. 16 S., R. 54 E.			
N-26669	sec. 11, E½.	Agricultural Use	320	None
N- 26249	sec. 11, SW¼; sec. 14, NW¼.	Agricultural Use	320	None
N-26463	sec. 12, S½.	Agricultural Use	320	None
	T. 23 S., R. 54 E.			
N-24179	sec. 1, Lots 1,2,3,4,5,7,8,9,10, NE¼NE¼; sec. 2, All.	Agricultural Use	323.33	None
	T. 16 S., R. 55 E.			
N-25866	sec. 1, S½.	Agricultural Use	320	None
N-23737	sec. 4, S½SW¼; sec. 5, E½SE¼; sec. 8, N½NE¼; sec. 9, N½NW¼.	Agricultural Use	320	None
N-23735	sec. 7, E½.	Agricultural Use	320	None
N-23736	sec. 8, S½NE¼, N½SE¼, SE¼SE¼; sec. 9, SW¼NW¼, W½SW¼.	Agricultural Use	320	None

N-23733	sec. 9, S½NE¼, SE¼NW¼, E½SW¼, N½SE¼, SW¼SE¼.	Agricultural Use	320	None
N-23734	sec. 10, SW¼NE¼, S½NW¼, SW¼, NW¼SE¼.	Agricultural Use	320	None
N-25547	sec. 10, S½SE¼.	Agricultural Use	320	None
N-24620	sec. 11, W½.	Agricultural Use	320	None
N-23858	sec. 11, E½.	Agricultural Use	320	None
N-23856	sec. 12, W½.	Agricultural Use	320	None
N-25814	sec. 13, E½.	Agricultural Use	320	None
N-37697	sec. 13, W½.	Agricultural Use	320	None
N-25460	sec. 14, W½.	Agricultural Use	320	None
N-25240	sec. 15, W½.	Agricultural Use	320	None
N-37703	sec. 17, All.	Agricultural Use	640	None
N-37172	sec. 18, All.	Agricultural Use	638.6	None
N-23854	sec. 12, E½.	Agricultural Use	320	None
T. 16 S., R. 55½ E.				
N-23857	sec. 1, N½SW¼, SE¼SW¼; sec. 2, Lots 3,4, N½SE¼, SW¼SE¼.	Agricultural Use	335.86	None
N-23311	sec. 1, SE¼SW¼.	Agricultural Use	40	None
N-23802	sec. 11, Lots 1,2,3,4, W½E½.	Agricultural Use	355.12	None
N-23855	sec. 12, E½.	Agricultural Use	320	None
N-23310	sec. 12, Lots 1,2, NE¼, NE¼NW¼, SE¼NW¼.	Agricultural Use	301.25	None
T. 16 S., R. 56 E.				
N-23835	sec. 9, SE¼; sec. 10, SW¼.	Agricultural Use	320	None
N-23849	sec. 10, E½.	Agricultural Use	320	None
N-23840	sec. 15, S½.	Agricultural Use	320	None
N-23843	sec. 15, N½.	Agricultural Use	320	None
N-23990	sec. 16, W½.	Agricultural Use	320	None
N-30630	sec. 18, All.	Agricultural Use	640	None
T. 17 S., R. 58 E.				
N-26462	sec. 10, W½.	Agricultural Use	320	None

	T. 21 S., R. 59 E.			
N-23450	sec. 3, S $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$; sec. 4, S $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$; sec. 14, SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$; sec. 15, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 16, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$; sec. 21, NW $\frac{1}{4}$, SE $\frac{1}{4}$; sec. 27, NW $\frac{1}{4}$; sec. 28, N $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$; sec. 33, E $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$.	Agricultural Use	2,200	None
	T. 22 S., R. 59 E.			
	(BLM Orders dated 02-16-1983 and 04-05-1983)			
N-29925	sec. 2, All; sec. 3, All; sec. 4, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$; sec. 5, W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 6, All; sec. 12, All; sec. 16, All; N-23316 N-23316 N-29925 sec. 18, N $\frac{1}{2}$; sec. 19, All;			
N-23316	sec. 20, All; sec. 21, All; sec. 22, All; sec. 23, All; sec. 25, All.	Agricultural Use	7,531.47	None
N-29925	sec. 16, All. (only 500 acres remain public)	Agricultural Use	500	None
	T. 22 S., R. 61 E.			
N-22751	sec. 6, Lots 33,37,38,96,97,99,100,101, N-31350 100,101,107,108,110,115, 116,117,124,125,128,130.	Agricultural Use	50.17	None
BLM Order	sec. 17, Parcels A,B,C,D.	Agricultural Use	?	None
	T. 20 S., R. 62 E.			
N-22753	sec. 1, SE $\frac{1}{4}$; sec. 12, NW $\frac{1}{4}$.	Agricultural Use	320	None
N-22651	sec. 11, E $\frac{1}{2}$.	Agricultural Use	320	None
	T. 23 S., R. 62 E.			
N-34824	sec. 2, Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$.	Agricultural Use	319.24	None
	T. 23 S., R. 63 E.			
N-24166	sec. 3, W $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$.	Agricultural Use	320	None

N-36717	sec. 10, E½.	Agricultural Use	320	None
N-23833	sec. 14, N½.	Agricultural Use	320	None
N-23832	sec. 14, S½.	Agricultural Use	320	None

T. 25 S., R. 64 E.

(BLM Orders dated 09-21-1982, 01-26-1983, 01-31-1983 and 10-05-1983)

N-24779	sec. 7, E½;			
N-25254				
N-23508	sec. 8, All;			
N-23756				
N-23826				
N-23831				
N-24779				
N-25254				
N-23507	sec. 9, All;			
N-23754				
N-23830				
N-23509	sec. 17, All;			
N-23752				
N-23751	sec. 18, N½;			
N-27628	sec. 20, All;			
N-23506	sec. 21, W½;			
N-22293	sec. 27, S½;			
N-23505	sec. 28, All;			
N-26955				
N-22291	sec. 34, N½, SW¼.	Agricultural Use	4,939.9	None
N-29234				

T. 26 S., R. 64 E.

(BLM Orders dated 09-21-1982 and 09-22-1982)

N-34997	sec. 17, N½;			
N-34315	sec. 18, W½;			
N-34280	sec. 34, E½.	Agricultural Use	960	None

T. 14 S., R. 65 E.

(BLM Orders dated 07-26-1982 and 11-13-1984)

N-23398	sec. 10, E½SW¼NW¼, W½SE¼NW¼, NE¼SW¼, NE¼NW¼SW¼, N½SE¼SW¼, SE¼SE¼SW¼;			
N-25272	sec. 13, All;			
N-25298				
N-29642				
N-29642	sec. 14, SE¼NE¼, NE¼SE¼;			
N-25298	sec. 15, N½NE¼; sec. 16, SW¼.	Agricultural Use	1,080	None

T. 13 S., R. 66 E.

N-25264	sec. 32, S½.	Agricultural Use	320	None
N-25274	sec. 33, S½.	Agricultural Use	320	None

T. 14 S., R. 66 E.

(BLM Orders dated 05-23-1983, 06-10-1983, 06-29-1983, 07-14-1983, 08-01-1983 and 04-12-1984)

N-22370	sec. 4, All;			
N-22373				
N-25277				
N-25286				
N-25388				
N-25574				
N-25575				
N-28612				
N-25278	sec. 8, E½;			
N-25368				
N-25573				
N-22655	sec. 9, All;			
N-25356				
N-25369				
N-25371				
N-25388				
N-22365	sec. 10, W½NW¼, SE¼NW¼, SW¼;			
N-22365	sec. 15, N½, E½SW¼, E½SE¼;			
N-24117				
N-25281				
N-25302				
N-25279	sec. 16, N½, SW¼, W½SE¼;			
N-25282				
N-25296				
N-25356				
N-22378	sec. 17, NE¼, N½NW¼, SE¼NW¼,			
N-25280	S½;			
N-25282				
N-25346				
N-25370				

N-25292	sec. 19, NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;			
N-27231	sec. 20, E $\frac{1}{2}$ SE $\frac{1}{4}$;			
N-25268	sec. 21, S $\frac{1}{2}$;			
N-25321				
N-22368	sec. 22, E $\frac{1}{2}$ E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ W $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;			
N-22368	sec. 23, SW $\frac{1}{4}$;			
N-25329				
N-22369	sec. 26, W $\frac{1}{2}$ W $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ E $\frac{1}{2}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$.			
N-25329				
N-25262	sec. 27, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$;			
N-25268				
N-25282				
N-25268	sec. 28, NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;			
N-27231				
N-25575	sec. 29, NE $\frac{1}{4}$ NE $\frac{1}{4}$;			
N-25262	sec. 34, W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$;			
N-25282				
N-25304	sec. 35, NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$;			
N-25270	sec. 36, W $\frac{1}{2}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$.	Agricultural Use	6,239.04	None
N-25289				
	T. 15 S., R. 66 E.			
N-25270	sec. 1, W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$.	Agricultural Use	10	None
	T. 15 S., R.67 E.			
N-25311	sec. 22, N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$.	Agricultural Use	40	None

(BLM Orders dated 06-29-1983, 07-06-1983, 09-22-1983 and 10-06-1983)

N-25270	sec. 7, Lot 1,			
N-23391	sec. 9, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;			
	sec. 10, NW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$;			
N-25276	sec. 14, W $\frac{1}{4}$;			
N-25312				
N-25314				
N-23391	sec. 15, NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$;			
N-25310				
N-25312				
N-25276	sec. 21, NW $\frac{1}{4}$ NE $\frac{1}{4}$;			
N-25276	sec. 22, E $\frac{1}{2}$ NE $\frac{1}{4}$;			
N-25314				

N-25318 N-25323 N-25276 N-25318 N-25269	sec. 23, NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$; sec. 26, N $\frac{1}{2}$ N $\frac{1}{2}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$; sec. 36, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$.	Agricultural Use	1,559.80	None
	T. 14 S., R. 69 E.			
N-22807	sec. 12, SE $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 13, NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$.	Agricultural Use	280	None
N-22808	sec. 13, NE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$.	Agricultural Use	320	None
N-23969	sec. 32, W $\frac{1}{2}$.	Agricultural Use	320	None
	T. 14 S., R. 70 E			
N-22807	sec. 7, Lot 4.	Agricultural Use	40.06	None
	T. 13 S., R. 71 E.			
N-37498	sec. 9, W $\frac{1}{2}$.	Agricultural Use	320	None

Suitable Desert Land Entry Classifications

<u>Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acreage</u>	<u>Segregates from Appropriation under the following laws</u>
	Nye County -			
Nev-060322 (No Entry)	T. 16 S., R. 49 E. sec. 36, Lots 1,2.	Agricultural Use	62.12	None
N-21908 (No Entry)	T. 21 S., R. 53 E. sec. 24, E $\frac{1}{2}$.	Agricultural Use	320	None

**Acres Unsuitable For Classification
Under The Indian Allotment Act**

<u>Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acreage</u>	<u>Segregates from Appropriation under the following laws</u>
	Clark County -			
N-29206	T. 21 S., R. 60 E. sec. 35, SE $\frac{1}{2}$ SE $\frac{1}{2}$ NW $\frac{1}{2}$ NE $\frac{1}{2}$, NE $\frac{1}{2}$ NE $\frac{1}{2}$ SW $\frac{1}{2}$ NE $\frac{1}{2}$, N $\frac{1}{2}$ NW $\frac{1}{2}$ SW $\frac{1}{2}$ NW $\frac{1}{2}$; sec. 36, NW $\frac{1}{2}$ NE $\frac{1}{2}$ NE $\frac{1}{2}$ NE $\frac{1}{2}$, S $\frac{1}{2}$ NE $\frac{1}{2}$ NE $\frac{1}{2}$ NE $\frac{1}{2}$, NW $\frac{1}{2}$ NE $\frac{1}{2}$ NE $\frac{1}{2}$, W $\frac{1}{2}$ SW $\frac{1}{2}$ NE $\frac{1}{2}$ NE $\frac{1}{2}$, N $\frac{1}{2}$ SE $\frac{1}{2}$ NE $\frac{1}{2}$ NE $\frac{1}{2}$, SE $\frac{1}{2}$ NE $\frac{1}{2}$ SE $\frac{1}{2}$ NE $\frac{1}{2}$;			
	T. 21 S., R. 61 E. sec. 30, NW $\frac{1}{2}$ SE $\frac{1}{2}$ NW $\frac{1}{2}$ NE $\frac{1}{2}$;			
	T. 20 S., R. 62 E. sec. 14, N $\frac{1}{2}$ SE $\frac{1}{2}$.	Agricultural Use	122.5	None

Classification and Multiple Use Act Retention Classifications

<u>Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
	Nye County -			
N-257 (11-10-1966)	T. 24 N., R. 7 E. sec. 1, Lot 8. T. 25 N., R. 7 E. sec. 4, Lot 1; sec. 5, Lots 1,2,3,4,5,6,7, SW $\frac{1}{2}$ NW $\frac{1}{2}$, SW $\frac{1}{2}$, SW $\frac{1}{2}$ SE $\frac{1}{2}$; sec. 6, Lots 1,2,3,4,5,6,8, 11, S $\frac{1}{2}$ NE $\frac{1}{2}$, SE $\frac{1}{2}$ NW $\frac{1}{2}$, NE $\frac{1}{2}$ SW $\frac{1}{2}$, SE $\frac{1}{2}$; sec. 7, Lots 1,3,8,9,11, NE $\frac{1}{2}$ NE $\frac{1}{2}$;			

sec. 8, Lots 1,5, N $\frac{1}{2}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
sec. 9, Lots 1,2,3,4,5,6,7,
SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 10, Lot 1;
sec. 14, Lot 1;
sec. 15, Lots 1,2,3,4,5,6,7,
SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 16, Lots 1,2,5,6, N $\frac{1}{2}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 17, Lots 3,8, NE $\frac{1}{4}$ NE $\frac{1}{4}$;
sec. 21, Lots 4,5,8;
sec. 22, Lots 1,3,6,7,9, N $\frac{1}{2}$ N $\frac{1}{2}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 23, Lots 1,2,3,4,5,6,7,
SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 24, Lot 1;
sec. 25, Lots 1,2,3,4,5,6,7,
SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 26, Lots 1,3,6,7,9, N $\frac{1}{2}$ N $\frac{1}{2}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 27, Lots 6,9, NE $\frac{1}{4}$ NE $\frac{1}{4}$;
sec. 35, Lots 4,6,8;
sec. 36, Lots 1,4,5,7,9, N $\frac{1}{2}$ N $\frac{1}{2}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 26 N., R. 7 E.

sec. 31, Lots 1,2,3,4,5,6,7,
W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$.

T. 25 N., R. 8 E.

sec. 30, Lot 1;
sec. 31, Lots 1,2,3, W $\frac{1}{2}$ NW $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 32, Lot 1.

Clark County -

T. 22 S., R. 57 E.

sec. 16, NE $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 20 S., R. 58 E. *

sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;

sec. 14, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, N $\frac{1}{2}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 30, All;
sec. 31, All;
sec. 32, W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$,
S $\frac{1}{2}$;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 21 S., R. 58 E. *

sec. 1, Lots 2,3,4, SE $\frac{1}{4}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$,
SW $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$,
NW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 2, All;
sec. 3, All;
sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$,
N $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 25, W $\frac{1}{2}$;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;

sec. 32, All;
sec. 33, All;
sec. 34, N $\frac{1}{2}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 35, N $\frac{1}{2}$, SE $\frac{1}{4}$;
sec. 36, W $\frac{1}{2}$.

T. 22 S., R. 58 E. *

sec. 1, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 2, Lots 1,2,3, S $\frac{1}{2}$ N $\frac{1}{2}$,
N $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 3, Lots 3,4, SW $\frac{1}{4}$ NW $\frac{1}{4}$,
S $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, Lots 1,2,3,4,5,6, E $\frac{1}{2}$,
SE $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 20, NE $\frac{1}{4}$;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 20 S., R. 59 E. *

sec. 7, All;
sec. 18, All;
sec. 19, N $\frac{1}{2}$.

T. 21 S., R. 59 E. *

sec. 5, S $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 6, Lot 7, SE $\frac{1}{4}$ SW $\frac{1}{4}$,
N $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
S $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
sec. 7, All;
sec. 8, W $\frac{1}{2}$;
sec. 18, All.

T. 24 S., R. 59 E. *	Multiple Use		
sec. 4, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$.	* designated Red Rock Canyon Recreation Lands	67,189.21	Agricultural Laws Public Land Laws 1872 Mining Law

Nye County -

N-257 B
(11-10-1966)

T. 17 S., R. 50 E.

sec. 35, E $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 36, NE $\frac{1}{4}$, W $\frac{1}{2}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$.

(09-25-1970)

T. 18 S., R. 50 E.

sec. 1, N $\frac{1}{2}$ N $\frac{1}{2}$;
sec. 2, NE $\frac{1}{4}$.

T. 17 S., R. 51 E.

sec. 31, NE $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$.

T. 18 S., R. 51 E.

sec. 6, Lots 2,3,4,5,6, SW $\frac{1}{4}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$.

Multiple Use	2,009.77	Agricultural Laws Public Land Laws 1872 Mining Law
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Clark County -

N-1575 A
(09-25-1970)

T. 21 S., R. 60 E.

sec. 11, Lots 127,128,129,130,
143,144, SW $\frac{1}{4}$ SW $\frac{1}{4}$.

T. 14 S., R. 69 E.

sec. 14, E $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 15, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 22, All;
sec. 27, All;
sec. 28, NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 29, SW $\frac{1}{4}$;
sec. 32, N $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SW $\frac{1}{4}$;

T. 13 S., R. 70 E. *

sec. 27, Lot 3, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 32, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$;
sec. 33, S $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 34, Lots 1,2,3,4,6, NW $\frac{1}{4}$ NW $\frac{1}{4}$.

T. 14 S., R. 70 E. *

sec. 4, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$.

	N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$; sec. 5, E $\frac{1}{2}$, SW $\frac{1}{4}$; sec. 6, S $\frac{1}{2}$; sec. 7, Lot 2, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$; sec. 8, N $\frac{1}{2}$.	Multiple Use * designated Virgin River Recreation Lands	5,127.16	Agricultural Laws Public Land Laws 1872 Mining Law
N-1575 (01-24-1969)	T. 15 S., R. 70 E. sec. 2, Lot 4. T. 16 S., R. 70 E. sec. 22, SW $\frac{1}{4}$ SW $\frac{1}{4}$; sec. 23, SE $\frac{1}{4}$. T. 15 S., R. 71 E. sec. 17, S $\frac{1}{2}$ SE $\frac{1}{4}$; sec. 20, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$.	Multiple Use	920.27	Agricultural Laws Public Land Laws 1872 Mining Law
N-3319 (12-27-1968)	T. 18 S., R. 51 E. sec. 18, Lot 2, W $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$.	Multiple Use Jackrabbit Springs Pupfish Areas	56.35	Agricultural Laws Section 2455 Sale Sale Act of 09-19-1964 1872 Mining Law

PUBLIC LAND WITHDRAWALS

It should be noted that overlapping withdrawals may result in a different combination of segregation on a particular parcel of land. Therefore, when determining the segregative effect on a parcel of land, it is necessary to consider the segregative effect of all the withdrawals encumbering that land.

FERC Power Project Withdrawals

(The legal descriptions of the FERC Withdrawals are described to the nearest section or aliquot part and in some cases do not represent the actual configurations of the withdrawals. Private lands or lands withdrawn to another agency are not shown.)

<u>Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
	Clark County -			
N-50945 (Authorized)	T. 13 S., R. 66 E. sec. 2, Lot 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$;			

sec. 3, Lots 1,2,3,4,
SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 10, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 11, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 14, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 15, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 22, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 23, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 26, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 27, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 34, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 35, W $\frac{1}{2}$ W $\frac{1}{2}$;

T. 14 S., R. 66 E.

sec. 2, Lot 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$,
W $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 3, Lot 1, SE $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 10, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 11, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 14, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 22, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 23, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 26, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 27, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 34, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 35, W $\frac{1}{2}$ W $\frac{1}{2}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$.

Mormon Peak Hydro-
power Proj. #10753 3,548

Public Land Laws
1872 Mining Law

N-50946
(ApIn Withdrawn
03-21-89)

T. 20 S., R. 59 E.

sec. 16, NW $\frac{1}{4}$;
sec. 17, Lots 1,2,3,4,5,6,
7,8,9,10,11,12.

La Madre Mtn. So. Hydro-
power Proj. #10754 494

Public Land Laws
1872 Mining Law

N-50948
(Authorized)

T. 21 S., R. 59 E.

sec. 20, S $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 21, Lots 13,14,15,16;
sec. 26, N $\frac{1}{2}$ N $\frac{1}{2}$;
sec. 27, N $\frac{1}{2}$ NE $\frac{1}{4}$;
sec. 28, All;
sec. 29, E $\frac{1}{2}$;
sec. 33, N $\frac{1}{2}$ N $\frac{1}{2}$;
sec. 34, N $\frac{1}{2}$ NW $\frac{1}{4}$.

T. 21 S., R. 60 E.

sec. 16, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 19, Lots 25,26,27,28,
S $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 20, E $\frac{1}{2}$ E $\frac{1}{2}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$,
S $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 21, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 29, N $\frac{1}{2}$ N $\frac{1}{2}$;
sec. 30, N $\frac{1}{2}$ N $\frac{1}{2}$.

Blue Diamond,S. Hydro-
power Proj. #10756 1,737

Public Land Laws
1872 Mining Law

N-50949
(Authorized)

T. 21 S., R. 59 E.

sec. 3, Lots 8,9,10;
sec. 4, Lot 8, S $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 5, S $\frac{1}{2}$;

sec. 8, All;
sec. 9, All;
sec. 10, Lots 8,9;
sec. 11, Lots 9,10,11.

T. 21 S., R. 60 E.

sec. 17, S½SW¼SE¼;
sec. 18, Lot 34, E½SW¼SE¼SW¼,

SW¼SW¼SE¼;
sec. 19, W½NW¼NW¼NE¼, Blue Diamond,N. Hydro- Public Land Laws
E½NE¼NE¼NW¼. power Proj. #10758 1,382 1872 Mining Law

N-50950
(Authorized)

T. 15 S., R. 63 E.

sec. 13, SE¼;
sec. 24, All.

T. 15 S., R. 64 E.

sec. 12, S½SE¼;
sec. 13, E½, S½;
sec. 14, S½;
sec. 15, S½;
sec. 16, S½;
sec. 17, W½NW¼, S½;
sec. 18, E½E½W½, W½SW¼;
sec. 19, NW¼NW¼.

T. 15 S., R. 66 E.

sec. 7, Lot 4, SE¼SW¼, S½SE¼;
sec. 8, S½S½;
sec. 9, S½S½;
sec. 10, NE¼SE¼NW¼, SW¼, N½SE¼,
SW¼SE¼;
sec. 11, W½NW¼;
sec. 15, N½NW¼;
sec. 16, N½N½;
sec. 17, N½N½;
sec. 18, Lot 1, NE¼NW¼, N½NE¼.

Arrow Mtn. Hydro- Public Land Laws
power Proj. #10759 3,141 1872 Mining Law

N-50951
(Authorized)

T. 16 S., R. 57 E.

sec. 28, SW¼, SW¼SE¼;
sec. 29, S½NE¼, N½SE¼, SE¼SE¼;
sec. 33, Lot 1, NE¼, NE¼NW¼;
sec. 34, Lots 2,3,4,6,7,8,9,10,
NW¼NW¼, S½NW¼.

T. 17 S., R. 57 E.

sec. 1, Lots 1,2, SE¼NE¼;
sec. 13, SE¼;
sec. 24, E½NE¼, NW¼NE¼, SE¼;
sec. 25, N½NE¼, SW¼NE¼, E½NW¼,
SW¼NW¼, SW¼;
sec. 26, SE¼;
sec. 34, S½NE¼, SE¼NW¼, E½SW¼,
SE¼;
sec. 35, N½NE¼, SW¼NE¼, NW¼,
NW¼SW¼.

T. 17 S., R. 58 E.

- sec. 6, Lots 3,4,5, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$;
- sec. 7, E $\frac{1}{2}$ E $\frac{1}{2}$;
- sec. 18, Lots 3,4, E $\frac{1}{2}$ W $\frac{1}{2}$;
- sec. 19, Lots 1,2,3, NE $\frac{1}{4}$ NW $\frac{1}{4}$.

Lee Canyon Hydro-
power Proj. #10760

1,801

Public Land Laws
1872 Mining Law

N-50952
(Authorized)

T. 19 S., R. 58 E.

- sec. 1, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 11, E $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 12, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 13, N $\frac{1}{2}$ NW $\frac{1}{4}$;
- sec. 14, N $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 15, SE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 16, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 21, E $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 22, N $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$.

T. 18 S., R. 59 E.

- sec. 28, S $\frac{1}{2}$ S $\frac{1}{2}$;
- sec. 29, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 32, E $\frac{1}{2}$ E $\frac{1}{2}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$;
- sec. 33, N $\frac{1}{2}$ N $\frac{1}{2}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$.

T. 19 S., R. 59 E.

- sec. 4, Lot 4;
- sec. 5, Lots 1,2,3,4, SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 6, Lots 1,2,6,7, S $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$.

Kyle Canyon Hydro-
power Proj. #10761

2,129

Public Land Laws
1872 Mining Law

N-50953
(Authorized)

T. 20 S., R. 62 E.

- sec. 1, E $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 12, E $\frac{1}{2}$ E $\frac{1}{2}$;
- sec. 13, E $\frac{1}{2}$ E $\frac{1}{2}$;
- sec. 14, SW $\frac{1}{4}$ SW $\frac{1}{4}$.

T. 20 S., R. 63 E.

- sec. 7, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 18, W $\frac{1}{2}$ W $\frac{1}{2}$;
- sec. 19, W $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$;
- sec. 30, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$.

Frenchman Mtn. Hydro-
power Proj. #10762

1,009

Public Land Laws
1872 Mining Law

N-50954
(Authorized)

T. 17 S., R. 56 E.

- sec. 12, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 13, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 14, S $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 22, NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 23, NW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$.

	T. 16 S., R. 57 E.			
	sec. 28, SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;			
	sec. 29, S $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;			
	sec. 32, Lots 1,2,5,6,7,8,10,11, 12, SE $\frac{1}{4}$ NE $\frac{1}{4}$.			
	T. 17 S., R. 57 E.			
	sec. 3, Lot 3;			
	sec. 4, Lots 1,2,3, S $\frac{1}{2}$ N $\frac{1}{4}$, SW $\frac{1}{4}$;			
	sec. 5, S $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;			
	sec. 7, Lots 3,4, E $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$;			
	sec. 8, N $\frac{1}{2}$ N $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$;			
	sec. 9, NW $\frac{1}{4}$ NW $\frac{1}{4}$;	Indian Ridge Hydro-		Public Land Laws
	sec. 18, Lot 1.	power Proj. #10763	1,334	1872 Mining Law
N-50955 (ApIn Withdrawn 03-21-89)	T. 23 S., R. 63 E.			
	sec. 13, E $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$;			
	sec. 26, N $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$.			
	T. 23 S., R. 63 $\frac{1}{2}$ E.			
	sec. 1, Lots 4,5,6,7,9,10.	Boulder Hydropower Proj. #10764	?	Public Land Laws 1872 Mining Law
N-50956 (Authorized)	T. 17 S., R. 58 E.			
	sec. 34, S $\frac{1}{2}$ SE $\frac{1}{4}$;			
	sec. 35, S $\frac{1}{2}$ S $\frac{1}{2}$;			
	sec. 36, S $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$.			
	T. 18 S., R. 58 E.			
	sec. 1, Lots 2,3,4;			
	sec. 2, Lots 1,2,3,4;			
	sec. 3, Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$;			
	sec. 9, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$;			
	sec. 10, NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;			
	sec. 15, NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$;			
	sec. 16, SE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$;			
	sec. 21, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;			
	sec. 28, N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$;	Lucky Strike Hydro-		Public Land Laws
	sec. 29, E $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$.	power Proj. #10765	1,488	1872 Mining Law
N-51058 (Authorized)	T. 20 S., R. 59 E.			
	sec. 30, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$.	Brownstone Canyon Hydro- power Proj. #10757	187	Public Land Laws 1872 Mining Law
FPC Order 12-14-1921 (No Serial #)	T. 21 S., R. 7 $\frac{1}{2}$ E.			
	All Township Included.	Power Project 258	191	Public Land Laws 1872 Mining Law

Bureau of Land Management Withdrawals

<u>Wdl Document and Serial No.</u>	<u>Location</u>	<u>Purpose</u>		<u>Segregates from Appropriation under the following laws</u>
	Nye County -			
PLO-5387 (N-7468)	T. 17 S., R. 50 E. sec. 14, Lot 11; sec. 35, SW¼NE¼, S½NE¼SE¼, SE¼SE¼.	Ash Meadows Pupfish Area	136.84	Public Land Laws 1872 Mining Law
	Clark County -			
PLO-3530 (Nev-065360)	T. 21 S., R. 58 E. sec. 17, N½NE¼, NW¼NW¼, N½SW¼NW¼, NW¼SE¼NW¼.	Pine Creek Cyn Natural Areas	150	Public Land Laws 1872 Mining Law
EO 2-23-1916 (Nev-047451)	T. 21 S., R. 59 E. sec. 6, Lot. 7	Public Water Res.	80.43	Public Land Laws Loc. Non-Metalliferous Metals
SO 01-07-1929 (Nev-054523)	T. 21 S., R. 63 E. sec. 12, S½SE¼; sec. 13, NE¼NE¼, SW¼NE¼;			
	T. 21 S., R. 64 E. Affects all lands at an altitude of less than 1250' above sea level to be interpreted to include when surveyed every smallest legal subdivision any part of which lies at altitude within the following sections: sections 2,3,4,5,6,7,8,9,10,11,12,13, 14,15,16,17,18,20,21,22,23, 24,25,26,27,28,29,33,34,35,36.			
	T. 20 S., R. 65 E. sec. 34, SE¼SW¼, SE¼.			
	T. 22 S., R. 65 E. sec. 6, Lots 1,2,3,4,5,6,7,8,9, 10,11,12; sec. 7, Lots 1,2,3,4,5, NW¼NE¼, S½NE¼, E½W½, SE¼; sec. 8, Lots 1,2,3,4,5, SW¼NW¼, SW¼; sec. 16, Lot 1;			

sec. 17, Lots 1,2,3,4,5, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 18, All;
sec. 19, All;
sec. 20, Lots 1,2, NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$,
NW $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$;
sec. 21, SW $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 28, Lot 1;
sec. 29, NW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 30, Lots 1,2, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$;
sec. 32, W $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$.

T. 21 S., R. 66 E.

Affects all lands at an altitude
of less than 1250' above sea level
within the following sections:

sections 24,25,31,32,33,34,35,36.

T. 16 S., R. 67 E.

sec. 24, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 18 S., R. 67 E.

sec. 25, Lots 1,2,3,4, SW $\frac{1}{4}$ NE $\frac{1}{4}$,
NW $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 19 S., R. 67 E.

sec. 1, SE $\frac{1}{4}$;
sec. 12, E $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$.

T. 20 S., R. 67 E.

Affects all lands at an altitude
of less than 1250' above sea level
within the township.

T. 16 S., R. 68 E.

sec. 13, SE $\frac{1}{4}$;
sec. 20, SW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 21, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 24, NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 25, E $\frac{1}{2}$ NE $\frac{1}{4}$;
sec. 26, E $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 28, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 30, Lot 2, E $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 31, W $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 32, S $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 33, NE $\frac{1}{4}$ NE $\frac{1}{4}$;
sec. 34, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 35, E $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 36, S $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$.

T. 17 S., R. 68 E.,

- sec. 1, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 2, Lots 1,2,3,4, SW $\frac{1}{4}$ NE $\frac{1}{4}$,
S $\frac{1}{2}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 3, Lots 1,2, SE $\frac{1}{4}$ NE $\frac{1}{4}$;
- sec. 4, Lot 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 5, Lots 1,2,3,4, SE $\frac{1}{4}$ NE $\frac{1}{4}$;
- sec. 9, N $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 10, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 11, NE $\frac{1}{4}$;
- sec. 12, N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 13, E $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 14, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 15, All;
- sec. 16, E $\frac{1}{2}$;
- sec. 23, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 24, W $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$;
- sec. 25, N $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 26, N $\frac{1}{2}$ N $\frac{1}{2}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$,
N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 27, N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 34, Lots 2,5,9,12,13,
E $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 36, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$.

T. 15 S., R. 69 E.

- sec. 31, Lots 3,4, E $\frac{1}{2}$ SW $\frac{1}{4}$.

T. 16 S., R.69 E.

- sec. 7, Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$;
- sec. 19, Lots 1,2,3,4;
- sec. 30, Lots 1,2,3,4, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 31, Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$, S $\frac{1}{2}$ SE $\frac{1}{4}$.

T. 17 S., R. 69 E.

- sec. 5 Lot 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$;
- sec. 6, Lots 1,2,3,4,5,6,7,
S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 7, Lots 1,2,3,4, NW $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ W $\frac{1}{2}$, SE $\frac{1}{4}$;
- sec. 17, E $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$;
- sec. 18, Lots 1,2,3,4, NE $\frac{1}{4}$,
E $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 19, Lots 1,4, NW $\frac{1}{4}$ NE $\frac{1}{4}$,
S $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$, SE $\frac{1}{4}$;
- sec. 20, W $\frac{1}{2}$ SW $\frac{1}{4}$;
- sec. 29, W $\frac{1}{2}$ W $\frac{1}{2}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 30, All;
- sec. 31, All;
- sec. 32, W $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 21 S., R. 69 E.

All Township Included.

T. 14 S., R. 70 E.

Affects All Lands Lying Below
1250' Above Sea Level.

T. 21 S., R. 70 E.

Affects Sections 12,13,14,23,26,
35 Lying Within Unsurveyed
Portions of Sections 12,13,14,
23,24,25,26,35,36 Lying
Between 1229' Contour Line and
the Colorado River. (GLO Order
June 30, 1945)

T. 22 S., R. 70 E.

Affects All Lands Lying Below
1250' Above Sea Level.

T. 20 S., R. 71 E.

Affects All Lands Lying Below
1250' Above Sea Level.

T. 21 S., R. 71 E.

All Township Included.

PSC #210

23,436.47

Public Land Laws

EO 04-17-1926
(Nev-047449)

T. 21 S., R. 58 E.

sec. 4, Lot 3.

T. 22 S., R. 58 E.

sec. 14, Lot 8, NE $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 22 NE $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 18 S., R. 67 E.

sec. 12, Lot 4.

Public Water
Reserve #107

200.21

Public Land Laws
Location of Nonmetal-
liferous Minerals

PL 85-339
(Nev-041800)

T. 24 S., R. 62 E.

sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 25 S., R. 62 E.

sec. 1, All;
sec. 2, All;

sec. 3, All;
sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 26 S., R. 62 E.

sec. 1, All;
sec. 2, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All.

T. 23 S., R. 63 E.

sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, NW¼;
sec. 25, All;
sec. 26, NE¼, N½NE¼NW¼,
S½SW¼NE¼NW¼, SE¼NE¼NW¼,
N½S½NW¼NW¼, S½NE¼SW¼NW¼,
W½SW¼NW¼, SE¼SW¼NW¼,
SE¼NW¼, S½.
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;

sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 24 S., R. 63 E.

sec. 1, All;
sec. 2, All;
sec. 3, All;
sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 25 S., R. 63 E.

sec. 1, All;
sec. 2, All;
sec. 3, All;
sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, All;

sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22 All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 26 S., R. 63 E.

sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 16, All;
sec. 17, All;
sec. 18, All.

T. 23 S., R. 63½ E.

sec. 25, Lots 1,2,3,4,
NE¼, SE¼;
sec. 36, Lots 1,2,3,4,
NE¼, SE¼.

T. 23 S., R. 64 E.

sec. 30, Lot 8, SE¼SW¼;
sec. 31, All;
sec. 32, All;
sec. 33, SW¼NE¼, W½NW¼,
SE¼NW¼, S¼;
sec. 34, W½SW¼, SE¼SW¼,
SW¼SE¼.

T. 23½ S., R. 64 E.

sec. 31, Lots 1,2,3,4,5,6,
N½E½, E½NW¼;
sec. 32, Lots 1,2,3,4, N½;
sec. 33, Lots 1,2,3,4, N½;
sec. 34, Lots 1,2,3,4, N½;
sec. 35, Lots 1,2,3,4, N½.

T. 24 S., R. 64 E.

- sec. 2, All;
- sec. 3, All;
- sec. 4, All;
- sec. 5, All;
- sec. 6, All;
- sec. 7, All;
- sec. 8, All;
- sec. 9, All;
- sec. 10, All;
- sec. 11, All;
- sec. 14, All;
- sec. 15, All;
- sec. 16, All;
- sec. 17, All;
- sec. 18, All;
- sec. 19, All;
- sec. 20, All;
- sec. 21, All;
- sec. 22, All;
- sec. 23, All;
- sec. 26, All;
- sec. 27, All;
- sec. 28, All;
- sec. 29, All;
- sec. 30, All;
- sec. 31, All;
- sec. 32, All;
- sec. 33, All;
- sec. 34, All;
- sec. 35, All.

T. 25 S., R. 64 E.

- sec. 1, All;
- sec. 2, All;
- sec. 3, All;
- sec. 4, All;
- sec. 5, All;
- sec. 6, All.

Eldorado Valley
Disposal Area 128,401.29 Public Land Laws
1872 Mining Law

T. 21 S., R. 63 E.

PL 73
Nev-061168

- sec. 35, Lots 8,9, S $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$.

Henderson Sale Area 187.65 Public Land Laws
1872 Mining Law
1920 Mineral Leasing Act

T. 21 S., R. 63 E.

PL 522
Nev-044337

- sec. 33, NE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$.

Henderson Sale Area 80.00 Public Land Laws
1872 Mining Law
1920 Mineral Leasing Act

SO 05-29-1933
(Nev-054528)

T. 22 S., R. 64 E.

- sec. 1, All;
- sec. 2, All;
- sec. 3, Lots 5,6,7,11,12,
S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
- sec. 10, All;
- sec. 11, All;
- sec. 12, All;
- sec. 13, All;
- sec. 14, All;
- sec. 15, N $\frac{1}{2}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;

- sec. 22, NE $\frac{1}{4}$ NE $\frac{1}{4}$;
- sec. 23, N $\frac{1}{2}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 24, Lots 1,2,3,4,5,6,
W $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{4}$ SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 25, Lots 1,2,3,4,5,6,7,
SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 21 S., R. 65 E.

- sec. 3, Lots 6,7,8, W $\frac{1}{2}$ SE $\frac{1}{4}$,
SW $\frac{1}{4}$;
- sec. 4, Lots 5,6, E $\frac{1}{2}$ SW $\frac{1}{4}$,
SE $\frac{1}{4}$;
- sec. 9, NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 10, W $\frac{1}{2}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 11, S $\frac{1}{2}$ SW $\frac{1}{4}$;
- sec. 12, Lot 7;
- sec. 13, Lots 1,2,3,4, W $\frac{1}{2}$ E $\frac{1}{2}$,
S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$;
- sec. 14, S $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 15, All;
- sec. 16, S $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$, SE $\frac{1}{4}$;
- sec. 17, SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$;
- sec. 18, E $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 19, Lots 10,17, S $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$;
- sec. 20, Lots 4,5,6,7,8,9,10,11,
- sec. 21, Lots 1,2,3,4,5,6,7,8,
S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
- sec. 22, Lots 1,2,3,4,5,6,7,8,9,
10, S $\frac{1}{2}$ N $\frac{1}{2}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 23, Lots 1,2,3,4,5,6,7,8,
S $\frac{1}{2}$ N $\frac{1}{2}$;
- sec. 24, Lots 1,2,3,4,5,6,7;
- sec. 27, Lots 1,2;
- sec. 28, Lots 1,2,3,4;
- sec. 29, Lots 1,2,3,4, N $\frac{1}{2}$ NE $\frac{1}{4}$,
NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 30, All;
- sec. 31, Lots 9,10,11,12, W $\frac{1}{2}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$.

T. 23 S., R. 65 E.

Includes All Township

Affects Land Below 700' Above
Sea Level In Sections 5,8,9,16,21,
27,28 and 34.

T. 23 $\frac{1}{2}$ S., R. 65 E.

Affects All Lands Lying Below
700' Above Sea Level In Sections
34 and 35.

T. 24 S., R. 65 E.

Affects All Lands Lying Below
700' Above Sea Level In Township.

T. 25 S., R. 65 E.

sec. 11, Lots 1,2,3,4, W $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 14, Lots 1,2,3,4;
sec. 23, Lots 1,2,3,4;
sec. 26, Lots 1,2,3,4;
sec. 35, Lots 1,2,3,4, SW $\frac{1}{4}$ NW $\frac{1}{4}$;
sec. 34, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$.

Affects All Lands Lying Below
700' Above Sea Level in Sections
2 and 3.

T. 26 S., R. 65 E.

sec. 2, Lots 1,2,3,4;
sec. 3, Lot 1, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 10, E $\frac{1}{2}$ NE $\frac{1}{4}$;
sec. 11, Lots 1,2,3,4,5, NW $\frac{1}{4}$ SW $\frac{1}{4}$,
SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 12, Lot 1;
sec. 13, Lots 1,2,3,4;
sec. 14, N $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$;
sec. 23, NE $\frac{1}{4}$ NE $\frac{1}{4}$;
sec. 24, Lot 1;
sec. 25, Lot 1;
sec. 26, SW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 35, N $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 36, SW $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 27 S., R. 65 E.

sec. 1, Lots 1,2,5, SW $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 13, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 23, E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 24, Lots 1,2,3,4,5,
NW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 25, NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 36, E $\frac{1}{2}$ E $\frac{1}{2}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 28 S., R. 65 E.

sec. 1, Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 12, Lots 1,2,3, N $\frac{1}{2}$ NE $\frac{1}{4}$,
SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 13, Lots 1,2,3,4, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 24, Lot 1,
Lots 2,3,(within)
Lot 4, W $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 25, Lots 1,2,3,4, N $\frac{1}{2}$ NW $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$;
sec. 36, W $\frac{1}{2}$ E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$.

T. 29 S., R. 65 E.

sec. 1, Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$;
sec. 12, E $\frac{1}{2}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$;
sec. 13, NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 27 S., R. 66 E.

Affects All Lands Lying Below
100' Above Sea Level In Township.

T. 29 S., R. 66 E.

sec. 8, Lot 1;
sec. 17, Lots 1,2,3,4, SW $\frac{1}{2}$ SW $\frac{1}{2}$;
sec. 18, Lot 4;
sec. 19 Lot 1, S $\frac{1}{2}$ NE $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{2}$,
N $\frac{1}{2}$ SE $\frac{1}{2}$, SE $\frac{1}{2}$ SE $\frac{1}{2}$;
sec. 20, Lots 1,2,3, W $\frac{1}{2}$, NW $\frac{1}{2}$ SE $\frac{1}{2}$,
S $\frac{1}{2}$ SE $\frac{1}{2}$;
sec. 21, Lots 1,2;
sec. 28, Lots 1,2,3,4,5, NW $\frac{1}{2}$ NW $\frac{1}{2}$;
S $\frac{1}{2}$ NW $\frac{1}{2}$, SW $\frac{1}{2}$, NW $\frac{1}{2}$ SE $\frac{1}{2}$;
sec. 29, N $\frac{1}{2}$, NE $\frac{1}{2}$ SW $\frac{1}{2}$, SE $\frac{1}{2}$;
sec. 30, NE $\frac{1}{2}$ NE $\frac{1}{2}$;
sec. 32, E $\frac{1}{2}$ NE $\frac{1}{2}$;
sec. 33, Lot 1,2,3, NW $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{2}$,
SE $\frac{1}{2}$ SW $\frac{1}{2}$, NW $\frac{1}{2}$ SE $\frac{1}{2}$, S $\frac{1}{2}$ SE $\frac{1}{2}$;
sec. 34, Lots 1,2.

T. 30 S., R. 66 E.

sec. 2, Within;
sec. 3, Within;
sec. 4, Within;
sec. 10, Within;
sec. 11, Within;
sec. 14, Within;
sec. 15, Within;
sec. 22, Within;
sec. 23, Within;
sec. 26, Within;
sec. 27, Within;
sec. 34, Within;
sec. 35, Within.

T. 31 S., R. 66 E.

sec. 2, Lots 1,2,3,4, W $\frac{1}{2}$ SW $\frac{1}{2}$;
sec. 3, Lot 1;
sec. 11, Lots 1,2,3,4, W $\frac{1}{2}$ NW $\frac{1}{2}$;
sec. 14, Lots 1,2,3,4, NW $\frac{1}{2}$ NW $\frac{1}{2}$,
W $\frac{1}{2}$ SW $\frac{1}{2}$;
sec. 23, Lots 1,2,3,4, N $\frac{1}{2}$ NW $\frac{1}{2}$,
SE $\frac{1}{2}$ NW $\frac{1}{2}$, NE $\frac{1}{2}$ SW $\frac{1}{2}$;
sec. 26, Lots 1,2,3,4, SW $\frac{1}{2}$ NE $\frac{1}{2}$,
W $\frac{1}{2}$ SE $\frac{1}{2}$;
sec. 35, Lots 1,2,3,4,10,
NW $\frac{1}{2}$ NE $\frac{1}{2}$;
sec. 36, Lots 1,2,3, SW $\frac{1}{2}$ SW $\frac{1}{2}$.

T. 18 S., R. 68 E.

sec. 1, All;
sec. 2, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$,
SE $\frac{1}{2}$ SW $\frac{1}{2}$, SE $\frac{1}{2}$;
sec. 3, Lots 2,3,4, SW $\frac{1}{2}$ NE $\frac{1}{2}$,
S $\frac{1}{2}$ NW $\frac{1}{2}$, SW $\frac{1}{2}$, W $\frac{1}{2}$ SE $\frac{1}{2}$;

sec. 4, All;
 sec. 5, All;
 sec. 8, NE $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;
 sec. 9, N $\frac{1}{2}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
 sec. 10, N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 11, All;
 sec. 12, All;
 sec. 13, W $\frac{1}{2}$;
 sec. 14, All;
 sec. 15, E $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 16, All;
 sec. 17, E $\frac{1}{2}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$;
 sec. 18, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
 sec. 19, Lots 3,4, E $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$,
 SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 20, N $\frac{1}{2}$, SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;
 sec. 21, N $\frac{1}{2}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
 sec. 22, N $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
 E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 23, All;
 sec. 24, N $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$;
 sec. 26, N $\frac{1}{2}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
 sec. 27, E $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$,
 SW $\frac{1}{4}$;
 sec. 28, W $\frac{1}{2}$, SE $\frac{1}{4}$;
 sec. 29, All;
 sec. 30, All;
 sec. 31, Lots 1,2,3,4, NE $\frac{1}{4}$,
 E $\frac{1}{2}$ W $\frac{1}{2}$, W $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
 sec. 32, Lots 1,2,3,4,5,6,7,8,
 9,10,11,13,15,16,17;
 sec. 33, All;
 sec. 34, All;
 sec. 35, NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$.

T. 19 S., R. 68 E.

sec. 2, Lots 3,4, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$;
 sec. 3, All;
 sec. 4, All;
 sec. 5, Lots 1,2,3,5, S $\frac{1}{2}$ NE $\frac{1}{4}$,
 S $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,
 S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
 sec. 6, Lots 2,3,4,5,6,7,9,
 S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
 E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 7, Lots 1,2, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$;
 sec. 8, All;
 sec. 9, All;
 sec. 10, All;
 sec. 11, W $\frac{1}{2}$;
 sec. 14, W $\frac{1}{2}$;
 sec. 15, All;
 sec. 16, Within;
 sec. 17, All;
 sec. 20, All;
 sec. 21, Within;
 sec. 22, All;
 sec. 23, W $\frac{1}{2}$;
 sec. 26, W $\frac{1}{2}$;
 sec. 27, All;
 sec. 28, All;

sec. 29, All;
sec. 31, SE¼;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, W½.

T. 20 S., R. 68 E.

sec. 3, All;
sec. 4, Within;
sec. 5, All;
sec. 6, Lot 1, S½NE¼, E½SW¼,
SE¼;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, N½, SW¼, N½SE¼,
SW¼SE¼;
sec. 21, All;
sec. 22, All;
sec. 26, W½W½, SE¼SW¼, S½SE¼;
sec. 27, All;
sec. 28, All;
sec. 29, E½NE¼, SW¼NE¼, NW¼,
S½;
sec. 30, All;
sec. 31, All;
sec. 32, N½, NE¼SW¼, N½SE¼,
SE¼SE¼;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, S½NW¼, SW¼, SW¼SE¼.

T. 21 S., R. 68 E.

sec. 1, All;
sec. 2, Lots 1,2,3,4, S½N½,
N½SE¼;
sec. 3, Lots 1,2,3,4, S½NE¼;
sec. 6, Lots 1,2,3, S½NE¼,
SE¼NW¼.

T. 18 S., R. 69 E.

sec. 5, Lots 2,3,4, SW¼NE¼,
S½NW¼, N½SW¼, SW¼SW¼,
NW¼SE¼;
sec. 6, All;
sec. 7, Lots 1,2,3,4, NE¼,
E½W½, NW¼SE¼;
sec. 18, Lot 1.

PSC #272

79,846.48 Public Land Laws

EO 11-17-1913 (Nev-054532)	T. 21 S., R. 65 E. sec. 24, Lots 8,9,10. T. 20 S., R. 67 E. Affects All Lands Lying Within ¼ Mile of the Colorado River. T. 21 S., R. 68 E. sec. 5, Lots 1,2,3,5,6; sec. 6, Lots 6,7,8,9, E½SW¼, NW¼SE¼. sec. 7, Lots 1,2,3.	PSR #407	6,266.27	Public Land Laws
EO 09-05-1914 (Nev-054534)	T. 21 S., R. 68 E. sec. 2, Lots 5,6,7,8; sec. 3, Lots 1,2,5,6,7; sec. 12, Lots 1,2,3,4. T. 21 S., R. 69 E. Affects All Lands Lying Within ¼ Mile of the Colorado River. T. 21 S., R. 70 E. Affects All Lands Lying Within ¼ Mile of the Colorado River. Affects Sections 12,13,14,23,26, 35 Lying Within Unsurveyed Portions of Sections 12,13,14, 23,24,25,26,35,36 Lying Between 1229' Contour Line and the Colorado River. (GLO Order June 30, 1945) T. 22 S., R. 70 E. Affects All Lands Lying Within ¼ Mile of the Colorado River. T. 21 S., R. 71 E. All Township Included.	PSR #446	12,064.39	Public Land Laws
EO 12-03-1913 (Nev-054535)	T. 21 S., R. 65 E. sec. 23, Lots 9,10,11,12, N½SE¼; sec. 24, Lots 11,12, SW¼NW¼.	PSC #462	325.38	Public Land Laws 1872 Mining Law
PL 100-275 (N-48281)	T. 13 S., R. 63 E. sec. 1, Lot 2 (W½),3,4, W½SW¼NE¼, S½NW¼, SW¼, W¼W½SE¼; sec. 2, All;			

	<p>sec. 3, Within; sec. 10, Within; sec. 11, All; sec. 12, All; sec. 13, All; sec. 14, All; sec. 15, Within; sec. 22, Within; sec. 23, Within; sec. 24, Within.</p>	<p>Aerojet Buffer Zone Lse. Agrmt.</p>	<p>6,110</p>	<p>Public Land Laws 1872 Mining Law 1920 Mineral Leasing Act 1970 Geothermal Steam Act</p>
N-45233	<p>T. 13 S., R. 70 E.</p> <p>sec. 12, S½; sec. 13, N½, SW¼, N½SE¼; sec. 14, S½; sec. 23, Lots 1,2, N½, SW¼, NW¼SE¼; sec. 24, Lots 2,6, W½NW¼; sec. 26, Lot 2, N½NW¼.</p> <p>T. 13 S., R. 71 E.</p> <p>sec. 7, All; sec. 8, Lots 1,2,3, N½, N½S½, SW¼SW¼; sec. 9, Lots 1,5,6,7,8,10, 11,13,15,16,17,19, 21, N½, N½SW¼, N½NW¼SE¼; sec. 10, Lots 5,6,7,8,9, NW¼, N½SW¼; sec. 17, Lot 1; sec. 18, Lots 5,6,7,9, NW¼NE¼, N½NW¼.</p>	<p>Mesquite Legis. Public Lands Sale Area</p>	<p>4,417.49</p>	<p>Public Land Laws 1872 Mining Law 1920 Mineral Leasing Act 1970 Geothermal Steam Act</p>
PL 99-548 (N-45240)	<p>T. 13 S., R. 70 E.</p> <p>sec. 24, Lot 3. (within) sec. 26, Lots 1,3,4. (within)</p> <p>T. 13 S., R. 71 E.</p> <p>sec. 15, Lots 5,6,7,8, SW¼; (within) sec. 16, Lots 1,2,3,4,5, S½SE¼; (within) sec. 17, Lot 2; sec. 19, Lot 6; (within) sec. 20, Lots 1,2,6, SW¼NE¼; (within) sec. 21, N½NW¼. (within)</p>	<p>Mesquite Legis. Public Lands Retention Areas</p>	<p>637.52</p>	<p>Public Land Laws 1872 Mining Law 1920 Mineral Leasing Act 1970 Geothermal Steam Act</p>
HR 4559 (10-26-1990)	<p>T. 20 S., R. 57 E.</p> <p>sec. 24, All; sec. 25, All; sec. 36, All.</p>			

T. 21 S., R. 57 E.

sec. 1, All;
sec. 12, All;
sec. 13, All;
sec. 24, All;
sec. 25, All;
sec. 36, All.

T. 20 S., R. 58 E.

sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 21 S., R. 58 E.

sec. 1, Lots 2,3,4, SW $\frac{1}{4}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,
W $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 2, All;
sec. 3, All;
sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;

- sec. 16, N $\frac{1}{2}$ N $\frac{1}{2}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$,
S $\frac{1}{2}$;
- sec. 17, All;
- sec. 18, All;
- sec. 19, All;
- sec. 20, All;
- sec. 21, All;
- sec. 22, All;
- sec. 23, All;
- sec. 24, E $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$ NE $\frac{1}{4}$,
NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$,
SW $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 25, W $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
SW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$ SE $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 26, All;
- sec. 27, All;
- sec. 28, All;
- sec. 29, All;
- sec. 30, All;
- sec. 31, All;
- sec. 32, All;
- sec. 33, All;
- sec. 34, N $\frac{1}{2}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 35, E $\frac{1}{2}$, NW $\frac{1}{4}$;
- sec. 36, W $\frac{1}{2}$ E $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 22 S., R. 58 E.

- sec. 1, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 2, Lots 1,2,3, S $\frac{1}{2}$ NE $\frac{1}{4}$,
S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 3, Lots 3,4, SW $\frac{1}{4}$ NW $\frac{1}{4}$,
S $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 4, All;
- sec. 5, All;
- sec. 6, All;
- sec. 7, All;
- sec. 8, All;
- sec. 9, All;
- sec. 10, All;
- sec. 11, All;

sec. 12, Lots 1,2,3,4,5,6,
E½, SE¼SW¼;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 20, NE¼;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All;

T. 23 S., R. 58 E.

sec. 1, Lots 1,2,3,4,
S½NW½, S½;
sec. 2, Lots 1,2,3,4,
S½NW½, S½;
sec. 3, Lots 1,2,3,4,
S½NW½, S½;
sec. 4, Lots 1,2,3,4,
S½NW½, S½;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All.

T. 20 S., R. 59 E.

sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 16, N½;
sec. 17, Lots 1,2,3,4,5,6,
7,8,9,10,11,12;
sec. 18, All;
sec. 19, All;
sec. 20, Lots 1,2,3,4;
sec. 30, All;
sec. 31, All;
sec. 32, S½. (within)

T. 21 S., R. 59 E.

sec. 3, S½NW¼, * SW¼;
sec. 4, Lots 3,4 (within),
Lots 5,6,7,8, NW¼,
SW¼, * E½SE¼;
sec. 5, Lots 1,2,3,4, S½NW½,
S½;
sec. 6, Lots 1,2, S½NE¼,
* NE¼NW¼, * N½SE¼NW¼,

* SW $\frac{1}{2}$ SE $\frac{1}{2}$ NW $\frac{1}{2}$, * N $\frac{1}{2}$ SE $\frac{1}{2}$ SE $\frac{1}{2}$ NW $\frac{1}{2}$,
 S $\frac{1}{2}$ SE $\frac{1}{2}$ SE $\frac{1}{2}$ NW $\frac{1}{2}$, * N $\frac{1}{2}$ NE $\frac{1}{2}$ SW $\frac{1}{2}$,
 * N $\frac{1}{2}$ S $\frac{1}{2}$ NE $\frac{1}{2}$ SW $\frac{1}{2}$, S $\frac{1}{2}$ S $\frac{1}{2}$ NE $\frac{1}{2}$ SW $\frac{1}{2}$,
 S $\frac{1}{2}$ SW $\frac{1}{2}$, * NW $\frac{1}{2}$ SE $\frac{1}{2}$, * N $\frac{1}{2}$ NE $\frac{1}{2}$ SW $\frac{1}{2}$ SE $\frac{1}{2}$,
 S $\frac{1}{2}$ NE $\frac{1}{2}$ SW $\frac{1}{2}$ SE $\frac{1}{2}$, N $\frac{1}{2}$ NW $\frac{1}{2}$ SW $\frac{1}{2}$ SE $\frac{1}{2}$,
 * S $\frac{1}{2}$ NW $\frac{1}{2}$ SW $\frac{1}{2}$ SE $\frac{1}{2}$, * S $\frac{1}{2}$ SW $\frac{1}{2}$ SE $\frac{1}{2}$,
 E $\frac{1}{2}$ SE $\frac{1}{2}$;

- sec. 7, All;
- sec. 8, All;
- sec. 9, All;
- sec. 10, Lots 15,16,17,18,
NW $\frac{1}{2}$ (minerals only);
- sec. 16, Lots 3,4, N $\frac{1}{2}$ NW $\frac{1}{2}$;
- sec. 17, Lots 1,2,3,4,5,6,
7, N $\frac{1}{2}$ N $\frac{1}{2}$;
- sec. 18, All;
- sec. 19, All.

T. 22 S., R. 59 E.

- sec. 6, All;
- sec. 7, Lots 1,2,3,4,
N $\frac{1}{2}$ NE $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{2}$ NE $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{2}$,
E $\frac{1}{2}$ SW $\frac{1}{2}$, S $\frac{1}{2}$ NE $\frac{1}{2}$ SW $\frac{1}{2}$ SE $\frac{1}{2}$,
W $\frac{1}{2}$ SW $\frac{1}{2}$ SE $\frac{1}{2}$, SE $\frac{1}{2}$ SE $\frac{1}{2}$;
- sec. 8, NW $\frac{1}{2}$, SW $\frac{1}{2}$, SW $\frac{1}{2}$ SE $\frac{1}{2}$;
- sec. 17, W $\frac{1}{2}$ NE $\frac{1}{2}$, NW $\frac{1}{2}$;
- sec. 18 Lots 1,2, NE $\frac{1}{2}$.

	Red Rock Canyon	Public Land Laws
	National Con-	1872 Mining Law
	servation Area	1920 Mineral Leasing Act
83,100		1970 Geothermal Steam Act

* Denotes federal ownership of mineral estate only - surface estate has been transferred into private ownership.

PL 101-67
(N-49779)

T. 17 S., R. 63 E.

- sec. 32, Within;
- sec. 33, Within;

T. 18 S., R. 63 E.

- sec. 3, Within;
- sec. 4, Within;
- sec. 5, Within;
- sec. 8, Within;
- sec. 9, All;
- sec. 10, Within;
- sec. 11, Within;
- sec. 13, Within;
- sec. 14, NE $\frac{1}{2}$, NW $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{2}$,
SW $\frac{1}{2}$ SW $\frac{1}{2}$, N $\frac{1}{2}$ SE $\frac{1}{2}$ SW $\frac{1}{2}$,
SW $\frac{1}{2}$ SE $\frac{1}{2}$ SW $\frac{1}{2}$;
- sec. 15, All;
- sec. 16, All;
- sec. 17, Within;
- sec. 18, Within;
- sec. 19, Within;
- sec. 20, All;
- sec. 21, All;
- sec. 22, All;
- sec. 23, E $\frac{1}{2}$ NE $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{2}$ NE $\frac{1}{2}$,
E $\frac{1}{2}$ SW $\frac{1}{2}$ NE $\frac{1}{2}$, SW $\frac{1}{2}$ SW $\frac{1}{2}$ NE $\frac{1}{2}$,
W $\frac{1}{2}$ NE $\frac{1}{2}$ NW $\frac{1}{2}$, W $\frac{1}{2}$ NW $\frac{1}{2}$, W $\frac{1}{2}$ SW $\frac{1}{2}$,
SE $\frac{1}{2}$ SE $\frac{1}{2}$ SW $\frac{1}{2}$, E $\frac{1}{2}$ SE $\frac{1}{2}$,
N $\frac{1}{2}$ NW $\frac{1}{2}$ SE $\frac{1}{2}$, SE $\frac{1}{2}$ NW $\frac{1}{2}$ SE $\frac{1}{2}$,

SW¼SE¼;
 sec. 24, All;
 sec. 26, E½NE¼, N½NW¼NE¼,
 N½SW¼NW¼NE¼, SE¼NW¼NE¼,
 E½SW¼NE¼, E½NE¼NW¼,
 N½SE¼NW¼, W½W½NW¼,
 NW¼NW¼SW¼, S½NE¼SW¼,
 SE¼SW¼, E½SE¼,
 NE¼NW¼SE¼, S½NW¼SE¼,
 SW¼SE¼;
 sec. 27, All;
 sec. 28, All;
 sec. 29, All;
 sec. 30, All;
 sec. 31, E½, SE¼SW¼;
 sec. 32, All;
 sec. 33, All;
 sec. 34, All;
 sec. 35, E, E½NW¼, E½NW¼NW¼,
 SW¼NW¼NW¼, SW¼NW¼, SW¼.

T. 19 S., R. 63 E.

sec. 2, All;
 sec. 3, Lots 1,2,3,4, S½NE¼,
 N½SW¼NW¼, SE¼SW¼NW¼,
 SE¼NW¼, NE¼SW¼, E½NW¼SW¼,
 SW¼NW¼SW¼, S½SW¼, SE¼;
 sec. 4, Lots 1,2,3,4, S½N½, SW¼,
 NW¼SE¼, S½SE¼;
 sec. 5, All;
 sec. 6, All;
 sec. 7, All;
 sec. 8, All;
 sec. 9, N½, N½SW¼.

T. 18 S., R. 64 E.

sec. 7, Lots 9,10,11, SE¼SW¼, SE¼;
 sec. 18, Lots 5,6,7,8,9,10,
 11,12,13,14,15, N½NE¼,
 E½NW¼;
 sec. 19, Lots 5,6,7,8,9,10,
 11,12, E½NE¼, E½SW¼, SE¼;
 sec. 20, N½.

Apex Project

21,000

All Except R&PP
 and Applicable
 Sale Authorities

Department of Energy Withdrawals

<u>Wdl Document and Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Segregates from Appropriation under the following laws</u>
	Clark County -		
PLO 4662 (N-2385)	T. 26 S., R. 64 E. sec. 4, SE¼NE¼NW¼SW¼.	Atomic Seismic Station	Public Land Laws 1872 Mining Law
		2.5	

PLO 4250
(Nev-067001)

T. 23 S., R. 63 E.

sec. 22, SW¼;
sec. 23, Lots 3,6, S½NW¼,
NE¼SW¼, E¼SE¼SW¼;
sec. 24, Lots 5,6,7,8, S½.

T. 23 S., R. 63½ E.

sec. 25, NE¼, N½SE¼.

T. 23 S., R. 64 E.

sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, Lots 5,6,7, NE¼,
E¼NW¼, NE¼SW¼, SE¼;
sec. 33, N½NE¼, SE¼NE¼, NE¼NW¼;
sec. 34, N½, NE¼SW¼, N½SE¼,
SE¼SE¼.

Pacific NW and
Pacific SW Intertie 4,302.57

Public Land Laws
1872 Mining Law

United States Forest Service Withdrawals

<u>Wdl Document and Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Segregates from Appropriation under Acres the following laws</u>
	Clark County -		
PLO-1355 (Nev-016774)	T. 18 S., R. 55 E. sec. 13, S½SE¼; sec. 24, N½NE¼. T. 19 S., R. 57 E. sec. 29, S½N½SE¼, S½SE¼, SE¼NE¼SW¼, E¼SE¼SW¼; sec. 32, Lots 1,2,3,4; (N½) sec. 7, Lots 8 (S½), 9 and 10 (SE¼), 11 (N½); sec. 8, Lots 5 (SW¼), 12 (NW¼), 9 (W½), 10,15; sec. 31, Lots 7 (W½), 8,9,11,12.	Recreation Areas & Administrative Sites 776.08	Public Land Laws 1872 Mining Law
PLO-1377 (Nev-028474)	T. 18 S., R. 56 E. sec. 27, SW¼NE¼NW¼, S½NW¼NW¼, W½SE¼NW¼, SW¼NW¼, NW¼NE¼SW¼, N½NW¼SW¼, SW¼NW¼SW¼; sec. 28, SE¼NE¼NE¼, NE¼SE¼NE¼, NE¼NE¼SE¼, S½NE¼SE¼;		

	sec. 33, NW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$.	Recreation Areas	270	Public Land Laws 1872 Mining Law
PLO-2785 (Nev-058297)	T. 19 S., R. 57 E. sec. 7, Lots II (S $\frac{1}{2}$), 12; sec. 8, Lots 5 (N $\frac{1}{2}$,SE $\frac{1}{4}$), 6 (S $\frac{1}{2}$), 11, 12 (NE $\frac{1}{4}$,S $\frac{1}{2}$), 13,14.	Geological Area	243	1872 Mining Law
PLO 1487 (Nev-054565)	T. 18 S., R. 55 E. sec. 10, E $\frac{1}{2}$; sec. 11, All; sec. 12, All; sec. 13, All; sec. 14, All; sec. 15, E $\frac{1}{2}$; sec. 23, All; sec. 24, All; sec. 25 All; sec. 36, All. T. 19 S., R. 55 E. sec. 1, Lots 1,2,3,4, S $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 2, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$; sec. 12, S $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, SE $\frac{1}{4}$; sec. 13, All; sec. 14, All; sec. 24, All. T. 18 S., R. 56 E. sec. 18, All; sec. 19, All; sec. 20, All; sec. 21, All; sec. 22, All; sec. 25, N $\frac{1}{2}$, SW $\frac{1}{4}$; sec. 26, All; sec. 27, All; sec. 28, All; sec. 29, All; sec. 30, All; sec. 31, All; sec. 32, All; sec. 33, All; sec. 34, All; sec. 35, E $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$; sec. 36 NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, SE $\frac{1}{4}$. T. 19 S., R.56 E. sec. 1, Lots 5,6,7,8,9,10,11, 12,13, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$; sec. 2, Tract 40 (within), Lots 5,6,7; sec. 3, Tract 43 (within),			

- Lots 5,6,7,8,9, S $\frac{1}{2}$ N $\frac{1}{2}$,
SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 4, Lots 5,6,7,8, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
- sec. 5, Lots 5,6,7,8,9,10,13,
14,15,16, S $\frac{1}{2}$ N $\frac{1}{2}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 6, Lots 8,9,10,11,12,13,
14,15,16,17,19,20,21,
22, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 7, Lots 6,7,8,9,10,11,12,
13, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 8, Lots 1,2,3,4, NE $\frac{1}{4}$ NE $\frac{1}{4}$,
S $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$;
- sec. 9, Tract 43 (within),
Lots 1,2,3,4, W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$;
- sec. 10, Tract 43 (within),
Tract 57 (all in sec.),
Lots 1,2,3,4;
- sec. 11, Tract 43 (all in sec.),
Tract 44;
- sec. 12, Tract 48 (all in sec.),
Tract 58;
- sec. 13, Tract 37 (within),
Tract 48 (all in sec.),
Tract 58 (all in sec.),
Lots 1,2,3,4,5,6,7,
SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 14, Tract 51 (all in sec.),
Lots 1,2,3,4,5,6,7,8,
SW $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 15, Tract 43 (all in sec.),
Tract 51 (all in sec.),
Tracts 52,53,54,
Tract 57 (all in sec.),
Lots 1,2,3,4,5,6;
- sec. 16, Tract 43 (all in sec.),
Lots 1,2,3,4,5,6,7,
NW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$,
W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 17, All;
- sec. 18, Lots 5,6,7,8, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$;
- sec. 19, Lots 5,6,7,8, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$;
- sec. 20, All;
- sec. 21, All;
- sec. 22, N $\frac{1}{2}$ N $\frac{1}{2}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$;
- sec. 23, Lots 1,2,3, SE $\frac{1}{4}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$,
SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 24, Lots 1,2,3,4, W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$;
- sec. 25, Lots 1,2,3,4, W $\frac{1}{2}$ E $\frac{1}{2}$, NW $\frac{1}{4}$,
N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 26, N $\frac{1}{2}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 27, All;
- sec. 28, All;
- sec. 29, All;
- sec. 30, Lots 5,6,7,8, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$;
- sec. 31, Lots 5,6,7,8,9,10,11,
NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 32, Lots 1,2,3,4, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$;
- sec. 33, Lots 1,2,3,4, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$;

- sec. 34, Lots 1,2,3,4, N½, N½S½;
- sec. 35, Lots 1,2,3,4, W½NE¼, SE¼NE¼, NW¼, N½SW¼, N½SE¼;
- sec. 36, Lots 1,2,3,4,5, E½NE¼ (within), SW¼NE¼, S½NW¼, N½SW¼, NW¼SE¼.

T. 20 S., R. 56 E.

- sec. 1, All;
- sec. 2, All;
- sec. 3, All;
- sec. 4, All;
- sec. 5, All;
- sec. 11, All;
- sec. 12, All;
- sec. 13, All.

T. 18 S., R. 57 E.

- sec. 30, Lots 1,2,3,4, E½W½, E½;
- sec. 31, Lots 1,2,3,4, E½W½, E½.

T. 19 S., R. 57 E.

- sec. 5, All;
- sec. 6, All;
- sec. 7, E½;
- sec. 8, All;
- sec. 17, All;
- sec. 18, Lots 2,3,5,6,7,8,9,10, 11,12,13,14,15, E½NW¼;
- sec. 19, All;
- sec. 20, All;
- sec. 29, All;
- sec. 30, All;
- sec. 31, Lots 5,6,7,8,9,10,11, 12,13;
- sec. 32, All;
- sec. 33, All.

T. 20 S., R. 57 E.

- sec. 4, All;
- sec. 5, All;
- sec. 6, All;
- sec. 7, All;
- sec. 8, All;
- sec. 9, All;
- sec. 18, All.

PLO-4708
(Nev-054565)

T. 18 S., R. 56 E.

- sec. 26, SE¼.

PLO-3253
(Nev-060240)

T. 19 S., R. 57 E.

- sec. 17, E½SW¼NW¼ (within), SE¼NW¼ (within).

Toiyabe National Forest	38,436.85	None
Toiyabe National Forest	160	None
Historic Site	38	1872 Mining Law

Federal Aviation Administration Withdrawals

<u>Wdl Document and Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
Nye County -				
BLM Order 09-18-1957 (Nev-045108)	T. 13 S., R. 47 E.			
	sec. 17, S½NE¼SW¼, SE¼NW¼SW¼, SE¼SW¼, E½SW¼SW¼, SW¼NW¼SE¼, W½SW¼SE¼; sec. 20, NW¼NW¼NE¼, N½NE¼NW¼, NE¼NW¼NW¼.	Beatty VOR Facility	160	Public Land Laws 1872 Mining Law
PLO-6687 (N-42735)	T. 13 S., R. 47 E.			
	sec. 17, W½SE¼NW¼SE¼, W½E½SW¼SE¼; sec. 20, W½NE¼NW¼NE¼, SW¼NW¼NE¼, S½NE¼NW¼, SE¼NW¼NW¼.	Beatty ANS	60	Public Land Laws 1872 Mining Law
Clark County -				
PLO-5305 (N-5999)	T. 19 S., R. 57 E.,			
	sec. 10, SE¼SE¼NE¼NW¼(within).	Angel Peak ANS	.304	Public Land Laws 1872 Mining Law
PLO-3447 PLO-3485 PLO-3931 (Nev-059256)	T. 26 S., R. 63 E.			
	sec. 12, S½N½NW¼NE¼, S½NW¼NE¼, SW¼NE¼, W½W½SE¼NE¼, S½NE¼NE¼NW¼, SE¼NE¼NW¼, E½SE¼NW¼.	SW¼NW¼NE¼NE¼, W½SW¼NE¼NE¼, Searchlight RCAG	122.5	Public Land Laws 1872 Mining Law
PLO-6687 (N-42415)	T. 13 S., R. 69 E.			
	sec. 27, NW¼SW¼; sec. 28, NE¼SE¼.	Mormon Mesa ANS	80	Public Land Laws 1872 Mining Law
BLM Order 01-18-1952 (Nev-051785)	T. 13 S., R. 69 E.			
	sec. 28, SE¼SE¼.	ANS Nev. #1	40	Public Land Laws 1872 Mining Law

Bureau of Reclamation Withdrawals

<u>Wdl. Document and Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Segregates from Appropriation under Acres the following laws</u>
	Clark County -		
PLO-3512 (Nev-059798)	T. 21 S., R. 62 E. sec. 23, NE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$; sec. 24, All; sec. 25, E $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$. T. 21 S., R. 63 E. sec. 19, Lots 3,4, E $\frac{1}{2}$ SW $\frac{1}{4}$; sec. 25, All; sec. 26, Lots 1,2,3,4, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, sec. 27, SE $\frac{1}{4}$; sec. 28, SE $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$; sec. 29, N $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, S $\frac{1}{2}$ S $\frac{1}{2}$; sec. 30, Lots 1,2,4, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$; sec. 34, Lots 1,2,3,4,5,6, W $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$; sec. 35, Lots 1,2,3,6,7, SE $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 36, S $\frac{1}{2}$. T. 22 S., R. 63 E. sec. 1, All; sec. 2, All; sec. 3, All; sec. 10, All; sec. 14, All; sec. 15, All; sec. 22, All; sec. 23, W $\frac{1}{2}$; sec. 26, W $\frac{1}{2}$; sec. 35, All. T. 22 S., R. 63 $\frac{1}{2}$ E. sec. 1, Lots 1,2,3,4,5,6, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$.	So. Nev. Water Supply Project	9,777.64 Public Land Laws 1872 Mining Law
Various SO's (Nev-051745)	T. 20 S., R. 63 E.		
SO 03-03-1933	sec. 35, All;		
SO 12-11-1941	sec. 36, All;		

T. 21 S., R. 63 E.

SO 12-11-1941 sec. 1, All;
sec. 2, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, N $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 23, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 24, All.

T. 23 S., R. 63 E.

SO 01-03-1929 sec. 2, Lots 12,20;
sec. 11, Lots 1,4,5,8; (within)
sec. 14, Lots 1,4,5,8. (within)

T. 30 S., R. 63 E.

SO 06-04-1930 sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All.

T. 31 S., R. 63 E.

SO 06-04-1930 sec. 1, Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$;
sec. 3, Lot 4, SW $\frac{1}{4}$ NW $\frac{1}{4}$;
sec. 4, Lots 1,2,3, S $\frac{1}{2}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$;
sec. 9, Lots 1,2,3,4,5,6,7,
8,9, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 12, NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 13, E $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 16, Lot 4.

T. 21 S., R. 63 $\frac{1}{2}$ E.

SO 12-11-1941 All Township Included.

T. 20 S., R. 64 E.

SO 03-03-1933 sec. 31, All;
sec. 32, All;
sec. 33, All.

SO 01-31-1903 Affects All Lands Lying Within
4 Miles of the Colorado River.

T. 21 S., R. 64 E.

SO 01-31-1903 sec. 11, Within;
sec. 12, Within;
sec. 13, All;
sec. 14, Within;
sec. 15, Within;
sec. 22, Within;
sec. 23, All;

sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, Within;
sec. 28, Within;
sec. 33, Within;
sec. 34, All;
sec. 35, All;
sec. 36, All.

SO 08-07-1920 All Township Included.

T. 22 S., R. 64 E.

SO 08-07-1920 sec. 1, All;
sec. 2, All;
sec. 3, Lots 5,6,7,11,12,
S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
sec. 4, Lots 6,7,8,10,11,
12,14,15,16, S $\frac{1}{2}$ N $\frac{1}{2}$,
S $\frac{1}{2}$;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, Lots 1,2,3,4,5,6,
W $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 25, Lots 1,2,3,4,5,6,
7,8,9,10,11,12,
SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 26, All;
sec. 27, All;
sec. 36, Lots 1,2,3,4,5,6,
W $\frac{1}{2}$ E $\frac{1}{2}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$.

T. 23 S., R. 64 E.

SO 08-07-1920 sec. 1, All;
sec. 12, All;
sec. 13, All.

SO 01-31-1903 sec. 6, Lots 12,13,16.

SO 01-03-1929 T. 29 S., R. 64 E.

SO 06-04-1930 sec. 31, Lots 1,2,3,4.
T. 14 S., R. 65 E.

SO 06-11-1943 sec. 25, NW¼NW¼;
sec. 27, E½E½;
sec. 34, E½E½.
sec. 35, Lots, 3,4, SW¼,
W½SE¼, SE¼SE¼.
T. 20 S., R. 65 E.

SO 04-19-1920 sec. 19, All;
SO 03-13-1933 sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

SO 01-31-1903 Affects All Lands Lying Within
4 Miles of the Colorado River.
T. 21 S., R. 65 E.

SO 04-19-1920 All Township Included.

SO 01-31-1903 Affects All Lands Lying Within
4 Miles of the Colorado River.
T. 22 S., R. 65 E.

SO 08-07-1920 All Township Included.
T. 23 S., R. 65 E.

SO 01-31-1903 sec. 5, Within;
SO 08-07-1920 sec. 6, All;
sec. 7, All;
sec. 8, Within;
sec. 9, Within;
sec. 16, Within;
sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, Within;
sec. 27, Within;
sec. 28, Within;
sec. 29, All;
sec. 34, Within.

T. 23½ S., R. 65 E.

SO 01-31-1903 sec. 35, Within.
SO 08-07-1920

T. 24 S., R. 65 E.

SO 01-31-1903 sec. 1, Within;
SO 05-08-1919 sec. 2, Within;
sec. 10, Within;
sec. 12, Within;
sec. 13, Within;
sec. 14, Within;
sec. 15, Within;
sec. 22, Within;
sec. 23, Within;
sec. 26, Within;
sec. 27, Within;
sec. 34, Within;
sec. 35, Within;

T. 25 S., R. 65 E.

SO 01-31-1903 sec. 2, Within;
SO 08-07-1920 sec. 11, Within;
sec. 14, Within;
sec. 23, Within;
sec. 26, Within;
sec. 35, Within.

T. 26 S., R. 65 E.

SO 10-16-1931 sec. 2, Within;
sec. 3, Within;
sec. 11, Within;
sec. 12, Within;
sec. 13, Within;
sec. 14, Within;
sec. 23, Within;
sec. 24, Within;
sec. 25, Within;
sec. 26, Within;
sec. 35, Within;
sec. 36, Within.

T. 27 S., R. 65 E.

SO 10-16-1931 sec. 1, Within;
sec. 13, Within;
sec. 23, Within;
sec. 24, Within;
sec. 25, Within;
sec. 26, Within;
sec. 36, Within.

T. 28 S., R. 65 E.

SO-10-16-1931 sec. 1, Within;
sec. 12, Within;
sec. 13, Within;
sec. 23, Within;
sec. 24, Within;

sec. 25, Within;
 sec. 36, Within.

 T. 29 S., R. 65 E.

SO 10-16-1931 sec. 1, E $\frac{1}{2}$; (within)
 sec. 12, E $\frac{1}{2}$; (within)
 sec. 13, E $\frac{1}{2}$. (within)

T. 33 S., R. 65 E.

SO 10-16-1931 sec. 14, Lot I, N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$,
 SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 23, Lots 2,3,4, N $\frac{1}{2}$ NE $\frac{1}{4}$,
 SE $\frac{1}{4}$ NE $\frac{1}{4}$.

T. 20 S., R. 66 E.

SO 04-19-1920 sec. 26, All;
 sec. 27, All;
 sec. 28, All;
 sec. 29, All;
 sec. 30, All;
 sec. 31, All;
 sec. 32, All;
 sec. 33, All;
 sec. 34, All;
 sec. 35, All.

T. 27 S., R. 66 E.

SO 10-16-1931 sec. 6, Within;
 sec. 7, Within;
 sec. 18, Within;
 sec. 19, Within;
 sec. 31, Within.

T. 29 S., R. 66 E.

SO 10-16-1931 sec. 8, Within;
 sec. 17, Within;
 sec. 18, Within;
 sec. 19, Within;
 sec. 20, Within;
 sec. 21, Within;
 sec. 28, Within;
 sec. 29, Within;
 sec. 30, Within;
 sec. 32, Within;
 sec. 33, Within;
 sec. 34, Within.

T. 30 S., R. 66 E.

SO 01-31-1903 sec. 3, Within;
 SO 09-08-1903 sec. 5, Within;
 SO 10-16-1931 sec. 8, Within;
 sec. 9, Within;
 sec. 10, Within;
 sec. 15, Within;
 sec. 16, Within;
 sec. 17, Within;

sec. 18, Within;
sec. 20, Within;
sec. 21, Within;
sec. 22, Within;
sec. 27, Within;
sec. 28, Within;
sec. 34, Within.

T. 31 S., R. 66 E.

SO 01-31-1903 sec. 2, Within;
SO 09-08-1903 sec. 3, Within;
SO 10-16-1931 sec. 10, Within;
sec. 11, Within;
sec. 14, Within;
sec. 23, Within;
sec. 26, Within;
sec. 35, Within;
sec. 36, Within.

T. 32 S., R. 66 E.

SO 01-31-1903 sec. 1, Lots 1,4;
SO 10-16-1931 sec. 2, S $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$, Lots 1,2;
sec. 10, NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$;
sec. 11, All;
sec. 12, Lots 6,7,9,12,17,
18,19,20,21,22,23,
24,25,26,27,28,29,
30,31,32,33;
SO 01-31-1903 sec. 29, S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
SO 10-16-1931 E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
SO 10-28-1953 E $\frac{1}{2}$ E $\frac{1}{2}$ E $\frac{1}{2}$ SE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$,
W $\frac{1}{2}$;
sec. 30, All;
sec. 31, NE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$, Lots 1,2,
3,4;
sec. 32, Lot 19. (W $\frac{1}{2}$)

T. 34 S., R. 66 E.

SO 01-31-1903 sec. 5, Within.
SO 10-16-1931

T. 20 S., R. 66 $\frac{1}{2}$ E.

SO 01-31-1903 sec. 18, Within;
sec. 19, All;
sec. 30, All;
sec. 31, All.

T. 16 S., R. 67 E.

SO 05-08-1919 sec. 1, Lot 1;
SO 04-21-1923 sec. 11, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 13, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 14, W $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$,
SE $\frac{1}{4}$;
sec. 24, SW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$, W $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$.
SO 12-06-1937 sec. 36, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$.

T. 17 S., R. 67 E.

SO 12-06-1937 sec. 1, Lots 5,6,9,10,11,
SW $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 12, Lots 1,2,3, W $\frac{1}{2}$ NE $\frac{1}{4}$,
N $\frac{1}{2}$ NW $\frac{1}{4}$.

T. 18 S., R. 67 E.

SO 03-03-1933 sec. 36, Lots 1,2,3,4,5,6,7,
E $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$,
NW $\frac{1}{2}$ SE $\frac{1}{4}$.

T. 19 S., R. 67 E.

SO 05-08-1919 sec. 1, E $\frac{1}{2}$. (within)

T. 20 S., R. 67 E.

SO 01-31-1903 sec. 12, All;
SO 03-30-1921 sec. 13, All;
SO 05-19-1921 sec. 24, All;
SO 03-03-1933 sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 36, All.

T. 15 S., R. 68 E.

SO 04-21-1923 sec. 1, Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$;
sec. 12, N $\frac{1}{2}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 13, W $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$.
SO 03-03-1933 sec. 23, SW $\frac{1}{4}$;
sec. 26, W $\frac{1}{2}$;
sec. 35, W $\frac{1}{2}$;
SO 05-08-1919 sec. 36, SE $\frac{1}{2}$ SE $\frac{1}{4}$. (within)

T. 17 S., R. 68 E.

SO 05-08-1919 sec. 1, Within;
sec. 2, Within;
sec. 3, Within;
sec. 4, Within;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, Within;
sec. 11, Within;
sec. 12, All;
sec. 13, E, N $\frac{1}{2}$ S $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$;
sec. 14, Within;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 19, All;

sec. 20, All;
 sec. 21, All;
 sec. 22, All;
 sec. 23, All;
 sec. 24, All;
 sec. 25, All;
 sec. 26, All;
 sec. 27, Within;
 sec. 28, All;
 sec. 29, Within;
 sec. 30, All;
 sec. 32, All;
 sec. 33, All;
 sec. 34, Within;
 sec. 35, All;
 sec. 36, E $\frac{1}{2}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
 SW $\frac{1}{4}$.

T. 18 S., R. 68 E.

SO 05-08-1919 sec. 1, All;
 SO 03-03-1933 sec. 2, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$,
 SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 3, Lots 2,3,4, SW $\frac{1}{4}$ NE $\frac{1}{4}$,
 S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
 sec. 4, All;
 sec. 5, All;
 sec. 9 Within;
 sec. 10, N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 11, All;
 sec. 12, Within;
 sec. 13, Within;
 sec. 14, Within;
 sec. 15, E $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 16, All;
 sec. 17, Within;
 sec. 19, Within;
 sec. 20, Within;
 sec. 21, N $\frac{1}{2}$, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
 sec. 22, N $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
 E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 23, Within;
 sec. 26, Within;
 sec. 27, E $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$;
 sec. 28, W $\frac{1}{2}$, SE $\frac{1}{4}$;
 sec. 29, All;
 sec. 30, Within;
 sec. 31, Within;
 sec. 32, Within;
 sec. 33, All;
 sec. 34, Within;
 sec. 35, Within.

T. 19 S., R. 68 E.

SO 05-08-1919 sec. 2, Within;
 SO 04-21-1923 sec. 3, Within;
 SO 03-31-1933 sec. 4, All;
 sec. 5, Within;
 sec. 6, Within;
 sec. 7, Within;
 sec. 8, Within;

sec. 9, Within;
sec. 10, Within;
sec. 11, Within;
sec. 14, Within;
sec. 15, Within;
sec. 16, Within;
sec. 17, Within;
sec. 20, Within;
sec. 21, Within;
sec. 22, Within;
sec. 27, Within;
sec. 28, All;
sec. 29, Within;
sec. 31, Within;
sec. 32, Within;
sec. 33, All;
sec. 34, Within.

T. 20 S., R. 68 E.

SO 01-31-1903 sec. 3, Within;
SO 04-21-1923 sec. 4, Within;
 sec. 5, All;
 sec. 6, Within;
 sec. 7, Within;
 sec. 8, All;
 sec. 9, Within;
 sec. 10, Within;
 sec. 15, Within;
 sec. 16, Within;
 sec. 17, All;
 sec. 18, Within;
 sec. 19, All;
 sec. 20, N $\frac{1}{2}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
 SW $\frac{1}{4}$ SE $\frac{1}{4}$;
 sec. 21, All;
 sec. 22, Within;
 sec. 26, Within;
 sec. 27, Within;
 sec. 28, All;
 sec. 29 E $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$,
 SE $\frac{1}{4}$;
 sec. 30, Within;
 sec. 31, All;
 sec. 32, All;
 sec. 33, All;
 sec. 34, All;
 sec. 35, Within;
 sec. 36, Within.

T. 21 S., R. 68 E.

SO 05-08-1919 All Township Included Except:

sec. 1, NE $\frac{1}{4}$ NE $\frac{1}{4}$.

SO 01-31-1903 Affects All Lands Lying Within
 4 Miles of the Colorado River
 Except:

sec. 1, NE $\frac{1}{4}$ NE $\frac{1}{4}$.

T. 15 S., R. 69 E.

SO 04-21-1923 sec. 6, Lots 3,4,5, SE¼NW¼.
sec. 8, E½, SW¼;
SO 03-21-1933 sec. 29, All;
SO 05-08-1919 sec. 31, Within;
SO 03-21-1933 sec. 32, All.

T. 16 S., R. 69 E.

SO 04-21-1923 sec. 5, All;
SO 05-08-1919 sec. 7, Within;
SO 04-21-1923 sec. 8, All;
SO 05-08-1919 sec. 18, SE¼SE¼;
sec. 19, E½;
sec. 30, E½;
sec. 31, Within.

T. 17 S., R. 69 E.

SO 05-08-1919 sec. 6, Within;
sec. 7, Within;
sec. 18, Within;
sec. 19, Within;
sec. 29, Within;
sec. 30, Within;
sec. 31, All;
sec. 32, Within.

T. 18 S., R. 69 E.

SO 05-08-1919 sec. 5, Within;
sec. 6, Within;
sec. 7, Within.

T. 20 S., R. 69 E.

SO 01-31-1903 sec. 18, Within;
sec. 19, Within;
sec. 20, Within;
sec. 28, Within;
sec. 29, Within;
sec. 33, Within;
sec. 34, Within;
SO 03-22-1933 sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 21 S., R. 69 E.

SO 01-31-1903 sec. 6, Within;
SO 05-08-1919 sec. 7, Within;
SO 05-19-1921 sec. 8, Within;
sec. 16, Within;
sec. 17, Within;
sec. 20, Within;
sec. 21, Within;
sec. 27, Within;
sec. 28, Within;
sec. 29, Within;

sec. 33, Within;
sec. 34, Within;
sec. 35, Within.

T. 14 S., R. 70 E.

SO 01-31-1903 sec. 31, All;
SO 05-08-1919 sec. 32, All;
sec. 33, All;
sec. 34, All.

T. 21 S., R. 70 E.

SO 01-31-1903 sec. 12, Within;
SO 05-08-1919 sec. 13, Within;
sec. 14, Within;
sec. 23, Within;
sec. 26, Within;
sec. 35, Within.

T. 22 S., R. 70 E.

SO 01-03-1903 sec. 2, Within;
SO 05-08-1919 sec. 9, Within;
sec. 10, Within;
sec. 11, Within;
sec. 14, Within;
sec. 15, Within;
sec. 16, Within;
sec. 17, Within;
sec. 18, Within.

T. 19 S., R. 71 E.

SO 01-31-1903 sec. 27, Within;
sec. 28, Within;
sec. 31, Within;
sec. 32, Within;
sec. 33, All;
sec. 34, All.

T. 20 S., R. 71 E.

SO 01-31-1903 sec. 10, Within;
SO 05-08-1919 sec. 15, Within;
sec. 16, Within;
sec. 21, Within;
sec. 28, Within;
sec. 29, Within;
sec. 30, Within;
sec. 31, Within;
sec. 32, Within.

T. 21 S., R. 71 E.

SO 01-31-1903
SO 05-08-1919 sec. 6, Within.
SO 03-03-1933 sec. 7, Within.

Colorado River
Project

254,058

Public Land Laws
1872 Mining Law

NOTE: Secretarial Orders dated 01-31-1903 and 09-08-1903 do not segregate against the Homestead Act of May 20, 1862)

National Park Service Withdrawals

<u>Wdl Document and Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
	Clark County -			
Act of Congress Oct. 08, 1964 (Nev-065135)	T. 20 S., R. 63 E.	sec. 35, All; sec. 36, All.		
	T. 21 S., R. 63 E.	sec. 1, All; sec. 2, All; sec. 11, All; sec. 12, All; sec. 13, All; sec. 14, N $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$; sec. 23, E $\frac{1}{2}$ E $\frac{1}{2}$; sec. 24, All.		
	T. 21 S., R. 63 $\frac{1}{2}$ E.	sec. 1, Within; sec. 12, Within; sec. 13, Within; sec. 24, Within; sec. 25, Within; sec. 36, Within.		
	T. 20 S., R. 64 E.	sec. 25, SE $\frac{1}{4}$; sec. 31, All; sec. 32, All; sec. 33, All; sec. 36, All.		
	T. 21 S., R. 64 E.	All Township Included.		
	T. 22 S., R. 64 E.	sec. 1, All; sec. 2, All; sec. 3, Lots 5,6,7,11,12, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$; sec. 4, Lots 6,7,8,10,11, 14,15,16, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$; sec. 5, All; sec. 6, Lots 8,9,10,11,14, 15,18, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,		

E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
sec. 7, Lots 5,8,9,12, E $\frac{1}{2}$,
E $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, Lots 5,8,9,12, E $\frac{1}{2}$,
E $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 19, Lots 5,8,9,12, E $\frac{1}{2}$,
E $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, Lots 1,2,3,4,5,6,
W $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$,
SW $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 25, Lots 1,2,3,4,5,6,
7,8,9,10,11,12,
SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 26, All;
sec. 27, All;
sec. 28, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$;
sec. 29, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$;
sec. 30, Lots 5,6,7,8,9,10,
NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 34, N $\frac{1}{2}$;
sec. 35, N $\frac{1}{2}$;
sec. 36, Lots 1,2,3,4,5,6,
W $\frac{1}{2}$ E $\frac{1}{2}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$.

T. 23 S., R. 64 E.

sec. 1, All;
sec. 12, All;
sec. 13, All;
sec. 35, All;
sec. 36, All.

T. 23 $\frac{1}{2}$ S., R. 64 E.

sec. 36, Lots 1,2,3,4, N $\frac{1}{2}$.

T. 24 S., R. 64 E.

sec. 1, All;
sec. 12, All;
sec. 13, All;
sec. 24, All;
sec. 25, All;
sec. 36, All.

T. 20 S., R. 65 E.

sec. 1, S½;
sec. 12, All;
sec. 13, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 21 S., R. 65 E.

All Township Included.

T. 22 S., R. 65 E.

All Township Included.

T. 23 S., R. 65 E.

All Township Included.

T. 23½ S., R. 65 E.

All Township Included.

T. 24 S., R. 65 E.

All Township Included.

T. 25 S., R. 65 E.

All Township Included.

T. 26 S., R. 65 E.

All Township Included

T. 27 S., R. 65 E.

All Township Included Except
Mineral Patent #338123.

T. 28 S., R. 65 E.

All Township Included Except
Mineral Patents in Sec. 24.

T. 29 S., R. 65 E.

All Township Included.

T. 30 S., R. 65 E.

sec. 1, All;
sec. 2, All;
sec. 3, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 31 S., R. 65 E.

sec. 1, All;
sec. 2, All;
sec. 3, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 32 S., R. 65 E.

sec. 1, All.

T. 20 S., R. 66 E.

All Township Included.

T. 21 S., R. 66 E.

All Township Included.

T. 27 S., R. 66 E.

All Township Included.

T. 29 S., R. 66 E.

- sec. 8, Lot 1;
- sec. 17, Lots 1,2,3,4, SW $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 18, Lot 4;
- sec. 19, Lots 1,2,3,4, S $\frac{1}{2}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ W $\frac{1}{2}$, SE $\frac{1}{4}$;
- sec. 20, Lots 1,2,3, W $\frac{1}{2}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$,
S $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 21, Lots 1,2;
- sec. 28, Lots 1,2,3,4,5, NW $\frac{1}{4}$ NW $\frac{1}{4}$,
S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 29, All;
- sec. 30, All;
- sec. 31, All;
- sec. 32, All;
- sec. 33, Lots 1,2,3, W $\frac{1}{2}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$,
S $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 34, Lots 1,2.

T. 30 S., R. 66 E.

All Township Included.

T. 32 S., R. 66 E.

- sec. 1, Lots 1,4;
- sec. 2, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
- sec. 3, S $\frac{1}{2}$;
- sec. 4, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
- sec. 5, Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
- sec. 6, Lots 1,2,3,4,5,6,7,
S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 10, N $\frac{1}{2}$ N $\frac{1}{2}$;
- sec. 11, N $\frac{1}{2}$ N $\frac{1}{2}$;
- sec. 12, Lots 6,7,9,12,17,18,
19,20,21,22,23,24,25,
26,27,28,29,30,31,32,
33.

T. 33 S., R. 66 E.

All Township Included.

T. 20 S., R. 66 $\frac{1}{2}$ E.

- sec. 6, All;
- sec. 7, All;
- sec. 18, All;
- sec. 19, All;
- sec. 30, All;
- sec. 31, All.

T. 18 S., R. 67 E.

- sec. 12, All;
- sec. 13, All;
- sec. 14, All;
- sec. 15, All;
- sec. 22, All;
- sec. 23, All;
- sec. 24, All;

sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 19 S., R. 67 E.

sec. 1, All;
sec. 2, All;
sec. 3, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, Lots 3,4, E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 20 S., R. 67 E.

All Township Included.

T. 15 S., R. 68 E.

sec. 36, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 17 S, R. 68 E.

sec. 1, All;
sec. 2, Within;
sec. 3, S $\frac{1}{2}$ N $\frac{1}{2}$; (within)
sec. 4, Within;
sec. 5, All;
sec. 8, All;
sec. 9, All;
sec. 10, Within;
sec. 11, Within;
sec. 12, All;
sec. 13, E $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$;
sec. 14, Within;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;

sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, Within;
sec. 28, All;
sec. 29, Within;
sec. 30, All;
sec. 32, All;
sec. 33, All;
sec. 34, Within;
sec. 35, All;
sec. 36, E $\frac{1}{2}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
SW $\frac{1}{4}$.

T. 18 S., R. 68 E.

All Township Included.

T. 19 S., R. 68 E.

All Township Included.

T. 20 S., R. 68 E.

All Township Included.

T. 21 S., R. 68 E.

All Township Included.

T. 15 S., R. 69 E.

sec. 31, Lots 3,4, E $\frac{1}{2}$ SW $\frac{1}{4}$.

T. 16 S., R. 69 E.

sec. 7, Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 19, Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 30, Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 31, Lots 1,2,4, E $\frac{1}{2}$ W $\frac{1}{2}$, E $\frac{1}{2}$;
sec. 32, All.

T. 17 S., R. 69 E.

sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 19, Lots 1,4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$;
sec. 20, All;

sec. 21, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;
sec. 33, All.

T. 18 S., R. 69 E.

sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 18, All;
sec. 19, All;
sec. 30, All;
sec. 31, All;

T. 20 S., R. 69 E.

sec. 30, All;
sec. 31, All;
sec. 32, All.

T. 21 S., R. 69 E.

All Township Included.

T. 14 S., R. 70 E.

sec. 12, All;
sec. 13, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 35, All;
sec. 36, All.

T. 21 S., R. 70 E.

All Township Included.

T. 22 S., R. 70 E.

All Township Included.

T. 20 S., R. 71 E.

All Township Included.

T. 21 S., R. 71 E.

All Township Included.

Proclamation
2961

T. 17 S., R. 50 E.
sec. 36, SW¼SE¼.

Lake Mead Nat'l.
Recreation Area 586,076

Public Land Laws
1872 Mining Law

Death Valley
National Monument 40

Public Land Laws
1872 Mining Law

Bureau of Indian Affairs Withdrawals

<u>Wdl Document and Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
	Clark County -			
PL 98-203 (N-39027)	T. 18 S., R. 59 E. sec. 25, All; sec. 27, All; sec. 34, All; sec. 35, All; sec. 36, All.			
	T. 20 S., R. 61 E.	Las Vegas Paiute Tribe	3,901.79	All
SO 03-17-1916 (Nev-054556)	T. 14 S., R. 66 E. sec. 31, Lots 20,23,25½,26,35,36.	Moapa Indian Tribe Administration Site	13.12	Public Land Laws 1872 Mining Law 1920 Mineral Leasing Act 1947 Materials Act
PL 96-491 (Nev-35395)	T. 16 S., R. 64 E. sec. 1, All; sec. 2, All; sec. 3, All; sec. 4, All; sec. 5, All; sec. 6, All; sec. 7, All; sec. 8, All; sec. 9, All; sec. 10, All; sec. 11, All; sec. 12, All; sec. 13, All; sec. 14, All; sec. 15, All; sec. 16, All; sec. 17, All; sec. 18, Lots 1,2,3,4, N½NE¼, NW¼SW¼NE¼, NE¼SE¼NE¼, E½NW¼, E½SW¼, SW¼NW¼SE¼, SW¼SE¼; sec. 19, All; sec. 20, All; sec. 21, All; sec. 22, All; sec. 23, All; sec. 24, All; sec. 25, All; sec. 26, All; sec. 27, All; sec. 28, All; sec. 29, All; sec. 30, All;			

sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 17 S., R. 64 E.

sec. 7, Lots 5,6, S $\frac{1}{2}$ NE $\frac{1}{4}$.

T. 15 S., R. 65 E.

sec. 1, Lots 1,6, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;

sec. 2, All;
sec. 3, All;
sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 10, All;
sec. 11, All;
sec. 12, All;
sec. 13, All;
sec. 14, All;
sec. 15, All;
sec. 16, All;
sec. 17, All;
sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 23, All;
sec. 24, All;
sec. 25, All;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, All;
sec. 36, All.

T. 16 S., R. 65 E.

sec. 1, All;
sec. 2, All;
sec. 3, All;
sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;

- sec. 10, All;
- sec. 11, All;
- sec. 12, All;
- sec. 13, All;
- sec. 14, All;
- sec. 15, All;
- sec. 16, All;
- sec. 17, All;
- sec. 18, All;
- sec. 19, All;
- sec. 20, All;
- sec. 21, All;
- sec. 22, All;
- sec. 23, All;
- sec. 24, All;
- sec. 25, All;
- sec. 26, All;
- sec. 27, All;
- sec. 28, All;
- sec. 29, All;
- sec. 30, All;
- sec. 31, Lots 3,4,5,6,7,8,9,10,
11,12,13,14,15,16,17,
18,19,20,21,22,23,24,
25,26,27, NE $\frac{1}{4}$, E $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ SW $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 32, All;
- sec. 33, All;
- sec. 34, All;
- sec. 35, All;
- sec. 36, All.

T. 14 S., R. 66 E.

- sec. 29, Lots 1,2,3,4,5,6,7, NW $\frac{1}{4}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 30, Lots 1,2,3,4,5,6,7,8,9,
10,11,12,13,14,15, NE $\frac{1}{4}$ NE $\frac{1}{4}$;
SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{4}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 31, Lots 2,4,5, NE $\frac{1}{4}$, E $\frac{1}{4}$ NW $\frac{1}{4}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 32, Lots 1,2,3,4,5,6, SW $\frac{1}{4}$.

Moapa Indian
Reservation

70,355.99

Public Land Laws
1872 Mining Law
1947 Materials Act

T. 14 S., R. 65 E.

SO 07-03-1875
(Nev-054557)

- sec. 25, Lots 2,3,4,5,6,;
- sec. 26, Lots 4,5,6,7,8,9,10,11,
12,13,14,15,16,17,18,19,
20,21,22,23,24,25,26,27,
28,29,30,31,32,33,34,35,
36,37,38;
- sec. 35, Lots 8,9,10,11,12,13,14,
15,17,18,19,20,21,22,23,
24,25,26,27,28,29,30,31,
32,33,34,35,36,37,38,39,
40,41,42,43,44,45,46,47,
48,49,50,51,52,56,57,58,
59,60,61,62,63,64,65,66,
67,68,69,70,71,72,73,74
75,76,77,78;

sec. 22, Within;
 sec. 30, Within;
 sec. 31, Within.

T. 34 S., R. 66 E.

sec. 5 Within.

Ft. Mohave Indian
 Reservation

3,793

Public Land Laws
 1872 Mining Law
 1920 Mineral Leasing Act
 1947 Materials Act

Military Withdrawals

<u>Wdl Document and Serial No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
	Clark County -			
PLO 1485 (Nev-045218)	T. 21 S., R. 61 E. sec. 1, E $\frac{1}{2}$ SE $\frac{1}{2}$ SE $\frac{1}{2}$ SW $\frac{1}{2}$.	LV Army Reserve Training Center	5	Public Land Laws 1872 Mining Law 1920 Mineral Leasing Act
EO 8954 (Nev-054510)	T. 18 S., R. 62 E. sec. 32, All; sec. 33, All; sec. 34, All; sec. 35, All; sec. 36, All;			
	T. 19 S., R. 62 E. sec. 1, All; sec. 2, All; sec. 3, All; sec. 4, All; sec. 5, All; sec. 8, All; sec. 9, All; sec. 10, All; sec. 11, All; sec. 12, W $\frac{1}{2}$; sec. 16, All; sec. 17, All.			
	T. 18 S., R. 63 E. sec 31, Lots 1,2,3,4, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$.	Nellis Air Force Base	10,759.54	Public Land Laws 1872 Mining Law 1920 Mineral Leasing Act
PLO 1175 (Nev-051793)	T. 19 S., R. 61 E. sec. 35, SE $\frac{1}{2}$ SW $\frac{1}{4}$.	Nellis Air Force Base	40	Public Land Laws 1872 Mining Law 1920 Mineral Leasing Act
PLO 1638 (Nev-013137)	T. 19 S., R. 62 E. sec. 25, S $\frac{1}{2}$; sec. 36, W $\frac{1}{2}$.			

	T. 20 S., R. 62 E.			
	sec. 1, Lots 3,4.			
(Nev-014602)	T. 19 S., R. 63 E.			Public Land Laws
	sec. 27, SW $\frac{1}{4}$;	Lake Mead		1872 Mining Law
	sec. 30, Lots 3,4, E $\frac{1}{2}$ SW $\frac{1}{4}$.	Base	997.85	1920 Mineral Leasing Act
PLO 841 (Nev-051790)	T. 19 S., R. 62 E.			
	sec. 36, E $\frac{1}{2}$.			
	T. 20 S., R. 62 E.			
	sec. 1, Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$.			
	T. 19 S., R. 63 E.			
	sec. 28, S $\frac{1}{2}$;			
	sec. 29, S $\frac{1}{2}$;			
	sec. 30, SE $\frac{1}{4}$;			
	sec. 31, All;			
	sec. 32, All;			
	sec. 33, All;			
	sec. 34, NW $\frac{1}{4}$, S $\frac{1}{2}$.			
	T. 20 S., R. 63 E.			
	sec. 3, N $\frac{1}{2}$, SW $\frac{1}{4}$;			
	sec. 4, All;			
	sec. 5, All;			
	sec. 6, Within;			
	sec. 8, NE $\frac{1}{4}$;	Lake Mead		Public Land Laws
	sec. 9, N $\frac{1}{2}$.	Base	6,192.94	1872 Mining Law
				1920 Mineral Leasing Act
PLO 877 (Nev-051795)	T. 20 S., R. 63 E.			Public Land Laws
	sec. 8, SE $\frac{1}{4}$;	Lake Mead		1872 Mining Law
	sec. 9, S $\frac{1}{2}$.	Base	480	1920 Mineral Leasing Act

**Withdrawal Applications Pending Within
The Stateline Resource Area**

<u>Serial No. and Date Filed</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
	Nye County -			
N-27612 (12-10-1979)	T. 17 S., R. 50 E.			
	sec. 26, S $\frac{1}{2}$;			
	sec. 34, NE $\frac{1}{4}$;			
	sec. 35, W $\frac{1}{2}$ W $\frac{1}{2}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ NE $\frac{1}{4}$;			
	SE $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;			
	sec. 36, W $\frac{1}{2}$.			

	T. 18 S., R. 50 E.				
	sec. 1, Lots 3,4;	Warm Springs			
	sec. 2, Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$.	Pupfish Area	1,419.04	None	
N-29915 (05-15-1980)	T. 18 S., R. 50 E.				
	sec. 13, E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$;				
	sec. 24, NE $\frac{1}{4}$ NE $\frac{1}{4}$;				
	T. 18 S., R. 51 E.				
	sec. 19, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$.	Ash Meadows Fish and Plants	150	None	
Nev-054565 (08-01-1903)	T. 19 S., R. 56 E.				
	sec. 27, SW $\frac{1}{4}$ SW $\frac{1}{4}$;				
	sec. 28, W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;				
	sec. 29, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;				
	sec. 32, Lots 1,2,3,4, NE $\frac{1}{4}$;				
	E $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ S $\frac{1}{2}$;				
	sec. 33, All;				
	sec. 34, Lot 1, W $\frac{1}{2}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$.				
	T. 20 S., R. 56 E.				
	sec. 4, N $\frac{1}{2}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;	Apln to segregate			
	sec. 5, All.	from mining location	1,623.6	1872 Mining Law	

PUBLIC LAND SEGREGATIONS

<u>Serial No. and Segregation Date</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
Nye County -				
N-40976 (02-09-1970)	T. 21 S., R. 53 E.,			
	sec. 3, Lots 2,3,4, SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;			
	sec. 4, All;	Pahrump Valley		
	sec. 9, All;	Regional Airport		
	sec. 10, W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$.	Application	2,168.07	All
Clark County -				
N-44642	T. 19 S., R. 60 E.			
	sec. 16, W $\frac{1}{2}$;			
	sec. 20, E $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$;	Public Airport		
	sec. 21, SW $\frac{1}{4}$ NW $\frac{1}{4}$.	Lease Application	380	All

N-38196
(01-07-1984)

T. 18 S., R. 60 E.

- sec. 30, Lots 3,4, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 31, Lots 1,2,3,4,
SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ W $\frac{1}{2}$, SE $\frac{1}{4}$;
- sec. 32, SW $\frac{1}{4}$ SW $\frac{1}{4}$;

T. 19 S., R. 60 E.

- sec. 5, Lots 3,4, S $\frac{1}{2}$ NW $\frac{1}{4}$;
- sec. 6, Lots 1,2,3,4,5,9,
S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$,
W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$,
NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 7, N $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ NE $\frac{1}{4}$.

Public Airport		
Lease Application	1,514.65	All

N-51436
(09-07-1989 NTE
09-07-1991)

T. 19 S., R. 60 E.

- sec. 5, Lots 3,4, S $\frac{1}{2}$ NW $\frac{1}{4}$;
- sec. 6, Lots 1,2,3,4,5,7,8,9,
10,11, S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
- sec. 7, Lots 1,2,3,4, NE $\frac{1}{4}$,
E $\frac{1}{2}$ W $\frac{1}{2}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 17, N $\frac{1}{2}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 20, NE $\frac{1}{4}$;
- sec. 21, SW $\frac{1}{4}$ NW $\frac{1}{4}$;
- sec. 28, W $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$,
SW $\frac{1}{4}$ NW $\frac{1}{4}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$.

T. 22 S., R. 61 E.

- sec. 23, N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
N $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
S $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
S $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
N $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
N $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
N $\frac{1}{2}$ S $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
N $\frac{1}{2}$ N $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
W $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
W $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
S $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
W $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;

sec. 26, N $\frac{1}{2}$ N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
 S $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
 S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
 S $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
 NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
 S $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
 N $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
 S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
 NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
 E $\frac{1}{2}$ SE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
 S $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
 N $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
 NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
 N $\frac{1}{2}$ S $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$;
 sec. 34, S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$,
 S $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$,
 S $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$,
 W $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$,
 SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$,
 NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$,
 N $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$,
 S $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$,
 N $\frac{1}{2}$ N $\frac{1}{2}$ N $\frac{1}{2}$ SW $\frac{1}{4}$,
 S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$,
 SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$,
 N $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$,
 S $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$,
 S $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$,
 N $\frac{1}{2}$ N $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$,
 S $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$,
 SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ N $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$,
 S $\frac{1}{2}$ S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$,
 N $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
 W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
 N $\frac{1}{2}$ N $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
 S $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
 SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$,
 S $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$,
 SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$.

Marys' River
 Private Exchange
 Application

3,246.57

Public Land Laws
 1872 Mining Law

N-53110
 (07-09-1990)

T. 19 S., R. 61 E.

sec. 13, N $\frac{1}{2}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$;
 sec. 14, N $\frac{1}{2}$;
 sec. 15, All;
 sec. 16, All;
 sec. 17, All;
 sec. 18, All;
 sec. 19, Lots 5,6,7,8,9,10,
 11,12,13,14,15,16,
 17,18;
 sec. 20, All;
 sec. 21, N $\frac{1}{2}$;
 sec. 23, N $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$;
 sec. 24, N $\frac{1}{2}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
 SW $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 19 S., R. 62 E.

sec. 18, All;
 sec. 19, All;
 sec. 20, All.

City of NLV Direct
 Sale Application

7,534.27

Public Land Laws
 1872 Mining Law

N-48869
(06-04-1990 NTE
06-04-1992)

T. 22 S., R. 61 E.

sec. 8, Lot 39;
sec. 17, NW $\frac{1}{4}$ NE $\frac{1}{4}$,
S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$ E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
E $\frac{1}{2}$ W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
E $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$.

Private Exchange
Application

96.25

Public Land Laws
1872 Mining Law

N-36878
(08-13-1982)

T. 13 S., R. 63 E.

sec. 25, N $\frac{1}{2}$; (south of Hwy)
sec. 36, All.

T. 13 $\frac{1}{2}$ S., R. 63 E.

sec. 36, N $\frac{1}{2}$.

T. 13 S., R. 64 E.

sec. 30, SW $\frac{1}{4}$; (south of Hwy 168)
sec. 31, All;
sec. 32, S $\frac{1}{2}$;
sec. 33, S $\frac{1}{2}$;
sec. 34, N $\frac{1}{2}$ (within), S $\frac{1}{2}$.
(south of Hwy 168)

T. 13 $\frac{1}{2}$ S., R. 64 E.

sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 35, SW $\frac{1}{4}$.

T. 14 S., R. 64 E.

sec. 1, SW $\frac{1}{4}$;
sec. 2, W $\frac{1}{2}$, SE $\frac{1}{4}$;
sec. 3, All;
sec. 4, N $\frac{1}{2}$, SW $\frac{1}{4}$;
sec. 5, N $\frac{1}{2}$;
sec. 10, N $\frac{1}{2}$, SW $\frac{1}{4}$;
sec. 11, All;
sec. 12, All;
sec. 13, N $\frac{1}{2}$;
sec. 14, N $\frac{1}{2}$.

T. 14 S., R. 65 E.

sec. 7, All;
sec. 8, N $\frac{1}{2}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 18, N $\frac{1}{2}$.

Arrow Canyon
State Park
R&PP Application

11,180

Public Land Laws
1872 Mining Law

T. 15 S., R. 66 E.

- sec. 13, All;
- sec. 14, All;
- sec. 15, E $\frac{1}{2}$;
- sec. 22, All;
- sec. 23, All;
- sec. 24, All;
- sec. 25, W $\frac{1}{2}$ NE $\frac{1}{4}$, W $\frac{1}{2}$;
- sec. 26, All;
- sec. 27, N $\frac{1}{2}$, W $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$,
N $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ W $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
S $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 28, All;
- sec. 33, W $\frac{1}{2}$ E $\frac{1}{2}$ E $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$;
- sec. 34, E $\frac{1}{2}$, E $\frac{1}{2}$ E $\frac{1}{2}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$,
SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$,
E $\frac{1}{2}$ E $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$,
E $\frac{1}{2}$ E $\frac{1}{2}$ W $\frac{1}{2}$ SW $\frac{1}{4}$;
- sec. 35, All;
- sec. 36, NW $\frac{1}{4}$.

T. 16 S., R. 66 E.

- sec. 2, Lots 2,3,4, SW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$,
SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 3, Lots 1,2,3,4(within),
S $\frac{1}{2}$ N $\frac{1}{2}$, S $\frac{1}{2}$;
- sec. 4, Lot 1(within),2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$,S $\frac{1}{2}$;
- sec. 9, All;
- sec. 10, All;
- sec. 11, W $\frac{1}{2}$ W $\frac{1}{2}$;
- sec. 14, W $\frac{1}{2}$ W $\frac{1}{2}$;
- sec. 15, All;
- sec. 16, All;
- sec. 17, All;
- sec. 20, All;
- sec. 21, All;
- sec. 22, All;
- sec. 23, W $\frac{1}{2}$ NW $\frac{1}{4}$;
- sec. 27, All;
- sec. 28, N $\frac{1}{2}$, E $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 29, W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$;
- sec. 30, All;
- sec. 31, All;
- sec. 32, NW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$;
- sec. 33, E $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$,
NE $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 34, W $\frac{1}{2}$ W $\frac{1}{2}$.

T. 15 S., R. 67 E.

- sec. 7, SW $\frac{1}{4}$ SE $\frac{1}{4}$;
- sec. 17, W $\frac{1}{2}$ W $\frac{1}{2}$ (within), SE $\frac{1}{4}$ SW $\frac{1}{4}$;
- sec. 18, All;
- sec. 19, All;
- sec. 20, All;
- sec. 21, W $\frac{1}{2}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$.

T. 17 S., R. 67 E.

sec. 2, All;
sec. 3, Lots 5,6, S½NE¼, S½;
sec. 4, SE¼, E½E½SW¼;
sec. 9, NE¼, E½E½NW¼, E½SE¼,
E½W½SE¼;
sec. 10, All;
sec. 11, N½, SW¼, N½SE¼.

T. 18 S., R. 67 E.

sec. 5, SW¼;
sec. 9, N½;
sec. 10, All;
sec. 11, N½.

Valley of Fire
State Park
R&PP Application 24,864.25 None

**OTHER LAND LAW DETERMINATIONS
AFFECTING PUBLIC LANDS**

<u>Document No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Acres</u>	<u>Segregates from Appropriation under the following laws</u>
	Clark County -			
PL 31 (05-22-1953)	T. 33 S., R. 66 E. sec. 4, within; sec. 5, within; sec. 9, within; sec. 10, within; sec. 15, within; sec. 22, within.			
	T. 34 S., R. 66 E.	Established rights vested in States for submerged lands	Not available	None
PL 167 (Nev-050646)	T. 18 S., R. 55 E. sec. 10, E½; sec. 11, All; sec. 12, All; sec. 13, All; sec. 14, All; sec. 15, E½; sec. 23, All; sec. 24, All; sec. 25, All; sec. 36, All.			
	T. 19 S., R. 55 E.			
	sec. 1, Lots 1,2,3,4, S½NE¼, S½NW¼, SW¼, NE¼SE¼;			

sec. 2, Lots 1,2,3,4, S½N½, S½;
sec. 12, S½NE¼, W½, SE¼;
sec. 13, All;
sec. 14, All;
sec. 24, All.

T. 18 S., R. 56 E.

sec. 18, All;
sec. 19, All;
sec. 20, All;
sec. 21, All;
sec. 22, All;
sec. 25, N½, SW¼;
sec. 26, All;
sec. 27, All;
sec. 28, All;
sec. 29, All;
sec. 30, All;
sec. 31, All;
sec. 32, All;
sec. 33, All;
sec. 34, All;
sec. 35, E½NE¼, W½NW¼;
sec. 36 NE¼NE¼, S½SE¼SE¼NW¼NE¼,
NW¼, SE¼.

T. 19 S., R. 56 E.

sec. 1, Lots 5,6,7,8,9,10,11,
12,13, SE¼NW¼, E½SW¼;
sec. 2, Tract 40 (within),
Lots 5,6,7;
sec. 3, Tract 43 (within),
Lots 5,6,7,8,9, S½N½,
SW¼, N½SE¼, SW¼SE¼;
sec. 4, Lots 5,6,7,8, S½N½, S½;
sec. 5, Lots 5,6,7,8,9,10,13,
14,15,16, S½N½, E½SE¼;
sec. 6, Lots 8,9,10,11,12,13,
14,15,16,17,19,20,21,
22, S½NE¼, SE¼NW¼,
NE¼SW¼, N½SE¼;
sec. 7, Lots 6,7,8,9,10,11,12,
13, S½NE¼, SE¼NW¼,
E½SW¼, SE¼;
sec. 8, Lots 1,2,3,4, NE¼NE¼,
S½NE¼, S½NW¼, S¼;
sec. 9, Tract 43 (within),
Lots 1,2,3,4, W½E½, W½;
sec. 10, Tract 43 (within),
Tract 57 (all in sec.),
Lots 1,2,3,4;
sec. 11, Tract 43 (all in sec.),
Tract 44;
sec. 12, Tract 48 (all in sec.),
Tract 58;
sec. 13, Tract 37 (within),
Tract 48 (all in sec.),
Tract 58 (all in sec.),
Lots 1,2,3,4,5,6,7,
SW¼, SW¼SE¼;

sec. 14, Tract 51 (all in sec.),
 Lots 1,2,3,4,5,6,7,8,
 SW $\frac{1}{2}$ SW $\frac{1}{2}$;
 sec. 15, Tract 43 (all in sec.),
 Tract 51 (all in sec.),
 Tracts 52,53,54,
 Tract 57 (all in sec.),
 Lots 1,2,3,4,5,6;
 sec. 16, Tract 43 (all in sec.),
 Lots 1,2,3,4,5,6,7,
 NW $\frac{1}{2}$ NE $\frac{1}{2}$, N $\frac{1}{2}$ NW $\frac{1}{2}$, SW $\frac{1}{2}$ NW $\frac{1}{2}$,
 W $\frac{1}{2}$ SW $\frac{1}{2}$, SE $\frac{1}{2}$ SW $\frac{1}{2}$;
 sec. 17, All;
 sec. 18, Lots 5,6,7,8, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$;
 sec. 19, Lots 5,6,7,8, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$;
 sec. 20, All;
 sec. 21, All;
 sec. 22, N $\frac{1}{2}$ N $\frac{1}{2}$, SW $\frac{1}{2}$ NW $\frac{1}{2}$, SW $\frac{1}{2}$;
 sec. 23, Lots 1,2,3, SE $\frac{1}{2}$ NE $\frac{1}{2}$,
 WNW, SENW, NSW, SESW,
 SE;
 sec. 24, Lots 1,2,3,4, W $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$;
 sec. 25, Lots 1,2,3,4, W $\frac{1}{2}$ E $\frac{1}{2}$, NW $\frac{1}{2}$,
 N $\frac{1}{2}$ SW $\frac{1}{2}$, SE $\frac{1}{2}$ SW $\frac{1}{2}$;
 sec. 26, N $\frac{1}{2}$, SW $\frac{1}{2}$, NW $\frac{1}{2}$ SE $\frac{1}{2}$;
 sec. 27, All;
 sec. 28, All;
 sec. 29, All;
 sec. 30, Lots 5,6,7,8, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$;
 sec. 31, Lots 5,6,7,8,9,10,11,
 NE $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{2}$, NE $\frac{1}{2}$ SW $\frac{1}{2}$,
 N $\frac{1}{2}$ SE $\frac{1}{2}$;
 sec. 32, Lots 1,2,3,4, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$;
 sec. 33, Lots 1,2,3,4, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$;
 sec. 34, Lots 1,2,3,4, N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$;
 sec. 35, Lots 1,2,3,4, W $\frac{1}{2}$ NE $\frac{1}{2}$,
 SE $\frac{1}{2}$ NE $\frac{1}{2}$, NW $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{2}$,
 N $\frac{1}{2}$ SE $\frac{1}{2}$;
 sec. 36, Lots 1,2,3,4,5,
 E $\frac{1}{2}$ NE $\frac{1}{2}$ (within), SW $\frac{1}{2}$ NE $\frac{1}{2}$,
 S $\frac{1}{2}$ NW $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{2}$, NW $\frac{1}{2}$ SE $\frac{1}{2}$.

T. 20 S., R. 56 E.

sec. 1, All;
 sec. 2, All;
 sec. 3, All;
 sec. 4, All;
 sec. 5, All;
 sec. 11, All;
 sec. 12, All;
 sec. 13, All.

T. 18 S., R. 57 E.

sec. 30, Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$, E $\frac{1}{2}$;
 sec. 31, Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$, E $\frac{1}{2}$.

T. 19 S., R. 57 E.

sec. 5, All;
 sec. 6, All;

sec. 7, E½;
sec. 8, All;
sec. 17, All;
sec. 18, Lots 2,3,5,6,7,8,9,10,
11,12,13,14,15, E½NW¼;
sec. 19, All;
sec. 20, All;
sec. 29, All;
sec. 30, All;
sec. 31, Lots 5,6,7,8,9,10,11,
12,13;
sec. 32, All;
sec. 33, All.

T. 20 S., R. 57 E.

sec. 4, All;
sec. 5, All;
sec. 6, All;
sec. 7, All;
sec. 8, All;
sec. 9, All;
sec. 18, All.

Determined surface
management responsi-
bility on unpatented
mining claims

38,436.85 None

APPENDIX J

**LIVESTOCK GRAZING, EPHEMERAL RANGE
ARIZONA, CALIFORNIA AND NEVADA**

In accordance with 43 CFR 4114.2-4 regarding special rules for grazing districts and pursuant to the receipt of recommendations of the State Directors for Arizona, California and Nevada, and a factual showing of its necessity, a special rule for range designated as ephemeral is hereby approved.

Ephemeral (annual) ranges lie within the general southwest desert region extending primarily into southern Arizona, southern California and Southern Nevada, and which include portions of the Mojave, Sonoran and Chihuahuan deserts. The region is characterized by desert type vegetation some of which may be classed as ephemeral only. Ephemeral range does not consistently produce forage, but periodically provides annual vegetation suitable for livestock grazing. In years of abundant moisture and other favorable climatic conditions, a large amount of forage may be produced. Favorable years are unpredictable and the season is usually short-lived. Ephemeral areas fall generally below the 3200 foot contour and below the 8-inch precipitation isoline. A minor percentage of the total plant composition is made up of desirable perennial forage plants, and potential to improve range condition and produce a dependable supply of forage by applying intensive management practices is lacking. Because of the unique characteristics of ephemeral range the following special rule shall apply as follows:

Applicable allotments or use areas shall be formally designated by the District Manager as ephemeral range.

An annual application by qualified licensees or permittees is not required unless grazing use is desired. On a year to year basis whenever forage exists or climatic conditions indicate the probability of an ephemeral forage crop, livestock grazing may be authorized upon application, pursuant to any management requirements for the allotment.

Use of base property (water base) during nonforage years is not feasible or economical, and no use of base property is required except during those periods when ephemeral forage is available and livestock grazing occurs.

Therefore:

An annual application, per 43 CFR 4114.2-1(e)(9), is not required unless grazing use is desired.

Grazing capacity, per 43 CFR 4225.2-1(e)(3), may be based on a reasonable potential for forage.

Substantial use of grazing privileges, per 43 CFR 4115.2-1(e)(7) is not required.

A year-round operation, per 43 CFR 4115.2-1(e)(1) is not required.

Substantial use of base property, per 43 CFR 4115.2-1(e)(7), is not required.

This special rule shall immediately apply to the Phoenix, Safford and St. George Districts in Arizona, the Bakersfield District in California and the Las Vegas District in Nevada, upon recommendation for adoption in that District by the respective District Advisory Board and concurrence by the State Director.

APPENDIX K

FISH AND WILDLIFE ENHANCEMENT
RENO FIELD STATION
4600 Kietzke Lane, Building C-125
Reno, Nevada 89502-5093

August 14, 1991
File No.: 1-5-91-F-36

Memorandum

To: State Director, Nevada State Office, Bureau of Land Management, Reno, Nevada

From: Field Supervisor, Reno Field Station, Reno, Nevada

Subject: Biological Opinion for the Proposed Livestock Grazing Program Within Desert Tortoise Habitat in Southern Nevada

This Biological Opinion responds to your January 23, 1991, request for formal consultation with the Fish and Wildlife Service (Service) pursuant to section 7 of the Endangered Species Act of 1973 (Act), as amended. At issue are the possible impacts to the desert tortoise (*Gopherus agassizii*), a federally listed threatened species, that may result from the proposed licensing of livestock use in southern Nevada. We received your request on January 29, 1991, and initiated consultation on that day. On April 19, 1991, we received a letter from the Bureau of Land Management (Bureau) concurring with our request for an extension of 60 days beyond our receipt of your request for formal consultation.

This Biological Opinion was prepared using the best project description and on-site biological information available at time of consultation, including: The Bureau's *Biological Evaluation for Managing Livestock Grazing in Desert Tortoise Habitat* dated January 1991. Additional information was obtained from existing files at the Bureau's Las Vegas District Office and the Reno Field Station.

Biological Opinion

It is our Biological Opinion that the proposed licensing of livestock use within desert tortoise habitat in southern Nevada is not likely to jeopardize the continued existence of the desert tortoise. Critical habitat has been designated for the Beaver Dam Slope desert tortoise subpopulation in Utah, but not for the subpopulations in Arizona, California, and Nevada. Therefore, no critical habitat will be destroyed or adversely modified by this proposed action.

Description of the Proposed Action

The Bureau proposes to license livestock (domestic sheep, cattle, and horses) use within desert tortoise habitat in southern Nevada. Sixty-six grazing allotments are within desert tortoise habitat in Nevada. Sixty of these allotments are administered by the Las Vegas District, two by the Battle Mountain District, and four by Bureau districts in Utah and Arizona. The four allotments administered by out-of-State Bureau offices and the two allotments under allotment management plans (Crescent Peak and Sand Hollow) within the Las Vegas District will be included in separate section 7 consultations. Therefore, the Bureau is only requesting formal consultation on the sixty allotments shown in Table 1. This consultation does not address range improvement projects. Such projects will be consulted on separately.

The emphasis of the Bureau's proposal is to limit livestock grazing in Categories I and II desert tortoise habitat areas and, where appropriate, some Category III habitat areas (intensive Category III areas). Intensive Category III areas are those areas adjacent to Categories I and II tortoise habitat areas or those areas that provide a corridor between Categories I and II areas as shown on the map provided with the January 1991 Biological Evaluation. Intensive Category III management areas are those habitat sites considered to be essential or important for maintaining viable desert tortoise populations in Nevada. These areas will be managed to achieve increased recruitment, reduced mortalities, reduced occurrence of osteoporosis or similar conditions, and healthy, vigorous desert tortoise population structures. Most non-intensive Category III areas will be managed with an objective of sustaining existing population levels. The Bureau proposes to implement the following objectives and grazing prescriptions consistent with the Bureau's *Desert Tortoise Rangewide Plan* (Bureau of Land Management 1988).

Proposed Objectives for Managing Desert Tortoise Habitat in Categories I, II, and Intensive III Areas (Bureau of Land Management 1991):

1. Manage the native ephemerals and perennials to ensure that plant species reach their full growth potential between spring and early fall, based on phenological stage. Provide the tortoise with those plant portions that provide the best source of nutrition and provide optimum plant reproduction.
2. Manage for a perennial native grass composition (by dry weight) of at least 15 percent, with no individual species exceeding 40 percent of the total perennial grass component, and including 5 percent total dry weight of bush muhly, or as limited by potential natural community of the range site.
3. Manage for at least 5 percent ground cover of perennial native grass species with warm season grass species no greater than 60 percent of total, or as limited by potential natural community.
4. Maintain a canopy cover of at least 20 percent or as limited by potential natural community.
5. Reserve a minimum of 150 pounds of air dry spring ephemeral forage per acre, to ensure maximum availability of desirable native ephemeral forage.
6. To accomplish the overall goal of maintaining/achieving viable tortoise populations, manage the habitats for tortoises such that:
 - a. Average annual adult mortality does not exceed 2 percent over a 5-year period;
 - b. less than 5 percent of animals below age class 6 should demonstrate osteoporosis;
 - c. average annual recruitment rate is 3-5 percent (immature into the adult class) over a 5-year period;
 - d. adult sex ratio is 1:1;
 - e. age structure is 40 percent adult and 60 percent immatures and juveniles as determined through:
 - 1) census plots
 - 2) percent of individual tortoises registered
 - 3) with a sample size of at least 30 individuals

Proposed Objectives for Managing Desert Tortoise Habitat in Non-intensive Category III Areas (Bureau of Land Management 1991):

1. Manage for a perennial native grass composition by dry weight of at least 3 to 5 percent or as limited by potential natural community (manage for at least 5 percent ground cover of perennial native grass species).
2. Maintain a canopy cover of at least 15 percent, or as limited by potential natural community.
3. Manage habitat to ensure tortoise recruitment is sufficient to maintain a stable population.

Proposed Grazing Management Prescriptions For Desert Tortoise Habitat (Bureau of Land Management 1991):

Prescription 1: In Categories I, II, and intensive III desert tortoise habitat areas, livestock use will not occur from March 1 to June 14. Utilization between June 15 and October 14 shall not exceed 40 percent on key perennial plant species. Utilization from October 15 to February 28 will not exceed 50 percent on key perennial grasses and 45 percent on key shrubs and perennial forbs.

Prescription 2: Within non-intensive Category III desert tortoise habitat, livestock use may occur February 15 to October 14, as long as forage utilization does not exceed 40 percent on key perennial grasses, forbs and shrubs. Between October 15 and February 14, forage utilization shall not exceed 50 percent on key perennial grasses and 45 percent on key shrubs and perennial forbs.

Each of sixty allotments will be managed per proposed grazing prescriptions 1 and 2 as shown in Table 1. Nineteen allotments will be managed by both prescriptions, 27 allotments by prescription 1, and 14 allotments by prescription 2.

Both prescriptions shall include the following key species where appropriate by density and availability: galleta grass (*Hilaria jamesii*) and (*H. rigida*), bush muhly (*Muhlenbergia porteri*), sand dropseed (*Sporobolus cryptandrus*), Indian ricegrass (*Oryzopsis hymenoides*), black grama (*Bouteloua eriopoda*), desert needlegrass (*Stipa speciosa*), range ratany (*Krameria parvifolia*), ephedra (*Ephedra spp.*), white burrobrush (*Hymenoclea salsola*) and winterfat (*Eurotia lanata*).

Within allotments classified as ephemeral, the number of livestock to be licensed during a particular period will be based upon the availability of forage consistent with the season of use and utilization level restrictions identified in the proposed grazing prescriptions. Within allotments classified as ephemeral-perennial and perennial, licensed use will be based upon active preference. Active preference will be modified to be consistent with the utilization level restrictions identified in the proposed grazing prescriptions.

Utilization monitoring studies in ephemeral allotments will be conducted at least once every 3 months during the active grazing period to determine utilization levels and potential availability of forage for the next license period. Utilization studies will be conducted at least twice annually in ephemeral-perennial and perennial allotments. These studies will be conducted at existing key areas which range from 1 to 2 miles from water. A key area is a relatively small portion of a pasture or management unit selected because of its location, use or grazing value as a monitoring point for grazing use. It is assumed that key areas are representative of current grazing management over the pasture or unit as a whole. All new

key areas will be established within .75-mile of waters by range and wildlife specialists. Use pattern mapping will also be conducted on an annual basis. Range monitoring studies will only be conducted within active allotments.

Vegetative trend studies will be established within each allotment managed under prescription 1 within 1 year of receipt of the Biological Opinion and within 3 years for allotments managed under prescription 2.

Existing permanent desert tortoise study plots will be resurveyed every 3 to 4 years. Additional plots will be established, as mutually determined by the Nevada Department of Wildlife, the Bureau, and the Service.

Ecological condition classes will be determined for each of the allotments affected by prescriptions 1 and 2, with prescription 1 allotments receiving higher priority. An order III soil survey will be used to determine ecological condition classes in each allotment.

An annual report will be submitted to the Service by December 15th of each year which will summarize grazing licenses issued and the results of monitoring conducted in each allotment the prior fiscal year.

Species Account and Environmental Baseline

The desert tortoise is a large, herbivorous reptile that is generally active when annual plants are most common, during spring, early summer, and autumn months. Tortoises usually spend the remainder of the year in burrows or dens, escaping the extreme weather conditions of the desert. Desert tortoises potentially occur in the United States throughout much of the Mojave and Sonoran deserts of Arizona, California, Nevada, and southwestern Utah, and in Mexico from Sonora to northern Sinaloa. In Nevada, the native range of this species is generally restricted to Clark County and those portions of Nye and Lincoln Counties south of 37 degrees North latitude and below approximately 1,330 meters elevation (4,000 feet).

On August 20, 1980, the Service determined the Beaver Dam Slope population of the desert tortoise, located in southwestern Washington County, Utah, to be threatened, and also designated 309 square miles of critical habitat (Fish and Wildlife Service 1980). Subsequently, the Mojave population of the desert tortoise was listed by emergency rule as endangered on August 4, 1989, and by final rule as threatened on April 2, 1990 (Fish and Wildlife Service 1989 and 1990). The Mojave population includes all desert tortoises north and west of the Colorado River in California, southern Nevada, northwestern Arizona, and southwestern Utah.

The burrowing habits of tortoises, which vary greatly with their geographic locality (Burge 1978, Luckenbach 1982), represent unique adaptations to the extreme environments they occupy. Burrows function primarily as thermo-regulatory aids and may also serve to aid in water conservation and protection from predators. Sheltersites may be located under bushes, in the banks or beds of washes, in rock outcrops, or in caliche caves.

Desert tortoise growth averages 9 millimeters (mm) per year, with the greatest amount of growth following winters of high precipitation and the resultant increase in production of winter annuals in the spring (Medica et al. 1975). Turner et al. (1987), estimated that sexual maturity is attained at an age of 17-20 years. Egg laying occurs from May through July. Nests are dug in sandy soil and usually resemble undisturbed ground. Females often urinate on the nest before and after filling it (Paterson 1971). Clutch size varies from 2 to 14 eggs (5 to 6 being the mean), with larger females generally having larger clutches (Grant 1936, Ernest and Barber 1972). Forage must be sufficient to allow females to accumulate energy reserves for egg production (Turner et al. 1986). Tortoises are able to increase

egg production in good rainfall years by increasing the number of clutches (Turner et al. 1984). The quality and quantity of food available is also important in clutch success (Mayhem 1968).

Incubation apparently varies from 90 to 120 days in the wild, with hatching occurring from August to October. Observations by Luckenbach (1982) indicate that hatchlings spend little time on the surface, as they either dig or find an existing burrow and begin dormancy shortly after hatching, ignoring food and water. In some cases, eggs do not hatch in autumn but remain over the winter, with hatchlings emerging in the spring.

Peak tortoise activity usually coincides with the abbreviated period of annual bloom in the spring. Luckenbach (1982) considers this spring bloom to be critically important to tortoise survival and reproduction.

Like livestock, tortoises prefer some plants over others and will go out of their way to consume them even when the plant is in low abundance. Understanding the composition of the desert tortoise diet is important in determining overall health of a population. It is important that tortoises vary their diet because few forage species supply a good balance of nutrients (Earnest and McCulloch 1973).

In southern Nevada, Nagy and Medica (1986) found that tortoises preferred forbs in early spring, dried grasses in late spring and summer (after the forbs dried), and forb seedlings and green grass sprouts in autumn. They also reported that tortoises consumed none of the 12 species of perennial shrubs and cacti that occurred in the study area.

In Ivanpah Valley, California, tortoises consumed grasses, (*Bouteloua* spp. *Bromus rubens*, *Hilaria rigida*, *Schismus barbatus* and *Stipa speciosa*) until mid May, followed by annuals (*Camissonia*, *Descurainia*, *Lotus*, *Lupinus*, *Lupinus*, *Malacothrix*, *Mentzelia* and *Nama demissum*) and seeds (Turner et al. 1984). In 1981, a dry year, tortoises in Ivanpah Valley consumed cacti much more frequently, particularly after mid-May (Turner et al. 1984). In other studies in southern California, Luckenbach (1982) reported that forbs were the most important tortoise foods, followed by grasses, which he suggested were used only to maintain summer activity. Luckenbach (1982) also reported no observations of desert tortoises feeding on perennials and related this avoidance to the high salt content found in perennial vegetation.

Based on field observations in September, October, November, and January, and on stomach content analyses, Woodbury and Hardy (1948) noted that tortoise diets on the Beaver Dam Slope in Utah consisted mainly of the grasses red brome (*Bromus rubens*) and bush muhly (*Muhlenbergia porteri*). In the same general area, Hansen et al. (1976) found that tortoise feces consisted of 64 percent grasses (red brome), 27 percent forbs *Erodium cicutarium*, *Astragalus*, and *Oxytropis*, and 6 percent shrubs (*Eurotia lanata*). The diet observed by Hansen et al. (1976) represents a dietary shift from perennial grasses and annual grasses to a diet of annual grasses and forbs.

When compared to shrubs on a dry weight basis, forbs are nutritionally superior in protein, phosphorus, and digestibility and are lower in fiber and dry matter (Earnest and McCulloch 1973). Forbs are also higher in protein than grasses (Fowler 1977). However, Nagy and Medica (1986) found that while eating forbs in spring, tortoises in southern Nevada did not eat enough food to achieve energy balance. They proposed two explanations: (1) Tortoises ate as much as they could but, due to the high water content, dry matter intake was inadequate; or (2) tortoises did not consume food at their maximum rate, possibly due to potassium levels in the food. Although forbs provide tortoises with abundant water, excess salts (primarily potassium) that are not excreted result in increased osmotic and ionic concentrations in both urine and plasma (Nagy and Medica 1986).

In southern California, cacti were a much more important dietary component in late spring and summer than in early spring and occurred more frequently in feces in both spring and summer than did grasses, annuals, perennials (other than cacti), and seeds (Turner et al. 1984). *Opuntia* spp. is much lower in protein, carbohydrates, fat, and phosphorus than shrubs, forbs, and grasses (Fowler 1977). It is also much lower in energy (Kilocalories/gram) than shrubs and grasses (Fowler 1977) and probably serves more importantly as a source of water (Turner et al. 1984). Fowler (1977) reported a water content of 79.4 percent for *Opuntia* spp., versus a fiber content of 2.8 percent.

Geophagy has been reported in desert tortoise feces by Hansen et al. (1976), Luckenbach (1982), and Escue et al. (1991). Escue et al. (1990), also reported consumption of cattle and rabbit bones by desert tortoises. Marlow and Tollestrup (1982) reported that tortoises actively mine and consume soils of high calcium content, and suggested that females may use these soils to replenish body calcium reserves depleted during eggshell development. Luckenbach (1982) suggested that soil in tortoise diets may aid in digestion or serve as territorial or individual markers.

Mortality of desert tortoises may be influenced by a number of natural factors. Predation of tortoise eggs and juveniles by animals such as coyotes, badgers, foxes, and raptors is probably a limiting biotic factor on desert tortoise populations (Luckenbach 1982). Gilpin (1990), as part of a preliminary minimum viable population analysis for the desert tortoise in Clark County, Nevada, inferred that raven populations did not pose a threat to desert tortoises in the eastern Mojave Desert. However, the increase in raven populations in the western and southern Mojave Desert may be a catastrophic event that could drive a tortoise population to extinction. Another possible catastrophic event to a local subpopulation may be a flash flood, especially a localized flood in a single watershed (Gilpin 1990).

Grazing has been implicated as one of the major impacts to tortoises and their habitat in the Mohave Desert (Berry 1978). Direct impacts from grazing include trampling (Berry 1978, Coffeen 1990), while indirect impacts include loss of plant cover, change in vegetation, and compaction of soils, which are most apparent in livestock watering, bedding, loading, and unloading areas (Berry 1978 and 1984).

A dietary overlap exists between cattle and tortoises in the eastern Mohave Desert, with both animals preferring annual forbs and grasses in the early spring (Hohman and Ohmart 1980, Sheppard 1982). Sheppard (1982) observed a dietary overlap between cattle and tortoises of 59.9 percent and stated that the overlap was greatest in drought conditions. Competition between tortoises and cattle occurs when grazing results in the inhibition of growth or reduction in populations of desert tortoises (Wagner 1978).

Grass fires have resulted in tortoise mortality both directly and through habitat destruction (Woodbury and Hardy 1948). Grass fires have increased in the Mohave Desert since the 1970s (Berry 1984). Bureau of Land Management (1989) reported that the Mohave Desert did not historically produce enough vegetation to keep a fire burning more than a few yards. However, the introduction of the prolific non-native annuals provides a flash fuel source that easily carries fires (Bureau of Land Management 1989).

Recently, an upper respiratory tract disease (URTD) has spread through many of the desert tortoise populations in the Mojave Desert, resulting in severe population declines in some areas. In Nevada, the occurrence of URTD in wild tortoise populations is not well documented (Haley et al. 1990). Reported cases outside the Las Vegas Valley include: One tortoise from Rock Valley on the Nevada Test Site; 2 tortoises from the Bonneville-Pacific Site at Apex approximately 20 miles northeast of Las Vegas; 2 tortoises from the Mormon Mesa permanent desert tortoise study plot about 60 miles northeast of Las Vegas; and 1 tortoise from the Gold Butte permanent desert tortoise study plot about 120 miles northwest of Las Vegas (Haley et al. 1990, Bureau of Land Management 1991). In the

Las Vegas Valley Hardenbrook and Tomlinson (1991) reported that approximately 15 percent (123 tortoises) of the 856 tortoises removed from 7,075 acres of private land displayed the symptoms of URTD. Most of URTD infected animals were removed from private properties located on the west side of the Las Vegas Valley (Hardenbrook and Tomlinson 1991).

Human activity is also a significant cause of tortoise mortality (Luckenbach 1982). Detrimental activities include collecting, vandalism, and release of captive tortoises back into the wild. In addition, the increasing use of off-road vehicles is having a significant effect on tortoise abundance and distribution. Not only may direct mortality result from crushing of tortoises either above ground or in their burrows, but the desert ecosystems also have been degraded as a result of off-road vehicle use (Luckenbach 1982). Growth of annuals and herbaceous perennials may be severely reduced, and the basic energy fixation and transfer systems of the desert can be disrupted or destroyed by vehicular activity (Luckenbach 1982).

The Bureau manages approximately 3 million acres out of approximately 5 million acres of desert tortoise habitat in Nevada. According to the Bureau's *Desert Tortoise Habitat Management on the Public Lands: A Rangeland Plan* (Bureau of Land Management 1988) approximately 2.7 million acres of desert tortoise habitat are classified as Categories I, II, and III. This classification includes approximately 341,400 acres of Category I; 643,600 acres of Category II; and 1,704,800 acres of Category III habitat. Another 138,250 acres of contiguous habitat on the Desert National Wildlife Refuge was classified as Categories I and II habitats. Grazing may be licensed on 63 percent (3,174,000 acres) of the approximately 5 million acres of desert tortoise habitat in Nevada. Presently, active grazing only occurs on 43 percent (2,154,000 acres) of the desert tortoise habitat in Nevada.

The Nevada Department of Wildlife in January 1990 estimated the wild tortoise population in Nevada to be somewhere between 26,065 and 161,375 desert tortoises (Haley et al. 1990). Based on the analysis of approximately 1400 of the Bureau's 1.5 mile triangular tortoise habitat transects, the Bureau estimates that of the habitat grazed, about 223,000 acres of tortoise habitat support moderate-high densities (80-150 tortoises/square mile), 491,000 acres support moderate densities (50-100 tortoises/square mile), 493,000 acres support low-moderate densities (20-70 tortoises/square mile), and the remaining habitats on public lands support low densities (less than 20 tortoises/square mile) (Bureau of Land Management 1991).

The following information regarding trends in desert tortoise populations is summarized from the Bureau's biological evaluation (Bureau of Land Management 1991). For the eastern Mojave Desert in Nevada, data are available from nine permanent study plots, of which eight were 1 square mile in size and one was 1.5 square miles in size. Surveys at each study plot were initially conducted for 30 days on three plots and 60 days for the remaining six plots in the spring. The plots are located in the Last Chance Range, 9 miles north of Pahrump, Nevada; the Sheep Mountain area, 3 miles east of Jean, Nevada; two plots in Piute Valley near Cal-Nev-Ari; the Gold Butte area near the Arizona/Nevada border; Pahrump Valley; Mormon Mesa; Coyote Springs Valley; and the Sand Hollow allotment 12 miles north of Mesquite, Nevada. Data are gathered on population density, size, age class composition, sex ratio, mortality rate, and causes of death.

It is quite difficult to ascertain conclusions about population trends with only one survey of a plot. It is also difficult to compare data between years when a plot has been surveyed for 30 days one time and 60 days the second time. Only three of the nine study plots have been surveyed more than one time; the Gold Butte and Sheep Mountain study plots have been surveyed twice, and the Piute Valley plot has been surveyed four times.

The crude mortality rates in the subadult/adult age class appear fairly high on four of the nine study plots: 24 percent was calculated for the Piute Valley plot; 5 percent for the Mormon Mesa plot; 6-9 percent for the Sheep Mountain plot; and 7 percent for the Trout Canyon plot. Also, a total of 53 tortoise carcasses was found on the Last Chance plot, 47 carcasses on the Sheep Mountain plot, 72 carcasses on the Gold Butte plot, and 189 carcasses on the Piute Valley plot.

Tortoises with sunken scutes have been found on the Sheep Mountain, Trout Canyon, and Mormon Mesa plots. At the Sheep Mountain plot, 30 and 39 percent of the tortoises in 1979 and 1984, respectively, had sunken scutes. At the Trout Canyon plot, 14 percent of the tortoises in 1987 and 25 percent of the tortoises at the Mormon Mesa study plot in 1989 had sunken scutes.

Effects of the Proposed Action on the Desert Tortoise

Desert tortoise habitat in the Mohave Desert originally consisted of shrubs interspersed with perennial bunchgrasses (Woodbury and Hardy 1948). Although non-native annual grasses were beginning to become established, bunchgrasses still persisted in the early part of this century and comprised a significant portion of the tortoise's diet (Woodbury and Hardy 1948). Warm season grasses, like bush muhly, are most important to desert tortoises in the Mohave Desert, as their growth and bloom coincide with the tortoise's activity period in spring. Warm season grasses are also higher in protein and phosphorus than are cool season grasses (Roszkopf et al. 1982). Bush muhly, formerly a major component of the tortoise's diet, is now scarce (Gould 1973). Bush muhly originally existed in extensive stands on open rangelands but now occurs mostly in the protection of shrubs and is seldom locally abundant, as it is highly palatable and well liked by livestock (Gould 1973). Red brome now occurs on ranges where the original grass cover has deteriorated (Humphrey 1960) and in areas that have been overgrazed (Parker 1972). The new vegetative community of annual grasses does not have the same nutritional qualities required by tortoises for growth and reproduction (Jarchow and May 1989).

Tortoises use the relatively high crude fiber content in perennial grasses to sustain their nutrition after ephemerals have died out (Jarchow and May 1989). Fibrous foods are fermented as they pass slowly through the hindgut, producing volatile fatty acids which are the major source of energy in herbivores (Jarchow and May 1989). Although consumption of annuals resulting from a wet spring provides a valuable nutrition source for tortoises, good quality forage is also important later in the year for activity, vitellogenesis, and spermatogenesis (Jarchow and May 1989). Spring annuals have a higher protein content than perennial grasses, but the latter provide tortoises with sufficient energy to prevent tissue catabolism in dry months (Jarchow and May 1989). Catabolism results from starvation or malnutrition when body tissues are used as a nutrient source. Malnutrition can lead to decreased resistance of an organism and may be a prime factor in the development of respiratory diseases in tortoises (Fowler 1977). Malnutrition results in shell deformity (Roszkopf et al. 1982) and may also account for the osteologic lesions observed in desert tortoises from the Beaver Dam Slope (Jarchow and May 1989).

Jacobson and Gaskin (1990) found that serum cholesterol of tortoises afflicted with URTD was significantly greater than that of healthy tortoises. Elevated serum levels of cholesterol in ill tortoises may be a response to starvation and an attempt to meet energy needs through lipid metabolism, suggesting that habitat degradation and reduction in forage quality must be considered as a potential predisposing factor in the severity and spread of this disease (Jacobson and Gaskin 1990). Starvation has been reported as the cause of a recent die-off in Ivanpah Valley, California (Jacobson in prep.).

Grazing of ephemeral forage also affects reproduction, growth, and survival of desert tortoises in the Mohave Desert. Tortoises must consume enough annual forage to sustain them through the summer aestivation and winter dormancy periods. The forage resulting from good rainfall years increases the number of clutches that desert tortoises produce (Turner et al. 1984) and results in increased tortoise growth (Medica et al. 1975). Increased growth is important reproductively because larger females are able to produce larger clutch sizes (Grant 1936, Ernest and Barber 1972).

Livestock grazing can directly impact desert tortoise populations through trampling of tortoises, sheltersites and nest sites (Webb and Stielstra 1979; Nicholson and Humphreys 1981; Coffeen 1990). A radio-collared, adult male desert tortoise was found suffering from paralysis of its hind legs in a burrow that had been stepped on by a cow in an allotment on the Arizona Strip area of Arizona (Wald et al. 1991). Direct mortality may also occur from equipment use during maintenance of range developments, use of watering trucks, and general site inspections.

Increased public access by development of roads to grazing allotments can have negative effects on both tortoises and their habitat. Increases in human activities in an area often results in increased vandalism (including shooting and crushing by vehicles), illegal collecting, and release of captive animals (Berry 1984). The release of captive animals may lead to the continued spread of the URTD (Jacobson and Gaskin 1990).

Desert tortoise mortality, especially that of hatchlings and juveniles, can also be affected by the increased presence of ravens which prey on small tortoises (Bureau of Land Management 1990). Ravens have increased in this century in combination with human developments. Range developments, especially water developments and large fence posts, may contribute to the increase of ravens on rangelands.

Livestock grazing also results in changes in habitat conditions, including decreases in shrub cover (Webb and Stielstra 1979) and desirable shrubs (Orodho et al. 1990). Shrubs and the sheltersites constructed in the loose, sandy soil that accumulates around the base of shrubs (coppice mounds) (Vasek 1989) provide important thermal cover for desert tortoises (Woodbury and Hardy 1948). Livestock can reduce the effectiveness of this cover through grazing and trampling (Nicholson and Humphreys 1981). Trampling is most visible in coppice mounds, which are usually composed of loosely consolidated sands without the rainfall crusts present in intershrub soils (Webb and Stielstra 1979).

Grazing by domestic sheep is particularly destructive to tortoise habitat. During a particularly lush spring in 1973, observations were made of the effects of sheep grazing on the Desert Tortoise Natural Area in the western Mojave Desert (Berry 1978). Berry (1978) stated that "In many areas sheep removed almost all traces of annual forbs and grasses; the desert floor appeared more devoid of herbaceous growth than in drought years." Berry (1978) observed that the annual flora was almost entirely removed near water tanks, bedding sites, and at loading and unloading areas. Sheep also trampled and uprooted perennial shrubs, such as burrobush (*Ambrosia dumosa*), goldenhead (*Acamptopappus sphaerocephalus*), Anderson thornbush (*Lycium andersoni*), and creosote bush (*Larrea tridentata*) (Berry 1978). Berry (1978) further indicated that sheep trampled most shallow burrows and pallets that were in the open, and they also crushed and caved in those near the edges of or within shrubs.

The most severe impacts to tortoises and tortoise habitat result from areas sacrificed for loading and unloading cattle, supplemental feeding, watering sites, and salt licks (Berry 1984). These activities may crush tortoises and result in severe degradation of habitat, soil compaction (Orodho et al. 1990) and the resultant reduction in soil moisture (Daddy et al. 1988). Grazing significantly affects the hydrology of rangelands through consumption of vegetation and trampling (Dadkahn and Gifford 1980). Trampling

decreases infiltration rates and increases surface runoff, leaving less water available for plant production (Dadkahn and Gifford 1980). The intensity of damage to soil caused solely by cattle is assumed to be directly proportional to the Animal Unit Months of forage used per pasture (Bureau of Land Management 1980). The reduction in existing vegetation and the inhibition of plant production impact the desert tortoise through loss of cover and forage.

Cryptogamic crusts, consisting of lichens, fungi, algae, and mosses, are important soil stabilizers of the southwestern deserts (Anderson et al. 1982). In deserts where there are large, sparsely vegetated areas, these crusts are responsible for reducing wind erosion (Brady 1974) and have a significant impact on soil stability and rates of water infiltration (Kleiner and Harper 1972 and 1977). Menke (1988) indicates that the cryptogamic crust provides improved microsites for seedling regeneration of desirable species and will aid in stabilizing the surface soil by reducing wind erosion. Menke further states that "(t)hese two effects will tend to force the soil and plant community to take on properties more similar to the potential natural community. Many of the native plants and animals should increase in abundance as the community develops." Cryptogamic crusts will not likely recover significantly from previous disturbances under a seasonal grazing regime, and without these crusts, the reestablishment of the potential natural community may not occur (Menke 1988).

A secondary impact resulting from the introduction and spread of non-native annual grasses through grazing (Gould 1973) is the increase in fire frequency (Berry 1984; Schmid and Rogers 1988; Bureau of Land Management 1989). Perennial bunch grasses, which are not contiguous in distribution, carry a range fire poorly, in contrast to annual grasses which increase fuel and fire frequency (Schmid and Rogers 1988). Many native desert shrubs did not evolve with fire and have no particular adaptation to survive any but very low intensity fires (Vasek 1989). Intense fires and repeated burning lead to the replacement of native annual species by Mediterranean weeds (Vasek 1989). Fires also result in destruction of shrubby plant communities and the consequential loss of sites for thermal cover (Vasek 1989). The increase in fire frequency has not only negatively affected the shrub community but also causes direct mortality to desert tortoises (Berry 1984, Bureau of Land Management 1989).

Numerous studies have been performed in the Southwest to measure recovery of vegetation following exclusion of grazing. Cook and Child (1971) observed that desert plants heavily clipped (90 percent) during any season or moderately clipped (60 percent) during either late spring or twice a year, in winter and again in late spring, were significantly lower in vigor than untreated plants, even after 7 years of protection (Cook and Child 1971). Bock et al. (1984), reported that a site excluded from grazing since 1968 supported 45 percent more grass cover, a comparatively heterogeneous grass community, and four times as many shrubs, compared to an adjacent continuously grazed area. After 16 years of rest, Brady et al. (1989), found increases in species diversity and significant increases in canopy cover for midgrass, shortgrass, shrub, and forb species as compared to a grazed community. Brady et al. (1989), also found that data do not support the hypothesis that continued animal impact is necessary to prevent ecosystem deterioration.

The seasonal grazing restriction (March 1 to June 14) imposed by grazing prescription 1 reduces the direct impacts (trampling, forage competition, etc.) of livestock grazing on the desert tortoise and its habitat by 29 percent (106 days/year) over time. Approximately 1,798,000 acres (including 45,000 acres of National Park Service lands) of Categories I, II, and intensive III habitat is expected to improve as a result of the 106 days of rest in the spring growing period. The Bureau predicts that the beneficial attributes of this rest will include: An increase in the percent composition of native perennial grasses, an increase in vegetative cover, a reliable forage base for tortoises, and a reduction in take of tortoises.

We anticipate that the Bureau's pending studies of livestock/desert tortoise interrelationships may provide answers regarding if or to what extent livestock grazing can be conducted within desert tortoise habitat without jeopardizing the recovery of the species and/or the enhancement of its habitat.

A Nevada Blue Ribbon Task Force comprised of four individuals representing desert tortoise biology and ecology, botany, and livestock management disciplines was convened for the purpose of reviewing the Bureau's October 1990 draft grazing objectives and prescriptions proposed to minimize the impacts of livestock grazing on the desert tortoise (Bureau of Land Management 1990). The grazing objectives and prescriptions proposed in the Bureau's January 1990 Biological Evaluation reflect the recommendations of the Nevada Blue Ribbon Task Force.

The Service believes the impacts described above for the proposed licensing of livestock use within desert tortoise habitat in southern Nevada will not reduce appreciably the likelihood of survival and recovery of the desert tortoise. We base this conclusion on the following reasons:

1. The Bureau's proposed grazing prescription 1 will manage 1,798,000 acres of Categories I, II, and intensive III habitat for the purpose of maintaining/achieving viable tortoise populations. These areas will be managed with the following objectives:
 - a. Average annual adult mortality does not exceed 2 percent over a 5-year period;
 - b. less than 5 percent of animals below age class 6 should demonstrate osteoporosis;
 - c. average annual recruitment rate is 3-5 percent (immature into the adult class) over a 5-year period;
 - d. adult sex ratio is 1:1;
 - e. age structure is 40 percent adult and 60 percent immatures and juveniles as determined through:
 - 1) census plots
 - 2) percent of individual tortoises registered
 - 3) with a sample size of at least 30 individuals
2. The Bureau's proposed grazing prescription 2 will manage 1,376,000 acres of Category non-intensive III habitat to ensure tortoise recruitment is sufficient to maintain a stable population. These areas presently support low density tortoise populations and may not be critical for the recovery of the species.

Cumulative Effects

Cumulative effects are those effects of future non-Federal (State, local government, or private) activities on endangered and threatened species or critical habitat that are reasonably certain to occur during the course of the Federal activity subject to consultation. Future Federal actions are subject to the consultation requirements established in section 7 of the Act and, therefore, are not considered cumulative to the proposed action.

The action area associated with this proposed action is primarily Federal land managed by the Bureau. Any future Federal activities on Federal lands will be subject to section 7 consultation. Certain actions on public lands, such as unauthorized off-highway vehicle use and dumping are difficult to control and may contribute to continued habitat loss and degradation.

Actions on private lands will continue to contribute to habitat degradation and loss. Clark County has developed a short-term Habitat Conservation Plan (HCP) for the Desert Tortoise in Las Vegas Valley, and a portion of Eldorado Valley, Clark County, Nevada (Regional Environmental Consultants 1991), which is required as part of the application documentation for a section 10(a)(1)(B) permit for incidental take under the Act. The requested 3-year permit applies to desert tortoises found on private property within a specified portion of the Las Vegas Valley. The permit application and HCP were submitted in January 1991 and subject to formal section 7 consultation on May 23, 1991. A section 10(a)(1)(B) permit was issued on July 24, 1991, requiring all non-Federal construction activities in specified portions of Clark County to conform to the conditions set forth in the permit to ensure compliance with section 9 of the Act. The plan provides among other stipulations, a \$550 per acre fee to compensate for the loss of habitat. These funds will be used to carry out the provisions of the HCP, which include securing desert tortoise habitats outside of the urban areas of Clark County, and funding management and research. Clark County is proceeding with preparation of a long-term habitat conservation plan for a section 10(a)(1)(B) permit, which if approved, will become effective at the end of the 3-year short-term permit. This second permit will apply to incidental take of desert tortoise throughout Clark County.

Incidental Take

Section 9 of the Act, as amended, prohibits any taking (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Under the terms of sections 7(b)(4) and 7(o)(2) of the Act, taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with this incidental take statement. The measures described as Reasonable and Prudent Measures and Terms and Conditions in this Biological Opinion are nondiscretionary, and must be undertaken by the agency or made a binding condition of any grant or permit issued to the applicant, as appropriate.

Based on the analysis of impacts provided above, the Service anticipates that the following forms of take could occur as a result of the activities associated with permitting livestock grazing on public lands in southern Nevada:

1. An unquantifiable number of tortoises and nests, containing an unquantifiable number of eggs, may be taken in the form of direct mortality through accidental death via vehicle kills during livestock grazing operations.
2. An unquantifiable number of tortoises and nests, containing an unquantifiable number of eggs, may be taken in the form of direct mortality through trampling by livestock.
3. An unquantifiable number of tortoises may be taken in the form of indirect mortality attributable to starvation and malnutrition.

4. An unquantifiable number of acres of desert tortoise habitat on public land may be taken in the form of heavy disturbance resulting from livestock bedding, trailing, watering, and loading activities.
6. A total 3,174,000 acres of desert tortoise habitat on Federal land may be taken in the form of habitat degradation resulting from livestock grazing activities.

Reasonable and Prudent Measures

The Service believes that the following reasonable and prudent measures are necessary and appropriate to minimize the incidental taking authorized by this Biological Opinion:

1. Measures shall be taken to reduce crushing of tortoises or their burrows from proposed grazing activities.
2. Measures shall be taken to reduce impacts to tortoises from predation.
3. Measures shall be taken to reduce disturbance and degradation to desert tortoise habitat from proposed grazing activities.
4. Measures shall be taken to reduce the death of tortoises attributable to starvation and malnutrition.
5. Measures shall be taken to ensure compliance with all conditions required within this Biological Opinion.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, the Bureau must ensure that all allottees/lessees comply with the following terms and conditions which implement the reasonable and prudent measures described above.

1. To implement reasonable and prudent measure 1, the following terms and conditions shall be implemented:
 - a. Grazing prescriptions 1 and 2 shall be implemented prior to March 1, 1992, and shall take effect on that date as full force and affect decisions.
 - b. All vehicle use in desert tortoise habitat associated with the livestock grazing program shall be restricted to existing roads and trails.
2. To implement reasonable and prudent measure 2, the following terms and conditions shall be implemented:
 - a. Trash and garbage shall be removed from each camp site that is associated with livestock grazing operations (branding, sheep herding, roundup, etc.) and disposed of off site in a designated facility. No trash or garbage shall be buried at camp sites.
 - b. All sheep carcasses found within 300 feet of any road shall be removed from the allotment and disposed of in a appropriate manner such as incineration.

3. To implement reasonable and prudent measure 3, the following terms and conditions shall be implemented:
 - a. The Bureau shall develop, complete, and implement evaluations, agreements, decisions and/or allotment management plans for all active grazing allotments listed in Table 1 over a 5-year period, beginning upon issuance of this Biological Opinion. Those allotments containing Categories I, II, and/or intensive III tortoise habitat will be given first priority. The evaluations, agreements, decisions and/or allotment management plans shall include all applicable terms and conditions, and other requirements contained in this Biological Opinion for livestock grazing.
 - b. No sheep bedding or watering site shall be used for more than 1 day. New bedding or watering sites shall be at least 0.25 mile from any previous sites.
 - c. A sheep camp site or camp trailer shall not remain in the same location for more than 7 days. A new camp location shall be at least 1 mile from any previous camp location.
 - d. All sheep shall be watered on or immediately adjacent to dirt roads (within 25 feet) or in areas that have been cleared of shrubs from past uses.

4. To implement reasonable and prudent measure 4, the following terms and conditions shall be implemented:
 - a. Use of hay or grains as a feeding supplemental shall be prohibited in desert tortoise habitat to avoid the introduction of non-native plant species. Mineral and salt blocks are authorized subject to 43 CFR section 4130.6-2(c).
 - b. Grazing prescription 1 shall be applied to all allotments that contain Categories I, II, and/or Intensive III tortoise habitat except for the Overton Arm, Mesa Cliff, Flat Top Mesa, Pulsipher Wash, Morrison-Wengert, White Rock, Summit Spring, Garden Springs, Boulder Springs, Lower Lake West, Pahrnagat West, Montezuma, and Razorback allotments. In those allotments in which both grazing prescriptions could be applied, but the necessary range improvements (i.e., fences, reservoirs, wells, springs, and water hauls) required to segregate the allotment are not physically in place on the ground, the allotment will be managed under prescription 1 until the required range improvements become available.
 - c. No turnout of cattle, domestic horses, or sheep shall occur within Categories I, II, and/or Intensive III tortoise habitat until the amount of spring ephemeral forage in the allotment is at least 150 pounds of air dry forage per acre. Should the ephemeral production drop below 150 pounds per acre, the allottee/lessee shall be required to remove the cattle from the allotment within 10 days.
 - d. Sheep bands shall be no greater than 1,000 adult sheep with an approximately equal number of lambs.

- e. Sheep grazing use shall be limited to one pass per season at a given location. A pass is identified by physical evidence that sheep use has occurred. Sheep shall be grazed in a loose or scattered pattern.
 - f. No trailing of sheep through Categories I, II, and/or intensive III tortoise habitat within the Beacon, Gourd Spring, and Toquop Sheep allotments shall be permitted between March 1 and June 14 of each year.
5. To implement reasonable and prudent measure 5, the following terms and conditions shall be implemented:
- a. The Bureau shall designate an individual or individuals as contact representatives who will be responsible for overseeing compliance with the terms and conditions contained in this Biological Opinion, and providing coordination with the Service.
 - b. All allottees/lessees and others associated with livestock grazing operations shall be informed, through an education program, of the occurrence of the desert tortoise in their allotment, and of the threatened status of the species. They shall be advised as to the definition of "take," and the potential penalties (up to \$25,000 in fines and 6 months in prison) for taking a species listed as threatened under the Endangered Species Act, and the terms and conditions included in this Biological Opinion. Written education materials shall be provided to all allottees/lessees and others associated with livestock grazing operations via receipt request certified mail.
 - c. The Bureau shall ensure that each allotment in which grazing use has been licensed is visited by wildlife biologists, range conservationists, natural resource specialists, or rangers once every 30 calendar days via aerial or vehicular reconnaissance, throughout the grazing season, to ensure compliance with the conditions of this Biological Opinion and the Bureau's stipulations. Any items in non-compliance shall be rectified by the Bureau and reported to the Service.
 - d. New key areas shall be established within 0.75-mile of a livestock watering site within all active allotments to ensure utilization levels are in compliance with grazing prescriptions 1 and 2.
 - e. Categories I, II, and/or intensive III tortoise habitat areas within an allotment shall not exceed 40 percent utilization of key perennial plant species between June 15 and October 14, and 50 percent on key perennial grasses and 40 percent on key shrubs and perennial forbs between October 15 and February 28. Category non-intensive III tortoise habitat areas within an allotment shall not exceed 40 percent utilization of key perennial grasses, forbs and shrubs between February 15 and October 14, and 50 percent on key perennial grasses and 45 percent on key shrubs and perennial forbs between October 15 and February 14. Should these utilization levels be exceeded the allottee/lessee shall have 10 calendar days in which to remove his/her livestock from the allotment. Utilization within each allotment shall not be averaged either among locations or over time.

- f. The Bureau shall establish a minimum of eight additional permanent desert tortoise monitoring plots within Categories I, II, or Intensive III desert tortoise habitat to determine demographic trends (density, age-class, sex, health, mortality, natality) of desert tortoises. The location of new study plots shall be determined within 90 days of the issuance of this Biological Opinion and in coordination and cooperation between the Bureau, the Service, and the Nevada Department of Wildlife. The new plots shall be established at a rate of at least one plot per year, over a 8-year period, beginning in the spring of 1992. Also, existing plots shall be reread at a rate of one plot per year, beginning in the spring of 1992. All plots shall be reread at a minimum interval of 5 years. Plots in active allotments will be given first priority. Reports shall be completed within 6 months of survey completion. Monitoring plot reports shall be submitted to the Service within 3 months of completion.
- g. All sheep herders shall be required to have a copy of the current use authorization in their possession. All herders shall be required to have a copy of the current trailing authorization when trailing between grazing use areas.

Reporting Requirements

Upon locating dead, injured, or sick desert tortoises that may have resulted from livestock grazing operations (e.g., tortoise trampled in burrows from livestock or any other injury or mortality that is reasonably determined by Bureau biologists to have been caused by such grazing operations), initial notification must be made to the Service's Division of Law Enforcement Special Agent Edward Dominguez, in Las Vegas, Nevada, at telephone number (702) 388-6380. Instructions for proper handling and disposition of such specimens will be issued by the Division of Law Enforcement. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. In conjunction with the care of sick or injured tortoises, or the preservation of biological material from a dead tortoise, the Bureau and the applicants have the responsibility to ensure that information relative to the date, time, and location of the tortoise when found, and possible cause of injury or death of each tortoise be recorded and provided to the Service.

The Bureau shall notify this office of all tortoises killed, injured, or removed from affected lands as a result of the proposed action within 3 days of each occurrence. Within 1 month of removing tortoises, the Bureau will provide the Service with a report detailing all tortoise -related activities (e.g., desert tortoise monitoring plots) actual number of tortoises accidentally injured or killed, etc.

If, during the course of the action, the amount or extent of the incidental take limit is reached, the Bureau shall immediately notify the Service in writing. If the incidental take limit is exceeded, the Bureau must immediately cease the activity resulting in the take and reinitiate consultation with the Service to avoid violation of section 9 of the Act. Operations must be stopped in the interim period between the initiation and completion of the new consultation if it is determined by the Service that the impact of the additional taking will cause an irreversible and adverse impact on the species, as required by 50 CFR 402.14(i). The Bureau shall provide an explanation of the causes of the taking.

Conservation Recommendations

Sections 2(c) and 7(a)(1) of the Act direct Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations have been defined as Service suggestions regarding discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, or to develop additional information. The recommendations provided here relate only to the proposed action and do not necessarily represent complete fulfillment of your agency's responsibility for this species.

1. The Bureau should authorize applications for non-use received for allotments that have been identified for the conservation of desert tortoise habitat. Grazing should not be permitted during the non-use period on these allotments until a definitive study of livestock/desert tortoise interrelationships has been completed that scientifically demonstrates that livestock grazing can be conducted under conditions that will improve desert tortoise habitat and not jeopardize recovery of the species.
2. The Bureau should obliterate and revegetate all unnecessary roads within all Categories I, II, and Intensive III desert tortoise habitats through the Resource Management Plan process.
3. The Bureau should use a geographical information system to analyze the cumulative impacts of livestock grazing on desert tortoise habitats on a range-wide basis in the Mojave Desert.
4. The Bureau should provide increased ranger patrols within all Categories I, II, and Intensive III desert tortoise habitats.
5. The Bureau should prepare a table that identifies the total number of acres in each allotment, the number of acres of tortoise habitat within each allotment, and the number of acres of tortoise habitat within each Bureau habitat category (Categories I, II, intensive III, and non-intensive III). This table would be very valuable in implementing both the Clark County short-term and long-term Habitat Conservation Plans. An integral part of these proposed plans is the conservation of a specific number of acres of desert tortoise habitat in order to anticipate a specific number of tortoises incidentally taken under the approved section 10(a)(1)(B) permit. Therefore, it is important that the Bureau is consistent in its presentation (e.g. draft Resource Management Plan, livestock grazing biological evaluation, Clark County short-term HCP) of the acreage of tortoise habitat per allotment and acreage of category type per allotment.
6. The Bureau should retire sheep grazing within all Categories I, II, and Intensive III desert tortoise habitats.
7. The Bureau should prepare a biological evaluation that analyzes the cumulative impacts of the wild horse and burro program on the desert tortoise in accordance with section 7 of the Act.

Conclusion

This concludes formal consultation on the Bureau's proposal to license livestock use within desert tortoise habitat in southern Nevada. As required by 50 CFR 402.16, reinitiation of formal consultation is required if: 1) The amount or extent of incidental take is exceeded; 2) new information reveals effects of the agency action that may impact listed species or critical habitat in a manner or to an extent not considered in this Opinion; 3) the agency action is subsequently modified in a manner that causes an effect to a listed species or critical habitat designated that was not considered in this Opinion (e.g. proposed grazing other than grazing prescriptions 1 and 2), or 4) a new species is listed or critical habitat designated that may be affected by the action. The forthcoming recovery plan or Bureau grazing studies may provide significant new information that warrants reinitiation of consultation.

Please notify this office as to your decision in this matter. We appreciate the assistance and cooperation of your staff throughout this consultation. If we can be of any further assistance, please contact me or Mark Maley at FTS 470-5227 or (702) 784-5227.

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cc:

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Table 1. Grazing allotments where the Bureau shall apply grazing prescriptions 1 and 2.

ALLOTMENT NAME	RESOURCE AREA	ACTIVE PREFERENCE* OR AVERAGE LICENSED USE BY SEASON	ACRES WITHIN PRESCRIPTION1 (in 000's)	ACRES WITHIN PRESCRIPTION 2 (In 000s)
South Point	Stateline	Not Active	10	6
Christmas Tree Pass	Stateline	76 CYL	54	16
Ireteba Peaks	Stateline	162 CYL	201	67
McCullough Mtn.	Stateline	292 CYL	119	-
Jean Lake	Stateline	208 CYL	71	-
Hidden Valley	Stateline	76 C March-May & Dec.-Feb.	37	-
Roach Lake	Stateline	21 CYL	12	-
Table Mountain	Stateline	Not Active	31	4
Black Butte	Stateline	Not Active	13	29
Spring Mountain	Stateline	Not Active	132	-
Stump Spring	Stateline	Not Active	21	-
Younts Spring	Stateline	Not Active	12	-
Wheeler Wash	Stateline	131 C March-May	27	-
Mt. Stirling	Stateline	13 CYL	14	89
Wheeler Slope	Stateline	Not Active	27	-
Lucky Strike	Stateline	17 HYL	38	-
Kyle Canyon	Stateline	Not Active	10	-
Dry Lake Valley	Stateline	Not Active	23	-
Muddy Mountains	Stateline	Not Active	78	79
White Basin	Stateline	46 CYL	-	172
Gold Butte	Stateline	296 CYL	31	76
Billy Goat Peak	Stateline	116 CYL	17	-
Bunkerville	Stateline	223 CYL	79	30
Hen Springs	Stateline	111 CYL	31	-
Lower Mormon Mesa	Stateline	44 C March-May & Dec.-Feb.	48	-
Overton Arm	Stateline	Not Active	-	5
Mesa Cliff	Stateline	Not Active	-	13
Newberry Mountains	Stateline	Not Active	26	9
Muddy River	Stateline	Not Active	6	18
Glendale	Stateline	Not Active	9	15
Rox/Tule	Caliente	70 CYL	27	-
Rox	Stateline	30 C Dec.-Feb.	20	-
Action Ferrier	Stateline	12 C March-May	41	-
Pittman Well	Stateline	Not Active	30	-
Ute	Stateline	Not Active	18	12
Arrow Canyon	Stateline	22 C March-May & Dec.-Feb.	59	24

Table 1. (Concluded)

ALLOTMENT NAME	RESOURCE AREA	ACTIVE PREFERENCE* OR AVERAGE LICENSED USE BY SEASON	ACRES WITHIN PRESCRIPTION 1 (IN 000'S)	ACRES WITHIN PRESCRIPTION 2 (IN 000'S)
Upper Mormon Mesa	Stateline	58 C March-May & Sept.-Feb.	47	-
Toquop Sheep	Stateline	1399 S March-May	27	-
Flat Top Mesa	Stateline	15 C/H March-May & Nov.-Feb.	-	5
Pulsipher Wash	Stateline	Not Active	-	3
Jackrabbit	Stateline	30 C March-May & Dec.-Feb.	3	9
Gourd Spring	Caliente	415 C October-May	38	20
Mormon Peak	Caliente	60 C June-March	7	-
Breedlove	Caliente	60 CYL & 20 HYL	113	-
Delamar (Pasture 5)	Caliente	464 CYL	39	-
Grapevine	Caliente	93 C October-March	10	30
Morrison-Wengert	Caliente	205 CYL	-	55
Henrie	Caliente	204 C November-April	30	31
White Rock	Caliente	360 C October-May	-	25
Summit Spring	Caliente	90 C October-May	-	17
Beacon	Caliente	2095 S(AUMs)March-May	7	-
Snow Springs	Caliente	475 C October-March	9	38
Garden Springs	Caliente	348 C & 4 H October-May	-	22
Boulder Springs	Caliente	70 C October-March	-	8
Lower Lake West	Caliente	104 CYL	-	13
Lower Lake East	Caliente	54 CYL	40	-
Pahranagat East	Caliente	52 C August-May	11	-
Pahranagat West	Caliente	212 C August-May	-	16
Montezuma	Tonopah	889 CYL	-	60
Razorback	Tonopah	112 CYL	-	24
TOTAL			1753	1040

*CYL = cows yearlong etc., C = cattle, S = sheep, H = horses
AUMs = Animal Unit Months

(Source: Table 1 from *Biological Evaluation for Managing Livestock Grazing in Desert Tortoise Habitat*, (Bureau of Land Management 1991: 7,8).

GLOSSARY

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ACRE-FOOT: The volume of water that will cover an acre of land to a depth of 1 foot (323,851 gallons or 43,560 cubic feet).

ACTIVITY PLAN: A detailed, specific plan for management of a single resource program or plan element undertaken as necessary to implement the more general resource management plan decisions.

ADVERSE EFFECT (Cultural Resources): Alteration of the characteristics which contribute to the use(s) determined appropriate for a cultural resource or which qualify a cultural property for the National Register to such a degree that the appropriate use(s) are diminished or precluded or the cultural property is disqualified from National Register eligibility. Criteria in the regulations of the Advisory Council (36 CFR Part 800) guide the determination of adverse effects.

AIR POLLUTION: Accumulation of aerial wastes beyond the concentrations that the atmosphere can absorb and which may, in turn, damage the environment.

AIR QUALITY CLASSES: Classes established by the Environmental Protection Agency (EPA) that define the amount of air pollution considered significant within an area:

I: Almost any change in air quality would be considered significant.

II: Deterioration normally accompanying moderate, well-controlled growth would be considered insignificant.

III. Deterioration up to the national standards would be considered insignificant.

ALLOTMENT: An area allocated for the use of the livestock or one or more qualified grazing permittees or lessees which includes prescribed numbers and kinds of livestock under one plan of management.

ALLOTMENT MANAGEMENT PLAN: A documented program which applies to livestock operations on the public lands, which is prepared in consultation with the permittee (s) or lessees involved, and which : 1) prescribes the manner in which livestock operations will be conducted in order to meet the multiple-use, sustained yield, economic, and other needs and objectives as determined for the public lands through land use planning.

ALLUVIAL FAN: A fan-shaped accumulation of disintegrated soil material; water deposited and located in a position where the water departs from a steep course to enter upon a flat plain or open valley bottom.

ALLUVIUM: Material, including clay, silt, sand, gravel, or similar unconsolidated sediments, deposited by a stream bed or other body of running water.

AMBIENT AIR QUALITY: Prevailing condition of the atmosphere at a given time; the outside air.

ANIMAL UNIT MONTH (AUM): The amount of food or forage required by an animal unit (one cow or five sheep) for 1 month.

ANNUAL PLANT SPECIES: A plant that completes its life cycle and dies in 1 year or less.

APPARENT TREND: An interpretation of the direction of change in vegetation and soil protection over time, based on a single observation. Apparent trend is described in the same terms as measured trend except that when no trend is apparent, it shall be described as none.

AQUIFER: A water-bearing unit of permeable rock or sediment which is capable of yielding water to wells.

ARCHAIC PERIOD: Archeological period of about 8,000

ARCHEOLOGICAL DISTRICT: An area that provides a concentration of cultural properties in a discrete, definable location.

AREA OF CRITICAL ENVIRONMENTAL CONCERN: Areas within the public land where special management attention is needed to protect and prevent irreparable damage to important historical, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards.

ASPECT SPECIES: A vegetation species that appears to be dominant in the landscape, although it may be only a small percent of the total vegetation composition.

BIOMASS: The total quantity of living organisms of one or more species per unit of space (called species biomass) or of all the species in a community (called community biomass).

BROWSE: (noun) That part of leaf and twig growth of shrubs, woody vines, and trees available for animal consumption. (verb) To consume browse.

BROWSERS: Animals which feed primarily on browse.

CALICHE: A layer in the soil more or less cemented by calcium carbonates (CaCo₃), commonly found in arid and semiarid regions.

CAMPSITE: A cultural site type representative of all periods consisting of temporary habitation areas which usually contain a lithic scatter, evidence of fire use, ground stone, and pottery scatter.

CANDIDATE SPECIES: Any species of plant or animal listed in the for consideration to be listed as threatened or endangered by U.S. Fish and Wildlife Services (USFWS) under the Endangered Species Act. Definitions for Categories 1 and 2 candidate species, excerpted from the *Federal Register*, are as follows:

Category 1: Taxa for which the USFWS currently has on file substantial information on biological vulnerability and threat(s) to support the appropriateness of proposing to list them as endangered or threatened species. Presently, data are being gathered concerning precise habitat needs, and for some of the taxa, concerning the precise boundaries for critical habitat designations. Development and publication of proposed rules on these taxa are anticipated, but, because of the large number of such taxa, could take some years. Also included in category 1 are taxa whose status in the recent past is known, but that may already have become extinct.

Category 2: Taxa for which information now in possession of the USFWS indicates that proposing to list them as endangered or threatened species is possibly appropriate, but for which substantial data on biological vulnerability and threat(s) are not currently known or on file to support the immediate preparation of rules. Further biological research and field study usually will be necessary to ascertain the status of the taxa in Category 2, and some of the taxa are of uncertain taxonomic validity. It is likely that some of the taxa will not warrant listing, while others will be found to be in greater danger of extinction than some taxa in category 1.

CARRYING CAPACITY: Maximum stocking rate possible without inducing damage to vegetation or related resources. It may vary from year-to-year on the same area due to fluctuating weather conditions and forage production. (See Grazing capacity.)

CAVE: Any naturally occurring void, cavity, recess, or system of interconnected passages which occurs beneath the surface of the earth or within a cliff or ledge (including any cave resource therein, but not including any vug, mine, tunnel, aqueduct, or other manmade excavation) and which is large enough to permit an individual to enter, whether or not the entrance is naturally formed or manmade. Such term shall include any natural pit, sinkhole, or other feature which is an extension of the entrance.

CLAY: A mineral soil separate consisting of particles less than 0.002 millimeters in equivalent diameter.

CLIMAX VEGETATION COMMUNITY: The final or stable community in a series of successive vegetation states which is self-perpetuating and in dynamic balance with the physical and biotic environment.

COMMUNITY: A group of plants and animals living together in a common area and having close interactions.

CONTRAST (VISUAL): The effect of a striking difference in the form, line, color, or texture of an area being viewed.

CONTRAST RATING: A method of determining the extent of visual impact of an existing or proposed activity that will modify any landscape feature.

COORDINATED RESOURCE MANAGEMENT PLAN: A plan for management of one or more allotments that involves all the affected resources, e.g. range, wildlife, and watershed.

COVER: Small rocks, litter, basal areas of grass and forbs, and aerial coverage of shrubs that provide protection to the soil surface (i.e. in contrast to bare ground.)

CRITICAL SOILS: Soils that (1) contain very highly saline soils and/or (2) are very susceptible to water erosion.

CRITICAL WATERSHED: An area of soils that (1) have a high potential for salt yield; (2) are subject to severe water and wind erosion when disturbed; (3) have high runoff potential during storm events; (4) are subject to frequent flooding; or (5) have a potential for loss of vegetation productivity under high rates of wind and water erosion.

CRITICAL WILDLIFE HABITAT: Is defined in the Endangered Species Act as follows (i) The specific areas within the geographical area occupied by an animal species at the time it is listed in accordance with the provisions of section 4 of this Act on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific area outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

CRUCIAL WILDLIFE HABITAT: Sensitive use areas that are necessary to the existence, perpetuation, or introduction of one or more species during critical periods of their life cycles.

CULTURAL PROPERTY: Any definite location of past human activity, habitation or use identified through a field inventory (see below), historical documentation or oral evidence. This term may include (1) archeological or historic sites, structures and places, and (2) sites or places of traditional cultural or religious importance to a specific group, whether or not represented by physical remains. Cultural properties are managed by the system of inventory evaluation, protection, and use.

CULTURAL RESOURCES: Those fragile and non-renewable remains of human activities, occupations, and endeavors as reflected in sites, buildings, structures, or objects, including works of art, architecture, and engineering. Cultural resources are commonly discussed as prehistoric and historic values, but each period represents a part of the full continuum of cultural values from the earliest to the most recent.

CULTURAL RESOURCE INVENTORY CLASSES:

Class I — Existing Date Inventory: an inventory study of a defined area designed to provide a narrative overview (cultural resource overview) derived from existing cultural resource information and to provide a compilation of existing cultural resource site record data on which to base the development of BLM's site record system.

Class II — Sampling Field Inventory: a sample-oriented field inventory designed to locate and record, from surface and exposed profile indications, all cultural resource sites within a portion of a defined area in a manner which will allow an objective estimate of the nature and distribution of cultural resources in the entire defined area. The Class II inventory is a tool utilized in management and planning activities as an accurate predictor of cultural resources in the area of consideration. The primary area of consideration for the implementation of a Class II inventory is a planning unit. The secondary area is a specific project in which an intensive field inventory (Class III) is not practical or necessary.

Class III — Intensive Field Inventory: an intensive field inventory designed to locate and record, from surface and exposed profile indications, all cultural resource sites within a specified area. Normally, upon completion of such inventories in an area, no further cultural resource inventory work is needed. A Class III inventory is appropriate on small project areas, all areas to be disturbed, and primary cultural resource areas.

CULTURAL SITE: A physical location of past human activities or events. Cultural resource sites are extremely variable in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features. Prehistoric and historic sites which are recorded as cultural resources have sociocultural or scientific values and meet criterion of being more than 50 years old.

DESIGNATED RIGHT-OF-WAY CORRIDOR: A parcel of land, either linear or areal, that has been identified by Secretarial Order, through the land use planning process, or by other management decision, as a preferred location for existing and future rights-of-way grants and suitable to accommodate more than one type of right-of-way or one or more rights-of-way which are similar, identical, or compatible.

DIVERSITY: An attribute of an area which is an expression of both the total number and relative abundance of species, communities, or habitats. Relative abundance can be measured by numbers of individuals, cover, or various other characteristics.

EARLY SERAL STAGE: A plant community with a species composition which is 0-25% of the potential natural community one would expect to find on that ecological site.

ECOLOGICAL SITE: A kind of land with a specific potential natural community and physical site characteristics differing from other kinds of land in its ability to produce vegetation and to respond to management.

ECOLOGICAL STATUS: The present state of vegetation and soil protection of an ecological site in relation to the potential natural community for the site. Vegetation status is the expression of the relative degree to which the kinds, proportions, and amounts of plants in a community resemble that of the potential natural community. If classes are used, they should be described in ecological rather than utilitarian terms. Soil status is a measure of present vegetation and litter cover relative to the amount of cover needed on the site to prevent accelerated erosion.

ECONOMIC IMPACT: The change, positive or negative, in economic conditions (including distribution and stability of employment and income in affected local and regional economies) that directly or indirectly result from an activity, project, or program.

ECOSYSTEM: A complex self-sustaining natural system which includes living and nonliving components of the environment and the circulation of matter and energy between organisms and their environment.

ENDANGERED SPECIES: An animal or plant whose prospects for survival and reproduction are in immediate jeopardy, and as further defined by the Endangered Species Act of 1973.

ENVIRONMENTAL ASSESSMENT (EA): A concise public document for which a Federal agency is responsible that serves to: (a) briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact; (b) aid an agency's compliance with the National Environmental Policy Act (NEPA) when no environmental impact statement is necessary; (c) facilitate preparation of a statement when one is necessary. An EA includes brief discussions of the need for the proposal, of alternatives as required by SEc. 102 (2) of NEPA, of the environmental impacts of the proposed action and other alternatives, and a listing of agencies and persons consulted.

ENVIRONMENTAL CONSEQUENCE: A temporal or spatial change in the human environment caused by an act of man. The change should be (1) perceptible, (2) measurable, and (3) relatable through a change agent to a proposed action or alternative. A consequence is something that follows an antecedent (as a cause or agent). Consequences are synonymous with impacts and effects.

ENVIRONMENTAL IMPACT STATEMENT (EIS): A written analysis of the impacts on the environment of a proposed project or resource management plan.

EROSION: The wearing away of land surface by wind, running water, and other geological agents.

EVALUATION (Cultural Resources): The analysis of cultural resource inventory records, the application of professional judgement to identify characteristics that contribute to possible uses for recorded cultural resources, and the recommendation of appropriate use(s) for each resource or group of resources. National Register eligibility criteria, 36 CFR Part 60, are interpreted through or with reference to BLM evaluation criteria.

EXISTING RIGHT-OF-WAY CORRIDOR: A parcel of land, without fixed limits or boundaries, that is being used as the locations for one or more rights-of-way.

EXOTIC SPECIES: A species which is not native to the United States.

EXTENSIVE RECREATION MANAGEMENT AREAS (ERMAs): Areas where recreation is unstructured and dispersed and where minimal recreation-related investments are required. ERMA provide recreatino visitors the freedom of choice with minimal regulatory constraint.

FEDERAL LAND: Land owned by the United States, without reference to how the land was acquired or which federal agency administers the land, including mineral or coal estates underlying private surface.

FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976 (FLPMA): Public Law 94-579, which gives the BLM legal authority to establish public land policy, to establish guidelines for administering such policy and to provide for the management, protection, development and enhancement of the public land.

FIRE MANAGEMENT: The intergration of fire protection, prescribed burning, and fire ecology knowledge into multiple use planning, decision making, and land management activities.

FORAGE: All browse and herbaceous foods available to grazing animals.

FORAGE UTILIZATION: An index of the extent to which forage is used. Utilization classes range from slight (less than 20 percent) to severe (more than 80 percent).

FORB: Any herbaceous nonwoody plant that is not grass or grass-like.

GRASS: Any of a family of plants with narrow leaves, jointed stems, and seed- like fruit.

GRAZING PREFERENCE: The total number of AUMS of livestock grazing on public lands apportioned and attached to base property owned or controlled by a permittee or lessee. Active preference combined with suspended non-use make up total grazing preference.

GROUND WATER: Water beneath the land surface, in the zone of saturation.

GULLY EROSION: Removal of soil leading to formation of relatively large channels or gullies cut into the soil by concentrations of runoff.

HABITAT: A specific set of physical conditions that surround the single species, a group of species, or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover, and living space.

HABITAT MANAGEMENT PLAN (HMP): A written and officially approved plan for a specific geographical area of public land which identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

HAZARDOUS WASTE OR MATERIAL (HAZMAT): Any substance that poses a threat to the health or safety of persons or the environment. These include any material that is toxic, ignitable, corrosive, or radioactive.

HEAVY USE: Indicates that 60-80 percent of current year's forage production has been eaten or destroyed by grazing animals.

HERD MANAGEMENT AREA PLAN (HMAP): A written and officially approved plan for a specific geographical area of public land which identifies wild horse (or burro) herd use areas and habitat, identifies population and habitat objectives, establishes the sequence of actions for achieving objectives, and outlines procedures for evaluating accomplishments.

HISTORICAL CULTURAL RESOURCES: Historical cultural resources include all mines, ranches, towns, resorts, railroads, trails, and other evidence of human use from the entrance of the Spanish to 1938.

ISOLATED TRACT: A parcel of public lands surrounded by non-federal lands.

KARST: A type of topography that results from dissolution and collapse of limestone, dolomite, or gypsum beds and is characterized by closed depressions or sinkholes, caves, and underground drainage.

KEY FORAGE SPECIES: Forage species whose use serves an indicator of the degree of use of associated species.

LAND DISPOSAL: A transaction that leads to the transfer of title of public lands from the federal government.

LATE SERAL: A plant community with a species composition which is 51-75% of the potential natural community one would expect to find on that ecological site.

LEASABLE MINERALS: Minerals such as coal, oil shale, oil and gas, phosphate, potash, sodium, geothermal resources, and all other minerals that may be acquired under the Mineral Leasing Act of 1920, as amended.

LIMESTONE: A sedimentary rock consisting chiefly (more than 50 percent) of calcium carbonate, primarily in the form of calcite.

LITHIC: A stone or rock exhibiting modification by humans. It generally applies to projectile points, scrapers and chips, rather than ground stone.

LITHIC SCATTER: A prehistoric cultural site type where flakes, cores, and stone tools are located as a result of the manufacture or use of the tools.

LOAM: Soil material that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand.

LOCATABLE MINERALS: A mineral subject to location under the 1872 mining laws. Examples of such minerals would be gold, silver, copper, and lead as compared to oil and natural gas, which are leasable minerals.

LONG-TERM PLANNING: Twenty years and beyond; approximately the year 2012.

MANAGEMENT FRAMEWORK PLAN (MFP): A planning decision document that establishes for a given planning area land use allocations, coordination guidelines for multiple use, and management objectives to be achieved for each class of land use or protection. An MFP is prepared in three steps: (1) resource recommendations, (2) impact analysis and alternative development, and (3) decision making.

METALLIC MINERALS: Those minerals whose native form is metallic or whose principal products after refinement are metallic.

MID SERAL STAGE: A plant community with a species composition which is 26-50% of the potential natural community one would expect to find on that ecological site.

MINERAL ENTRY: The location of mining claims by an individual to protect his right to a valuable mineral.

MINERAL WITHDRAWALS: Closure of land to mining laws, including sales, leasing and location, subject to valid existing rights.

MITIGATION: The lessening of a potential adverse effect by applying appropriate protection measures, the recovery of cultural resource data or other measures.

MODERN URBAN: One of the six classes of the recreation opportunity spectrum. In modern urban areas, opportunities to experience recreation in affiliation with individuals and groups are prevalent, as is the convenience of recreation sites and opportunities. Opportunities for wildland challenges, risk taking, and testing of outdoor skills are unimportant. Opportunities for competitive spectator sports are common, as are opportunities to use parks and open spaces highly influenced by people.

MODERATE USE: Indicates that 40-60 percent of current year's forage production has been eaten or destroyed by grazing animals.

MONITORING: The orderly collection and analysis of data to evaluate progress in meeting resource management objectives.

MULTIPLE USE: Management of public lands and their various resource values so that they are used in the combination best meeting the present and future needs of the American people. Relative resource values are considered, not necessarily the combination of uses that will give the greatest potential economic return or the greatest unit output.

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS): National standards, established under the Clean Air Act by the Environmental Protection Agency (EPA), prescribed levels of pollution in the outdoor air which may not be exceeded. There are two levels of NAAQS: primary, set at a level to protect the public health from air pollution damage, and secondary set at a level to protect public welfare from air pollution damage.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) OF 1969: A law enacted on January 1, 1970 that established a national policy to maintain conditions under which man and nature can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations of Americans. It established the Council on Environmental Quality for coordinating environmental matters at the federal level and to serve as advisor to the President on such matters. The law made all federal actions and proposals which could have significant impact on the environment subject to review by federal, state, and local environmental authorities.

NATIONAL HISTORIC PRESERVATION ACT (NHPA): The primary federal law providing for the protection and preservation of cultural resources. NHPA established the National Register of Historic Places, the Advisory Council on Historic Preservation, and the State Historic Preservation Officers.

NATIONAL REGISTER OF HISTORIC PLACES (NRHP): A list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, and culture maintained by the Secretary of the Interior. Expanded as authorized by Section 2(b) of the Historic Sites Act of 1935 (16 U.S.C. 462) and Section 101(a) (1)(A) of the National Historic Preservation Act.

NATURAL AREA: Land managed for (1) retention of its typical or unusual plant or animal types, associations or other biotic phenomena; or (2) its outstanding scenic, geologic, soil or aquatic features or processes.

NONPOINT POLLUTION: Pollution from scattered sources, as opposed to pollution from one location, e.g. a manufacturing plant.

NONUSE: Current authorized grazing use (in AUMs) that is not used during a given time period. Nonuse is applied for and authorized on an annual basis.

OFF-HIGHWAY VEHICLE (OHV): Any motorized vehicle designed for cross-country travel over any type of natural terrain.

OFF-HIGHWAY VEHICLE DESIGNATIONS: BLM designations used in this document are as follows:

Open areas are designated areas and trails where OHVs may operate without restrictions.

Limited areas are designated areas and trails where the use of OHVs is subject to restrictions such as limits on the number or types of vehicles allowed or the dates and times of use, limit of use to existing roads and trails, or limit of use to designated roads and trails.

Closed areas are areas and trails where the use of OHVs are permanently or temporarily prohibited. Emergency use of vehicles is allowed.

OVERGRAZING: Consumption of vegetation by herbivores beyond the endurance of a plant to survive.

PERENNIAL PLANT SPECIES: A plant that has a life cycle of 3 years or more.

PERENNIAL STREAM: A stream of portion of stream which flows continually.

PERMITTEE: One who holds a permit to graze livestock on public land.

PETROGLYPH: A form of rock art manufactured by incising, scratching or pecking designs into rock surfaces.

PICTORGRAPH: A form of rock art created by applying mineral based or organic paints to rock surfaces.

PLANT COMMUNITY: One or more plant species growing in association on a given location of area.

PLAYA: The usually dry and nearly level lake plain that occupies the lowest part of a closed depression.

PREDATOR: An animal that preys on one or more other animals.

PRIMITIVE: One of the six classes of the recreation opportunity spectrum. Primitive areas offer recreation opportunities for isolation from the sights and sounds of human activities, where a visitor can feel a part of the natural environment, experience a high degree of challenge and risk, and use outdoor skills.

PROPOSED SPECIES: Any species of plant or animal formally proposed by the U.S. Fish and Wildlife Service (USFWS) to be listed as threatened or endangered under the Endangered Species Act.

PUBLIC LAND: Any land and interest in land owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except:

- lands located on the Outer Continental Shelf;
- lands held for the benefit of Indians, Aleuts, and Eskimos;
- lands in which the United States retains the minerals, but surface is private.

RANGE IMPROVEMENT: A structure, development or treatment used to rehabilitate, protect or improve the public lands to advance range betterment.

RANGE SITE: Rangeland that differs in its ability to produce a characteristic natural plant community. A range site is the product of all the environmental factors responsible for its development. It is capable of supporting a native plant community typified by an association of species that differ from other range sites in the kind or proportion of species or in total production.

RANGE TREND: The direction of change in range condition; it indicates whether range condition is improving, declining or remaining stable.

RANGELAND CONDITION (ECOLOGICAL): The present state of the vegetation on a range site in relation to the climax (natural potential) plant community for that site. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the climax plant community for the site. Rangeland condition is basically an ecological rating of the plant community.

Four classes are used to express the degree to which the composition of the present plant community reflects that of the climax.

Condition Class	Range Site
Excellent	76-100
Good	51-75
Fair	26-50
Poor	0-25

RANGELAND CONDITION TREND: The direction of change in rangeland condition.

RAPTOR: Any predatory bird (such as a falcon, hawk, eagle or owl) that has feet with sharp talons or claws adapted for seizing prey and a hooked beak for shearing flesh.

RECREATION OPPORTUNITY SPECTRUM: A continuum used to characterize recreation opportunities in terms of setting, activity, and experience opportunities. Six classes are included: Primitive, Semiprimitive Nonmotorized, Semiprimitive Motorized, Roaded Natural, Rural, and Modern Urban.**RIGHT-OF-WAY (ROW)** An easement or permit which authorizes public land to be used for a specified purpose that generally requires a long narrow strip of land. Examples are roads, powerlines, pipelines, etc.

RECREATION VISITOR DAY: An aggregation of 12 visitor hours. A visitor hour is the presence of one or more persons on land and water for outdoor recreation for periods totalling 60 minutes; one person for one hour, two persons for one-half hour each, and so on.

RIPARIAN ZONE: The banks and adjacent areas of water bodies, water courses, seeps, springs, and meadows, whose waters provide soil moisture sufficiently in excess of that otherwise available locally so as to provide a more moist habitat than that of contiguous plains and uplands.

ROADED NATURAL: One of the six classes of the recreation opportunity spectrum. Roaded natural areas offer about equal opportunities for affiliation with other user groups or isolation from sights and sounds of human activities. Such areas provide the opportunity for visitors to have a high degree of interaction with the natural environment. Challenge and risk opportunities are not very important except in specific challenging activities. The practice of outdoor skills may be important. Opportunities for both motorized and nonmotorized recreation are present.

ROCK ART (PETROGLYPH OR PICTOGRAPH): An Archaic to Modern cultural site type consisting of incised or painted figures such as people, animals, plants or abstracts on a rock surface.

ROCK SHELTER: A cultural site type representative of all periods consisting of an area protected by an overhanging cliff. Often associated with the same materials as a campsite or rock art.

RUNOFF: A general term used to describe the portion of precipitation on the land that ultimately reaches streams; may include channel and non-channel flow.

RURAL: One of the six classes of the recreation opportunity spectrum. In rural areas, opportunities to experience recreation in affiliation with individuals and groups are prevalent, as is the convenience of recreation sites. These factors generally are more important than the natural setting. Opportunities for wildland challenges, risk taking, and testing of outdoor skills are unimportant except in activities involving challenge and risk.

SAND: Individual rock or mineral fragments in a soil that range in diameter from 0.05 to 2.0 millimeters. Most sand grains consist of quartz, but they may be of any mineral composition. The textural class name of any soil that contains 85 percent or more sand and less than 10 percent clay.

SECTION: One square mile or 640 acres.

SEDIMENT: Solid, clastic material, both mineral and organic, that is in suspension, is being transported or has been moved from its site of origin by water, wind, or ice and has come to rest on the earth's surface.

SEMI-PRIMITIVE MOTORIZED: One of the six classes of the recreation opportunity spectrum. Semiprimitive motorized areas offer some opportunities for isolation from the sights and sounds of human activities, but this is not as important as opportunities for primitive recreation. Use of these areas involves the opportunities for visitors to have a high degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills. Such an area provides an explicit opportunity to use motorized equipment while in the area.

SEMI-PRIMITIVE NON-MOTORIZED: One of the six classes of the recreation opportunity spectrum. Semiprimitive nonmotorized areas offer some opportunities for isolation from the sights and sounds of human activities, but this is not as important as opportunities for primitive recreation. Use of these areas involves the opportunity for visitors to have a degree of interaction with the natural environment, to have moderate challenge and risk, and to use outdoor skills.

SEVERE USE: Utilization in excess of 80 percent.

SHORT-TERM IMPACT: Ten years or less; approximately the year 2001.

SILT: Sedimentary material consisting primarily of mineral particles intermediate in size between sand and clay/

SLIGHT USE: Indicates that 0 to 20 percent of current year's forage production has been eaten or destroyed by grazing animals.

SOILS: (a) The unconsolidated mineral material on the immediate surface of the earth that serves as a natural medium for the growth of land plants. (b) The unconsolidated mineral matter of the surface of the earth that has been influenced by genetic and environmental factors including parent material, climate, topography, all acting over a period of time and producing soil that differs from the parent material in physical, chemical, biological, and morphological properties and characteristics.

SOIL ASSOCIATIONS: (a) A group of defined and named taxonomic soil units occurring together in an individual and characteristic pattern over a geographic region, comparable to plant associations in many ways. (b) A soil mapping unit in which two or more defined taxonomic units occurring together in a characteristic pattern are combined because of map scale or intermixing of taxonomic units.

SOIL COMPACTION: A decrease in the volume of a soil as a result of compressive stress from livestock trampling as an example.

SOIL DEPTH:

	<u>Lower boundary in inches.</u>
Very shallow	12
Shallow	12 — 20
Moderately deep	20 — 36
Deep	36 — 40
Very deep	40

SOIL PROFILE: A succession of soil zones or horizons beginning at the surface that have been developed through normal soil-forming processes.

SOIL SERIES: A group of soils having genetic horizons (layers) that, except for texture of the surface layer, have similar characteristics and arrangement in the profile.

SPECIAL RECREATION MANAGEMENT AREA (SRMA): An area where special management or intensive recreation management is needed. Recreation activity plans are required, and greater managerial investment in facilities or supervision can be anticipated.

SUCCESSION: An orderly process of community development that involves changes in species structure and community processes with time; it is reasonably directional and, therefore, predictable.

SUSTAINED YIELD: The achievement and maintenance in perpetuity of a high level of annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use.

THREATENED SPECIES: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, and as further defined by the Endangered Species Act of 1973.

UTILIZATION: The portion of the current year's forage production that is consumed or destroyed by grazing animals.

VEGETATION STATUS: The expression of the relative degree to which the kinds, proportions, and amounts of plants in a community resemble that of the potential plant community (see early seral, mid seral, late seral and potential natural community).

VIEWSHED: The landscape that can be directly seen under favorable atmospheric conditions from a viewpoint or along a transportation corridor.

VISUAL RESOURCES: Visible features of the landscape including land, water, vegetation, and animals.

VISUAL RESOURCE MANAGEMENT (VRM): The planning, designing, and implementation of management objectives for maintaining scenic value and visual quality on public lands (see appendix on BLM Visual Resource Management).

WILDERNESS CHARACTERISTICS: Identified by Congress in the 1964 Wilderness Act; namely size, naturalness, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and supplemental values such as geological, archeological, historical, ecological, scenic, or other features. It is required that the area possess at least 5,000 acres or more of contiguous public land or be of a size to make practical its preservation and use in an unimpaired condition; be substantially natural or generally appear to have been primarily by the forces of nature, with the imprint of man being substantially unnoticeable; and have either outstanding opportunities for solitude or a primitive and unconfined type of recreation.

WILDERNESS STUDY AREAS (WSA): A roadless area which has been found to have wilderness characteristics.

WILDERNESS STUDY CRITERIA: The criteria and quality standards developed in the Wilderness Study Policy to guide planning efforts in the wilderness EISs.

WILD HORSE AREA: An area of the public lands which provides habitat for one or more wild horse herds.

WILD HORSE: All unbranded and unclaimed horses and their progeny that have used public lands on or after December 15, 1971, or that do use these lands as all or part of their habitat.

ABBREVIATIONS AND ACRONYMS

ACEC	Area of Critical Environmental Concern	SCS	Soils Conservation Service
ACHP	Advisory Council on Historic Preservation	SHPO	State Historic Preservation Office
ADC	Animal Damage Control	SRA	Stateline Resource Area
AML	Appropriate Management Levels	USAF	U.S. Air Force
AMP	Allotment Management Plan	USDI	U.S. Department of Interior
AQCR	Air Quality Control Regions	USFWS	U.S. Fish and Wildlife Service
AUM	Animal Unit Month	VRM	Visual Resource Management
BLM	Bureau of Land Management		
CEQ	Council on Environmental Quality		
CFR	Code of Federal Regulations		
CRA	Caliente Resource Area		
CRMP	Coordinated Resource Management and Planning		
DEIS	Draft Environmental Impact Statement		
DOE	Department of Energy		
DRP	Draft Resource Plan		
EA	Environmental Assessment		
EIS	Environmental Impact Statement		
EPA	Environmental Protection Agency		
ESA	Endangered Species Act		
FEIS	Final Environmental Impact Statement		
FLPMA	Federal Land Policy and Management Act		
HMAP	Herd Management Area Plan		
HMP	Habitat Management Plan		
LVDO	Las Vegas District Office		
MFP	Management Framework Plan		
MOU	Memorandum of Understanding		
MSA	Management Situation Analysis		
NAFB	Nellis Air Force Base		
NEPA	National Environmental Policy Act of 1969		
NDOW	Nevada Department of Wildlife		
NHA	Natural Hazard Areas		
NHPA	National Historic Preservation Act of 1966		
NSO	Nevada State Office		
NWHR	Nevada Wild Horse Range		
NWR	National Wildlife Refuge		
ONA	Outstanding Natural Areas		
PNC	Potential Natural Community		
PRP	Proposed Resource Plan		
PL	Public Law		
RMP	Resource Management Plan		
RNA	Resource Natural Area		
RPS	Rangeland Program Summary		
ROD	Record of Decision		
ROW	Right-of-way		

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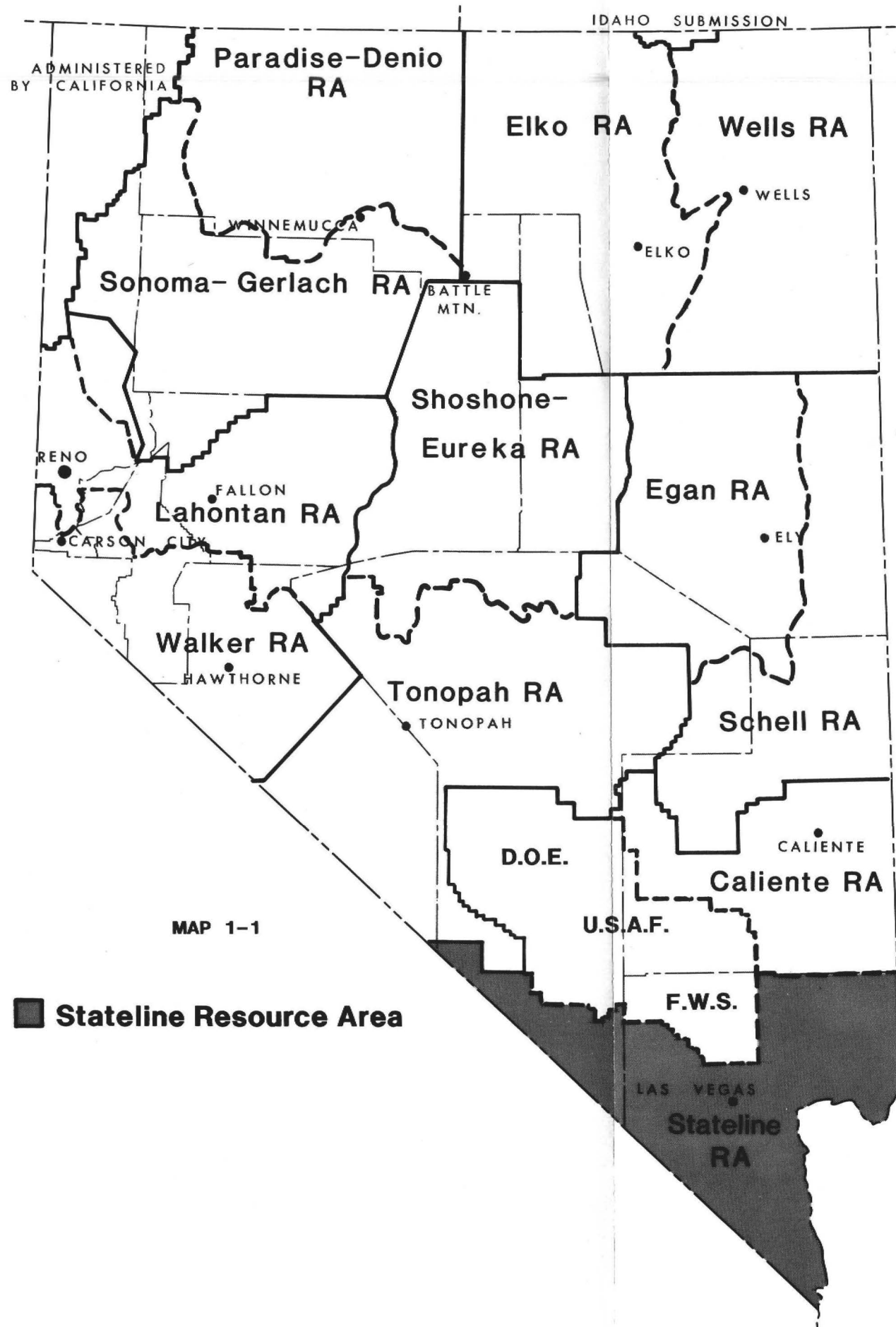
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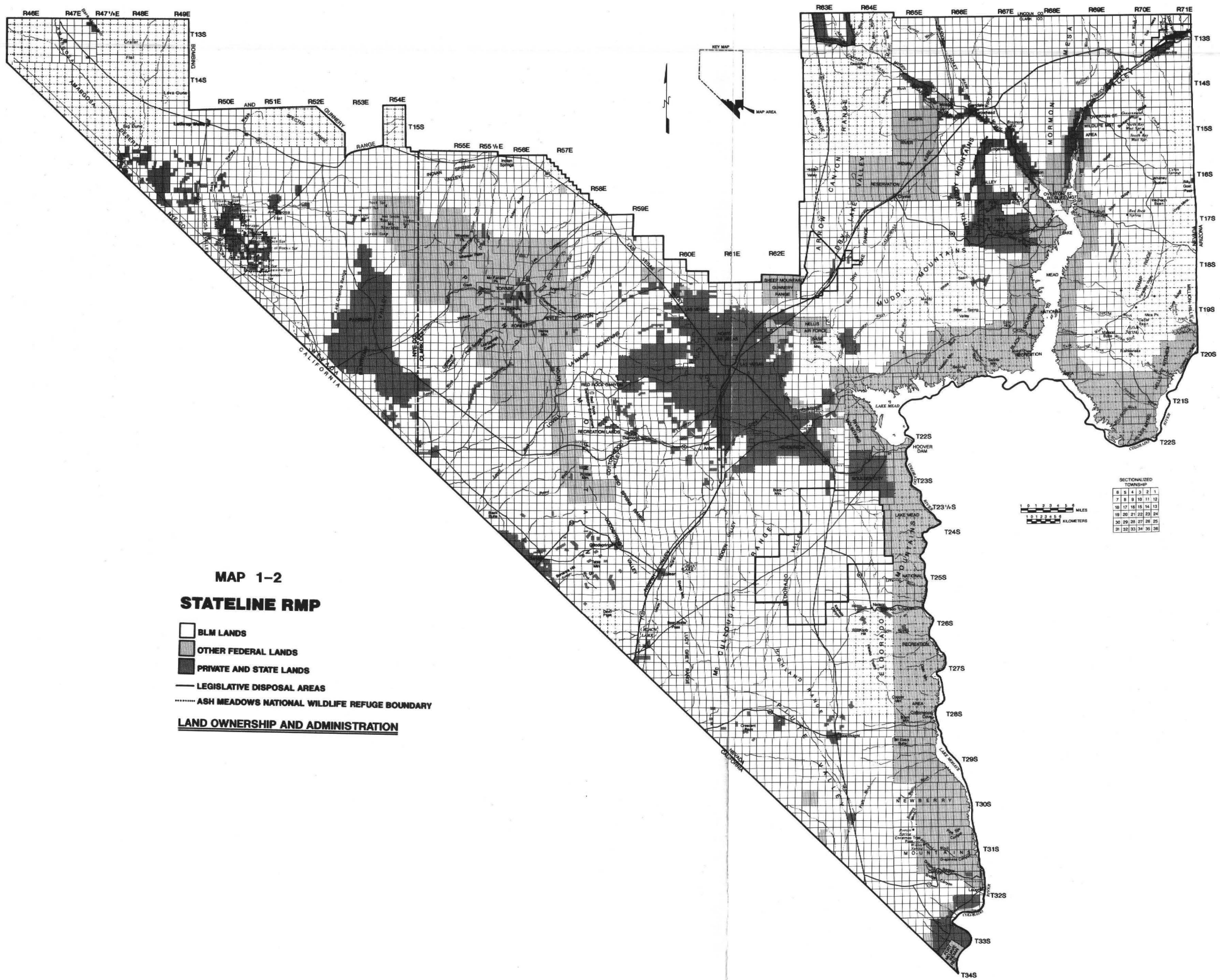
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MAPS



MAP 1-1

■ Stateline Resource Area

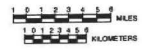


MAP 1-2

STATELINE RMP

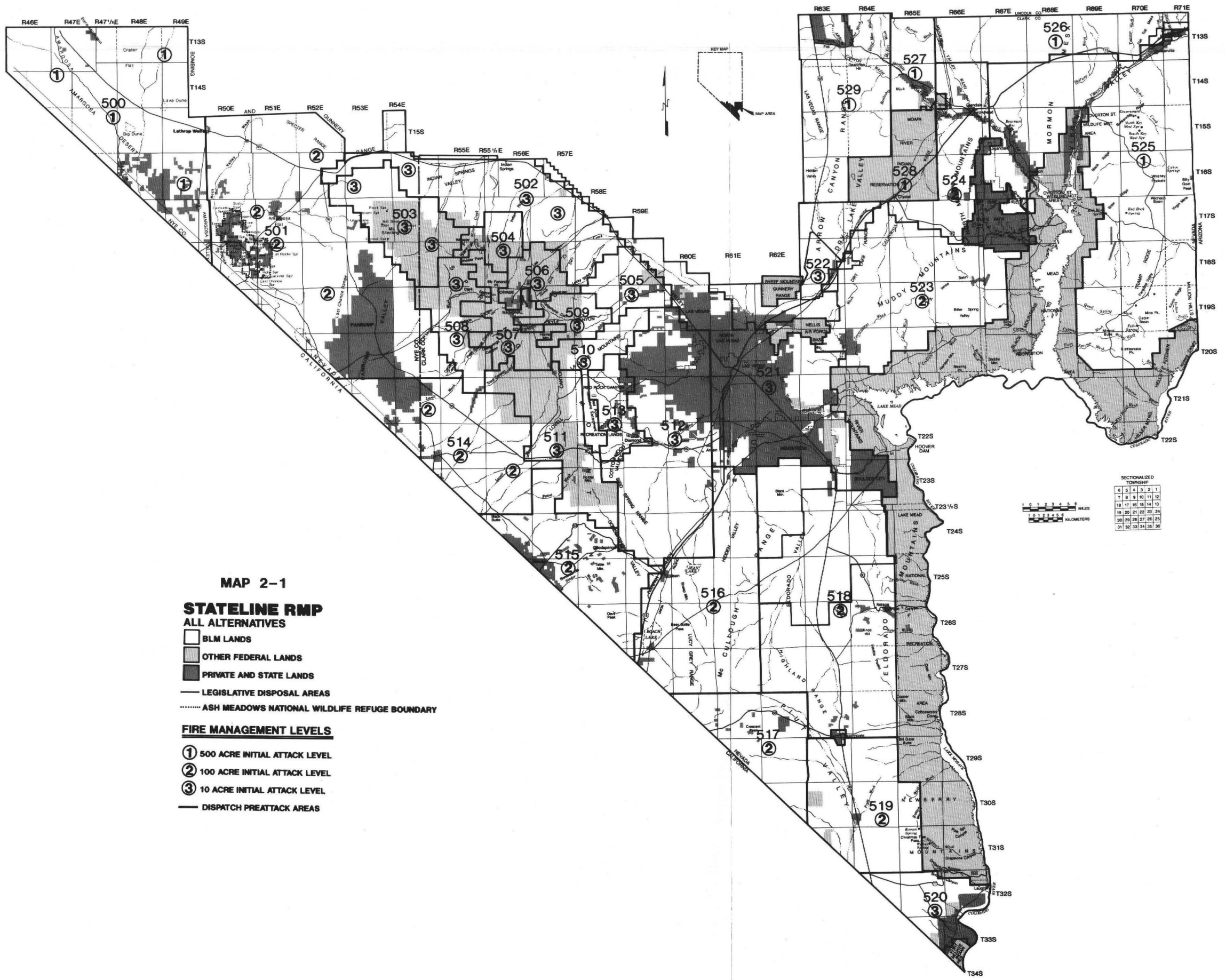
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

LAND OWNERSHIP AND ADMINISTRATION



SECTIONALIZED TOWNSHIP

6	9	12	15	18
7	10	13	16	19
8	11	14	17	20
9	12	15	18	21
10	13	16	19	22
11	14	17	20	23
12	15	18	21	24
13	16	19	22	25
14	17	20	23	26
15	18	21	24	27
16	19	22	25	28
17	20	23	26	29
18	21	24	27	30
19	22	25	28	31
20	23	26	29	32
21	24	27	30	33
22	25	28	31	34
23	26	29	32	35
24	27	30	33	36



MAP 2-1

**STATELINE RMP
ALL ALTERNATIVES**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

FIRE MANAGEMENT LEVELS

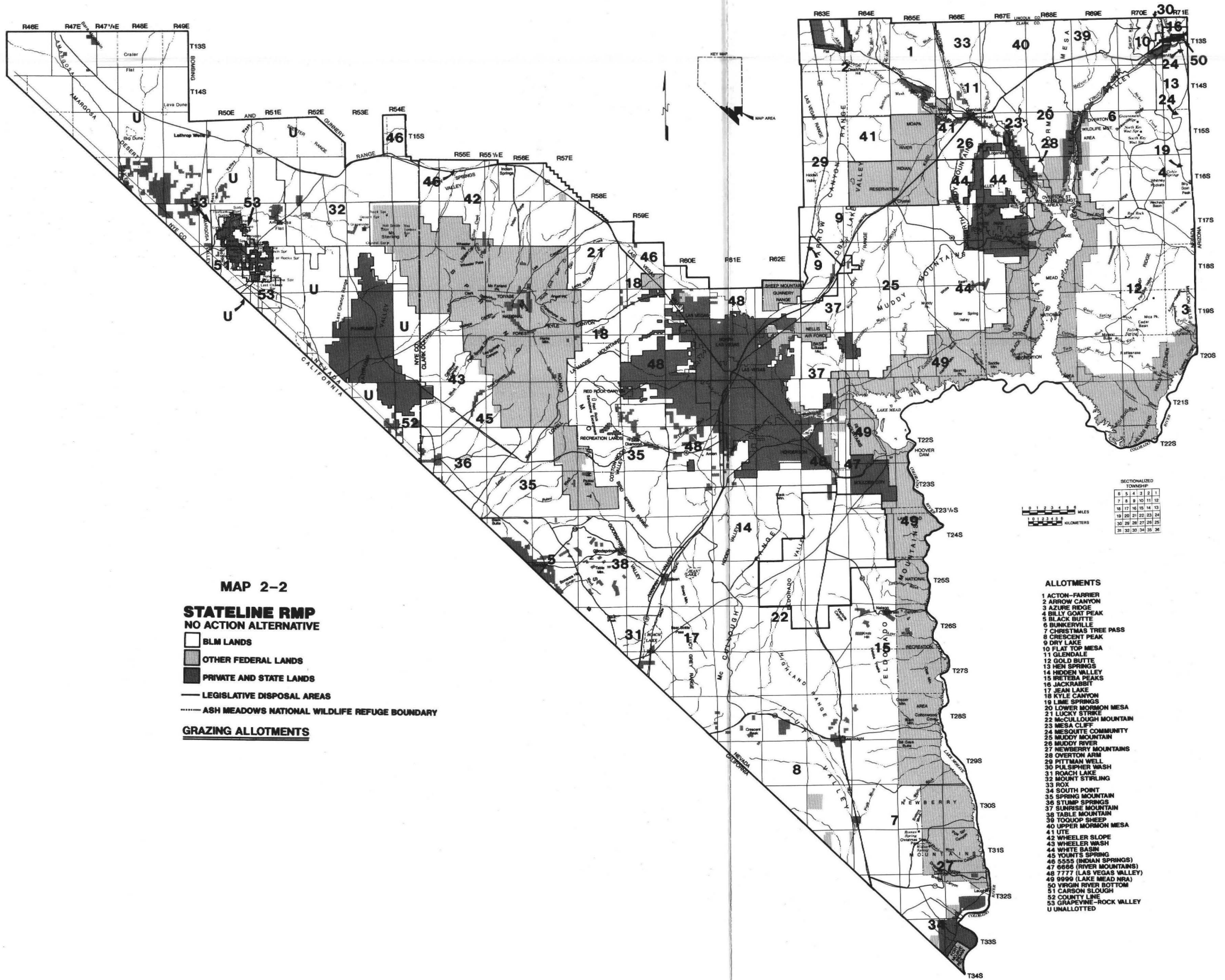
- 1 500 ACRE INITIAL ATTACK LEVEL
- 2 100 ACRE INITIAL ATTACK LEVEL
- 3 10 ACRE INITIAL ATTACK LEVEL
- DISPATCH PREATTACK AREAS

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5
MILES

0 1 2 3 4 5
KILOMETERS



MAP 2-2

**STATELINE RMP
NO ACTION ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

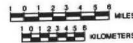
GRAZING ALLOTMENTS

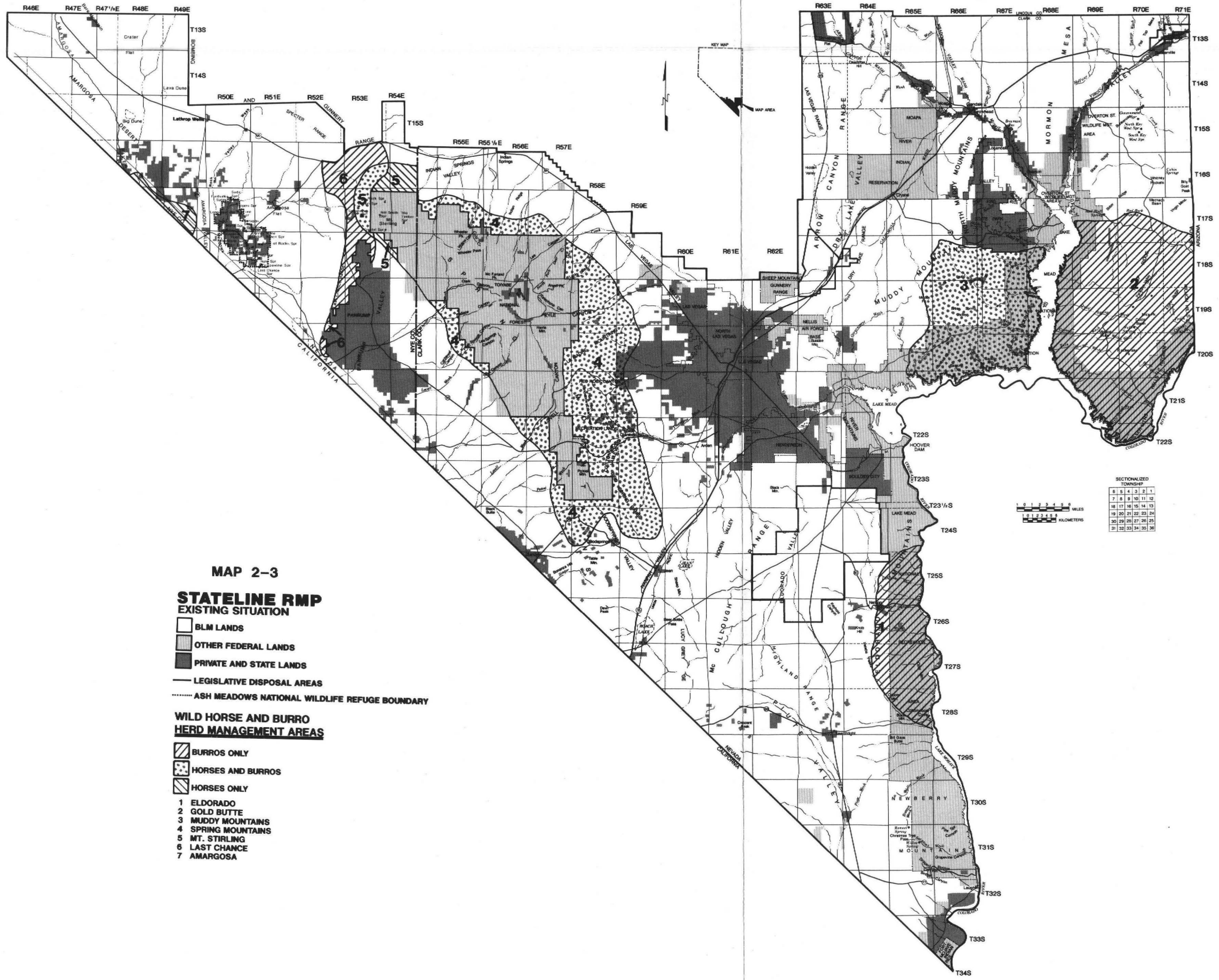
ALLOTMENTS

- 1 ACTON-FARRIER
- 2 ARROW CANYON
- 3 AZURE RIDGE
- 4 BILLY GOAT PEAK
- 5 BLACK BUTTE
- 6 BUNKERVILLE
- 7 CHRISTMAS TREE PASS
- 8 CRESCENT PEAK
- 9 DRY LAKE
- 10 FLAT TOP MESA
- 11 GLENDALE
- 12 GOLD BUTTE
- 13 HEN SPRINGS
- 14 HIDDEN WALLEY
- 15 IRETEBA PEAKS
- 16 JACKRABBIT
- 17 JEAN LAKE
- 18 KYLE CANYON
- 19 LIME SPRINGS
- 20 LOWER MORMON MESA
- 21 LUCKY STRIKE
- 22 McCULLOUGH MOUNTAIN
- 23 MESA CLIFF
- 24 MESQUITE COMMUNITY
- 25 MUDDY MOUNTAIN
- 26 MUDDY RIVER
- 27 NEWBERRY MOUNTAINS
- 28 OVERTON ARRI
- 29 PITTMAN WELL
- 30 PULSIPHER WASH
- 31 ROACH LAKE
- 32 MOUNT STERLING
- 33 ROX
- 34 SOUTH POINT
- 35 SPRING MOUNTAIN
- 36 STUMP SPRINGS
- 37 SUNRISE MOUNTAIN
- 38 TABLE MOUNTAIN
- 39 TOUJOP SHEEP
- 40 UPPER MORMON MESA
- 41 UTE
- 42 WHEELER SLOPE
- 43 WHEELER WASH
- 44 WHITE BASIN
- 45 YOUNGS SPRING
- 46 5555 (INDIAN SPRINGS)
- 47 6666 (RIVER MOUNTAINS)
- 48 7777 (LAS VEGAS VALLEY)
- 49 9999 (LAKE MEAD NRA)
- 50 VIRGIN RIVER BOTTOM
- 51 CARSON SLOUGH
- 52 COUNTY LINE
- 53 GRAPEVINE-ROCK VALLEY
- U UNALLOTTED

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





**STATELINE RMP
EXISTING SITUATION**

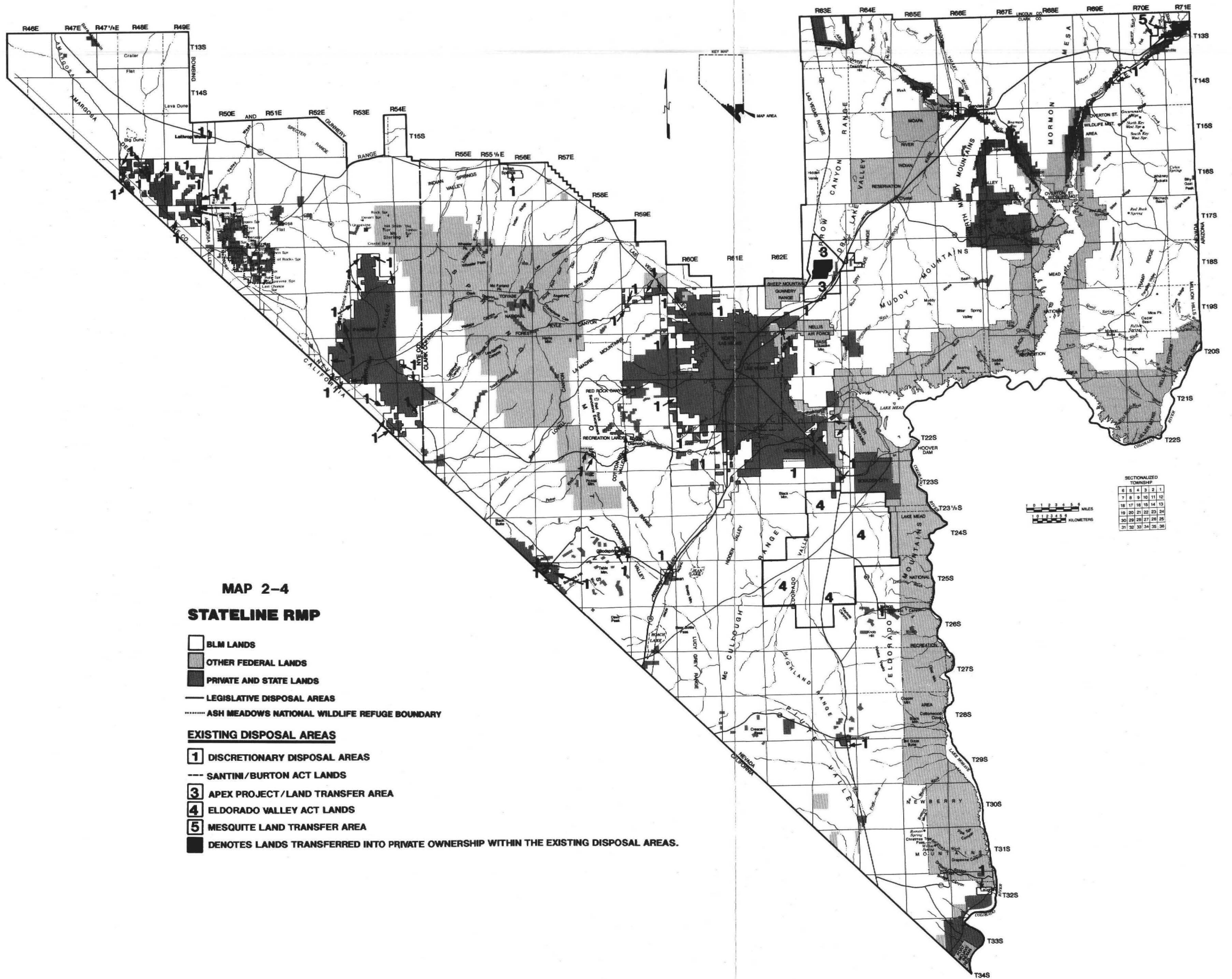
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- - - - - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

**WILD HORSE AND BURRO
HERD MANAGEMENT AREAS**

- BURROS ONLY
 - HORSES AND BURROS
 - HORSES ONLY
- 1 ELDORADO
 - 2 GOLD BUTTE
 - 3 MUDDY MOUNTAINS
 - 4 SPRING MOUNTAINS
 - 5 MT. STIRLING
 - 6 LAST CHANCE
 - 7 AMARGOSA

SECTIONALIZED TOWNSHIP

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36



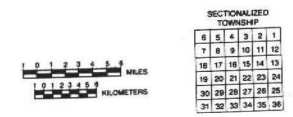
MAP 2-4

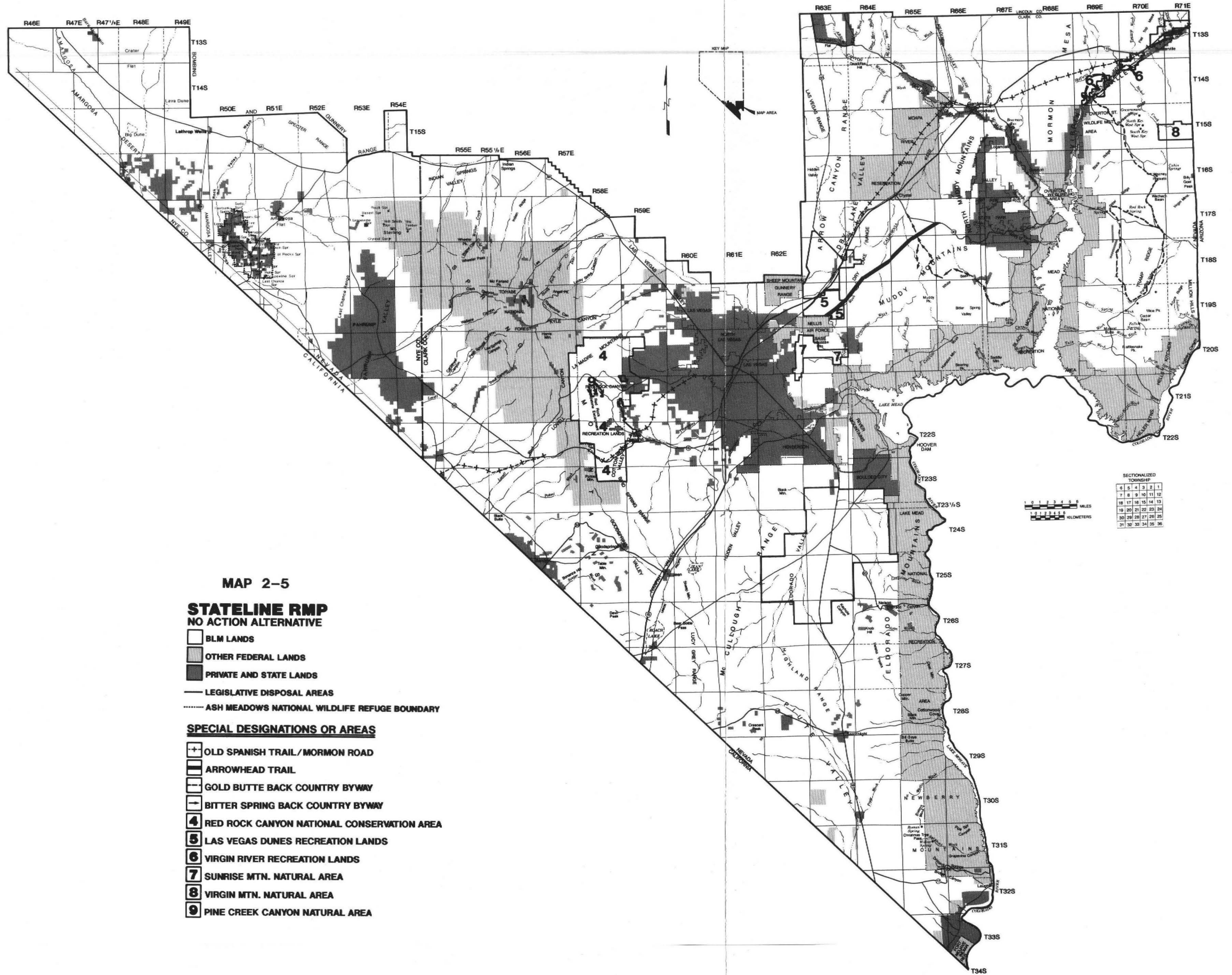
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

EXISTING DISPOSAL AREAS

- 1** DISCRETIONARY DISPOSAL AREAS
- SANTINI/BURTON ACT LANDS
- 3** APEX PROJECT/LAND TRANSFER AREA
- 4** ELDERADO VALLEY ACT LANDS
- 5** MESQUITE LAND TRANSFER AREA
- DENOTES LANDS TRANSFERRED INTO PRIVATE OWNERSHIP WITHIN THE EXISTING DISPOSAL AREAS.





MAP 2-5

**STATELINE RMP
NO ACTION ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

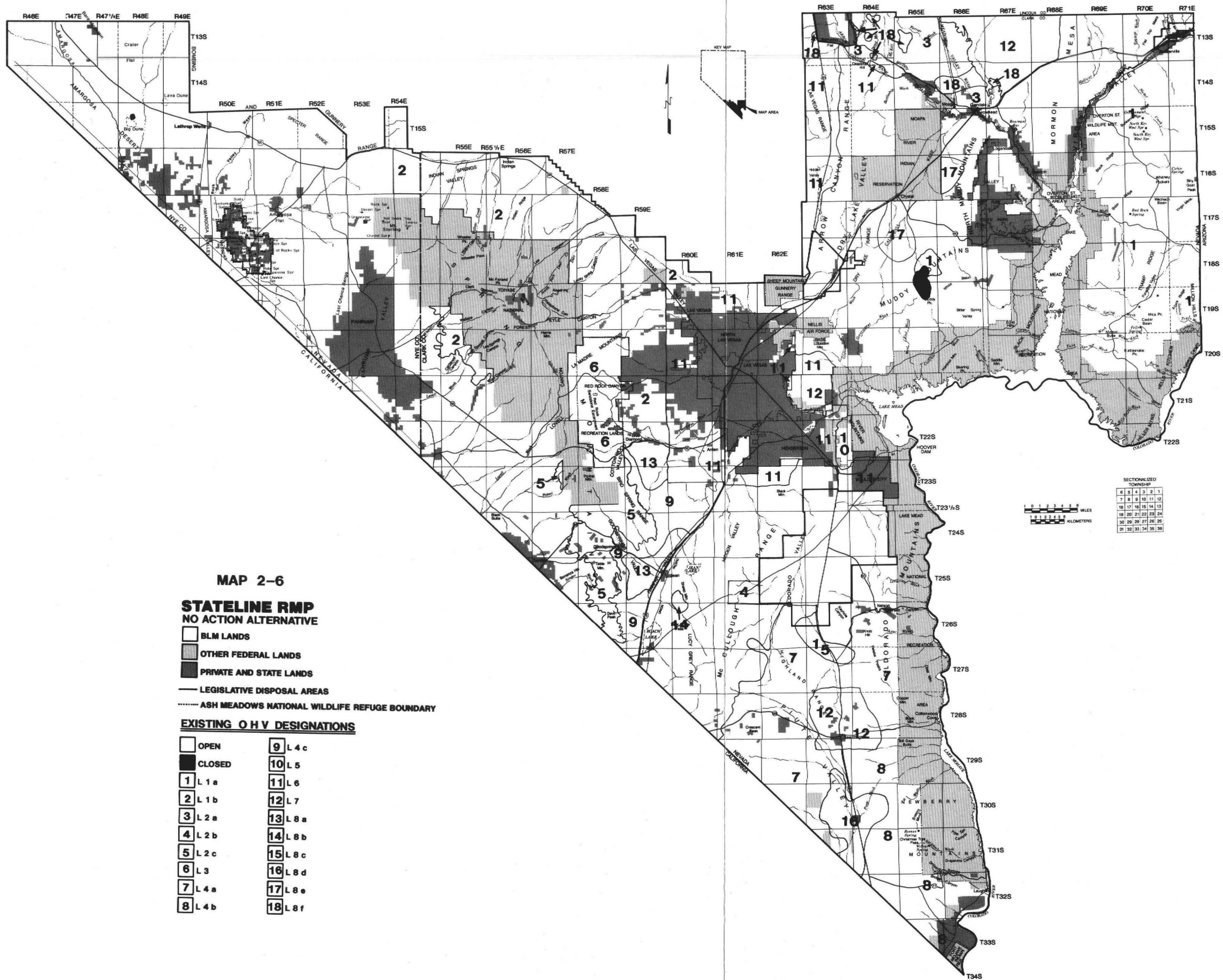
SPECIAL DESIGNATIONS OR AREAS

- + OLD SPANISH TRAIL/MORMON ROAD
- ARROWHEAD TRAIL
- GOLD BUTTE BACK COUNTRY BYWAY
- BITTER SPRING BACK COUNTRY BYWAY
- 4 RED ROCK CANYON NATIONAL CONSERVATION AREA
- 5 LAS VEGAS DUNES RECREATION LANDS
- 6 VIRGIN RIVER RECREATION LANDS
- 7 SUNRISE MTN. NATURAL AREA
- 8 VIRGIN MTN. NATURAL AREA
- 9 PINE CREEK CANYON NATURAL AREA

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 6 MILES
0 1 2 3 4 5 6 KILOMETERS



MAP 2-6

**STATELINE RMP
NO ACTION ALTERNATIVE**

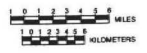
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

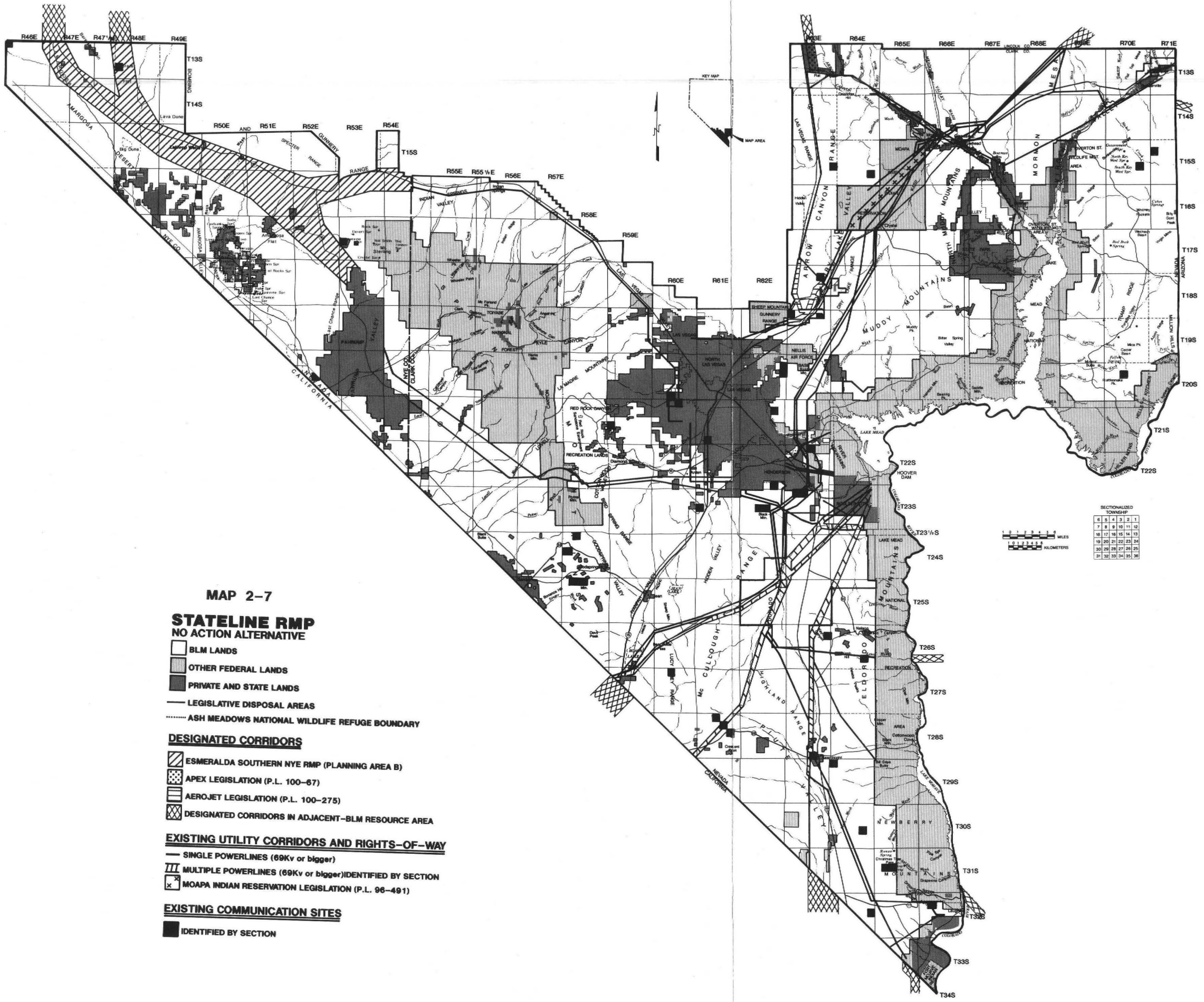
EXISTING OHV DESIGNATIONS

- | | |
|---|--|
| OPEN | 9 L 4 c |
| CLOSED | 10 L 5 |
| 1 L 1 a | 11 L 6 |
| 2 L 1 b | 12 L 7 |
| 3 L 2 a | 13 L 8 a |
| 4 L 2 b | 14 L 8 b |
| 5 L 2 c | 15 L 8 c |
| 6 L 3 | 16 L 8 d |
| 7 L 4 a | 17 L 8 e |
| 8 L 4 b | 18 L 8 f |

SECTIONALIZED TOWNSHIP

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36





MAP 2-7

**STATELINE RMP
NO ACTION ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

DESIGNATED CORRIDORS

- ESMERALDA SOUTHERN NYE RMP (PLANNING AREA B)
- APEX LEGISLATION (P.L. 100-67)
- AEROJET LEGISLATION (P.L. 100-275)
- DESIGNATED CORRIDORS IN ADJACENT-BLM RESOURCE AREA

EXISTING UTILITY CORRIDORS AND RIGHTS-OF-WAY

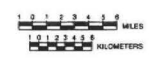
- SINGLE POWERLINES (69Kv or bigger)
- MULTIPLE POWERLINES (69Kv or bigger) IDENTIFIED BY SECTION
- x MOAPA INDIAN RESERVATION LEGISLATION (P.L. 96-491)

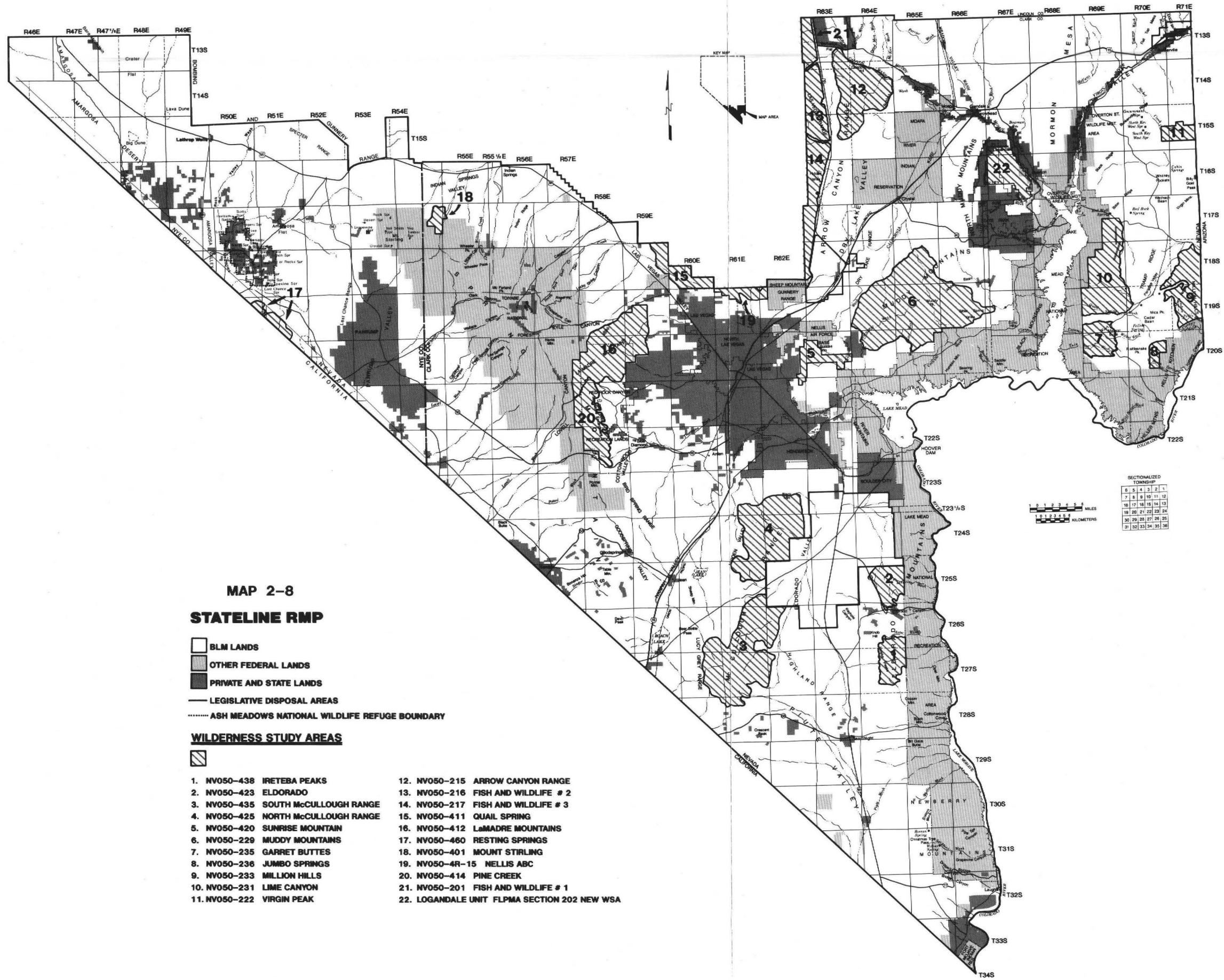
EXISTING COMMUNICATION SITES

- IDENTIFIED BY SECTION

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
10	9	8	7	6	5
11	10	9	8	7	6
12	11	10	9	8	7
13	12	11	10	9	8
14	13	12	11	10	9
15	14	13	12	11	10
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17	16	15	14	13	12
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25	24	23	22	21	20
26	25	24	23	22	21
27	26	25	24	23	22
28	27	26	25	24	23
29	28	27	26	25	24
30	29	28	27	26	25
31	30	29	28	27	26
32	31	30	29	28	27
33	32	31	30	29	28
34	33	32	31	30	29
35	34	33	32	31	30
36	35	34	33	32	31





MAP 2-8
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

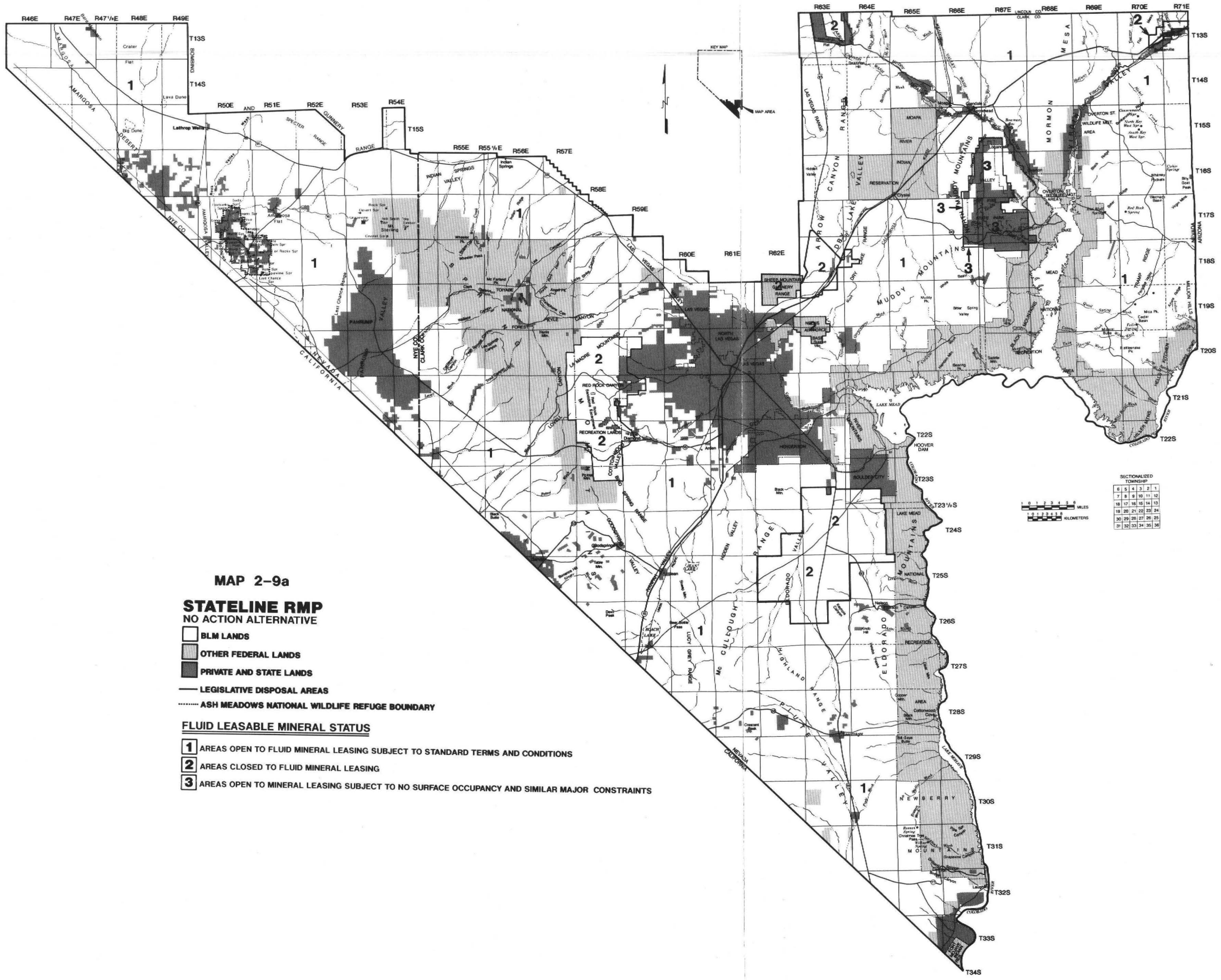
WILDERNESS STUDY AREAS

- 1. NV050-438 IRETEBA PEAKS
- 2. NV050-423 ELDORADO
- 3. NV050-435 SOUTH McCULLOUGH RANGE
- 4. NV050-425 NORTH McCULLOUGH RANGE
- 5. NV050-420 SUNRISE MOUNTAIN
- 6. NV050-229 MUDDY MOUNTAINS
- 7. NV050-235 GARRET BUTTES
- 8. NV050-236 JUMBO SPRINGS
- 9. NV050-233 MILLION HILLS
- 10. NV050-231 LIME CANYON
- 11. NV050-222 VIRGIN PEAK
- 12. NV050-215 ARROW CANYON RANGE
- 13. NV050-216 FISH AND WILDLIFE # 2
- 14. NV050-217 FISH AND WILDLIFE # 3
- 15. NV050-411 QUAIL SPRING
- 16. NV050-412 LAMADRE MOUNTAINS
- 17. NV050-460 RESTING SPRINGS
- 18. NV050-401 MOUNT STIRLING
- 19. NV050-4R-15 NELLIS ABC
- 20. NV050-414 PINE CREEK
- 21. NV050-201 FISH AND WILDLIFE # 1
- 22. LOGANDALE UNIT FLPMA SECTION 202 NEW WSA

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS



MAP 2-9a

**STATELINE RMP
NO ACTION ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

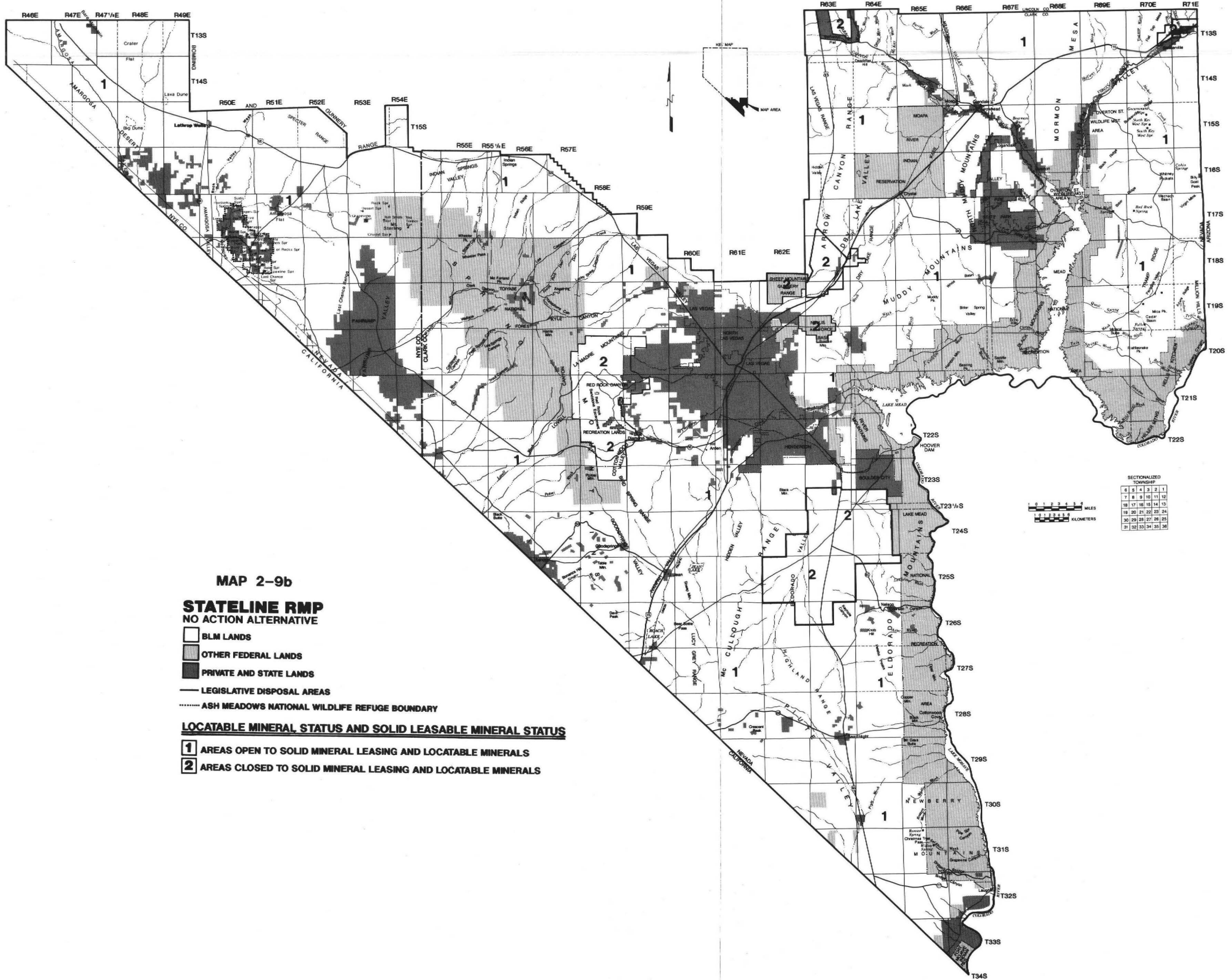
FLUID LEASABLE MINERAL STATUS

- 1** AREAS OPEN TO FLUID MINERAL LEASING SUBJECT TO STANDARD TERMS AND CONDITIONS
- 2** AREAS CLOSED TO FLUID MINERAL LEASING
- 3** AREAS OPEN TO MINERAL LEASING SUBJECT TO NO SURFACE OCCUPANCY AND SIMILAR MAJOR CONSTRAINTS

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 2-9b

**STATELINE RMP
NO ACTION ALTERNATIVE**

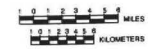
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

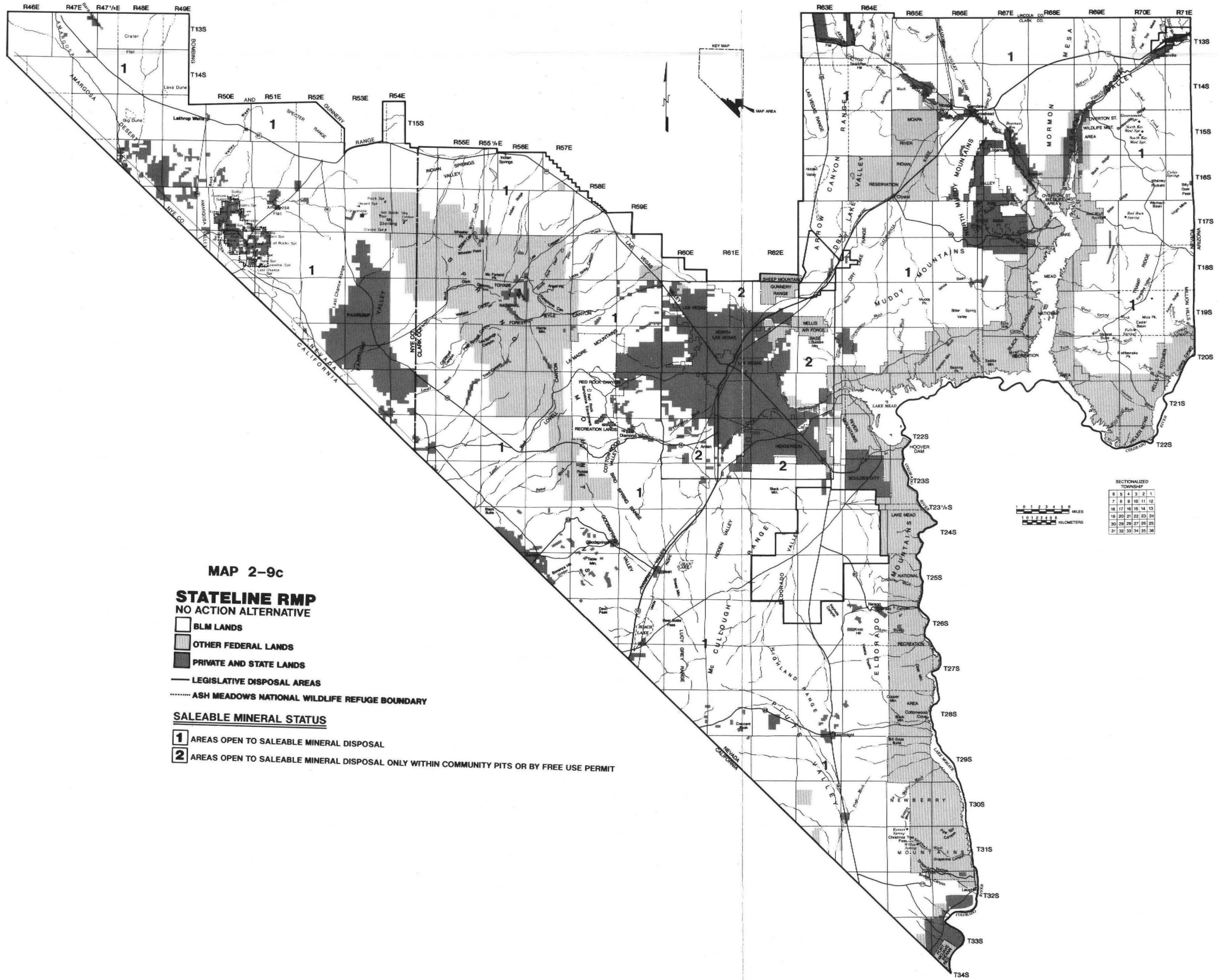
LOCATABLE MINERAL STATUS AND SOLID LEASABLE MINERAL STATUS

- 1** AREAS OPEN TO SOLID MINERAL LEASING AND LOCATABLE MINERALS
- 2** AREAS CLOSED TO SOLID MINERAL LEASING AND LOCATABLE MINERALS

SECTIONALIZED
TOWNSHIP

6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	32	33
34	35	36	37	38	39	40





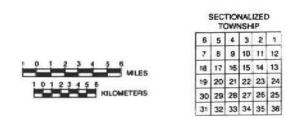
MAP 2-9c

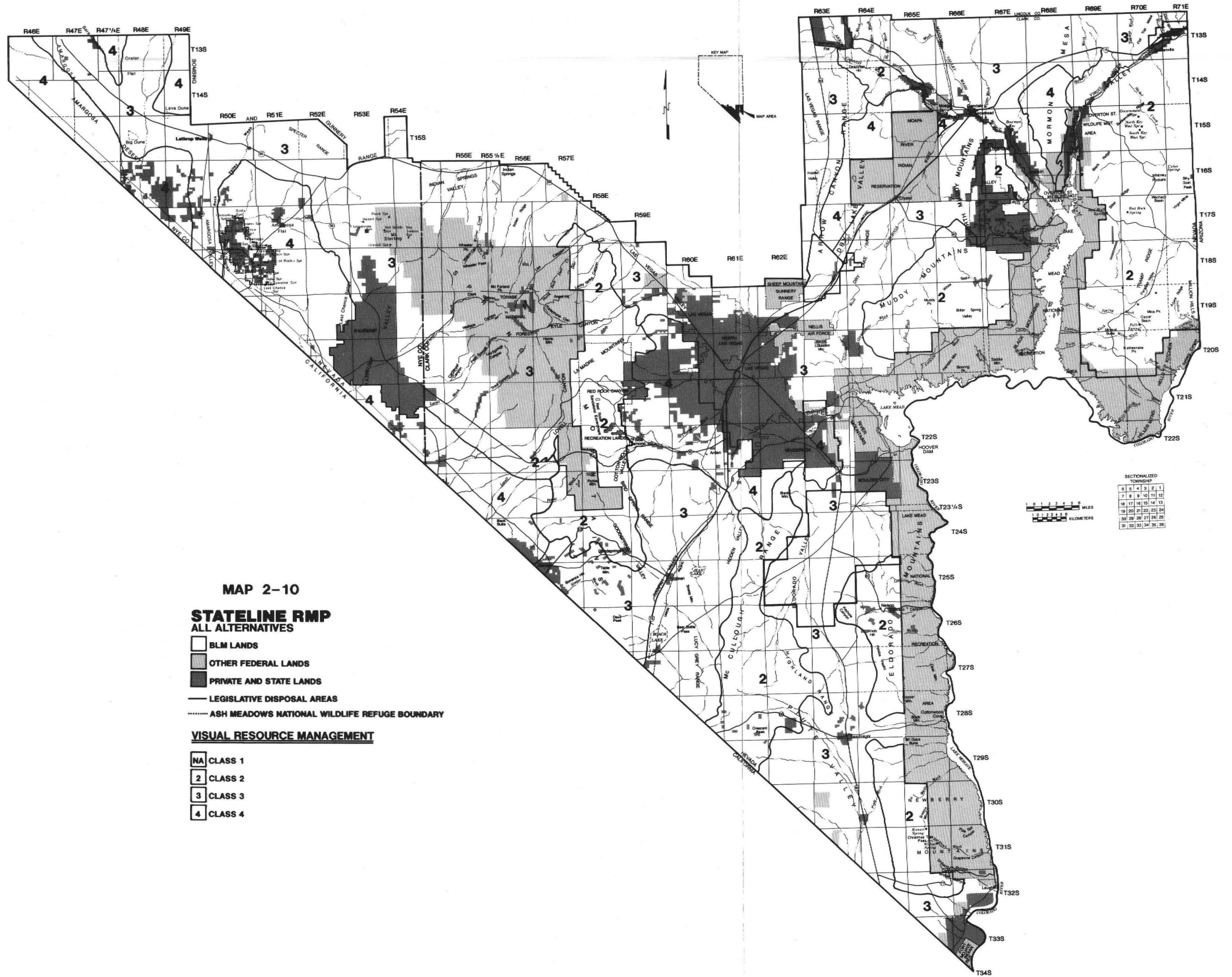
**STATELINE RMP
NO ACTION ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

SALEABLE MINERAL STATUS

- 1** AREAS OPEN TO SALEABLE MINERAL DISPOSAL
- 2** AREAS OPEN TO SALEABLE MINERAL DISPOSAL ONLY WITHIN COMMUNITY PITS OR BY FREE USE PERMIT





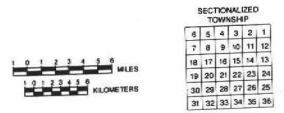
MAP 2-10

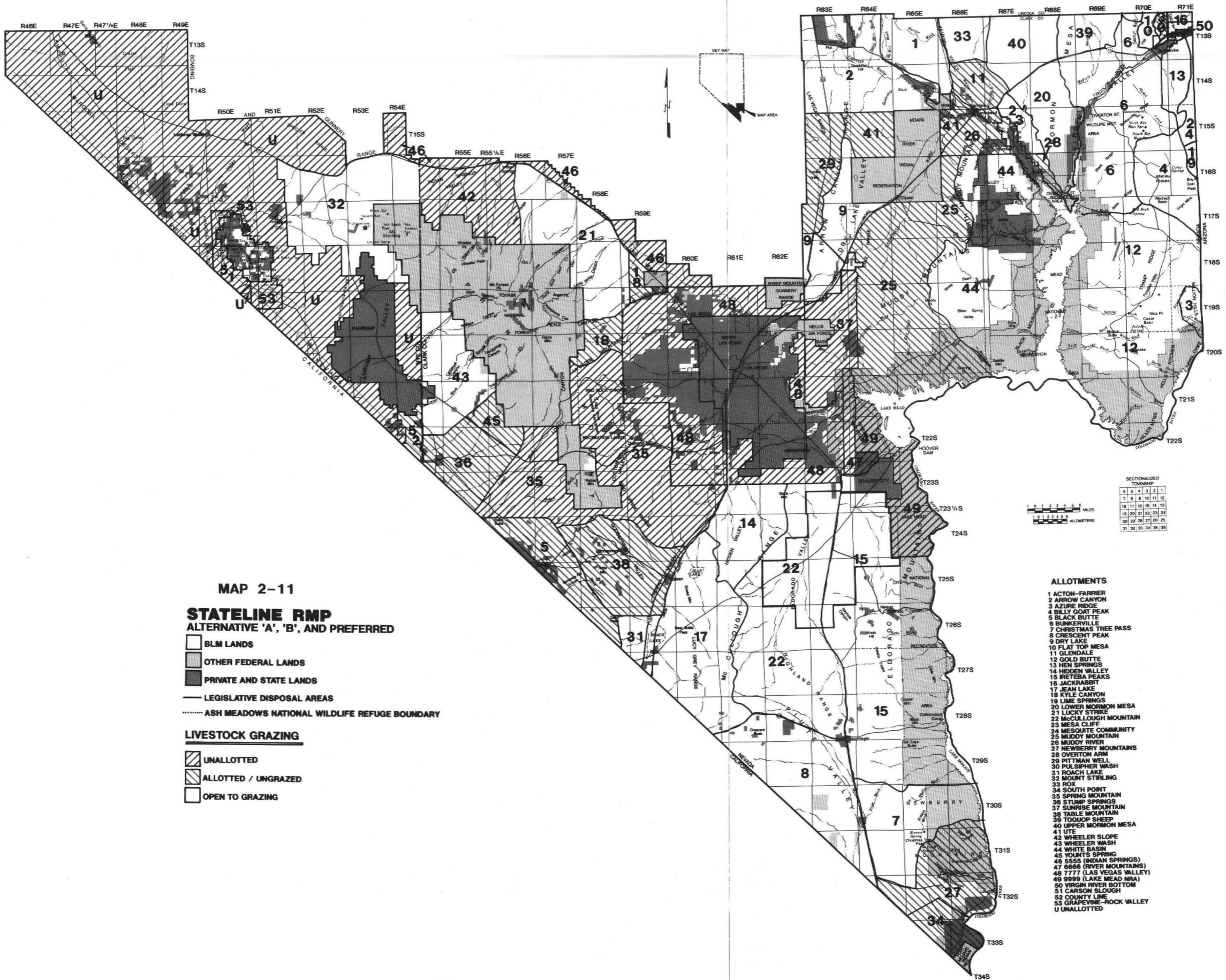
**STATELINE RMP
ALL ALTERNATIVES**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

VISUAL RESOURCE MANAGEMENT

- CLASS 1
- CLASS 2
- CLASS 3
- CLASS 4





MAP 2-11

STATELINE RMP
 ALTERNATIVE 'A', 'B', AND PREFERRED

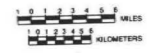
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

LIVESTOCK GRAZING

- UNALLOTTED
- ALLOTTED / UNGRAZED
- OPEN TO GRAZING

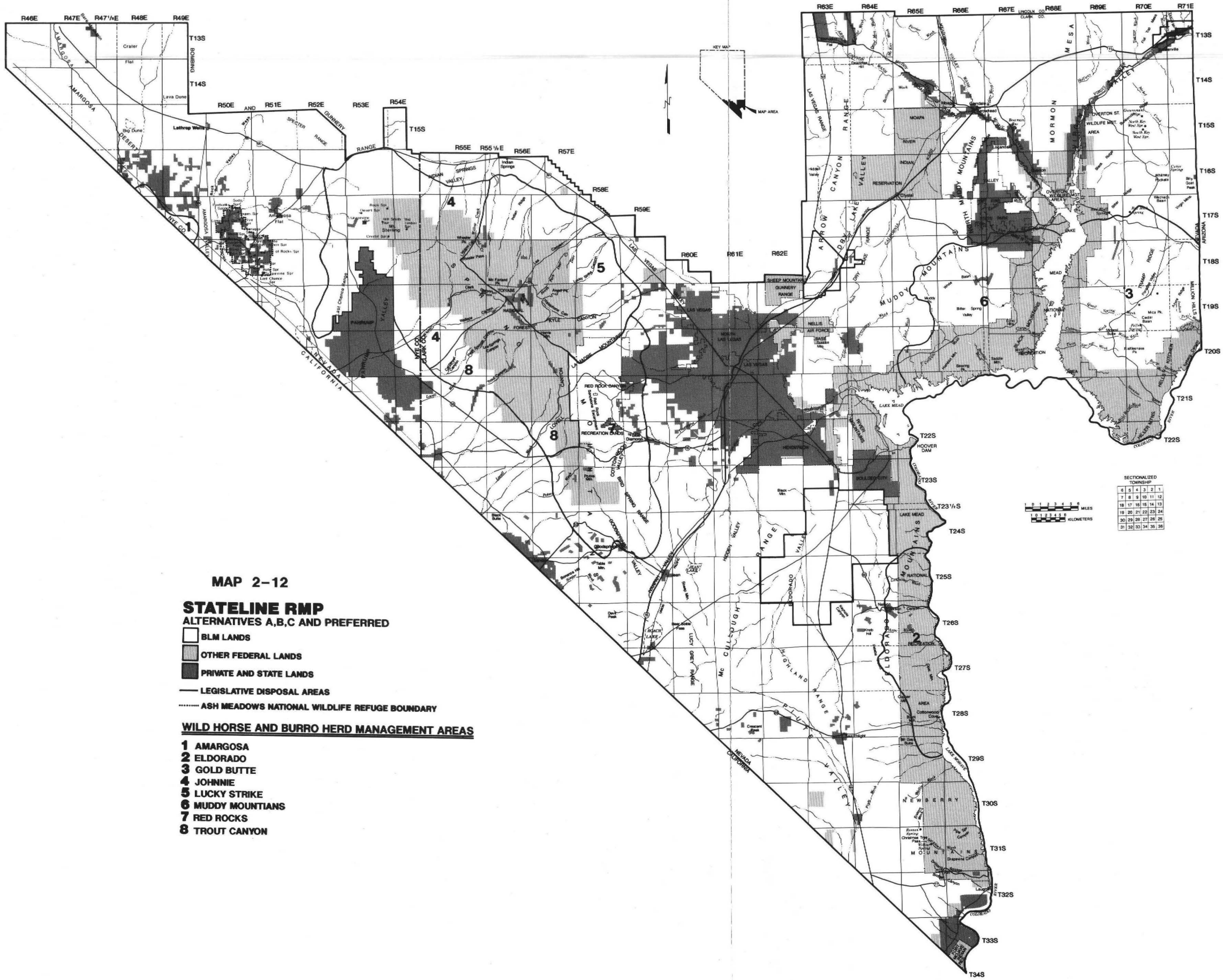
SECTIONALIZED TOWNSHIP

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36



ALLOTMENTS

- 1 ACTON-FARRIER
- 2 ARROW CANYON
- 3 AZURE RIDGE
- 4 BILLY GOAT PEAK
- 5 BLACK BUTTE
- 6 BUNKERVILLE
- 7 CHRISTMAS TREE PASS
- 8 CRESCENT PEAK
- 9 DRY LAKE
- 10 FLAT TOP MESA
- 11 GLENDALE
- 12 GOLD BUTTE
- 13 HEN SPRINGS
- 14 HIDDEN VALLEY
- 15 PRETEBA PEAKS
- 16 JACKRABBIT
- 17 JEAN LAKE
- 18 KYLE CANYON
- 19 LIME SPRINGS
- 20 LOWER MORMON MESA
- 21 LUCKY STRIKE
- 22 McCULLOUGH MOUNTAIN
- 23 MESA CLIFF
- 24 MESQUITE COMMUNITY
- 25 MUDDY MOUNTAIN
- 26 MUDDY RIVER
- 27 NEWBERRY MOUNTAINS
- 28 OVERTON ARM
- 29 PITTMAN WELL
- 30 PULSIPHER WASH
- 31 ROACH LAKE
- 32 MOUNT STIRLING
- 33 ROX
- 34 SOUTH POINT
- 35 SPRING MOUNTAIN
- 36 STUMP SPRINGS
- 37 SUNRISE MOUNTAIN
- 38 TABLE MOUNTAIN
- 39 TOQUOP SHEEP
- 40 UPPER MORMON MESA
- 41 UTE
- 42 WHEELER SLOPE
- 43 WHEELER WASH
- 44 WHITE BASIN
- 45 YOUNTS SPRING
- 46 5555 (INDIAN SPRINGS)
- 47 6666 (RIVER MOUNTAINS)
- 48 7777 (LAS VEGAS VALLEY)
- 49 9999 (LAKE MEAD NRA)
- 50 VIRGIN RIVER BOTTOM
- 51 CARSON SLOUGH
- 52 COUNTY LINE
- 53 GRAPEVINE-ROCK VALLEY
- U UNALLOTTED



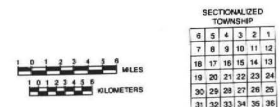
MAP 2-12

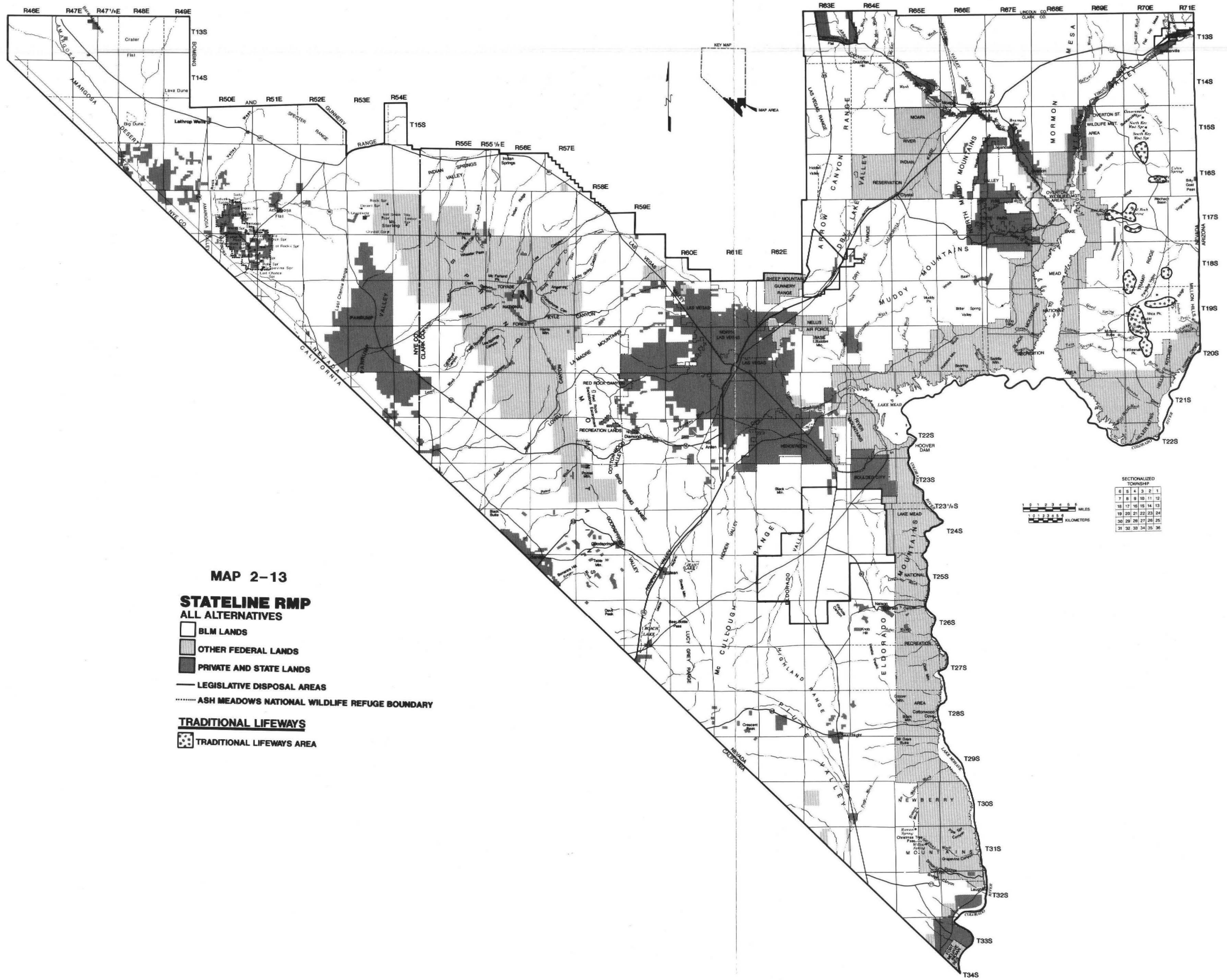
**STATELINE RMP
ALTERNATIVES A,B,C AND PREFERRED**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

WILD HORSE AND BURRO HERD MANAGEMENT AREAS

- 1** AMARGOSA
- 2** ELDORADO
- 3** GOLD BUTTE
- 4** JOHNNIE
- 5** LUCKY STRIKE
- 6** MUDDY MOUNTIANS
- 7** RED ROCKS
- 8** TROUT CANYON





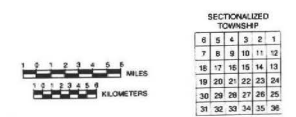
MAP 2-13

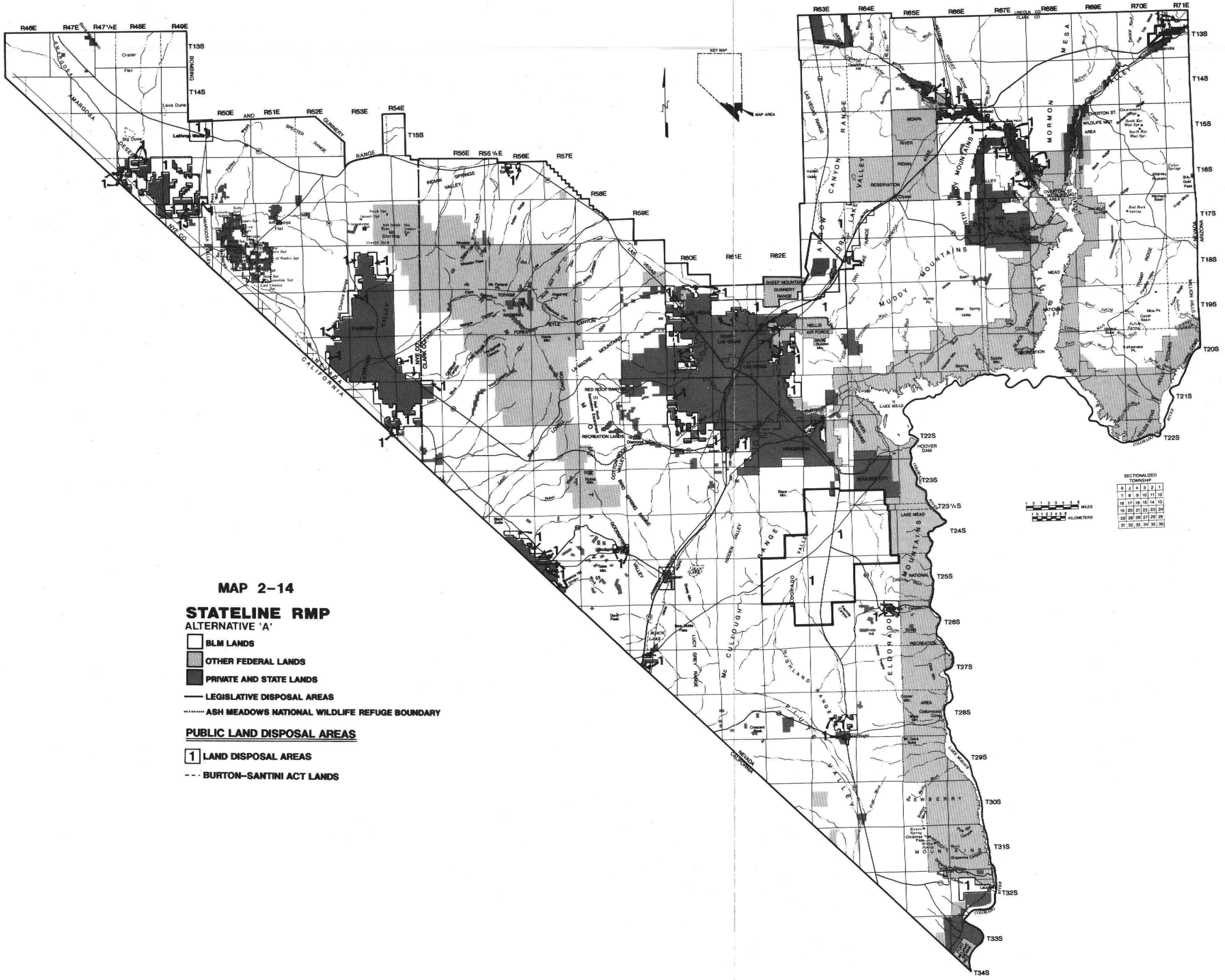
**STATELINE RMP
ALL ALTERNATIVES**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

TRADITIONAL LIFEWAYS

- TRADITIONAL LIFEWAYS AREA





MAP 2-14
STATELINE RMP
ALTERNATIVE 'A'

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

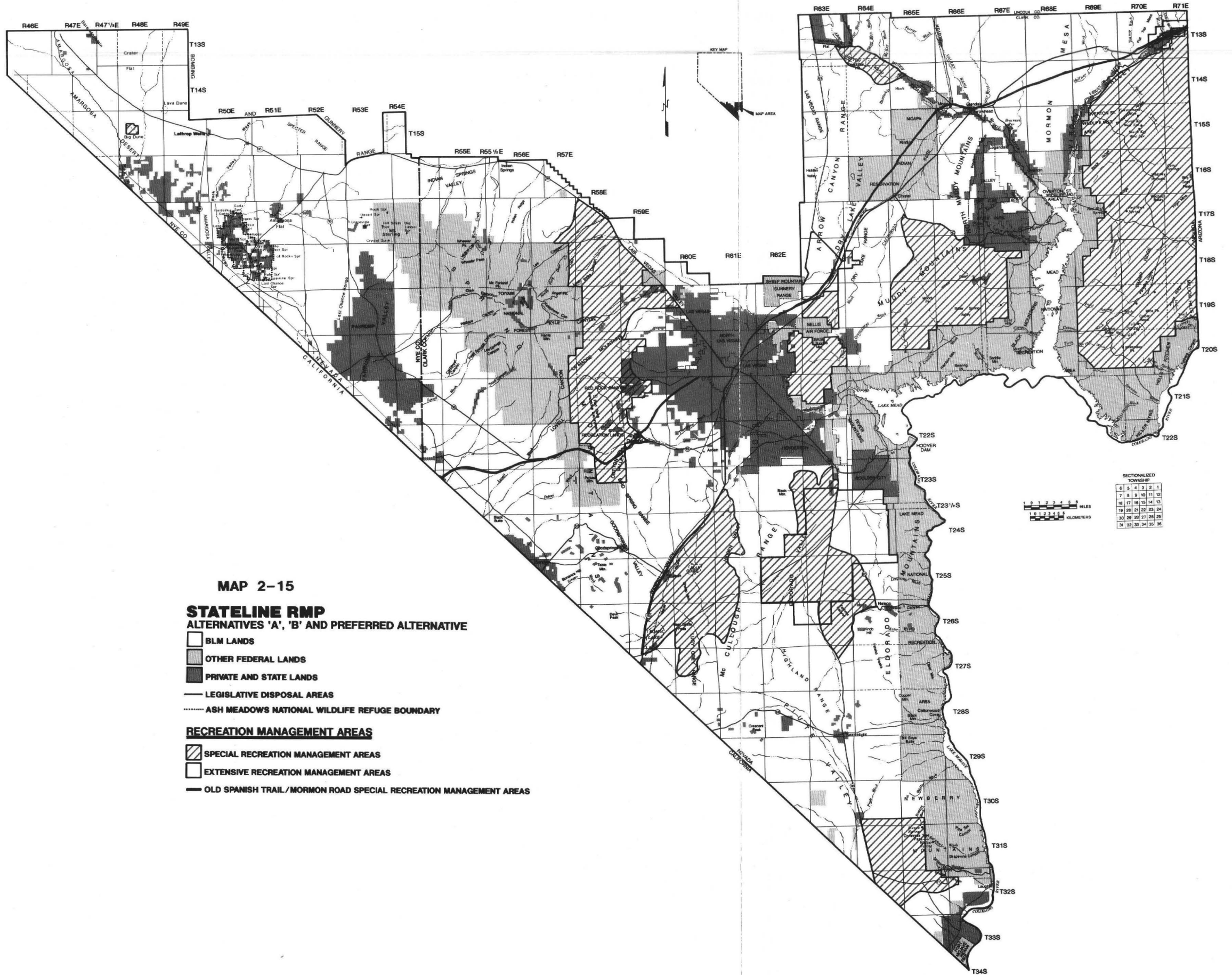
PUBLIC LAND DISPOSAL AREAS

- 1 LAND DISPOSAL AREAS
- - - BURTON-SANTINI ACT LANDS

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 6 MILES
0 1 2 3 4 5 6 KILOMETERS



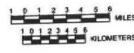
MAP 2-15

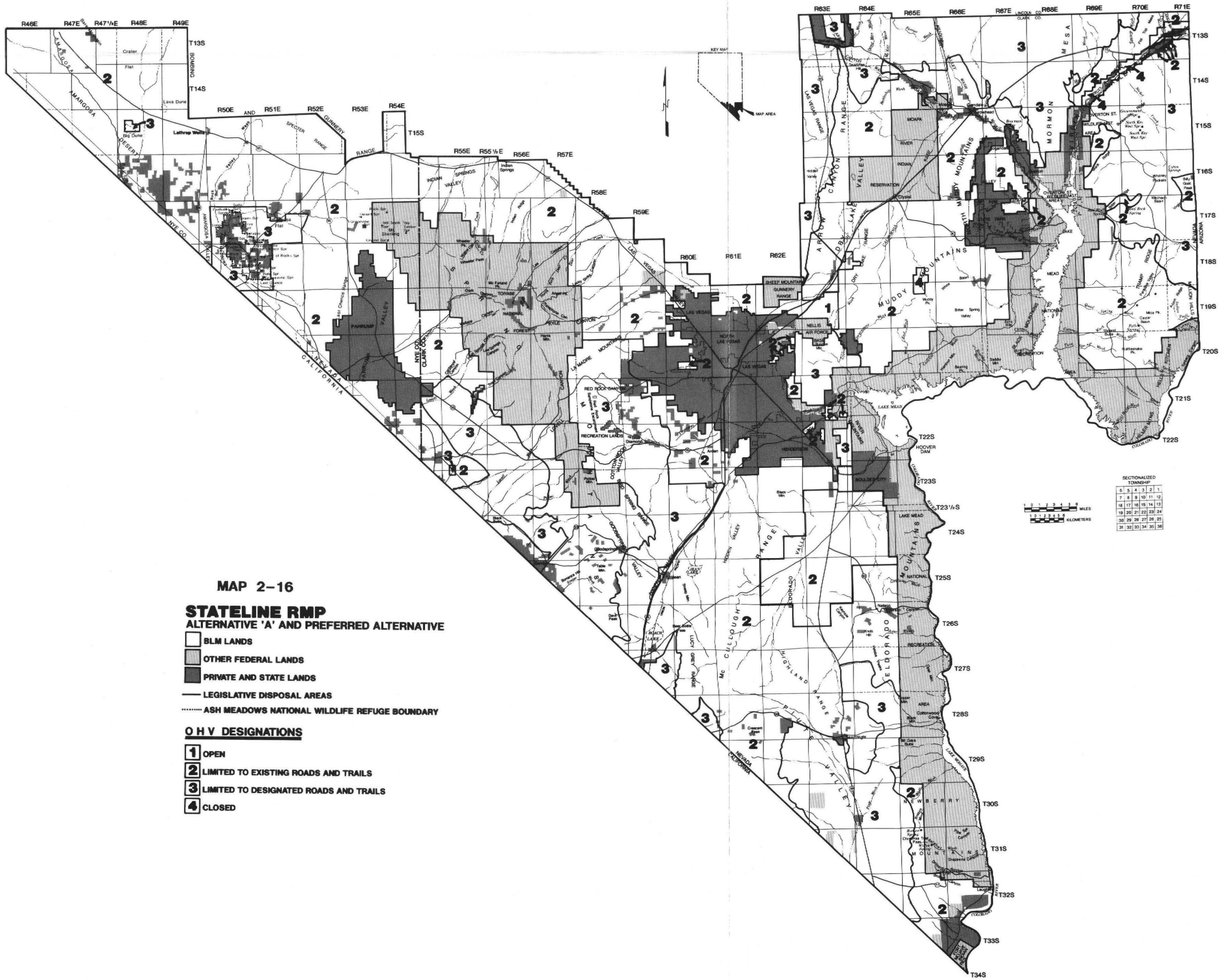
**STATELINE RMP
ALTERNATIVES 'A', 'B' AND PREFERRED ALTERNATIVE**

- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- RECREATION MANAGEMENT AREAS**
- SPECIAL RECREATION MANAGEMENT AREAS
 - EXTENSIVE RECREATION MANAGEMENT AREAS
 - OLD SPANISH TRAIL/MORMON ROAD SPECIAL RECREATION MANAGEMENT AREAS

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





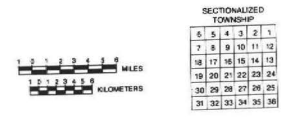
MAP 2-16

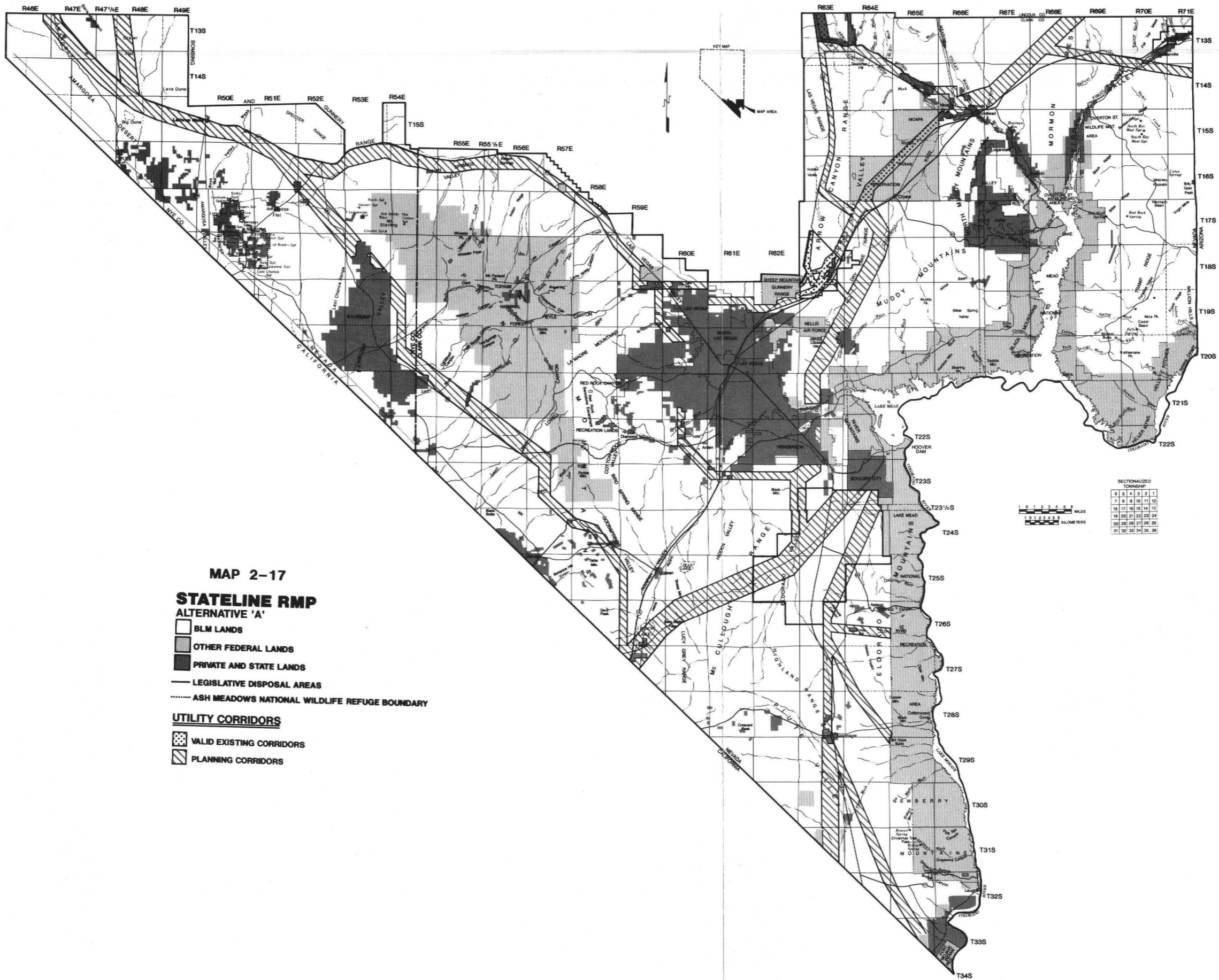
**STATELINE RMP
ALTERNATIVE 'A' AND PREFERRED ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

OHV DESIGNATIONS

- 1 OPEN
- 2 LIMITED TO EXISTING ROADS AND TRAILS
- 3 LIMITED TO DESIGNATED ROADS AND TRAILS
- 4 CLOSED





MAP 2-17

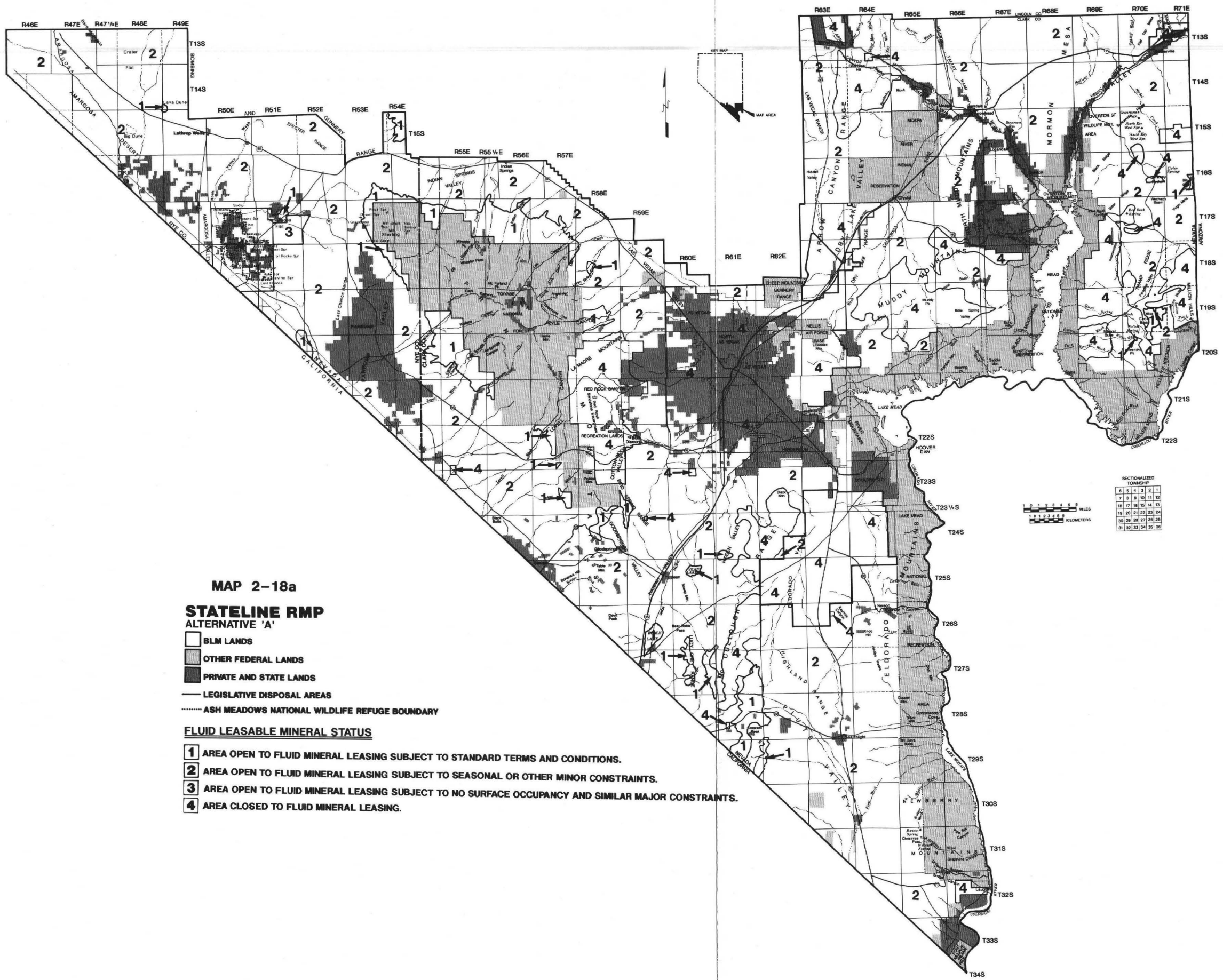
**STATELINE RMP
ALTERNATIVE 'A'**

- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- UTILITY CORRIDORS**
- VALID EXISTING CORRIDORS
 - PLANNING CORRIDORS

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS



MAP 2-18a

**STATELINE RMP
ALTERNATIVE 'A'**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

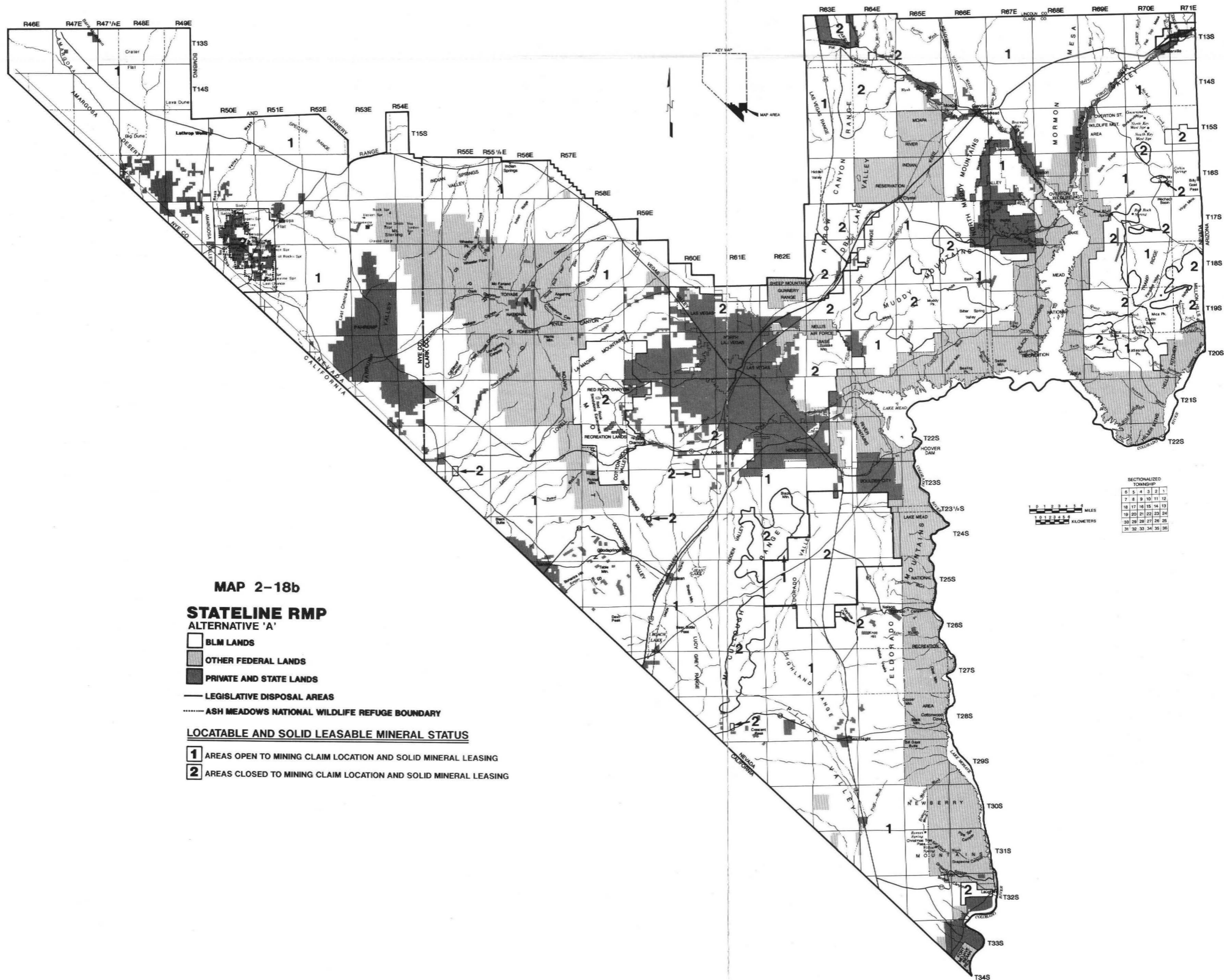
FLUID LEASABLE MINERAL STATUS

- 1** AREA OPEN TO FLUID MINERAL LEASING SUBJECT TO STANDARD TERMS AND CONDITIONS.
- 2** AREA OPEN TO FLUID MINERAL LEASING SUBJECT TO SEASONAL OR OTHER MINOR CONSTRAINTS.
- 3** AREA OPEN TO FLUID MINERAL LEASING SUBJECT TO NO SURFACE OCCUPANCY AND SIMILAR MAJOR CONSTRAINTS.
- 4** AREA CLOSED TO FLUID MINERAL LEASING.

SECTIONALIZED TOWNSHIP

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36





MAP 2-18b
STATELINE RMP
ALTERNATIVE 'A'

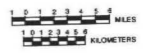
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

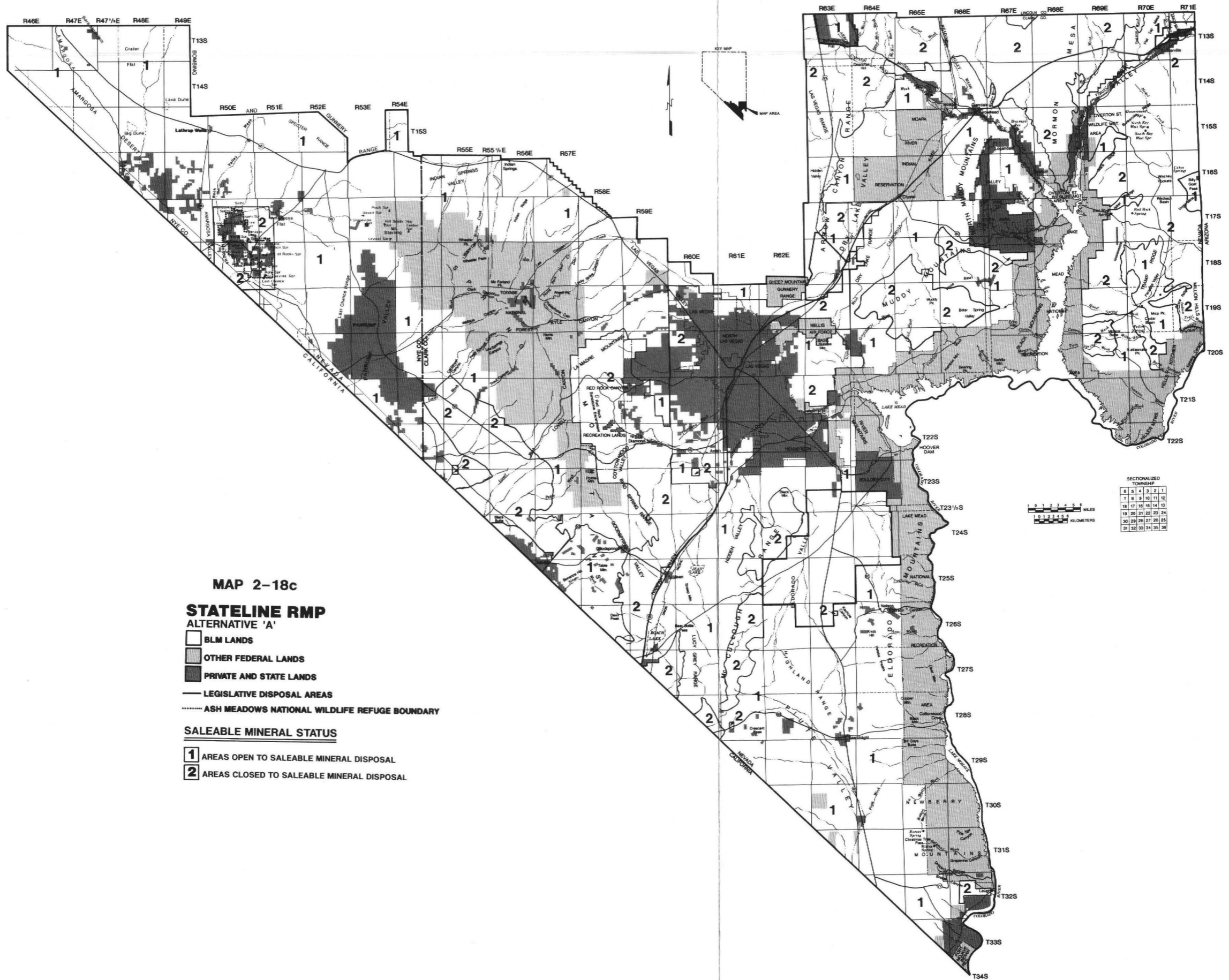
LOCATABLE AND SOLID LEASABLE MINERAL STATUS

- 1** AREAS OPEN TO MINING CLAIM LOCATION AND SOLID MINERAL LEASING
- 2** AREAS CLOSED TO MINING CLAIM LOCATION AND SOLID MINERAL LEASING

SECTIONALIZED TOWNSHIP

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36





MAP 2-18c

**STATELINE RMP
ALTERNATIVE 'A'**

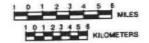
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

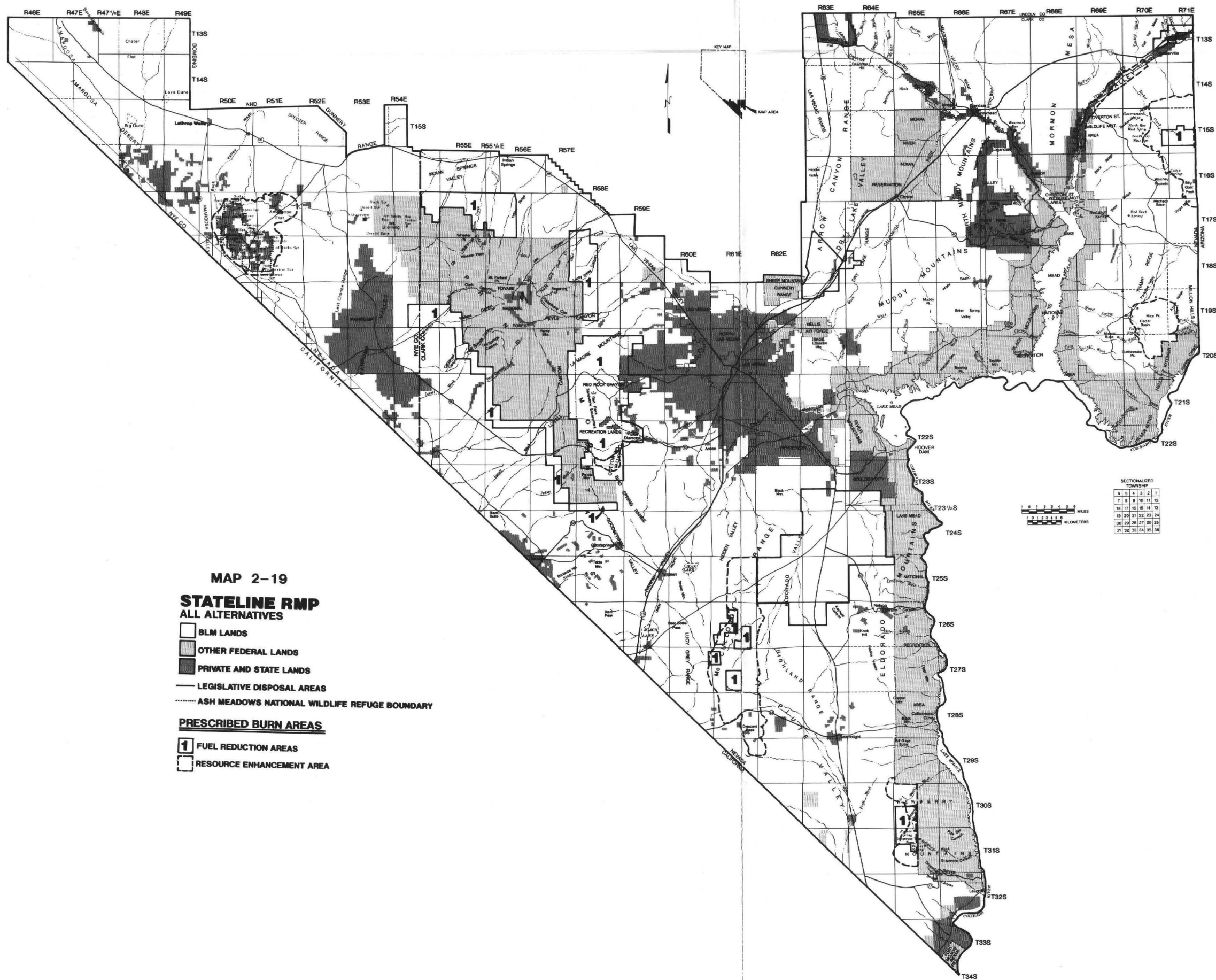
SALEABLE MINERAL STATUS

- 1 AREAS OPEN TO SALEABLE MINERAL DISPOSAL
- 2 AREAS CLOSED TO SALEABLE MINERAL DISPOSAL

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 2-19
STATELINE RMP
ALL ALTERNATIVES

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

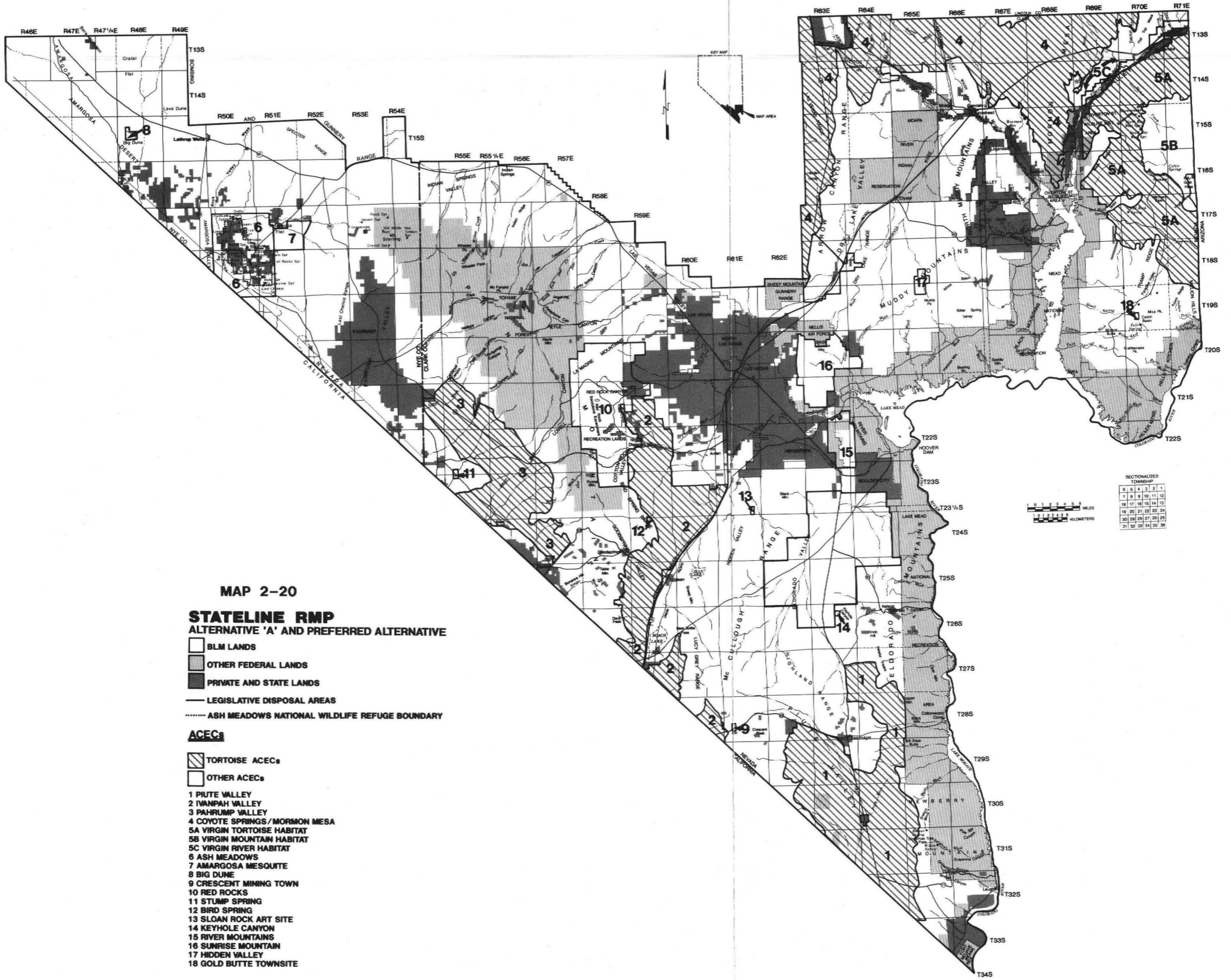
PRESCRIBED BURN AREAS

- 1 FUEL REDUCTION AREAS
- RESOURCE ENHANCEMENT AREA

SECTIONALIZED
TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS



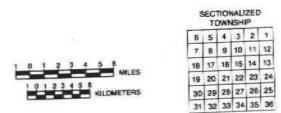
MAP 2-20

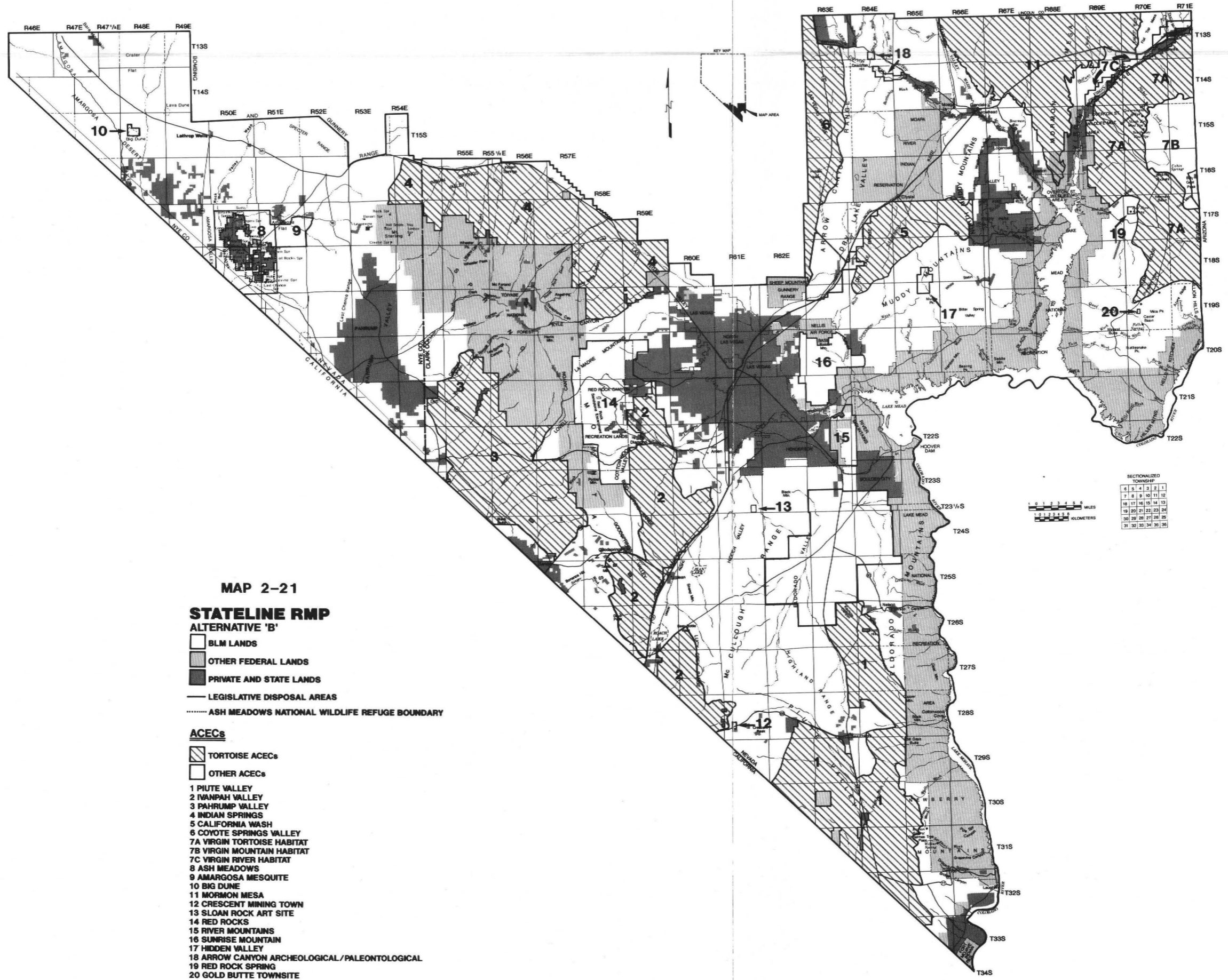
**STATELINE RMP
ALTERNATIVE 'A' AND PREFERRED ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

ACECs

- TORTOISE ACECs
 - OTHER ACECs
- 1 PIUTE VALLEY
 - 2 IVANPAH VALLEY
 - 3 PAHRUMP VALLEY
 - 4 COYOTE SPRINGS/MORMON MESA
 - 5A VIRGIN TORTOISE HABITAT
 - 5B VIRGIN MOUNTAIN HABITAT
 - 5C VIRGIN RIVER HABITAT
 - 6 ASH MEADOWS
 - 7 AMARGOSA MESQUITE
 - 8 BIG DUNE
 - 9 CRESCENT MINING TOWN
 - 10 RED ROCKS
 - 11 STUMP SPRING
 - 12 BIRD SPRING
 - 13 SLOAN ROCK ART SITE
 - 14 KEYHOLE CANYON
 - 15 RIVER MOUNTAINS
 - 16 SUNRISE MOUNTAIN
 - 17 HIDDEN VALLEY
 - 18 GOLD BUTTE TOWNSITE





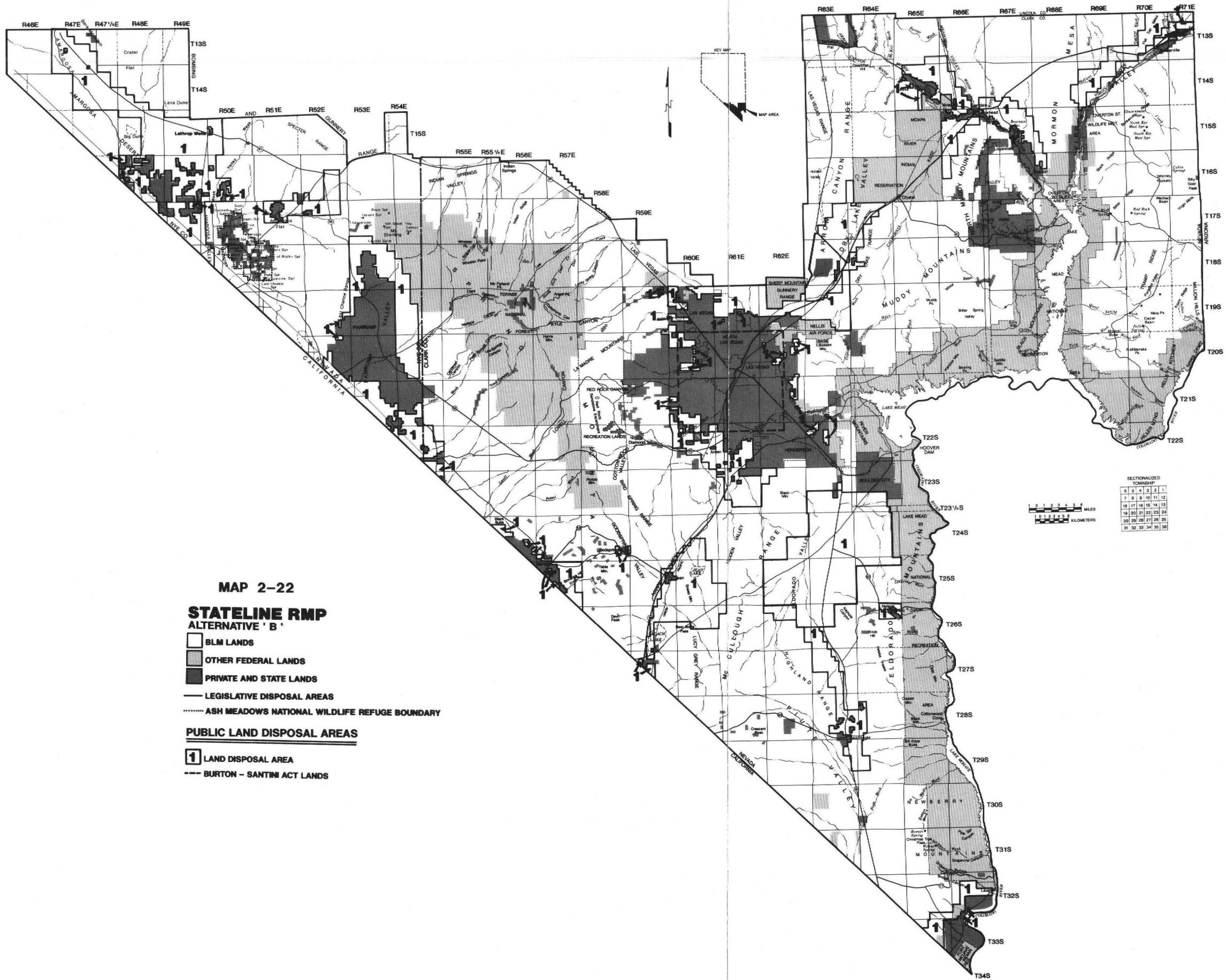
MAP 2-21

**STATELINE RMP
ALTERNATIVE 'B'**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

ACECs

- TORTOISE ACECs
 - OTHER ACECs
- 1 PIUTE VALLEY
 - 2 NANPAH VALLEY
 - 3 PAHRUMP VALLEY
 - 4 INDIAN SPRINGS
 - 5 CALIFORNIA WASH
 - 6 COYOTE SPRINGS VALLEY
 - 7A VIRGIN TORTOISE HABITAT
 - 7B VIRGIN MOUNTAIN HABITAT
 - 7C VIRGIN RIVER HABITAT
 - 8 ASH MEADOWS
 - 9 AMARGOSA MESQUITE
 - 10 BIG DUNE
 - 11 MORMON MESA
 - 12 CRESCENT MINING TOWN
 - 13 SLOAN ROCK ART SITE
 - 14 RED ROCKS
 - 15 RIVER MOUNTAINS
 - 16 SUNRISE MOUNTAIN
 - 17 HIDDEN VALLEY
 - 18 ARROW CANYON ARCHEOLOGICAL/PALEONTOLOGICAL
 - 19 RED ROCK SPRING
 - 20 GOLD BUTTE TOWNSITE



MAP 2-22

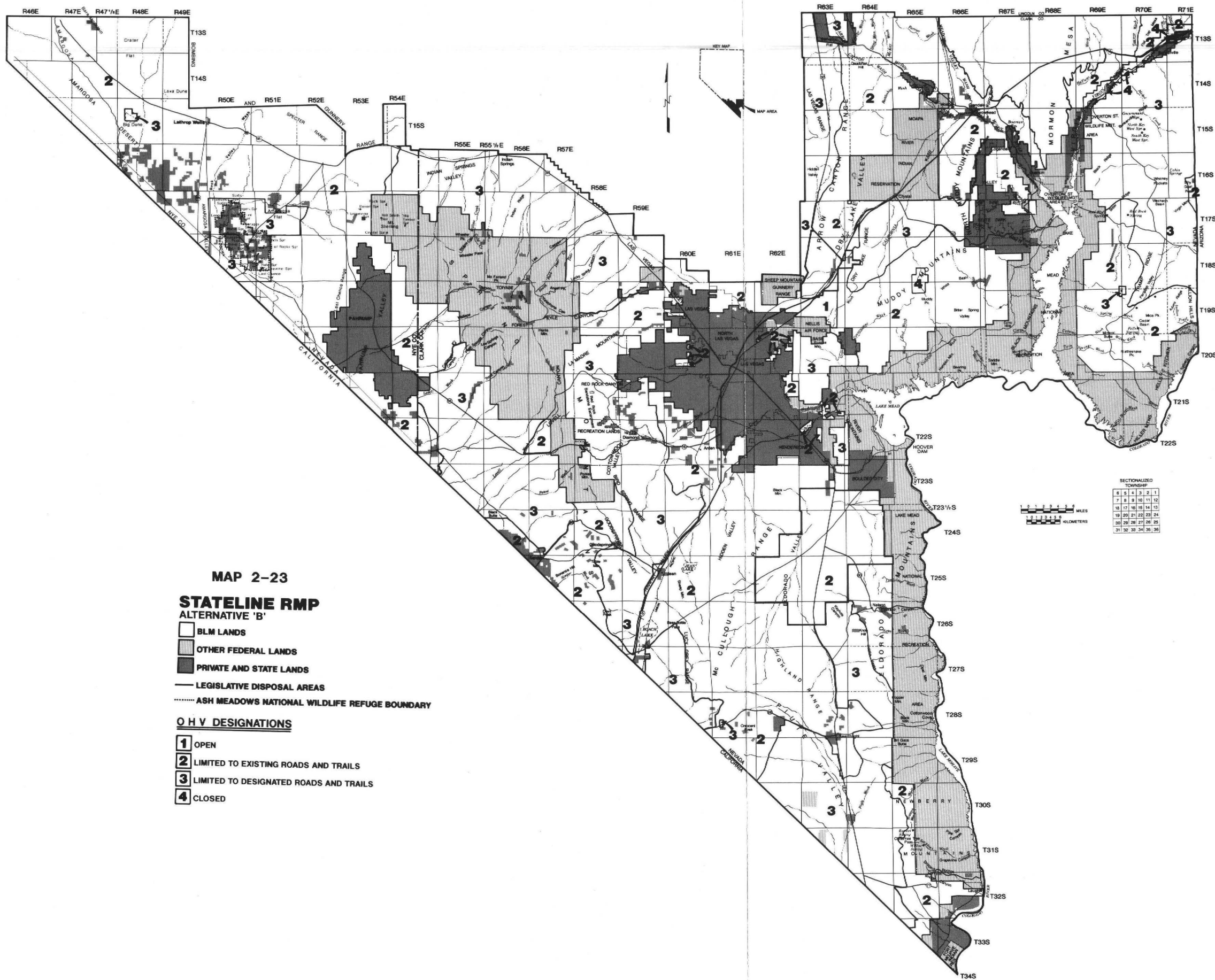
**STATELINE RMP
ALTERNATIVE 'B'**

- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- PUBLIC LAND DISPOSAL AREAS**
- 1 LAND DISPOSAL AREA
 - BURTON - SANTINI ACT LANDS

SECTIONALIZED
TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 2-23

**STATELINE RMP
ALTERNATIVE 'B'**

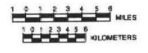
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

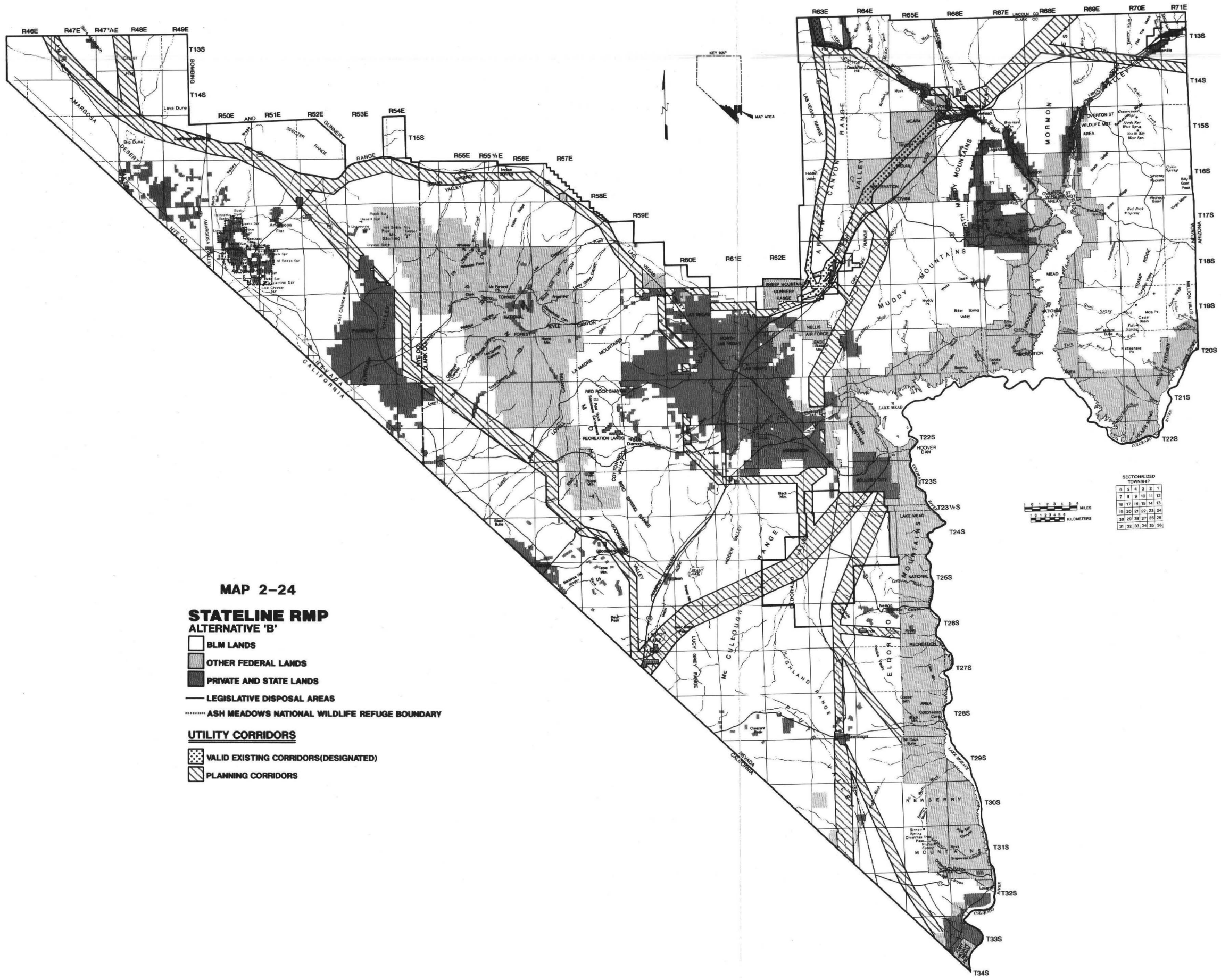
OHV DESIGNATIONS

- 1 OPEN
- 2 LIMITED TO EXISTING ROADS AND TRAILS
- 3 LIMITED TO DESIGNATED ROADS AND TRAILS
- 4 CLOSED

SECTIONALIZED
TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





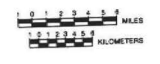
MAP 2-24

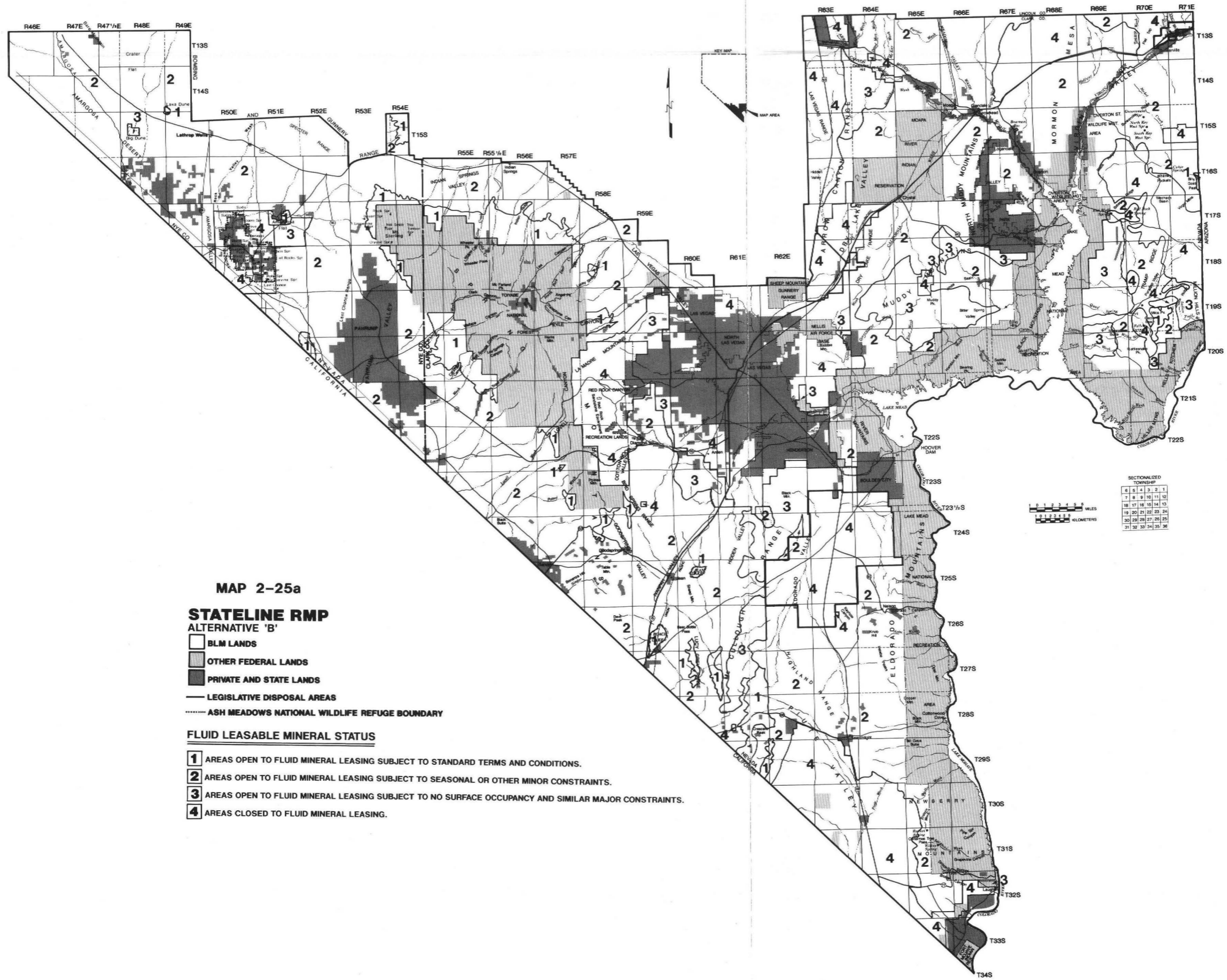
**STATELINE RMP
ALTERNATIVE 'B'**

- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- UTILITY CORRIDORS**
- VALID EXISTING CORRIDORS (DESIGNATED)
 - PLANNING CORRIDORS

SECTIONALIZED
TOWNSHIP

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36





MAP 2-25a

**STATELINE RMP
ALTERNATIVE 'B'**

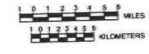
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

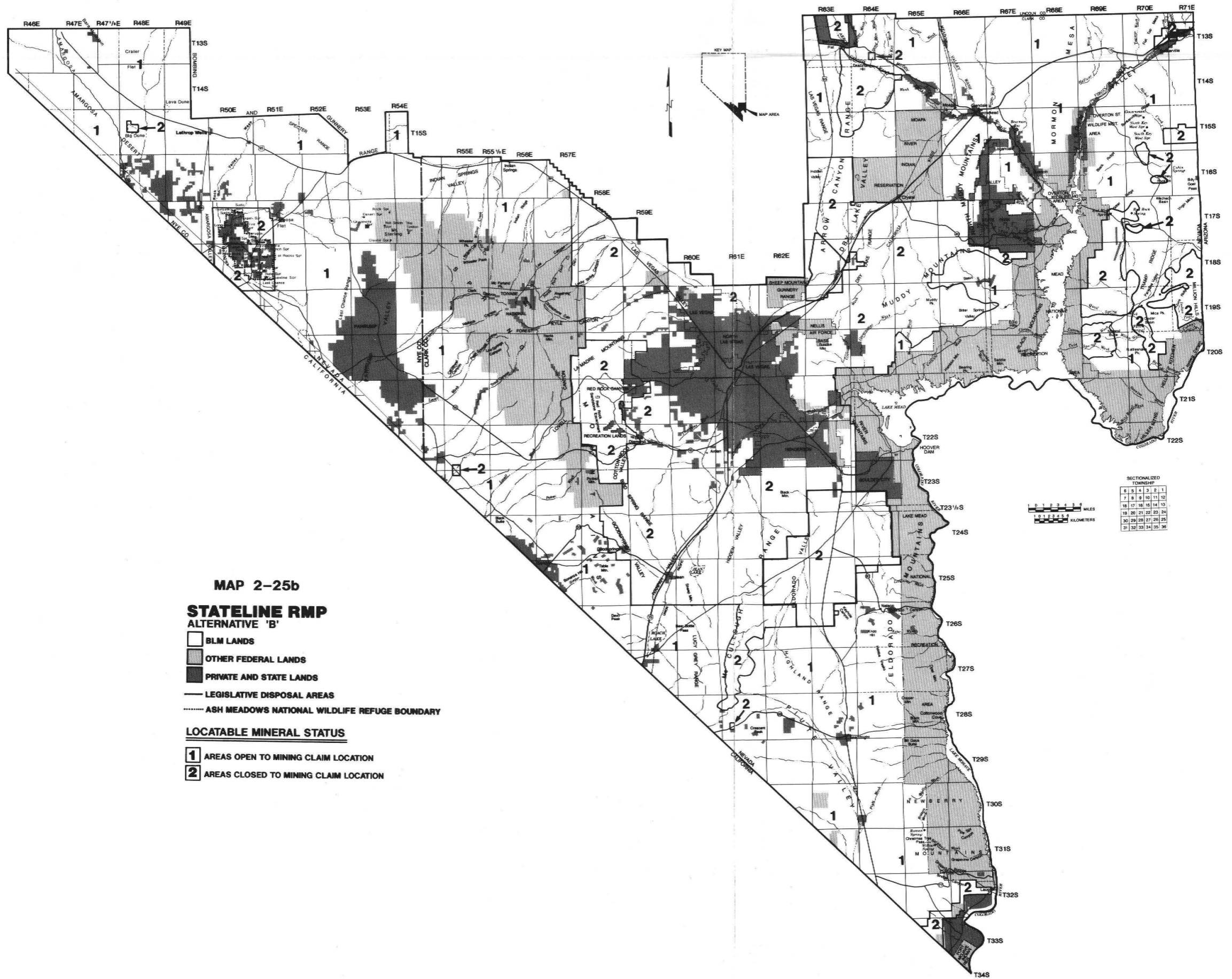
FLUID LEASABLE MINERAL STATUS

- 1** AREAS OPEN TO FLUID MINERAL LEASING SUBJECT TO STANDARD TERMS AND CONDITIONS.
- 2** AREAS OPEN TO FLUID MINERAL LEASING SUBJECT TO SEASONAL OR OTHER MINOR CONSTRAINTS.
- 3** AREAS OPEN TO FLUID MINERAL LEASING SUBJECT TO NO SURFACE OCCUPANCY AND SIMILAR MAJOR CONSTRAINTS.
- 4** AREAS CLOSED TO FLUID MINERAL LEASING.

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 2-25b

**STATELINE RMP
ALTERNATIVE 'B'**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

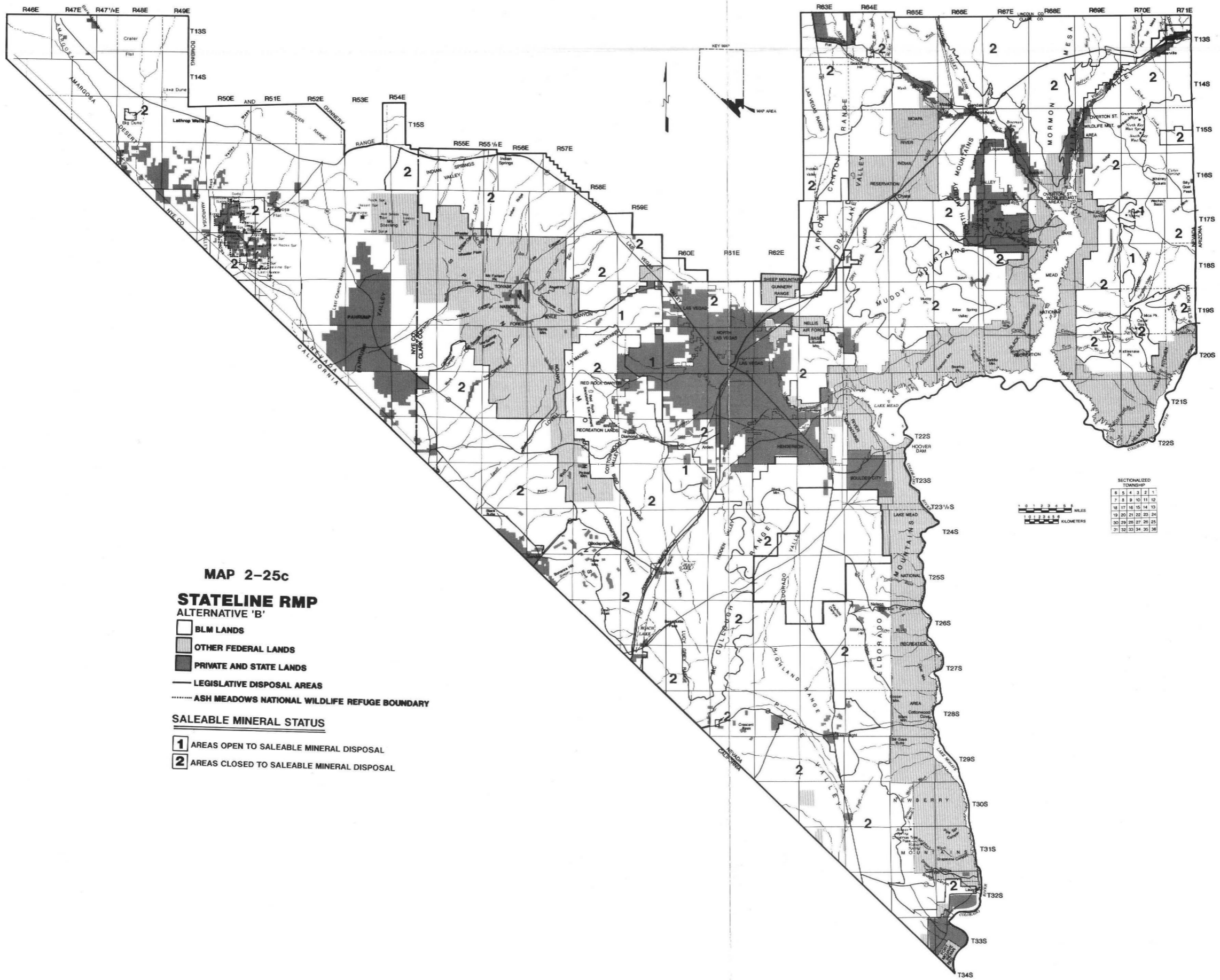
LOCATABLE MINERAL STATUS

- 1 AREAS OPEN TO MINING CLAIM LOCATION
- 2 AREAS CLOSED TO MINING CLAIM LOCATION

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS



MAP 2-25c

**STATELINE RMP
ALTERNATIVE 'B'**

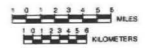
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

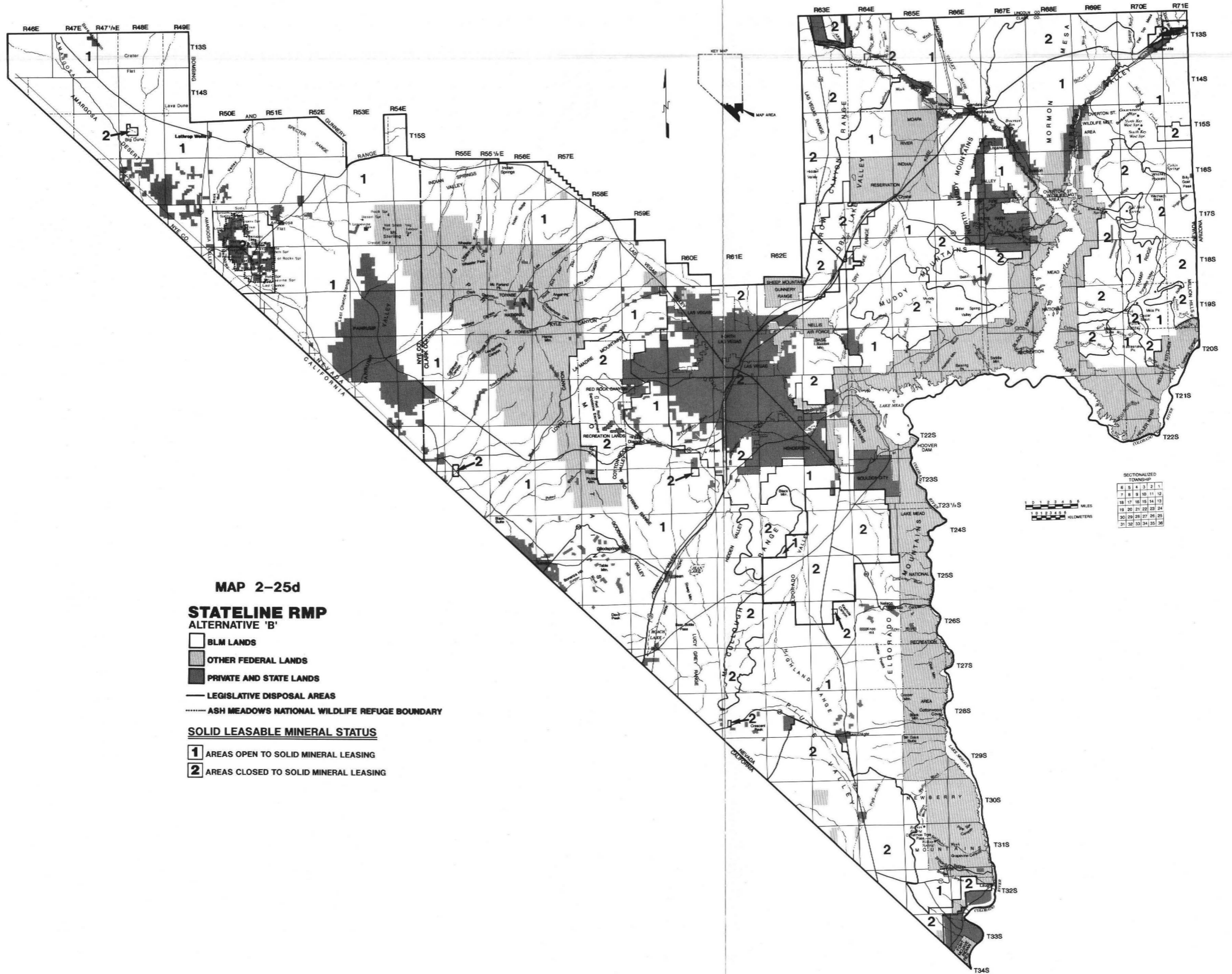
SALEABLE MINERAL STATUS

- 1** AREAS OPEN TO SALEABLE MINERAL DISPOSAL
- 2** AREAS CLOSED TO SALEABLE MINERAL DISPOSAL

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36





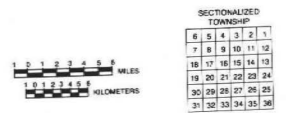
MAP 2-25d

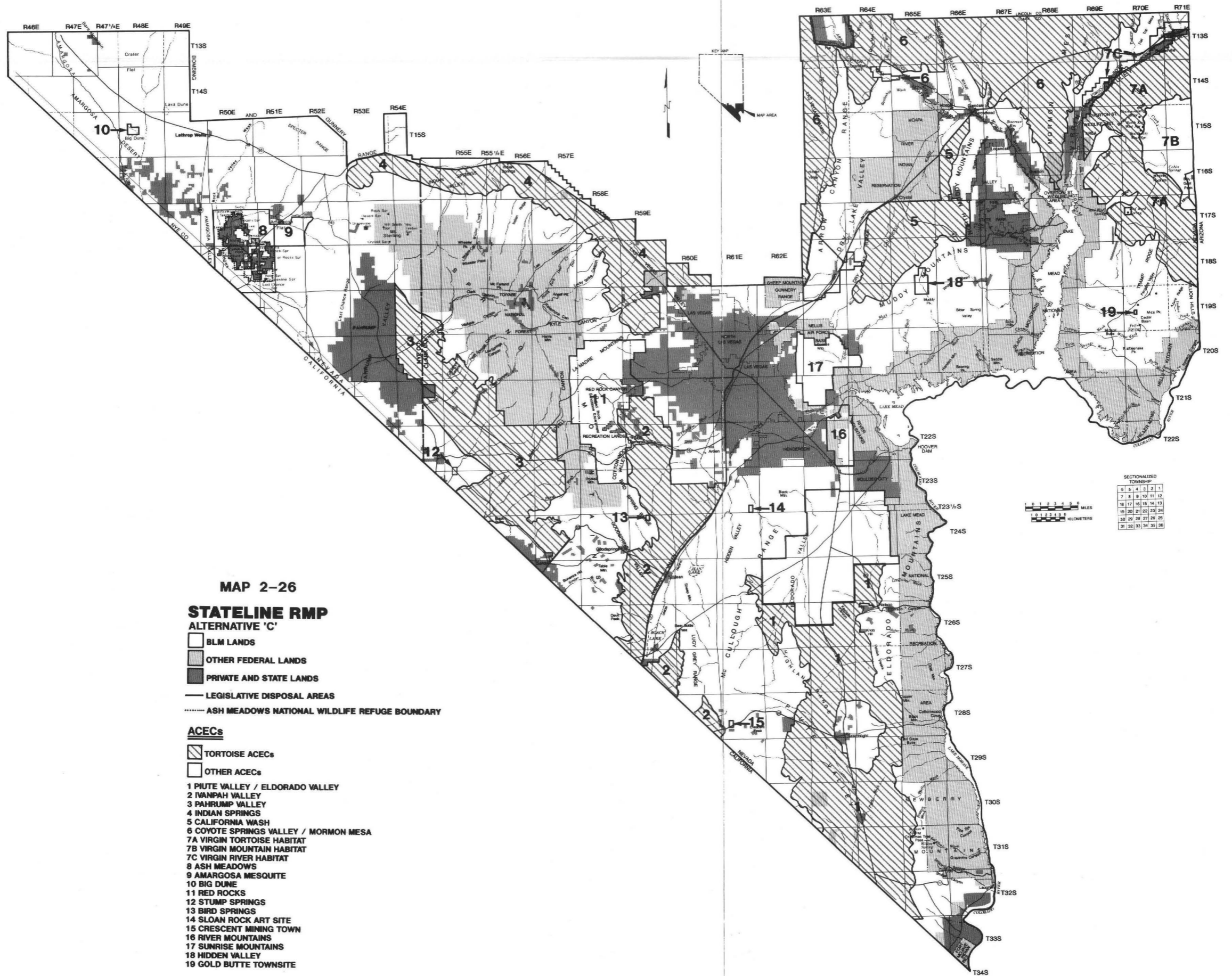
**STATELINE RMP
ALTERNATIVE 'B'**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

SOLID LEASABLE MINERAL STATUS

- 1 AREAS OPEN TO SOLID MINERAL LEASING
- 2 AREAS CLOSED TO SOLID MINERAL LEASING





MAP 2-26

**STATELINE RMP
ALTERNATIVE 'C'**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

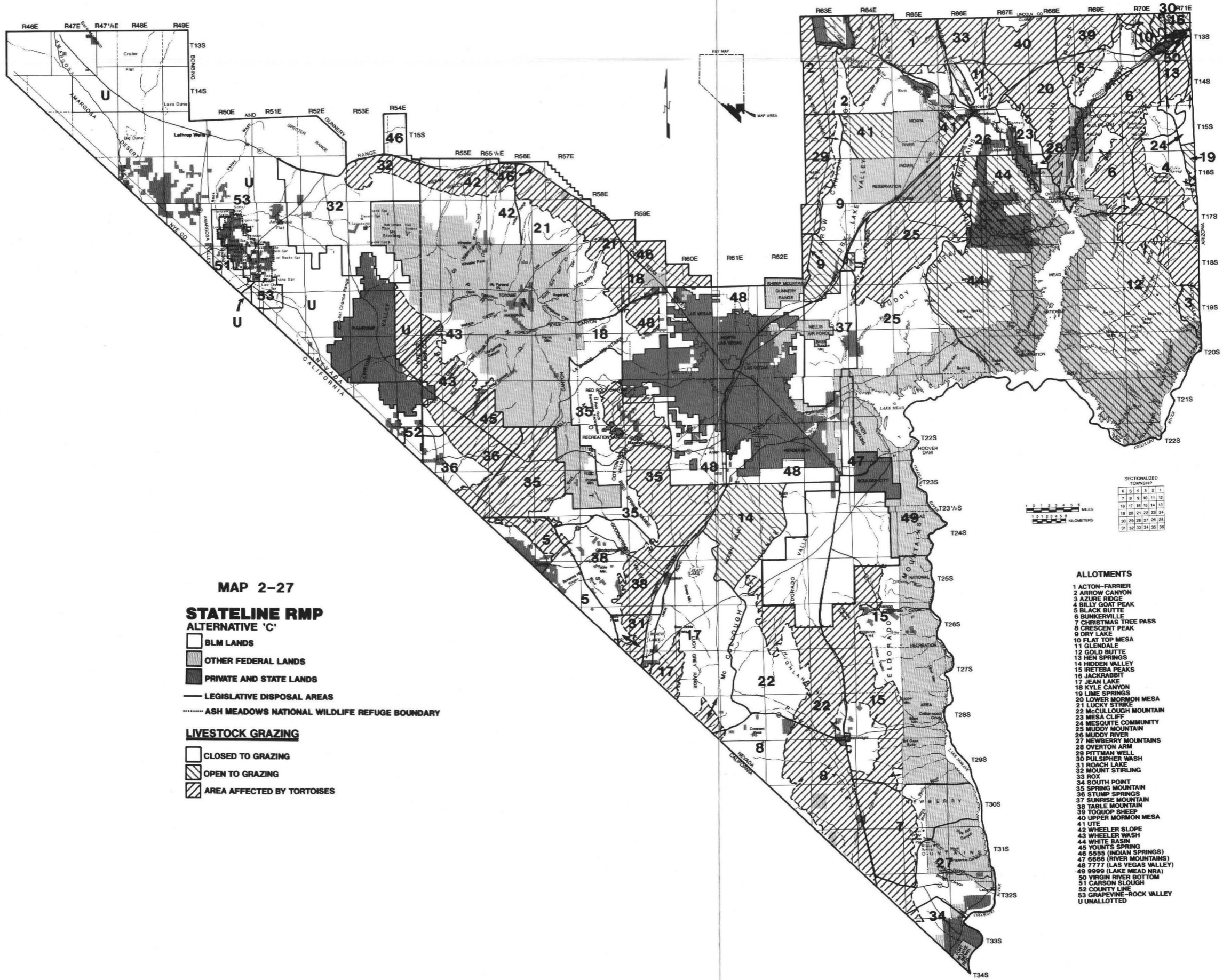
ACECs

- TORTOISE ACECs
 - OTHER ACECs
- 1 PIUTE VALLEY / ELDORADO VALLEY
 - 2 IVANPAH VALLEY
 - 3 PAHRUMP VALLEY
 - 4 INDIAN SPRINGS
 - 5 CALIFORNIA WASH
 - 6 COYOTE SPRINGS VALLEY / MORMON MESA
 - 7A VIRGIN TORTOISE HABITAT
 - 7B VIRGIN MOUNTAIN HABITAT
 - 7C VIRGIN RIVER HABITAT
 - 8 ASH MEADOWS
 - 9 AMARGOSA MESQUITE
 - 10 BIG DUNE
 - 11 RED ROCKS
 - 12 STUMP SPRINGS
 - 13 BIRD SPRINGS
 - 14 SLOAN ROCK ART SITE
 - 15 CRESCENT MINING TOWN
 - 16 RIVER MOUNTAINS
 - 17 SUNRISE MOUNTAINS
 - 18 HIDDEN VALLEY
 - 19 GOLD BUTTE TOWNSITE

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 6 MILES
0 1 2 3 4 5 KILOMETERS



MAP 2-27

**STATELINE RMP
ALTERNATIVE 'C'**

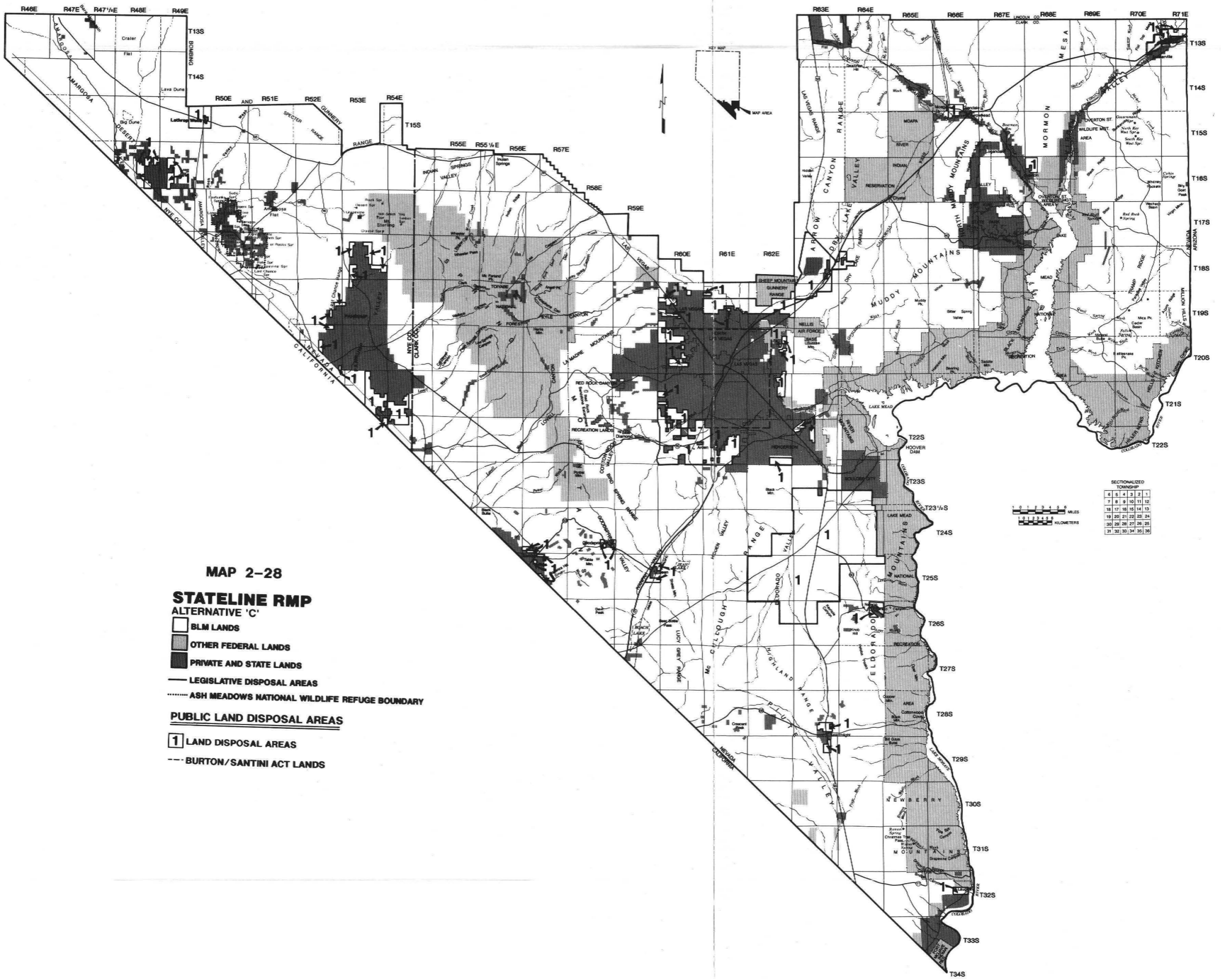
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

LIVESTOCK GRAZING

- CLOSED TO GRAZING
- OPEN TO GRAZING
- AREA AFFECTED BY TORTOISES

ALLOTMENTS

- 1 ACTON-FARRIER
- 2 ARROW CANYON
- 3 AZURE RIDGE
- 4 BILLY GOAT PEAK
- 5 BLACK BUTTE
- 6 BUNKERVILLE
- 7 CHRISTMAS TREE PASS
- 8 CRESCENT PEAK
- 9 DRY LAKE
- 10 FLAT TOP MESA
- 11 GLENDALE
- 12 GOLD BUTTE
- 13 HEN SPRINGS
- 14 HIDDEN VALLEY
- 15 IRETEBA PEAKS
- 16 JACKRABBIT
- 17 JEAN LAKE
- 18 KYLE CANYON
- 19 LIME SPRINGS
- 20 LOWER MORMON MESA
- 21 LUCKY STRIKE
- 22 McCULLOUGH MOUNTAIN
- 23 MESA CLIFF
- 24 MESQUITE COMMUNITY
- 25 MUDDY MOUNTAIN
- 26 MUDDY RIVER
- 27 NEWBERRY MOUNTAINS
- 28 OVERTON ARM
- 29 PITTMAN WELL
- 30 PULSIPHER WASH
- 31 ROACH LAKE
- 32 MOUNT STIRLING
- 33 ROX
- 34 SOUTH POINT
- 35 SPRING MOUNTAIN
- 36 STUMP SPRINGS
- 37 SUNRISE MOUNTAIN
- 38 TABLE MOUNTAIN
- 39 TOQUOP SHEEP
- 40 UPPER MORMON MESA
- 41 UTE
- 42 WHEELER SLOPE
- 43 WHEELER WASH
- 44 WHITE BASIN
- 45 YOUNT'S SPRING
- 46 5555 (INDIAN SPRINGS)
- 47 6666 (RIVER MOUNTAINS)
- 48 7777 (LAS VEGAS VALLEY)
- 49 9999 (LAKE MEAD NRA)
- 50 VIRGIN RIVER BOTTOM
- 51 CARSON SLOUGH
- 52 COUNTY LINE
- 53 GRAPEVINE-ROCK VALLEY
- U UNALLOTTED



MAP 2-28

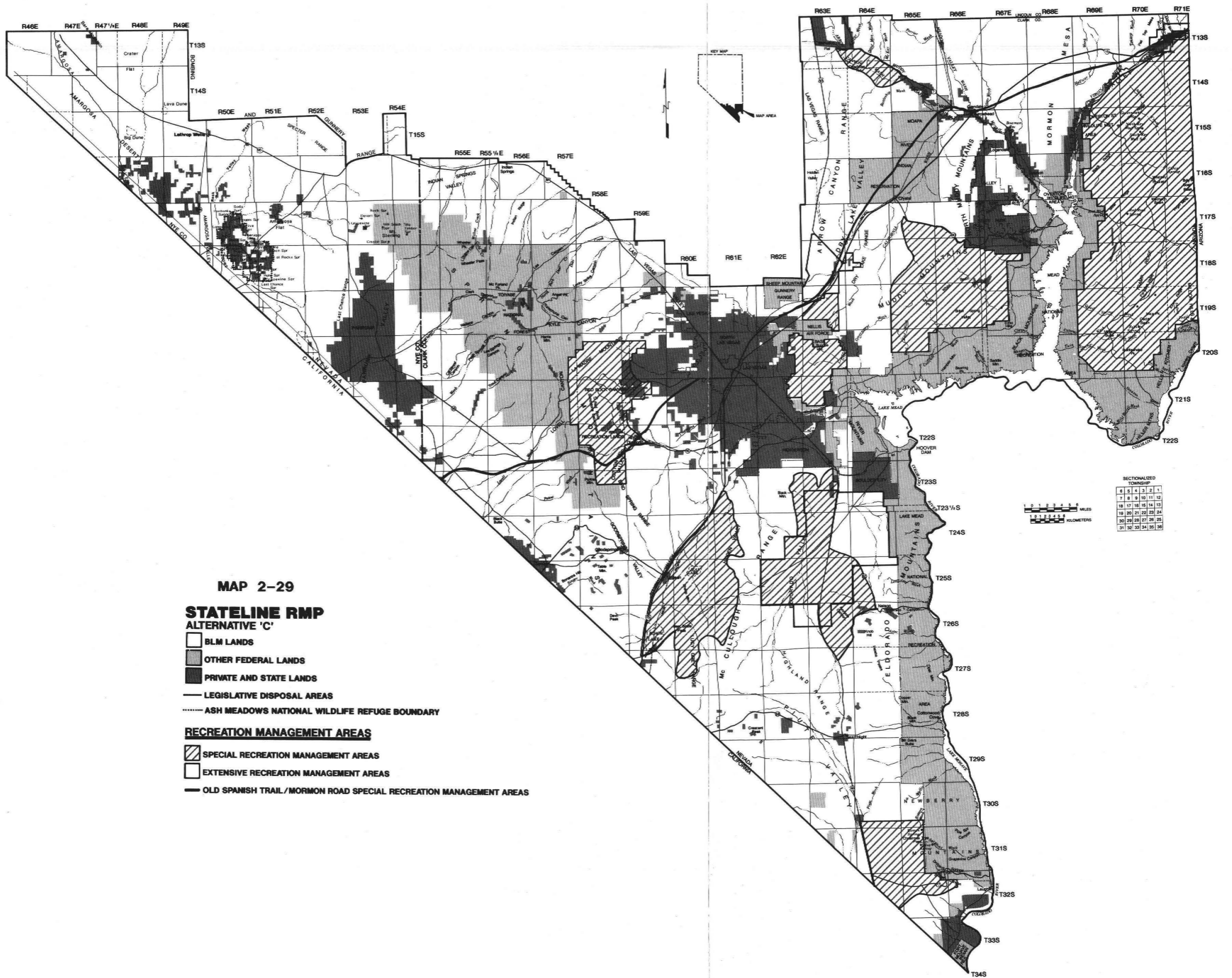
**STATELINE RMP
ALTERNATIVE 'C'**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- PUBLIC LAND DISPOSAL AREAS
- 1 LAND DISPOSAL AREAS
- BURTON/SANTINI ACT LANDS

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 6 MILES
0 1 2 3 4 5 6 KILOMETERS



MAP 2-29

**STATELINE RMP
ALTERNATIVE 'C'**

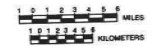
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

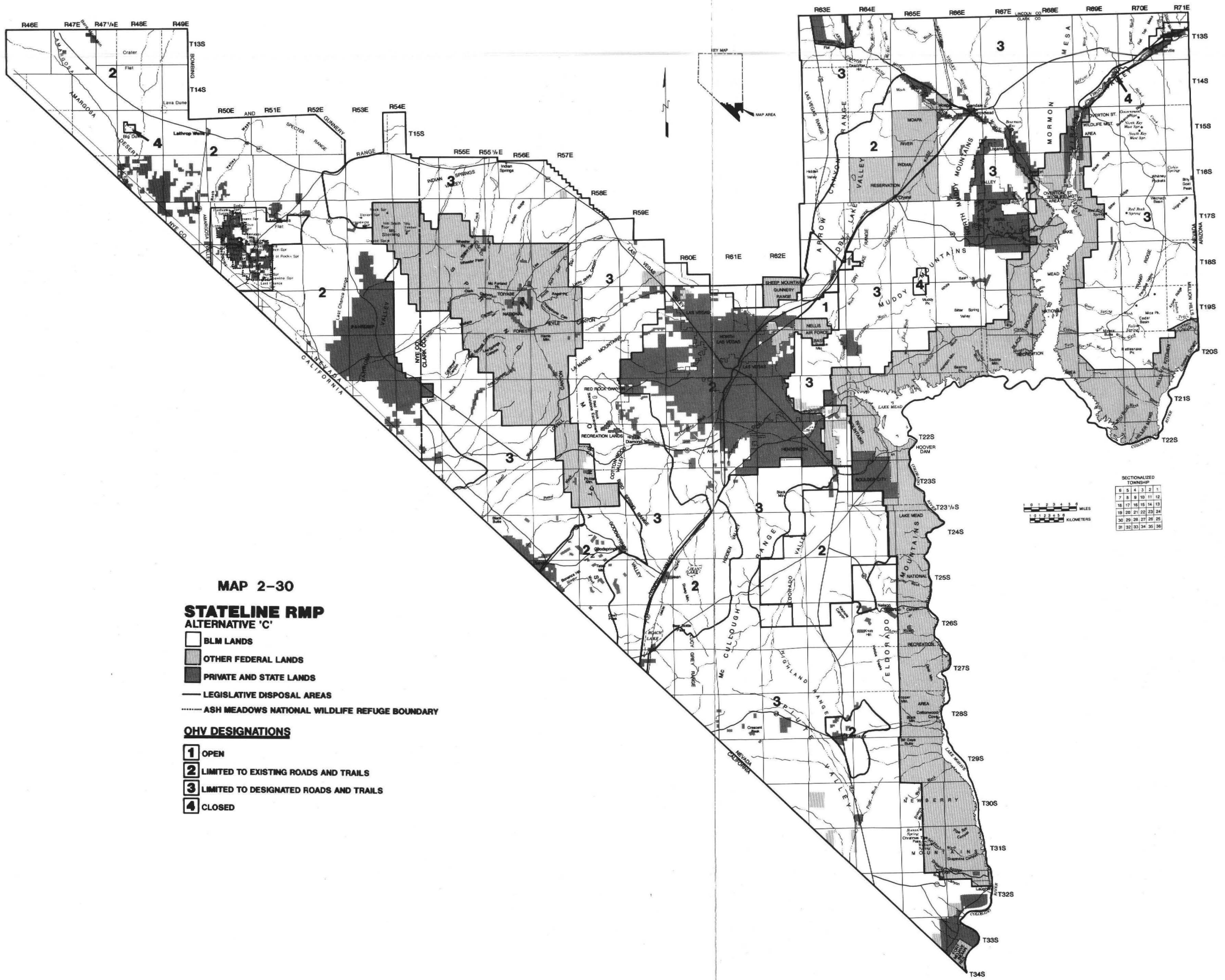
RECREATION MANAGEMENT AREAS

- SPECIAL RECREATION MANAGEMENT AREAS
- EXTENSIVE RECREATION MANAGEMENT AREAS
- OLD SPANISH TRAIL/MORMON ROAD SPECIAL RECREATION MANAGEMENT AREAS

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36





MAP 2-30

**STATELINE RMP
ALTERNATIVE 'C'**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

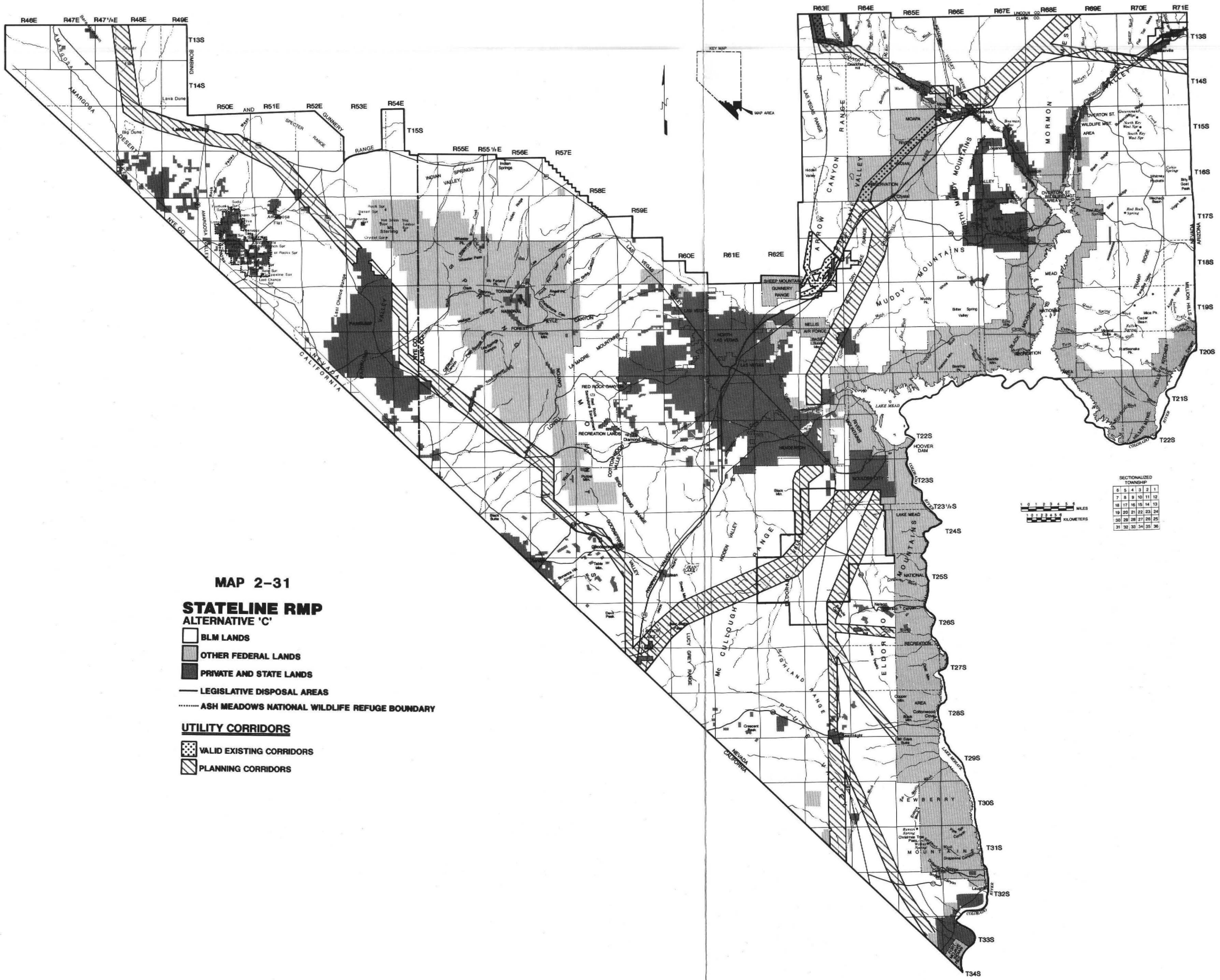
OHV DESIGNATIONS

- 1 OPEN
- 2 LIMITED TO EXISTING ROADS AND TRAILS
- 3 LIMITED TO DESIGNATED ROADS AND TRAILS
- 4 CLOSED

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 2-31

**STATELINE RMP
ALTERNATIVE 'C'**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

UTILITY CORRIDORS

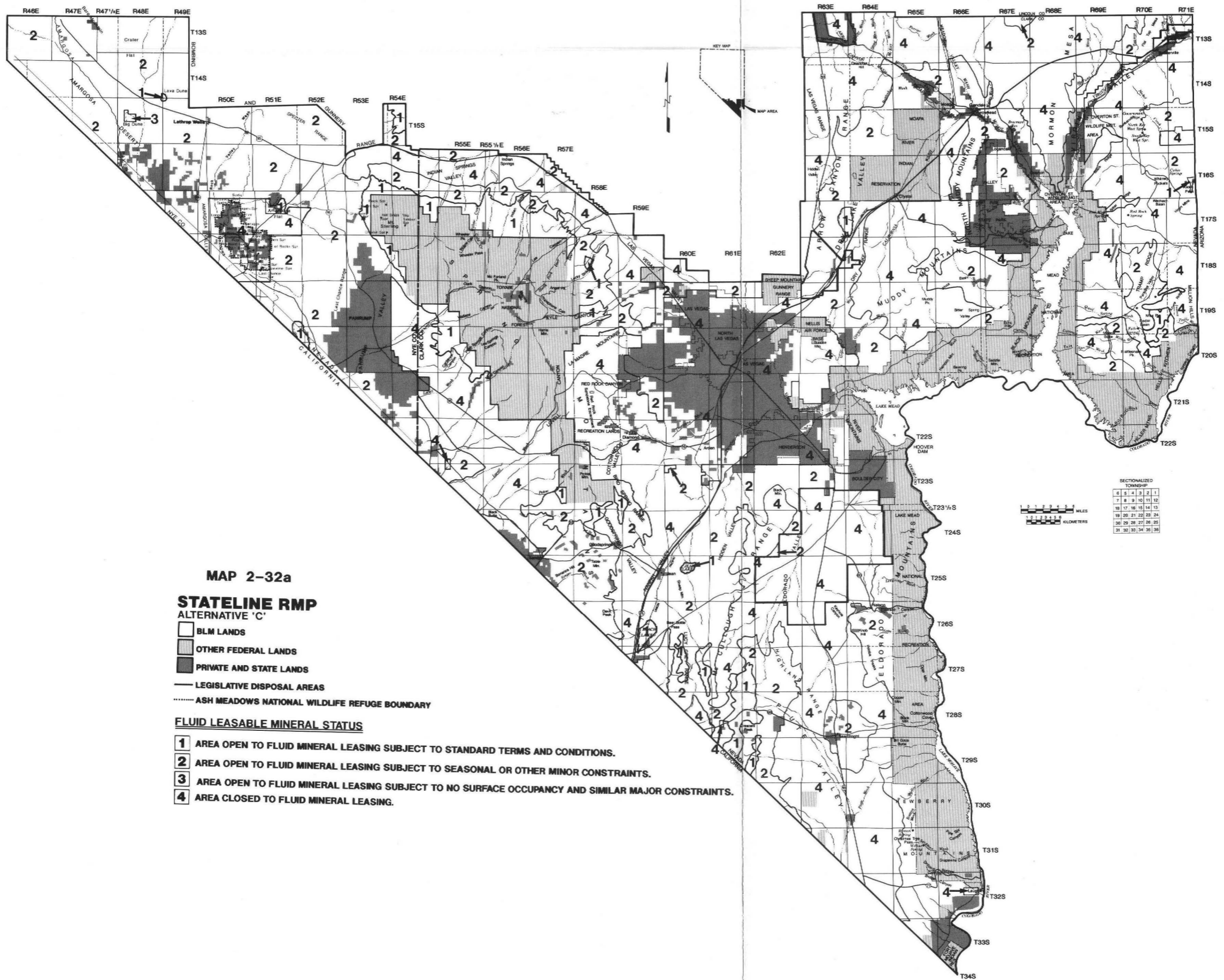
- VALID EXISTING CORRIDORS
- PLANNING CORRIDORS

SECTIONALIZED TOWNSHIP

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36

0 1 2 3 4 5
MILES

0 1 2 3 4 5
KILOMETERS



MAP 2-32a

**STATELINE RMP
ALTERNATIVE 'C'**

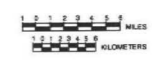
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

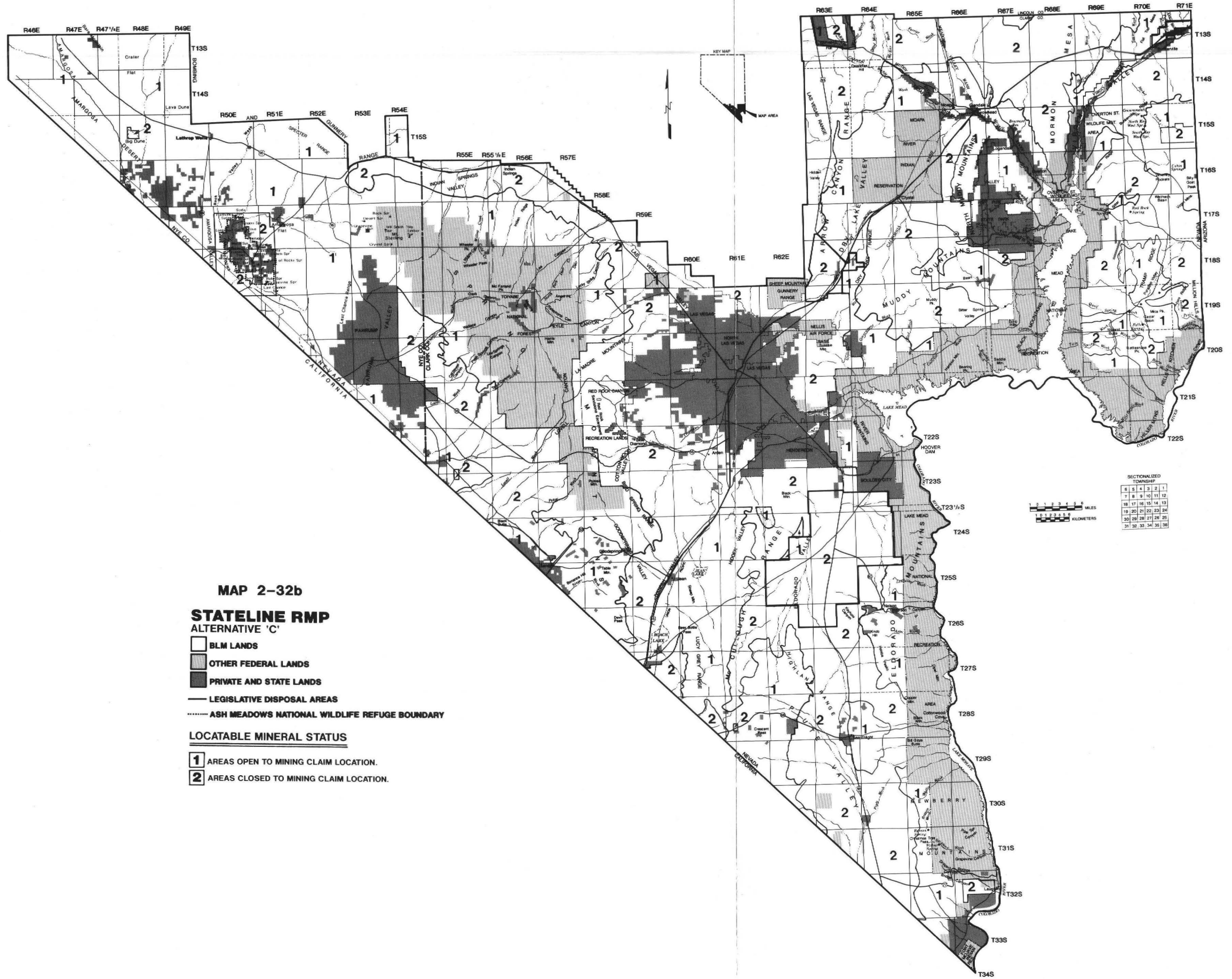
FLUID LEASABLE MINERAL STATUS

- 1** AREA OPEN TO FLUID MINERAL LEASING SUBJECT TO STANDARD TERMS AND CONDITIONS.
- 2** AREA OPEN TO FLUID MINERAL LEASING SUBJECT TO SEASONAL OR OTHER MINOR CONSTRAINTS.
- 3** AREA OPEN TO FLUID MINERAL LEASING SUBJECT TO NO SURFACE OCCUPANCY AND SIMILAR MAJOR CONSTRAINTS.
- 4** AREA CLOSED TO FLUID MINERAL LEASING.

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 2-32b
STATELINE RMP
ALTERNATIVE 'C'

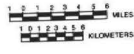
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

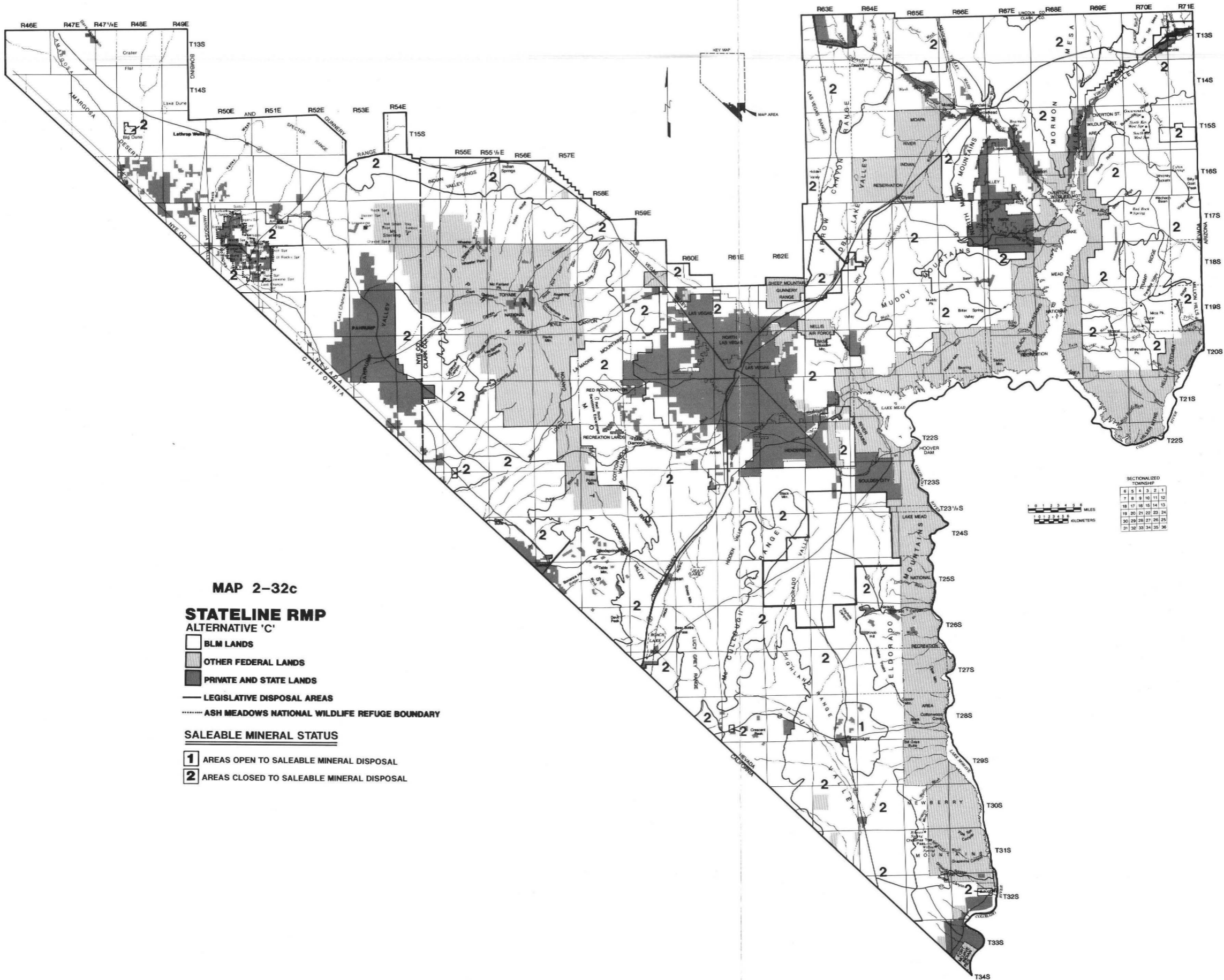
LOCATABLE MINERAL STATUS

- 1 AREAS OPEN TO MINING CLAIM LOCATION.
- 2 AREAS CLOSED TO MINING CLAIM LOCATION.

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





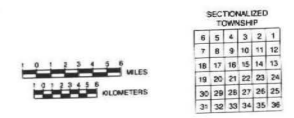
MAP 2-32c

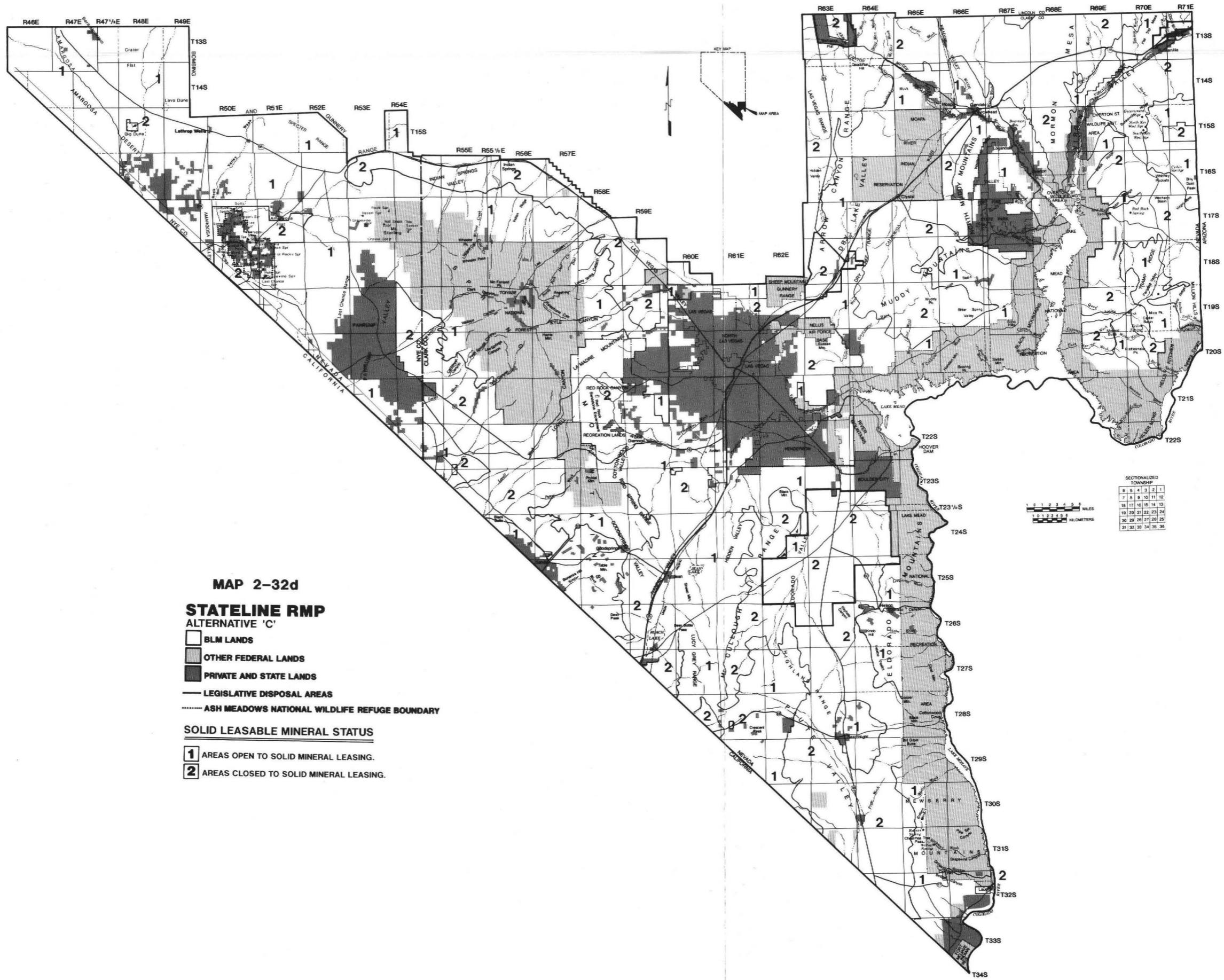
**STATELINE RMP
ALTERNATIVE 'C'**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

SALEABLE MINERAL STATUS

- 1 AREAS OPEN TO SALEABLE MINERAL DISPOSAL
- 2 AREAS CLOSED TO SALEABLE MINERAL DISPOSAL





MAP 2-32d

**STATELINE RMP
ALTERNATIVE 'C'**

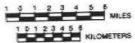
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

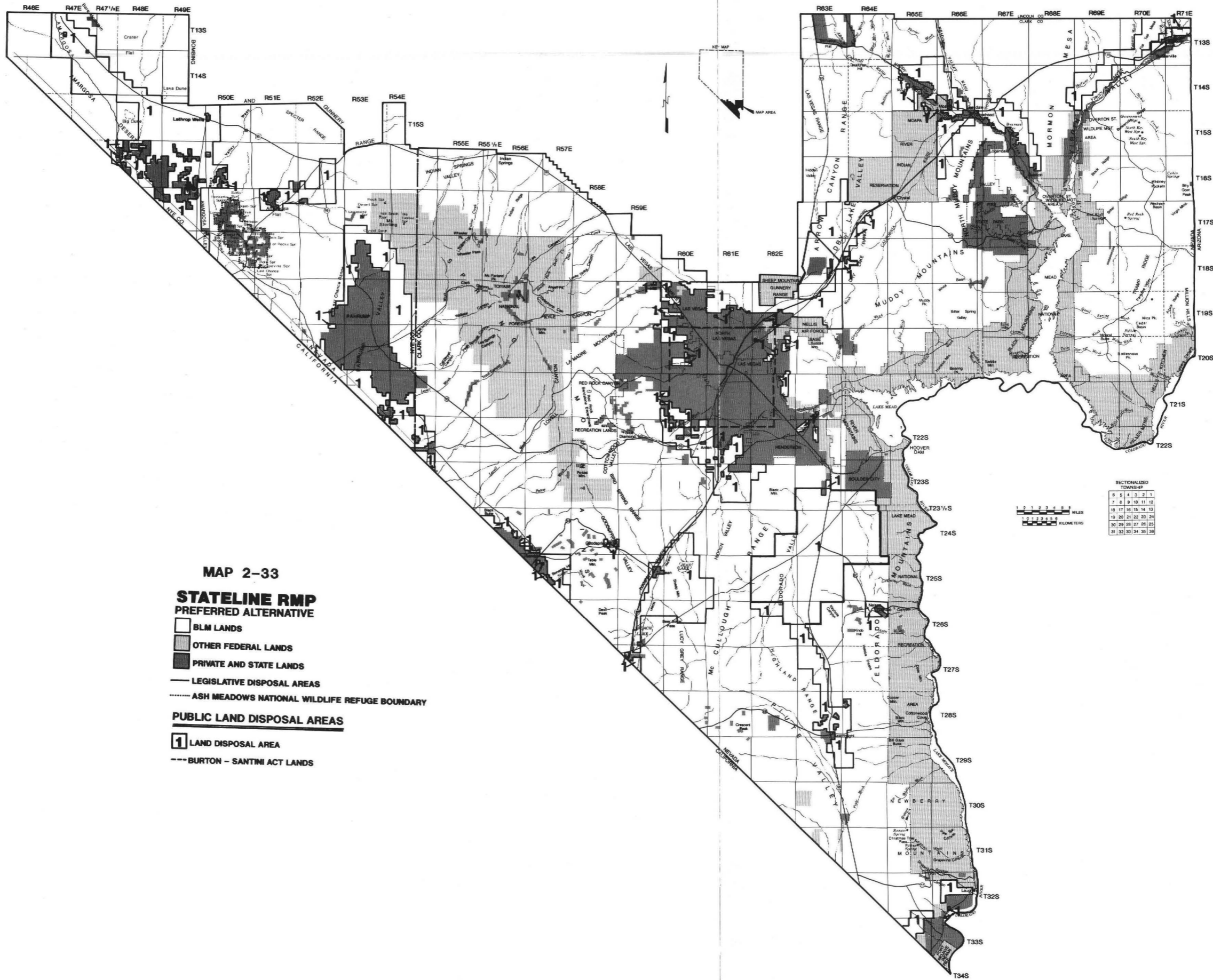
SOLID LEASABLE MINERAL STATUS

- 1 AREAS OPEN TO SOLID MINERAL LEASING.
- 2 AREAS CLOSED TO SOLID MINERAL LEASING.

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 2-33

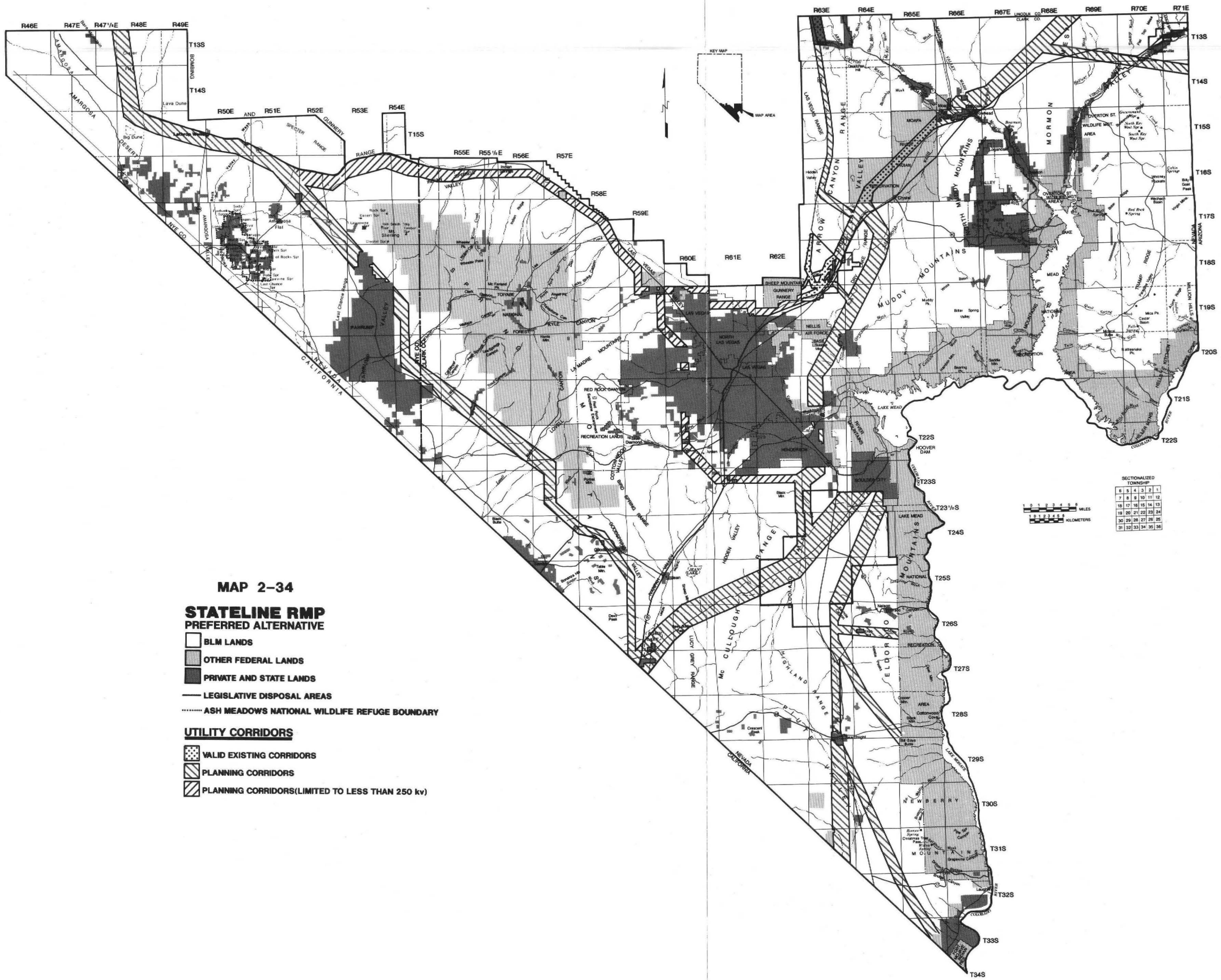
**STATELINE RMP
PREFERRED ALTERNATIVE**

- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - - - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- PUBLIC LAND DISPOSAL AREAS**
- 1 LAND DISPOSAL AREA
 - - - BURTON - SANTINI ACT LANDS

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

0 1 2 3 4 5 6 MILES
0 1 2 3 4 5 KILOMETERS



MAP 2-34

**STATELINE RMP
PREFERRED ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

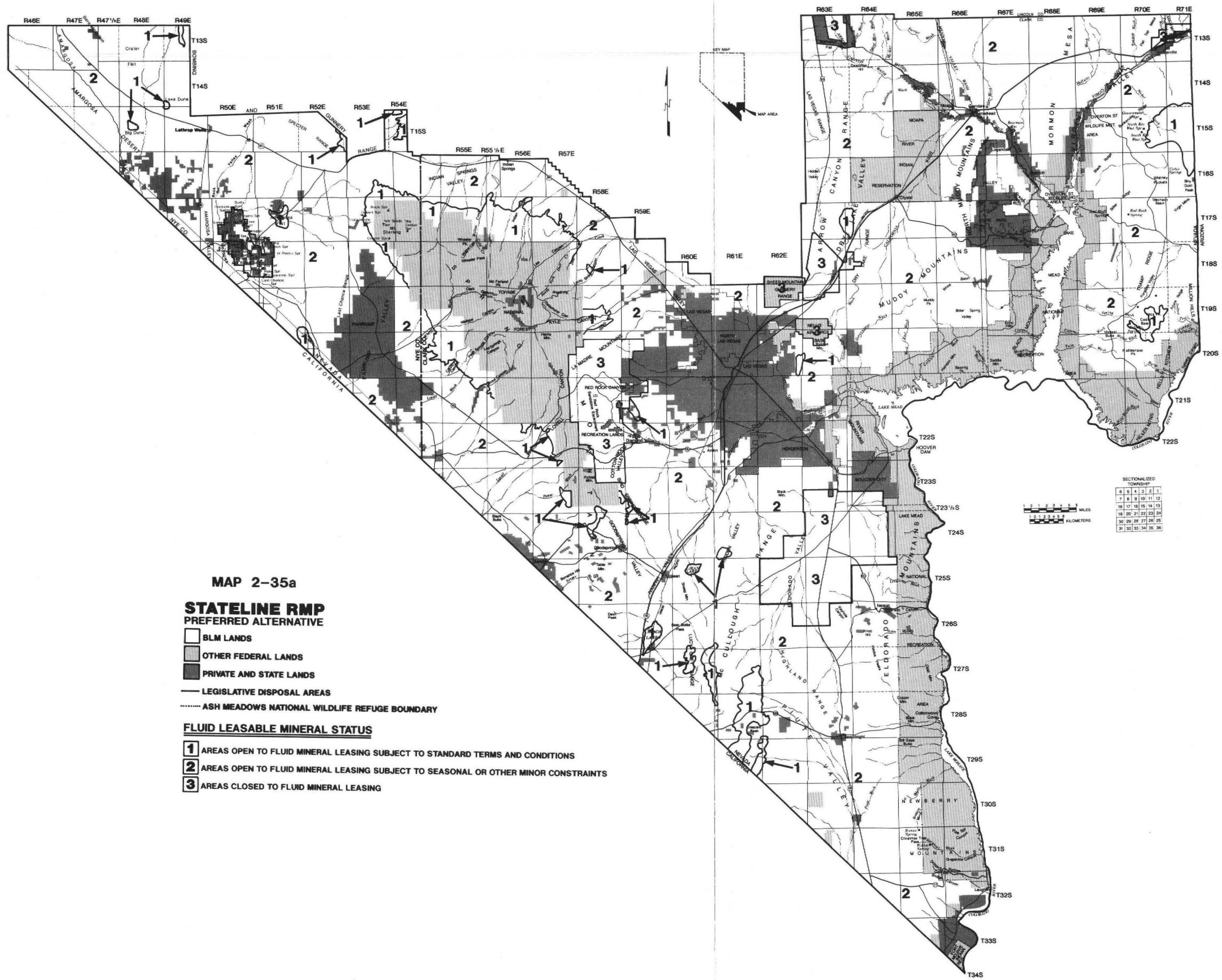
UTILITY CORRIDORS

- VALID EXISTING CORRIDORS
- PLANNING CORRIDORS
- PLANNING CORRIDORS (LIMITED TO LESS THAN 250 kv)

SECTIONALIZED TOWNSHIP

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36

0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS



MAP 2-35a

**STATELINE RMP
PREFERRED ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

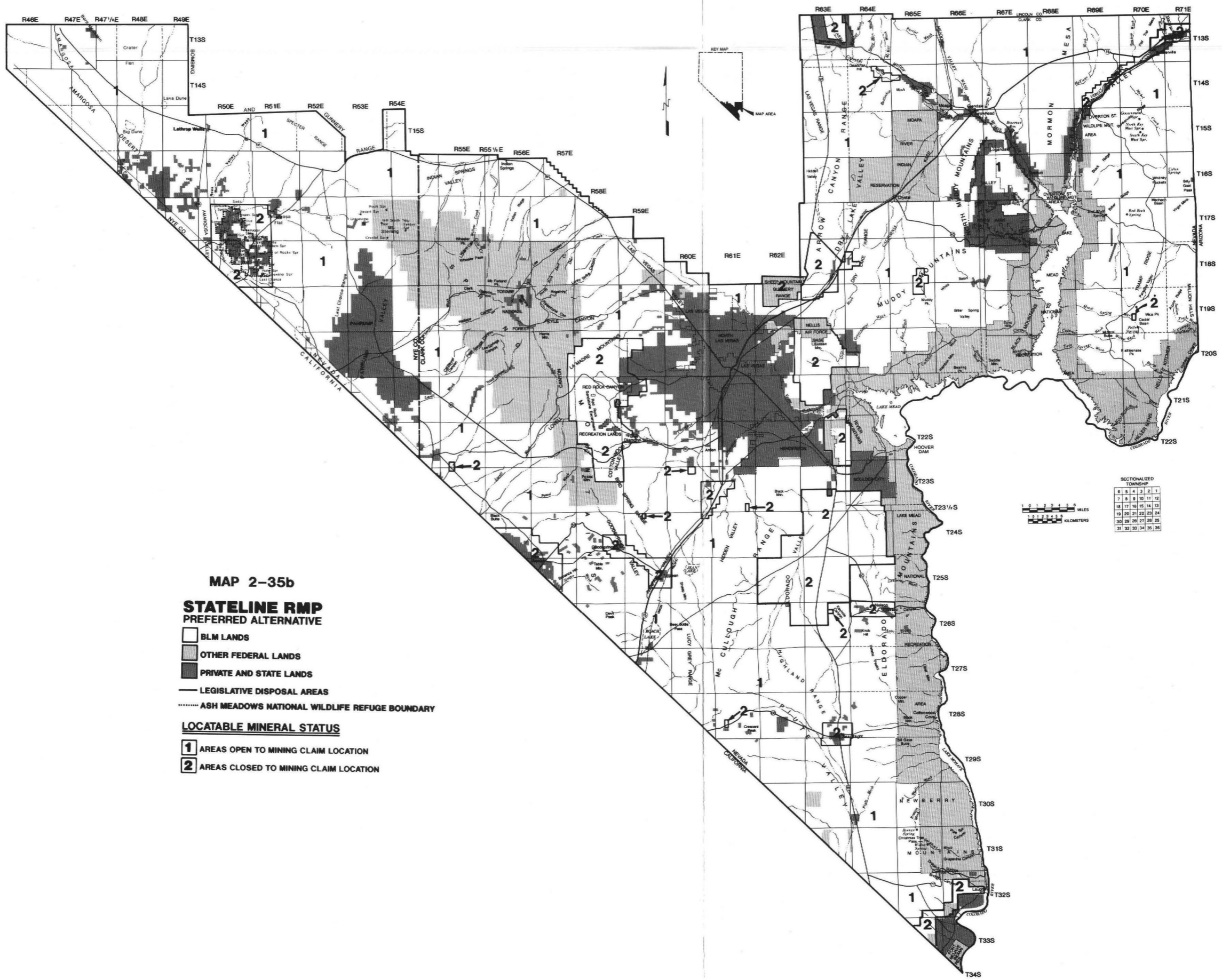
FLUID LEASABLE MINERAL STATUS

- 1** AREAS OPEN TO FLUID MINERAL LEASING SUBJECT TO STANDARD TERMS AND CONDITIONS
- 2** AREAS OPEN TO FLUID MINERAL LEASING SUBJECT TO SEASONAL OR OTHER MINOR CONSTRAINTS
- 3** AREAS CLOSED TO FLUID MINERAL LEASING

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 2-35b

**STATELINE RMP
PREFERRED ALTERNATIVE**

[White Box] BLM LANDS
 [Grey Box] OTHER FEDERAL LANDS
 [Dark Grey Box] PRIVATE AND STATE LANDS
 [Solid Line] LEGISLATIVE DISPOSAL AREAS
 [Dotted Line] ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

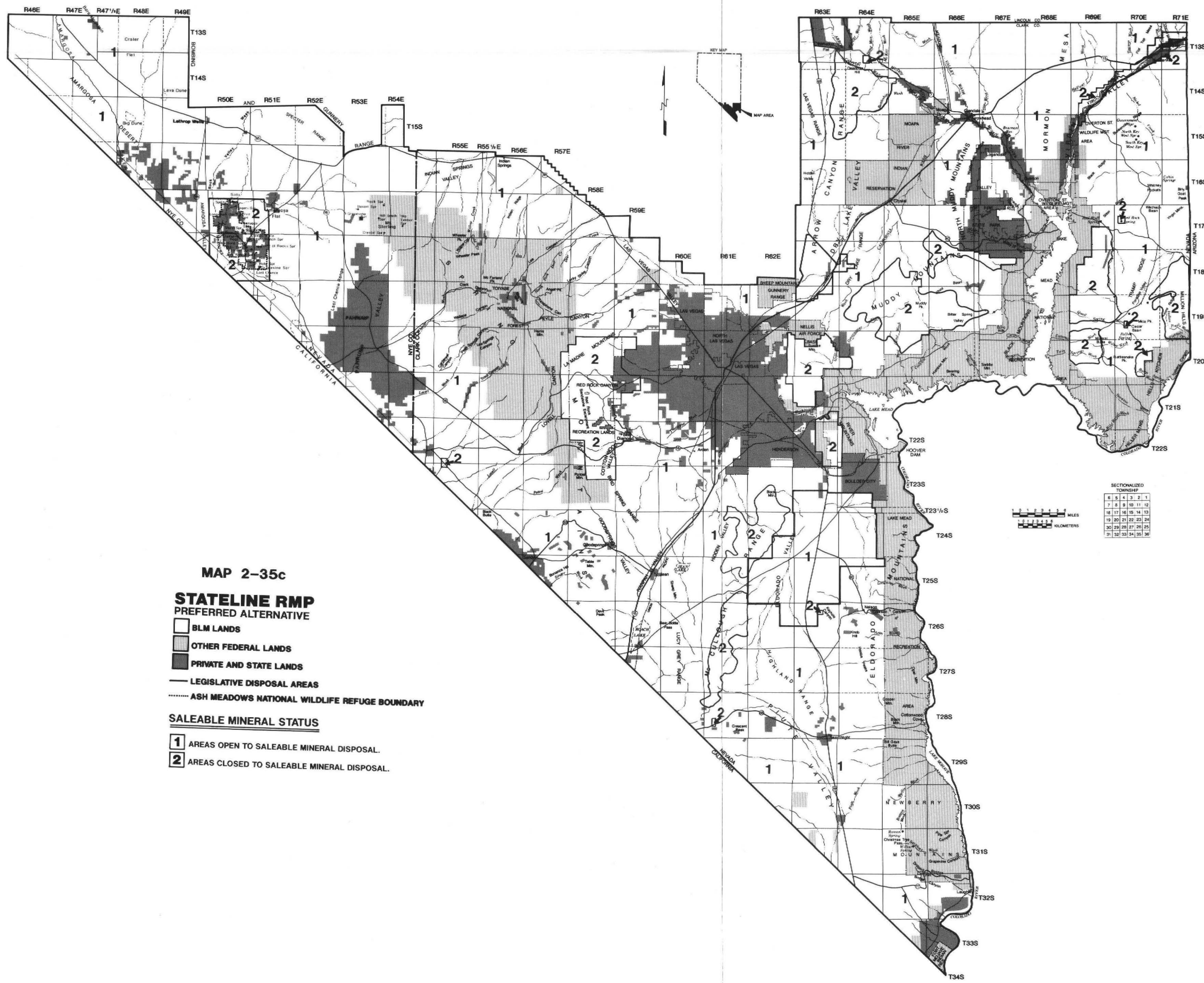
LOCATABLE MINERAL STATUS

1 AREAS OPEN TO MINING CLAIM LOCATION
2 AREAS CLOSED TO MINING CLAIM LOCATION

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5
MILES
0 1 2 3 4 5
KILOMETERS



MAP 2-35c

**STATELINE RMP
PREFERRED ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

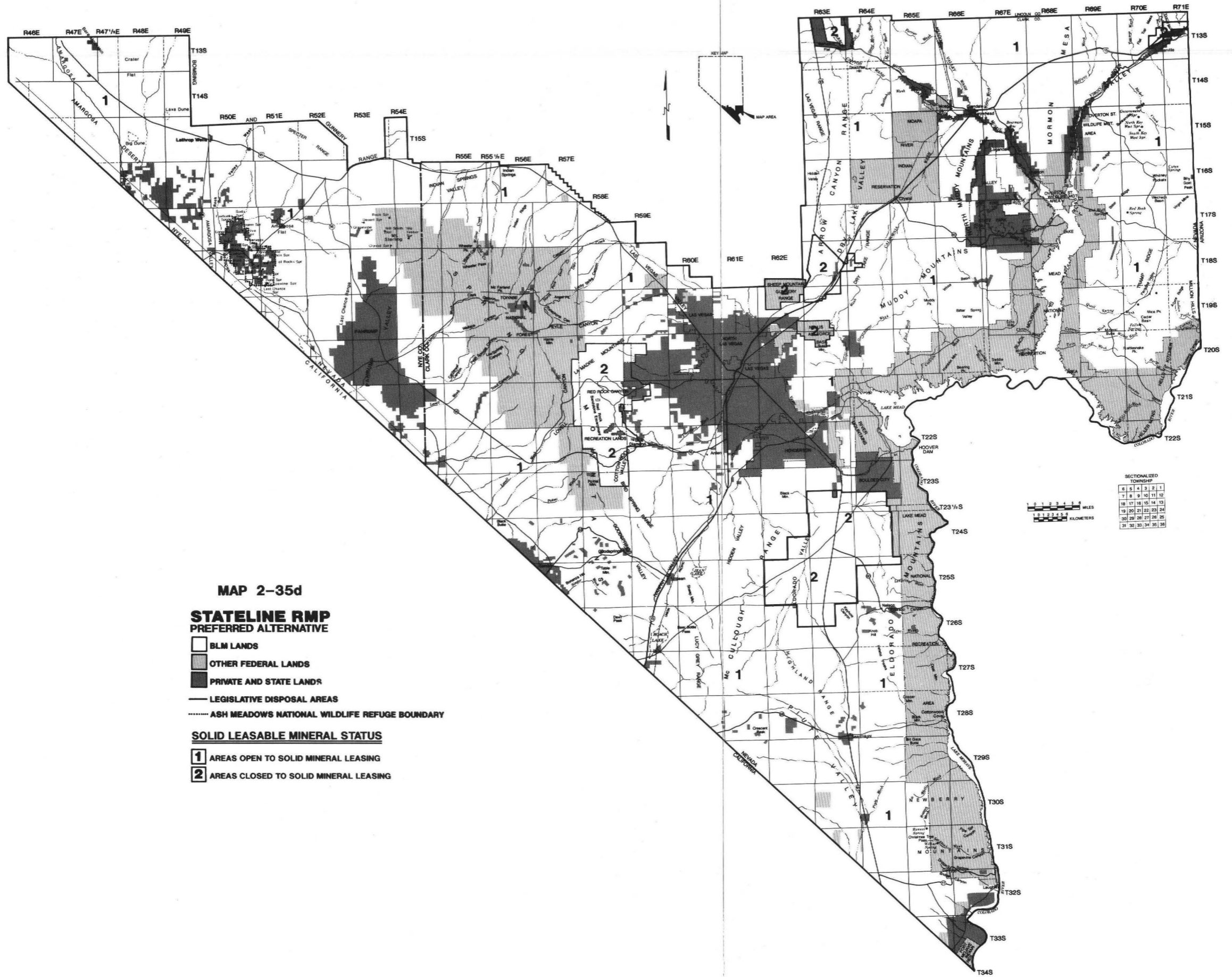
SALEABLE MINERAL STATUS

- 1 AREAS OPEN TO SALEABLE MINERAL DISPOSAL.
- 2 AREAS CLOSED TO SALEABLE MINERAL DISPOSAL.

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





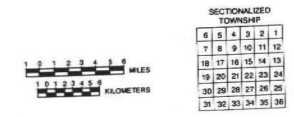
MAP 2-35d

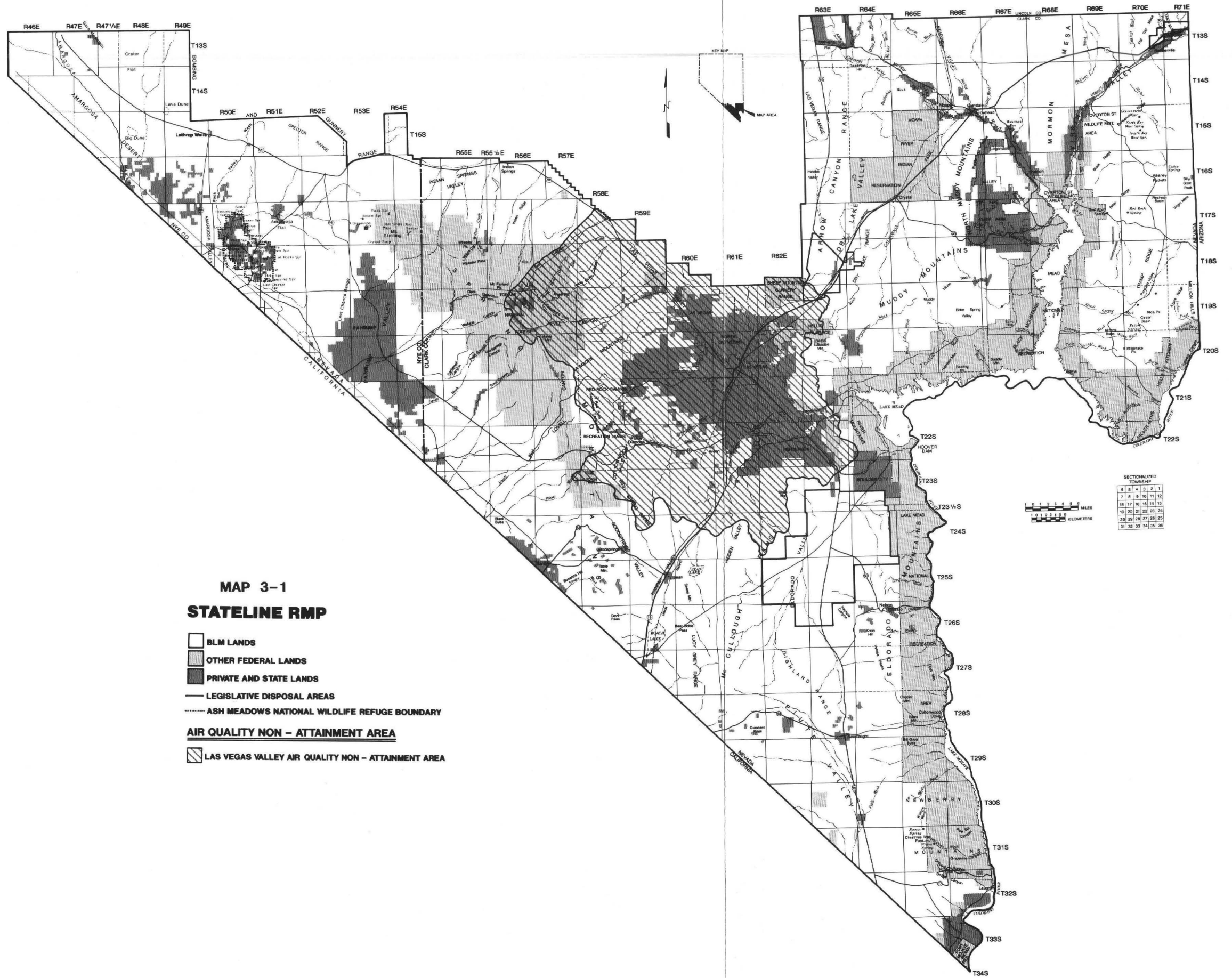
**STATELINE RMP
PREFERRED ALTERNATIVE**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

SOLID LEASABLE MINERAL STATUS

- 1 AREAS OPEN TO SOLID MINERAL LEASING
- 2 AREAS CLOSED TO SOLID MINERAL LEASING





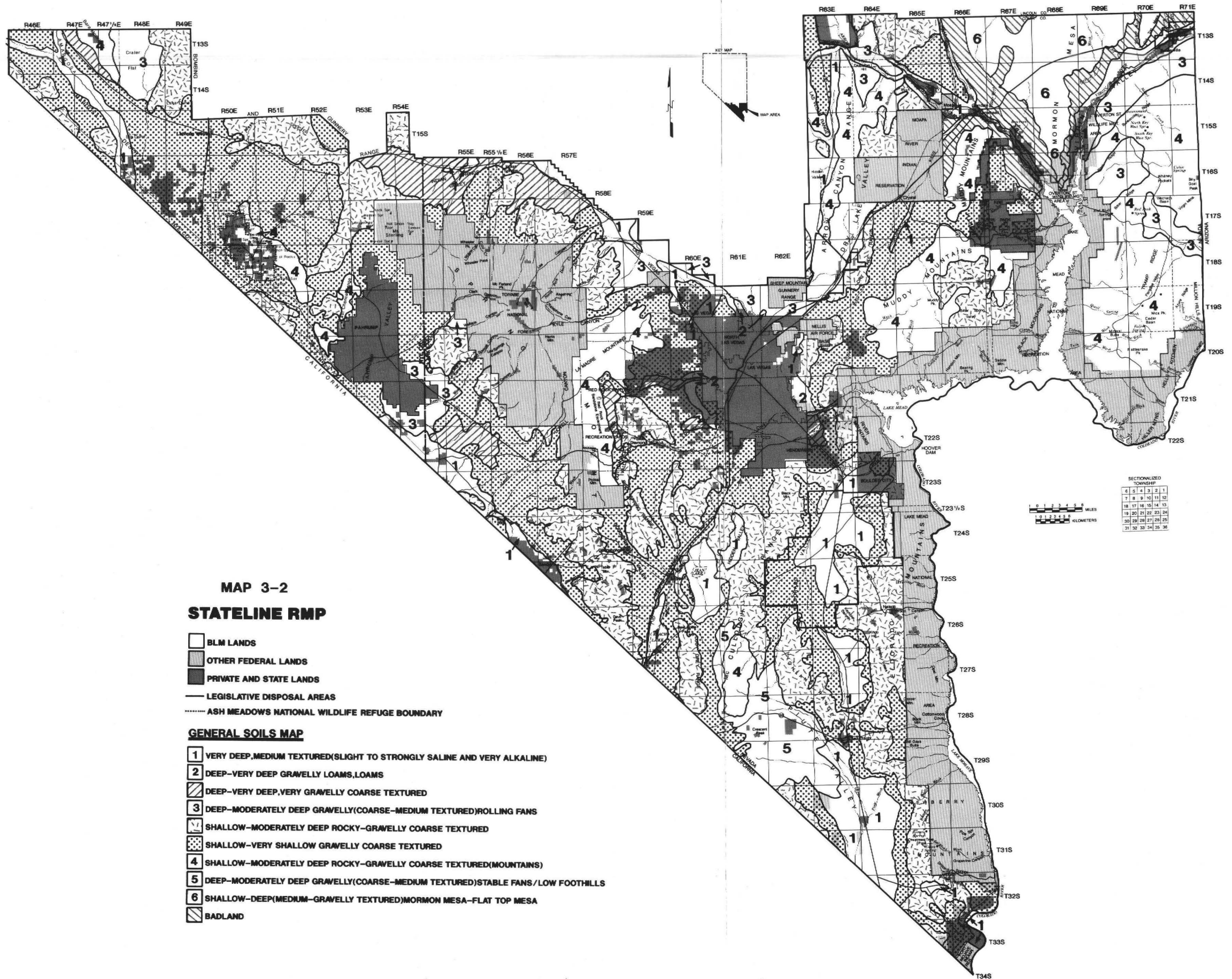
MAP 3-1
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- AIR QUALITY NON - ATTAINMENT AREA**
- LAS VEGAS VALLEY AIR QUALITY NON - ATTAINMENT AREA

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS



MAP 3-2
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

GENERAL SOILS MAP

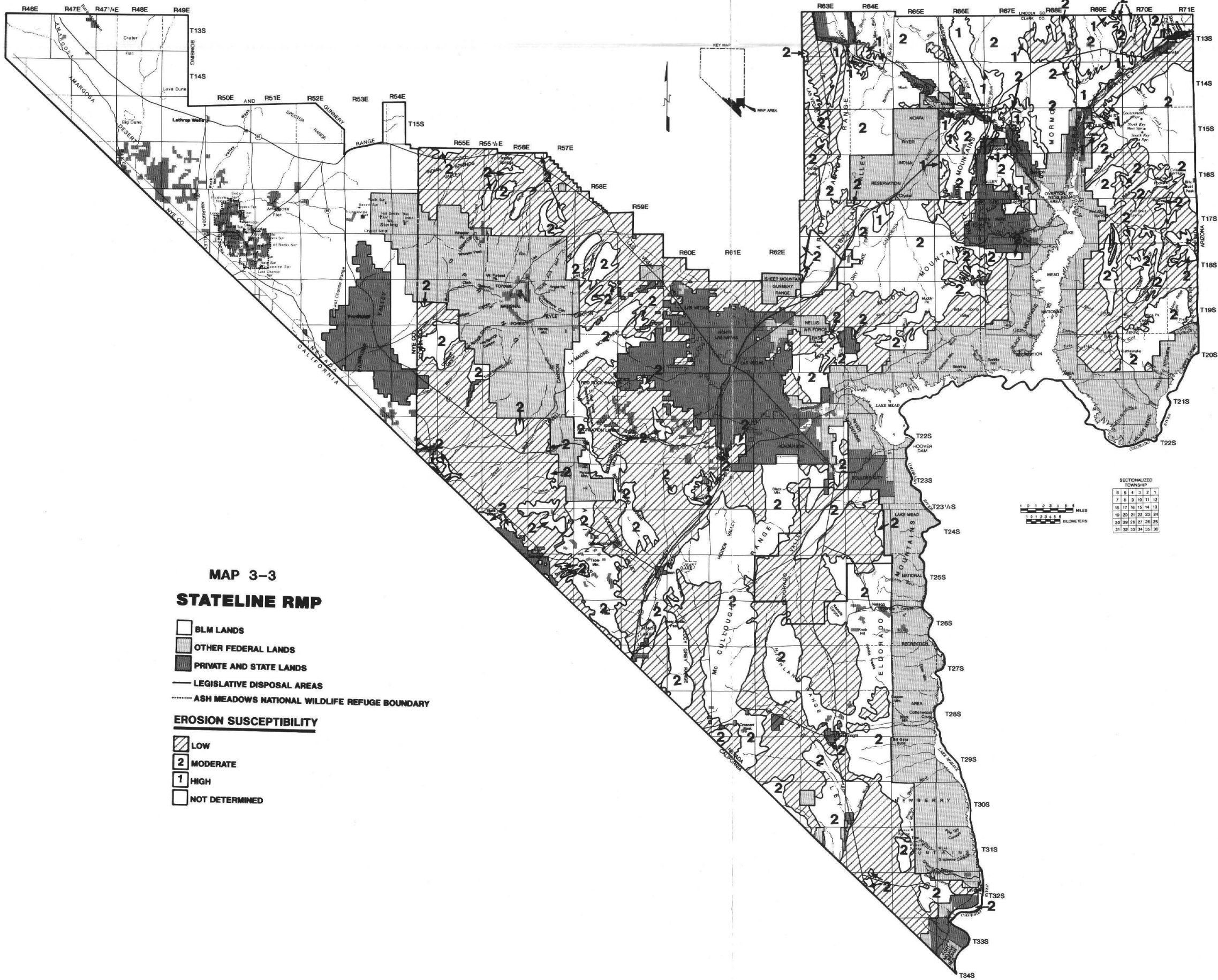
- 1 VERY DEEP, MEDIUM TEXTURED (SLIGHT TO STRONGLY SALINE AND VERY ALKALINE)
- 2 DEEP-VERY DEEP GRAVELLY LOAMS, LOAMS
- 3 DEEP-VERY DEEP, VERY GRAVELLY COARSE TEXTURED
- 4 DEEP-MODERATELY DEEP GRAVELLY (COARSE-MEDIUM TEXTURED) ROLLING FANS
- 5 SHALLOW-MODERATELY DEEP ROCKY-GRAVELLY COARSE TEXTURED
- 6 SHALLOW-VERY SHALLOW GRAVELLY COARSE TEXTURED
- 7 SHALLOW-MODERATELY DEEP ROCKY-GRAVELLY COARSE TEXTURED (MOUNTAINS)
- 8 DEEP-MODERATELY DEEP GRAVELLY (COARSE-MEDIUM TEXTURED) STABLE FANS / LOW FOOTHILLS
- 9 SHALLOW-DEEP (MEDIUM-GRAVELLY TEXTURED) MORMON MESA-FLAT TOP MESA
- 10 BADLAND

SECTIONALIZED TOWNSHIP

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32	33	34	35	36

0 1 2 3 4 5
MILES

0 1 2 3 4 5
KILOMETERS



MAP 3-3
STATELINE RMP

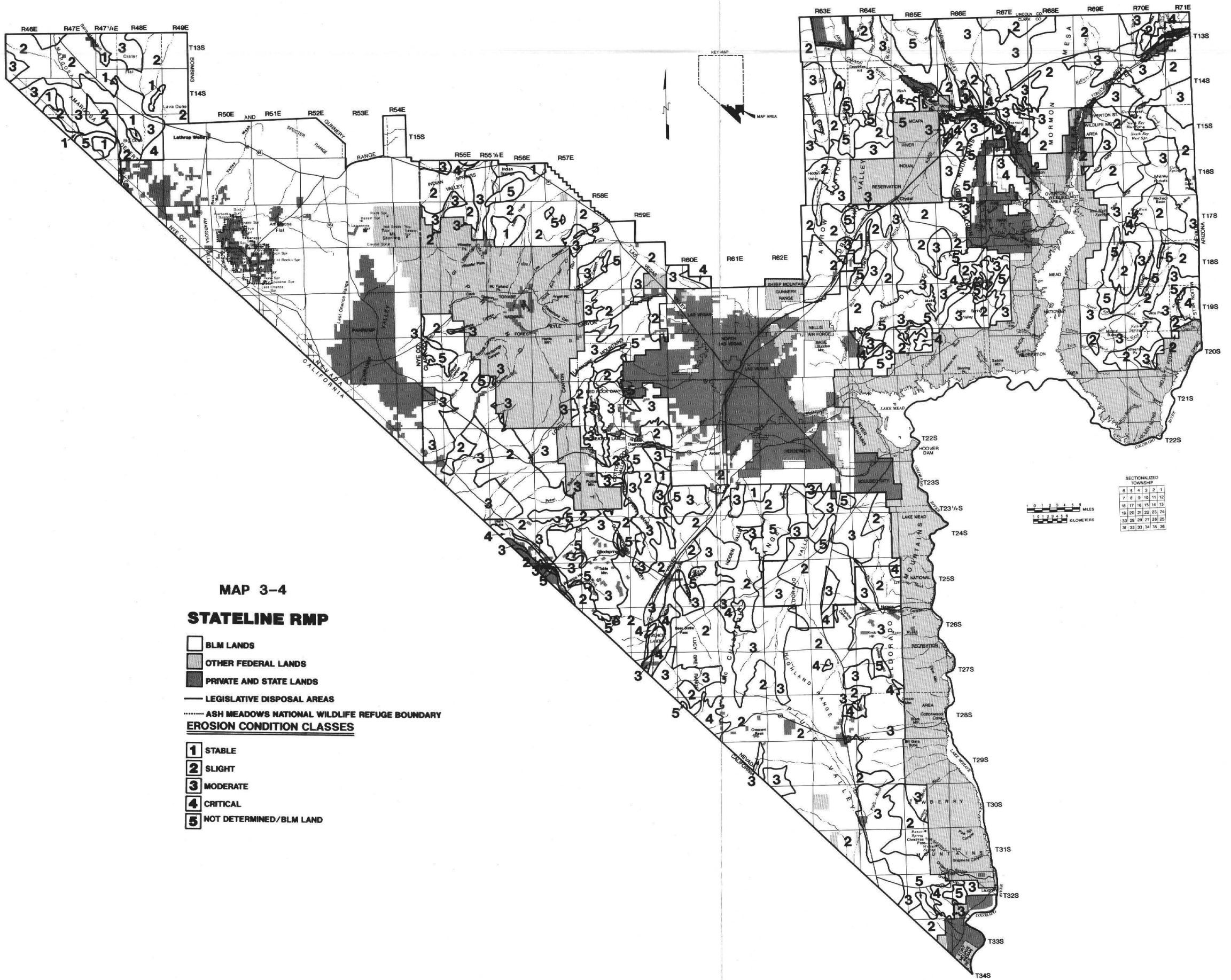
- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- EROSION SUSCEPTIBILITY**
- LOW
 - 2 MODERATE
 - 1 HIGH
 - NOT DETERMINED

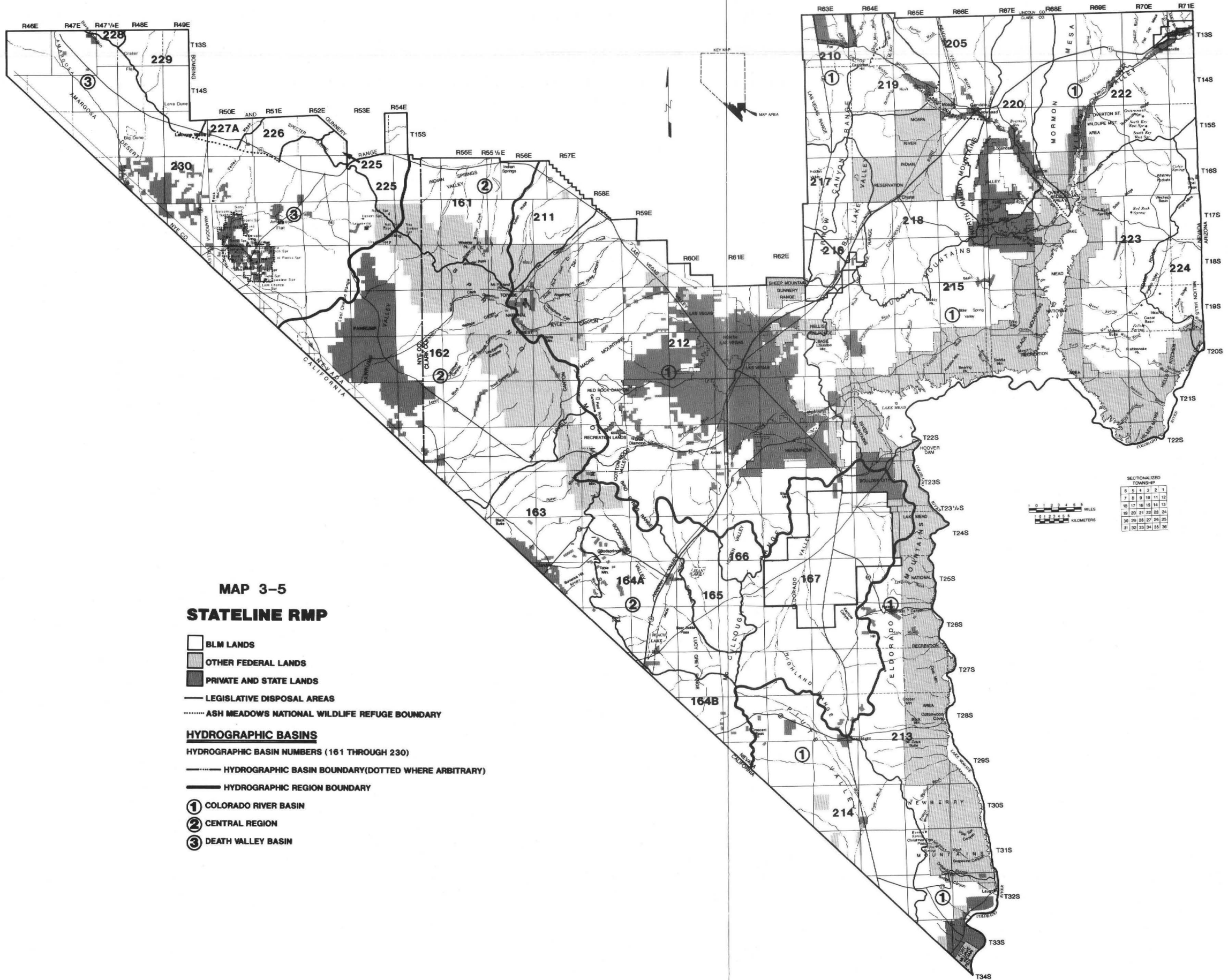
SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5
MILES

0 1 2 3 4 5
KILOMETERS





**MAP 3-5
STATELINE RMP**

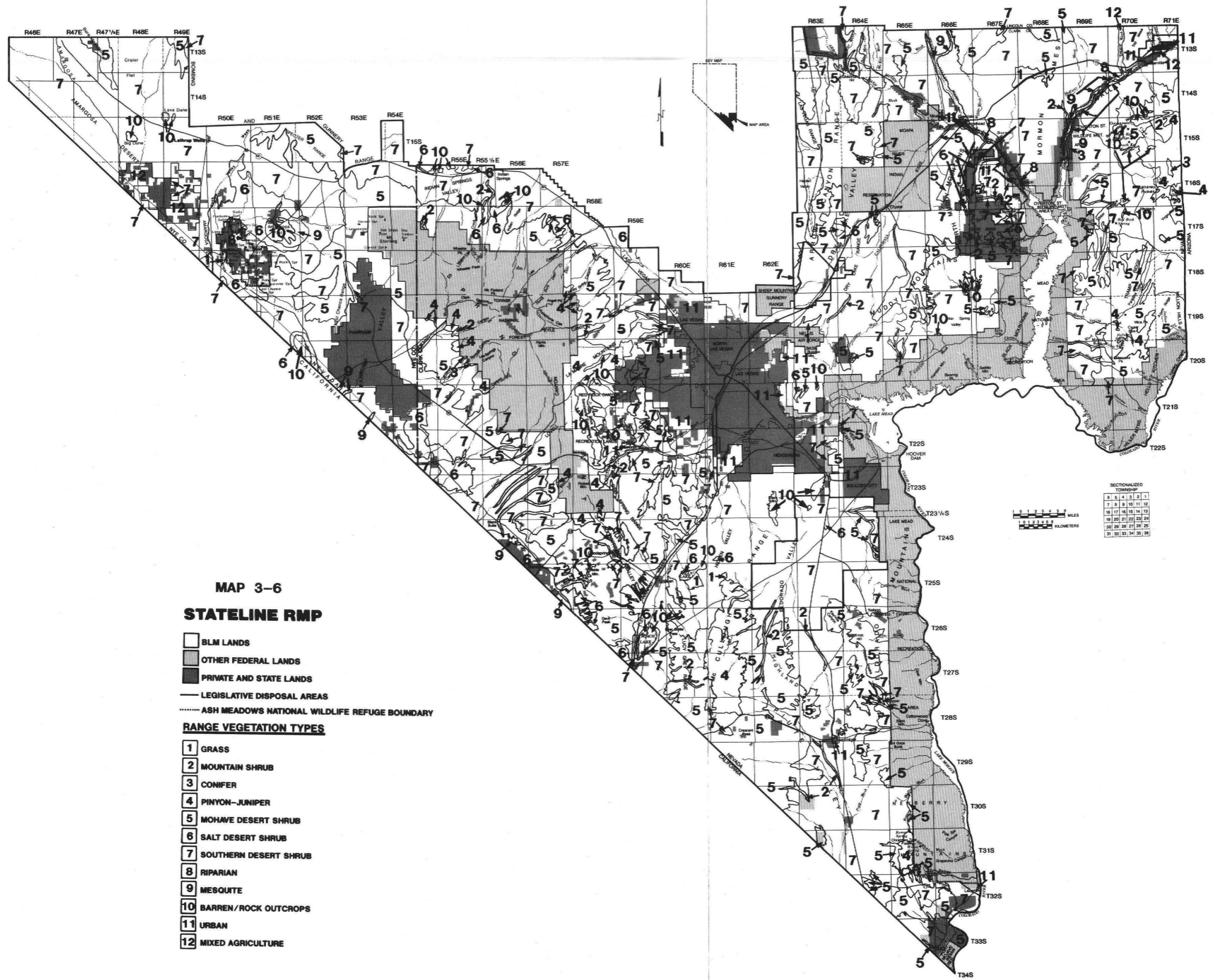
- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- HYDROGRAPHIC BASINS**
- HYDROGRAPHIC BASIN NUMBERS (161 THROUGH 230)
- HYDROGRAPHIC BASIN BOUNDARY (DOTTED WHERE ARBITRARY)
 - HYDROGRAPHIC REGION BOUNDARY
- 1 COLORADO RIVER BASIN
 - 2 CENTRAL REGION
 - 3 DEATH VALLEY BASIN

SECTIONALIZED
TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 6
MILES

0 1 2 3 4 5 6
KILOMETERS



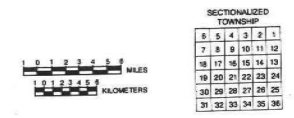
MAP 3-6

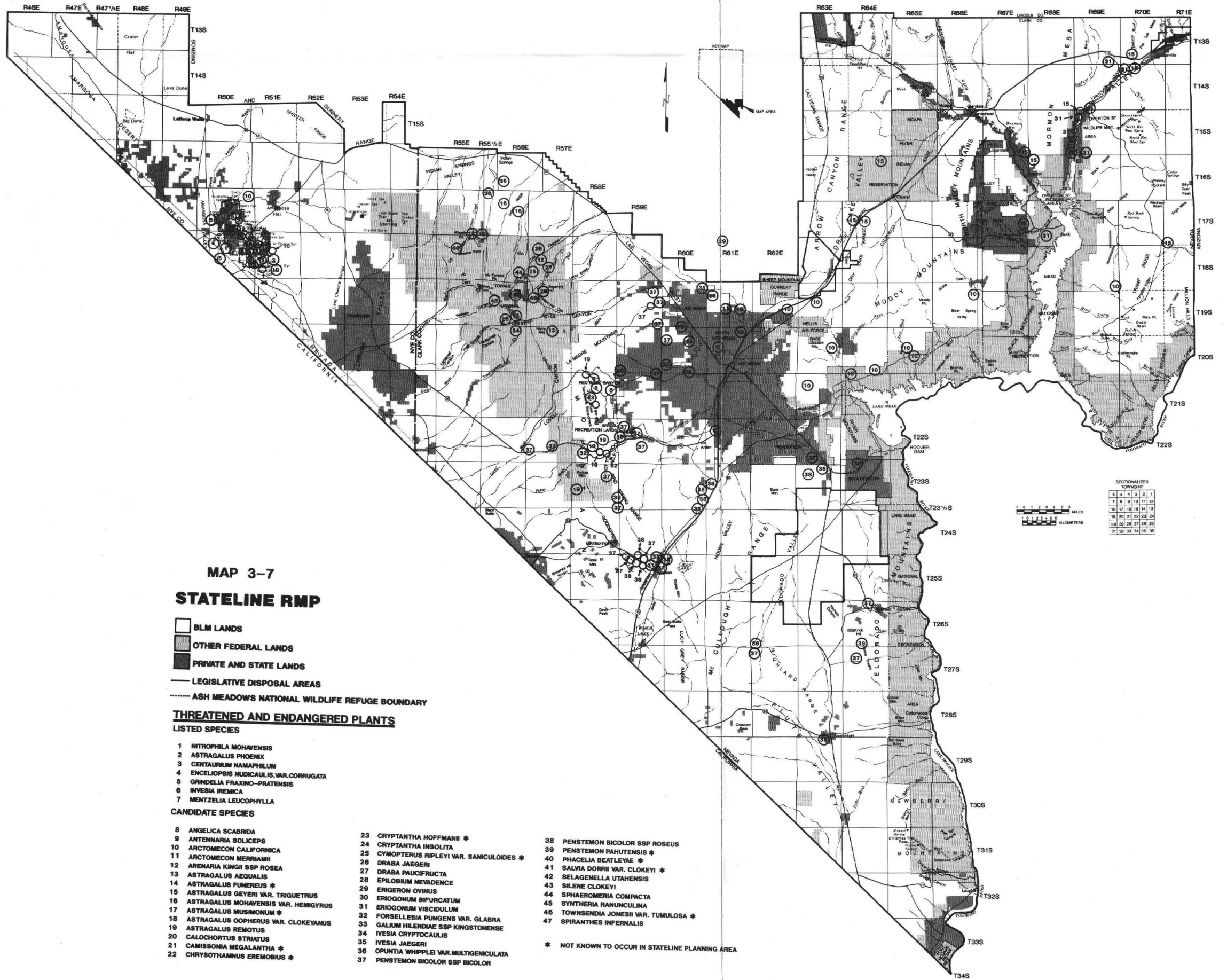
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

RANGE VEGETATION TYPES

- 1 GRASS
- 2 MOUNTAIN SHRUB
- 3 CONIFER
- 4 PINYON-JUNIPER
- 5 MOHAVE DESERT SHRUB
- 6 SALT DESERT SHRUB
- 7 SOUTHERN DESERT SHRUB
- 8 RIPARIAN
- 9 MESQUITE
- 10 BARREN/ROCK OUTCROPS
- 11 URBAN
- 12 MIXED AGRICULTURE





MAP 3-7
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

THREATENED AND ENDANGERED PLANTS

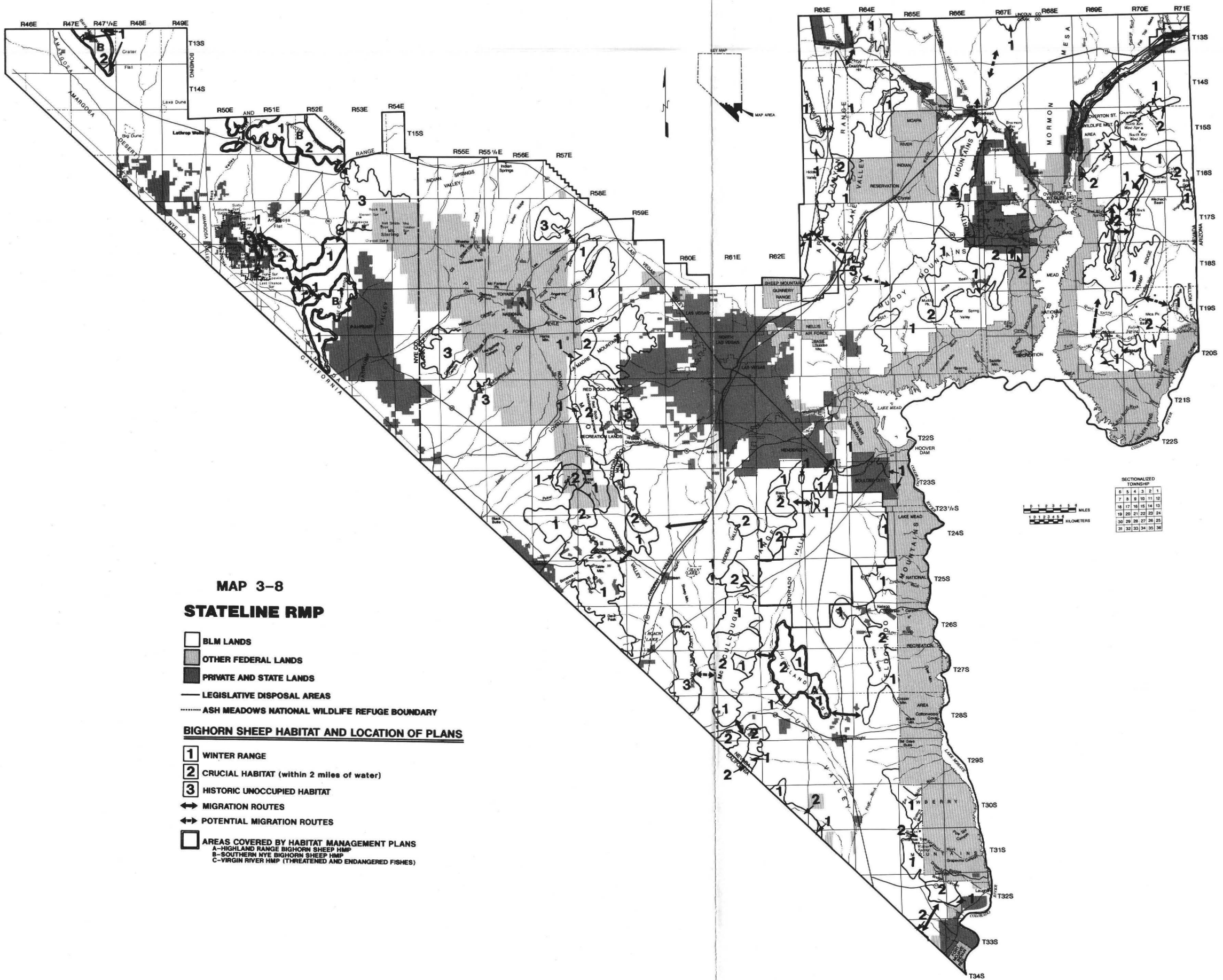
LISTED SPECIES

- 1 NITROPHILA MOHAVENSIS
- 2 ASTRAGALUS PHOENIX
- 3 CENTAURIUM NAMAPHILUM
- 4 ENCELLOPSIS MUDICAULIS, VAR. CORRUGATA
- 5 GRINDELIA FRAXINO-PRATENSIS
- 6 IVESIA IREMICA
- 7 MENTZELIA LEUCOPHYLLA

CANDIDATE SPECIES

- | | | |
|--|--|--|
| <ol style="list-style-type: none"> 8 ANGELICA SCABRIDA 9 ANTENNARIA SOLICEPS 10 ARCTOMECON CALIFORNICA 11 ARCTOMECON MERRIAMII 12 ARENARIA KINGII SSP ROSEA 13 ASTRAGALUS AEQUALIS 14 ASTRAGALUS FUNEREUS * 15 ASTRAGALUS GEYERI VAR. TRIGUETRUS 16 ASTRAGALUS MOHAVENSIS VAR. HEMIGYRUS 17 ASTRAGALUS MUSIMONUM * 18 ASTRAGALUS OOPHERUS VAR. CLOKEYANUS 19 ASTRAGALUS REMOTUS 20 CALOCHORTUS STRIATUS 21 CAMISSONIA MEGALANTHA * 22 CHRYSOTHAMNUS EREMOSIUS * | <ol style="list-style-type: none"> 23 CRYPTANTHA HOFFMANII * 24 CRYPTANTHA INSOLITA 25 CYMOPTERUS RIPLEYI VAR. SANCULOIDES * 26 DRABA JAEGERI 27 DRABA PAUCIFRUCTA 28 EPILOBIUM NEVADENCE 29 ERIGONUM OVINUS 30 ERIOGONUM BIFURCATUM 31 ERIOGONUM VISCIDULUM 32 FORSELLESIA PUNGENS VAR. GLABRA 33 GALIUM HILENDIAE SSP KINGSTONENSE 34 IVESIA CRYPTOCAULIS 35 IVESIA JAEGERI 36 OPUNTIA WHIPPLEI VAR. MULTIGENICULATA 37 PENSTEMON BICOLOR SSP BICOLOR | <ol style="list-style-type: none"> 38 PENSTEMON BICOLOR SSP ROSEUS 39 PENSTEMON PAHUTENSIS * 40 PHACELIA BEATLEYAE * 41 SALVIA DORRII VAR. CLOKEYI * 42 SELAGENELLA UTAHENSIS 43 SILENE CLOKEYI 44 SPHAEROMERIA COMPACTA 45 SYNTHERIA RANUNCULINA 46 TOWNSENDIA JONESII VAR. TUMULOSA * 47 SPIRANTHES INFERNALIS |
|--|--|--|

* NOT KNOWN TO OCCUR IN STATELINE PLANNING AREA

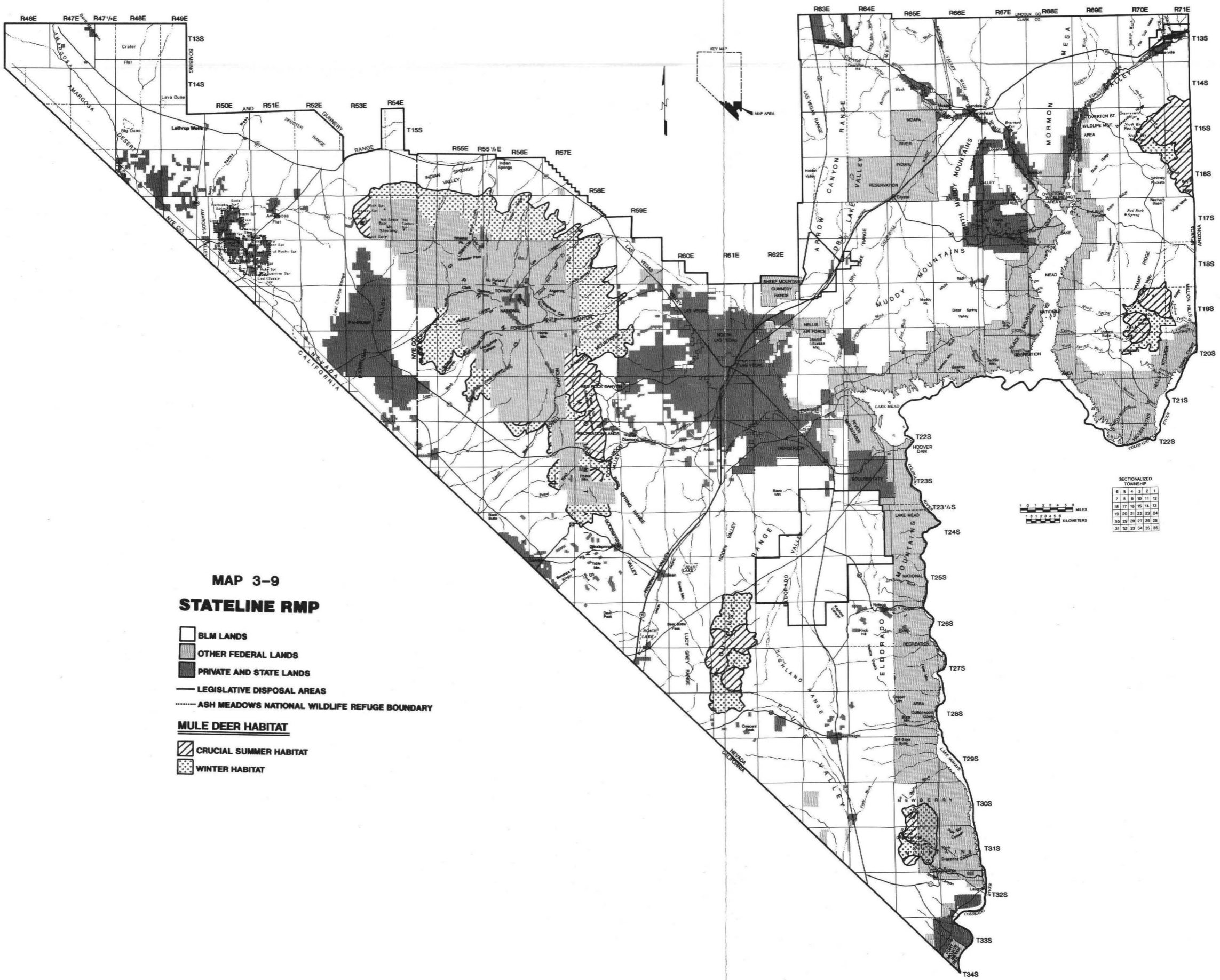


MAP 3-8
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

BIGHORN SHEEP HABITAT AND LOCATION OF PLANS

- 1 WINTER RANGE
- 2 CRUCIAL HABITAT (within 2 miles of water)
- 3 HISTORIC UNOCCUPIED HABITAT
- ↔ MIGRATION ROUTES
- ↔ POTENTIAL MIGRATION ROUTES
- AREAS COVERED BY HABITAT MANAGEMENT PLANS
 A-HIGHLAND RANGE BIGHORN SHEEP HMP
 B-SOUTHERN NYE BIGHORN SHEEP HMP
 C-VIRGIN RIVER HMP (THREATENED AND ENDANGERED FISHES)



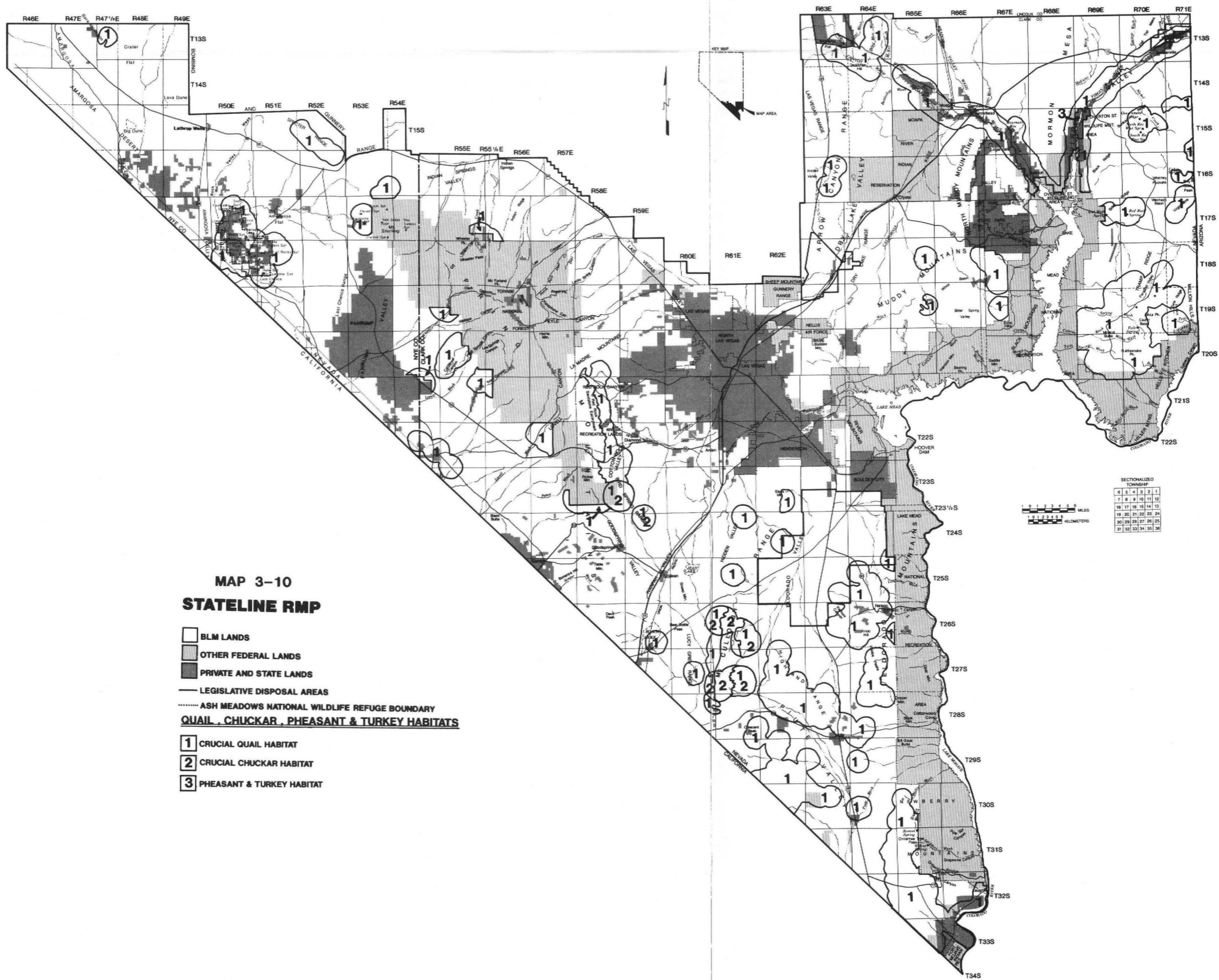
MAP 3-9
STATELINE RMP

- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- MULE DEER HABITAT**
- CRUCIAL SUMMER HABITAT
 - WINTER HABITAT

SECTIONALIZED TOWNSHIP

5	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS

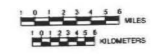


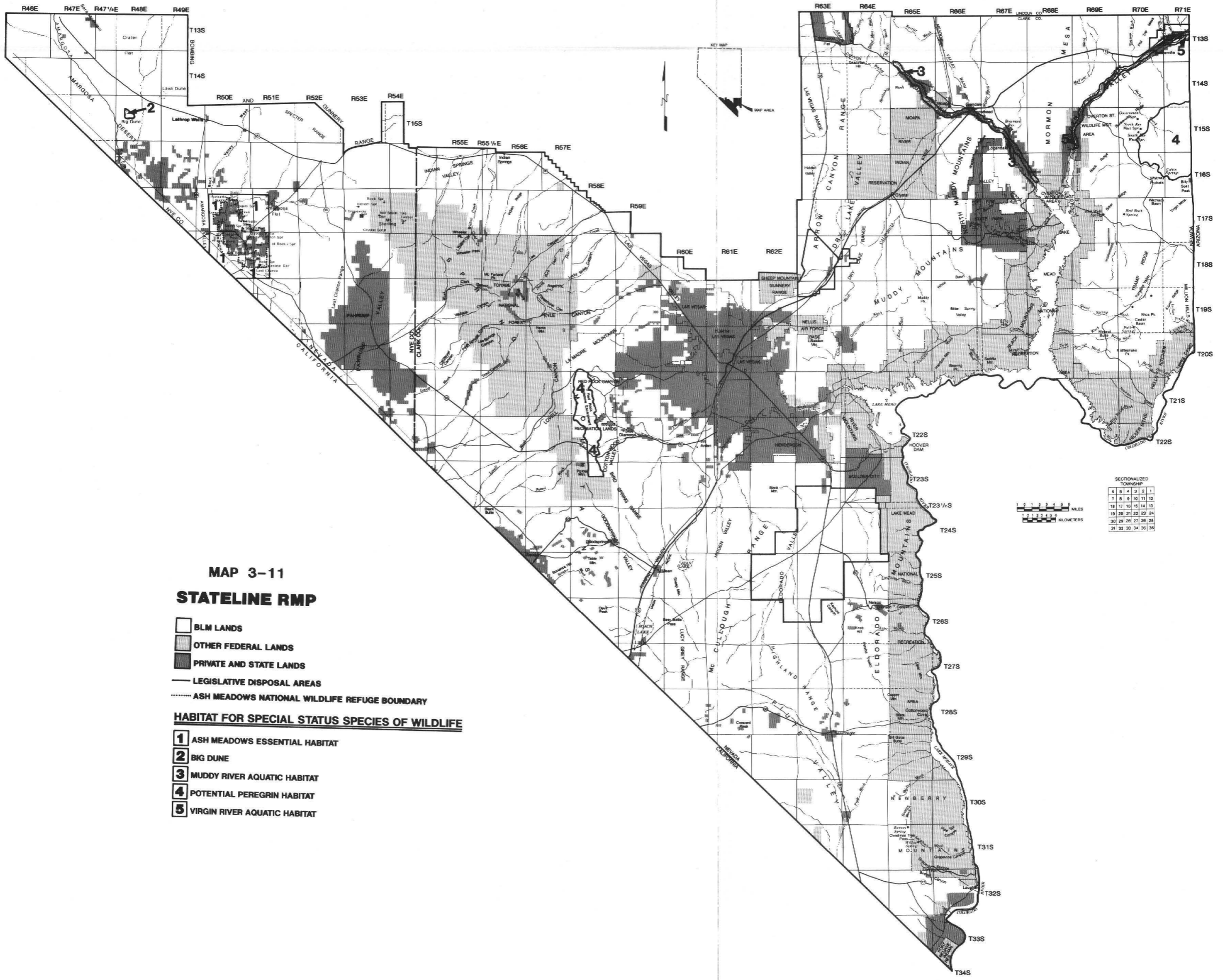
**MAP 3-10
STATELINE RMP**

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- QUAIL, CHUCKAR, PHEASANT & TURKEY HABITATS**
- 1 CRUCIAL QUAIL HABITAT
- 2 CRUCIAL CHUCKAR HABITAT
- 3 PHEASANT & TURKEY HABITAT

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36





**MAP 3-11
STATELINE RMP**

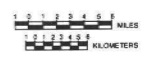
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

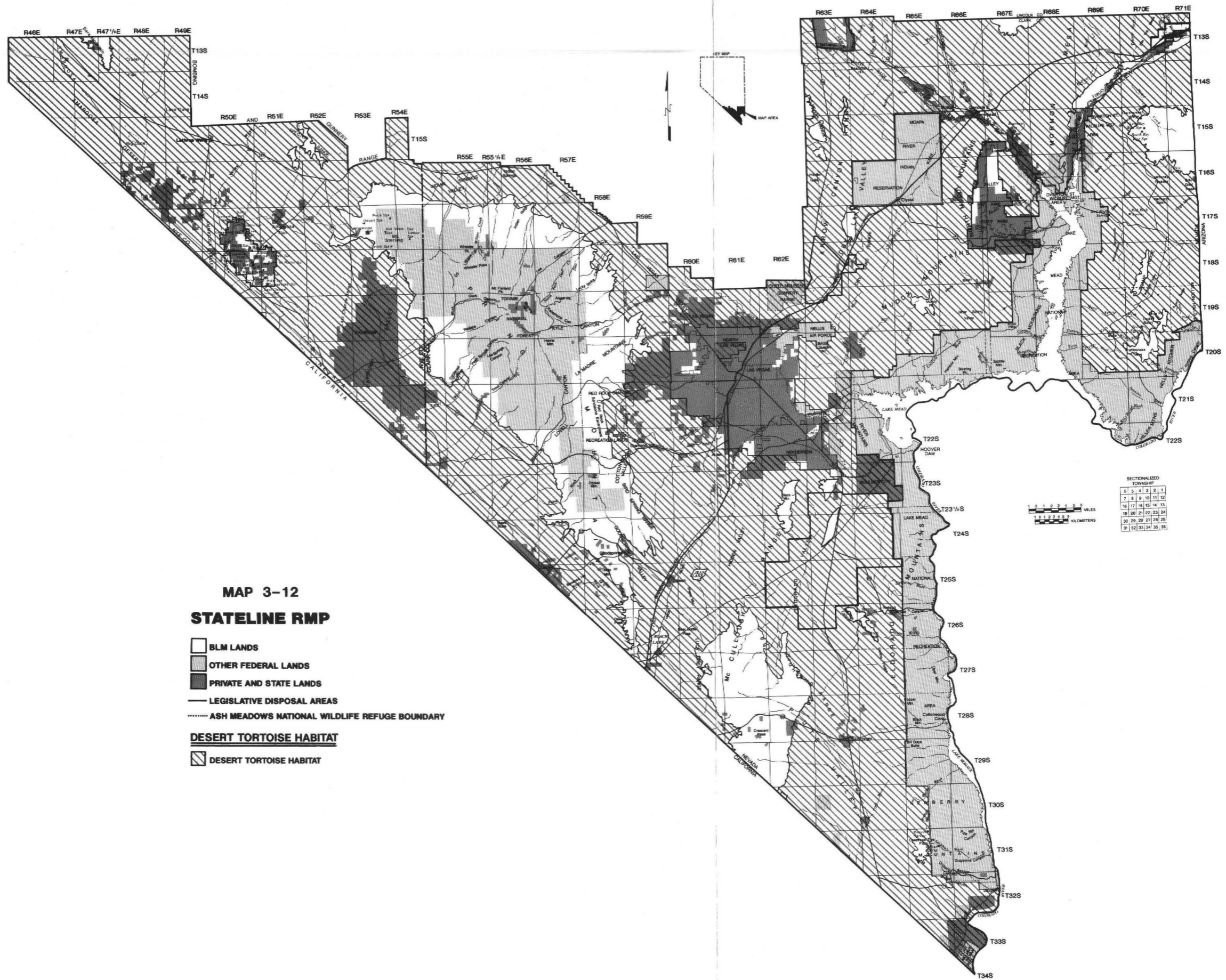
HABITAT FOR SPECIAL STATUS SPECIES OF WILDLIFE

- 1** ASH MEADOWS ESSENTIAL HABITAT
- 2** BIG DUNE
- 3** MUDDY RIVER AQUATIC HABITAT
- 4** POTENTIAL PEREGRIN HABITAT
- 5** VIRGIN RIVER AQUATIC HABITAT

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	6	5	4	3	2
8	7	6	5	4	3
9	8	7	6	5	4
10	9	8	7	6	5
11	10	9	8	7	6
12	11	10	9	8	7
13	12	11	10	9	8
14	13	12	11	10	9
15	14	13	12	11	10
16	15	14	13	12	11
17	16	15	14	13	12
18	17	16	15	14	13
19	18	17	16	15	14
20	19	18	17	16	15
21	20	19	18	17	16
22	21	20	19	18	17
23	22	21	20	19	18
24	23	22	21	20	19
25	24	23	22	21	20
26	25	24	23	22	21
27	26	25	24	23	22
28	27	26	25	24	23
29	28	27	26	25	24
30	29	28	27	26	25
31	30	29	28	27	26
32	31	30	29	28	27
33	32	31	30	29	28
34	33	32	31	30	29
35	34	33	32	31	30
36	35	34	33	32	31





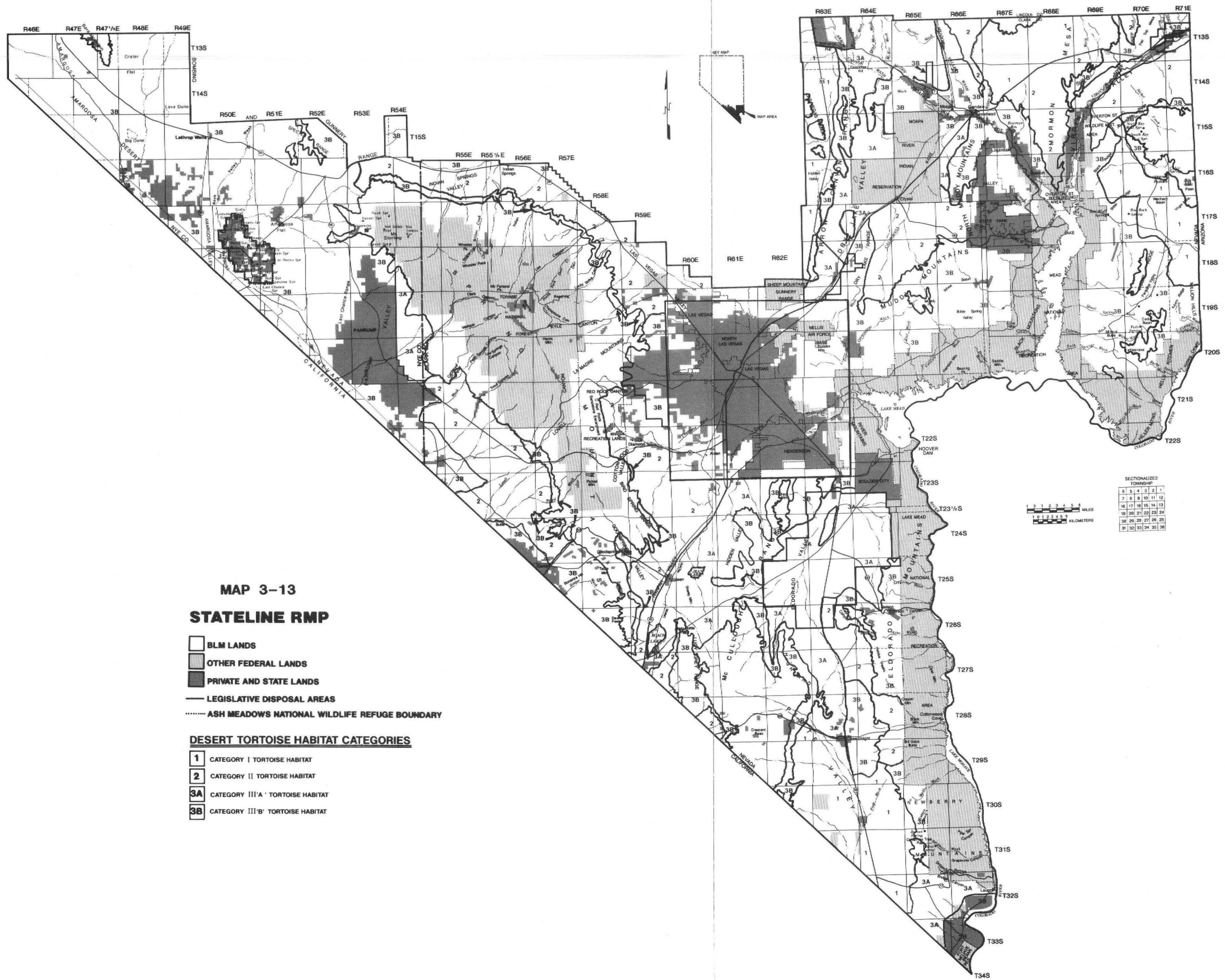
MAP 3-12
STATELINE RMP

- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- DESERT TORTOISE HABITAT**
- DESERT TORTOISE HABITAT

SECTIONALIZED TOWNSHIP

5	4	3	2	1
7	8	9	10	11
13	14	15	16	17
19	20	21	22	23
25	26	27	28	29
31	32	33	34	35

0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS



MAP 3-13
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

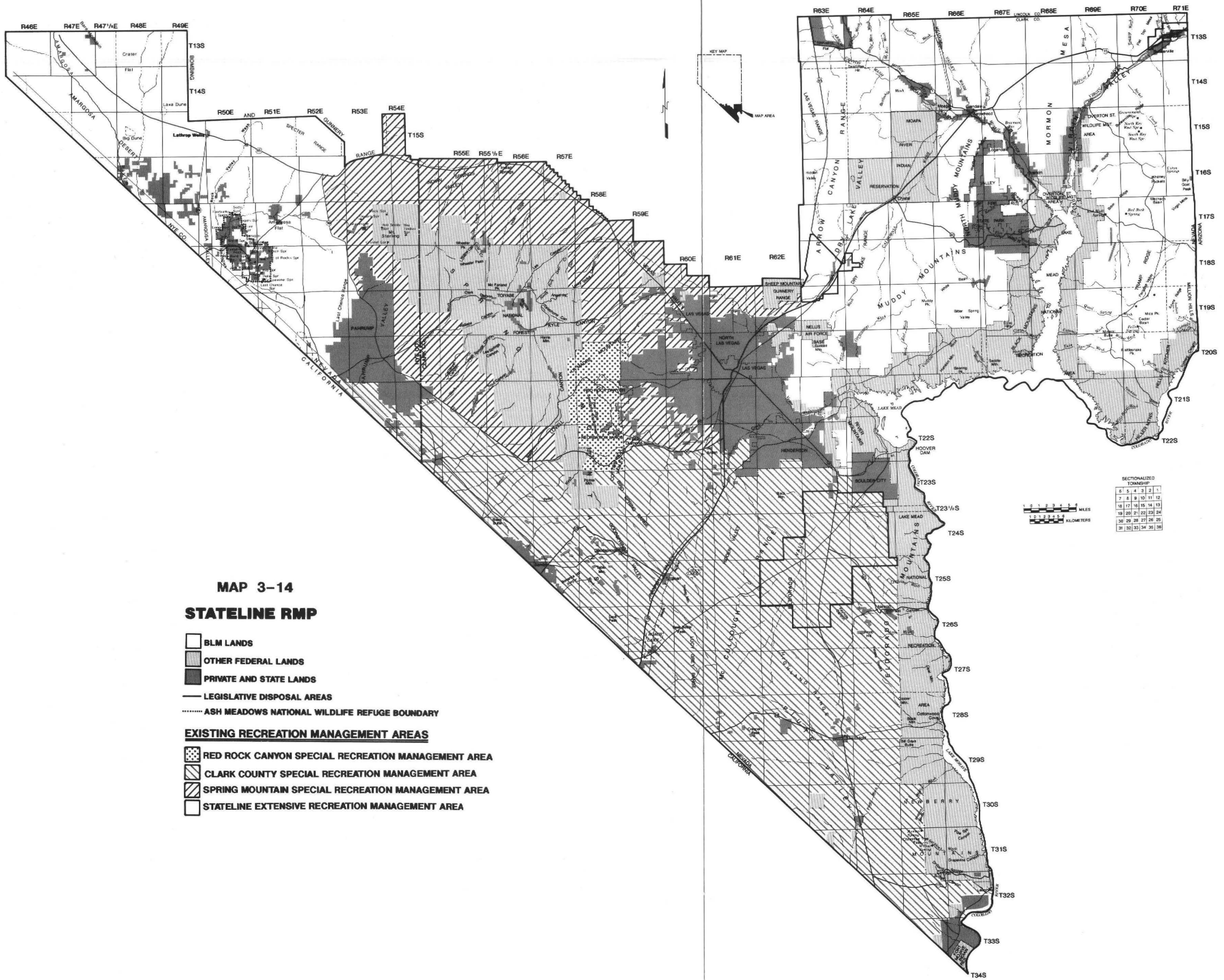
DESERT TORTOISE HABITAT CATEGORIES

- CATEGORY I TORTOISE HABITAT
- CATEGORY II TORTOISE HABITAT
- CATEGORY III 'A' TORTOISE HABITAT
- CATEGORY III 'B' TORTOISE HABITAT

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 MILES
0 1 2 3 4 KILOMETERS



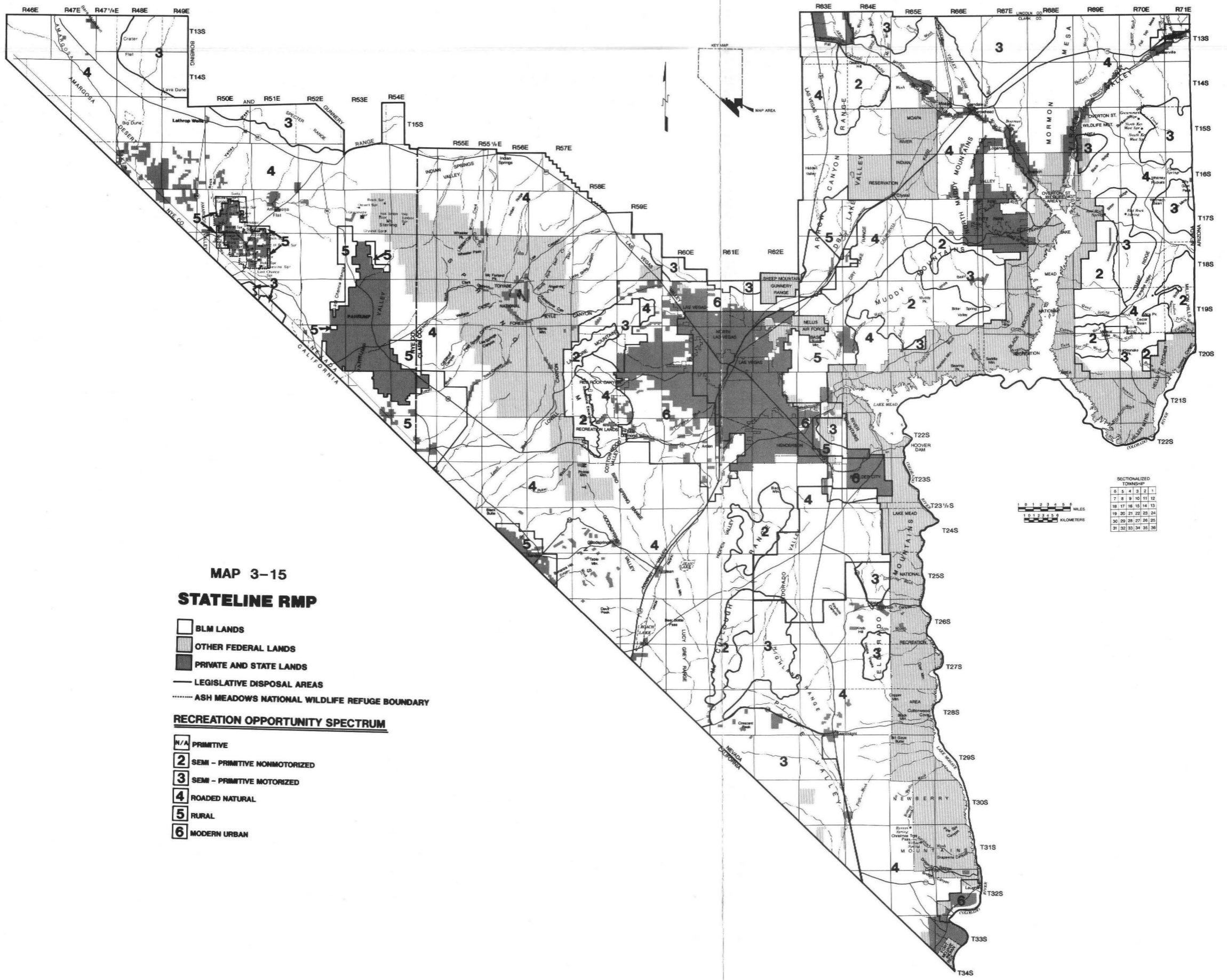
MAP 3-14
STATELINE RMP

- BLM LANDS
 - OTHER FEDERAL LANDS
 - PRIVATE AND STATE LANDS
 - LEGISLATIVE DISPOSAL AREAS
 - ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY
- EXISTING RECREATION MANAGEMENT AREAS**
- RED ROCK CANYON SPECIAL RECREATION MANAGEMENT AREA
 - CLARK COUNTY SPECIAL RECREATION MANAGEMENT AREA
 - SPRING MOUNTAIN SPECIAL RECREATION MANAGEMENT AREA
 - STATELINE EXTENSIVE RECREATION MANAGEMENT AREA

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5 6 MILES
0 1 2 3 4 5 KILOMETERS



MAP 3-15
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

RECREATION OPPORTUNITY SPECTRUM

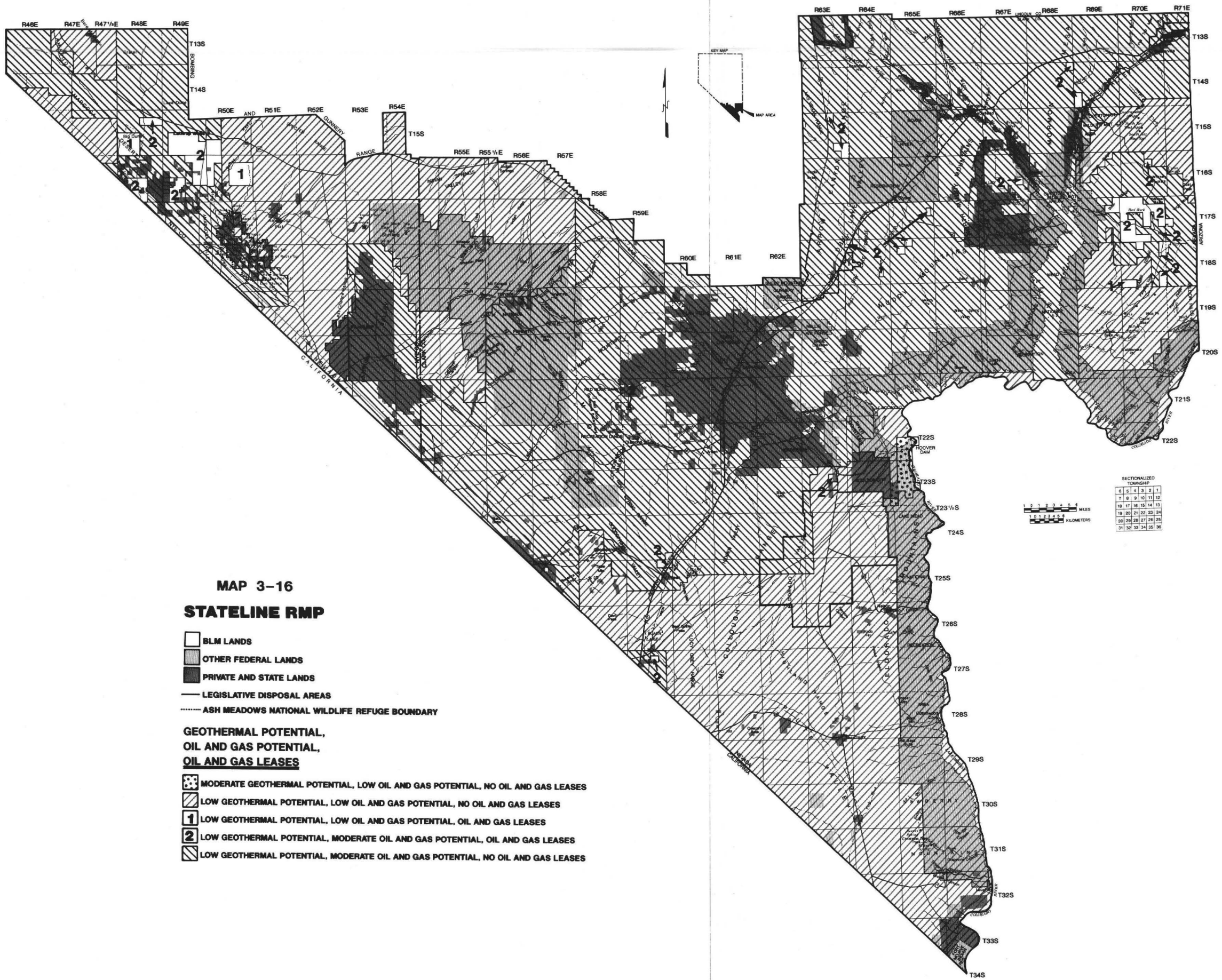
- N/A PRIMITIVE
- 2 SEMI - PRIMITIVE NONMOTORIZED
- 3 SEMI - PRIMITIVE MOTORIZED
- 4 ROADED NATURAL
- 5 RURAL
- 6 MODERN URBAN

SECTIONALIZED TOWNSHIP

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

0 1 2 3 4 5
MILES






0 1 2 3 4 5
KILOMETERS



MAP 3-16
STATELINE RMP

-  BLM LANDS
-  OTHER FEDERAL LANDS
-  PRIVATE AND STATE LANDS
-  LEGISLATIVE DISPOSAL AREAS
-  ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

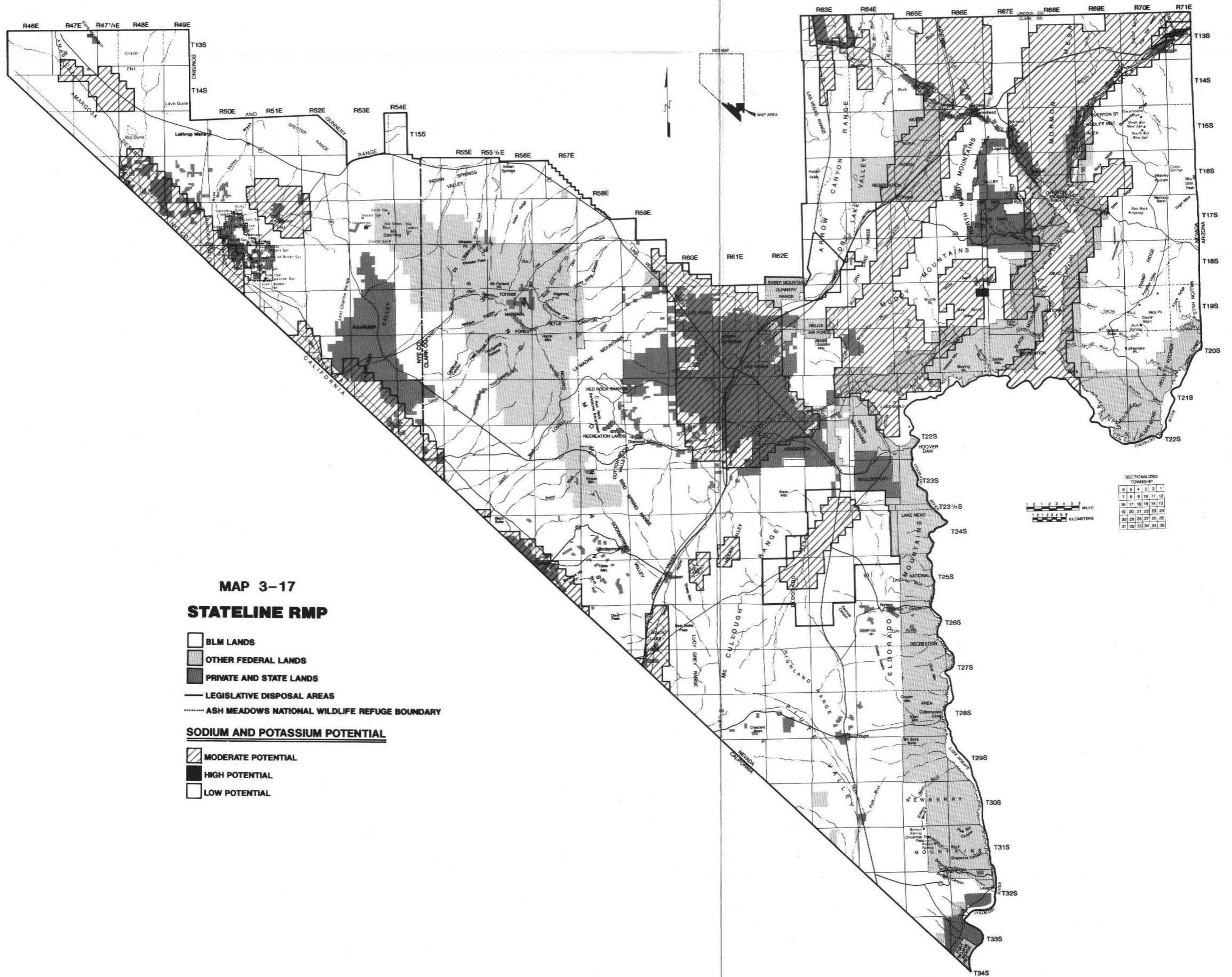
**GEOTHERMAL POTENTIAL,
OIL AND GAS POTENTIAL,
OIL AND GAS LEASES**

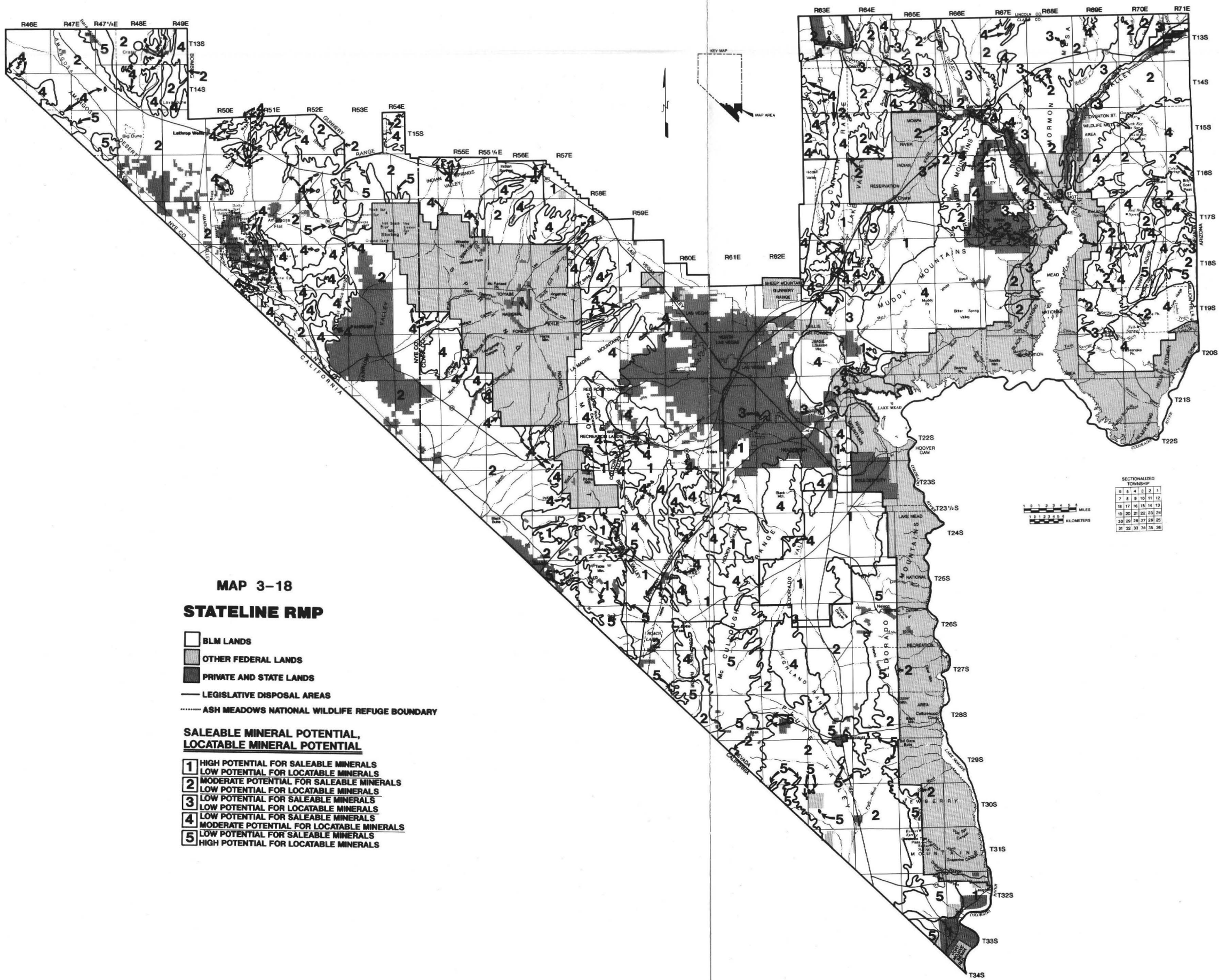
-  MODERATE GEOTHERMAL POTENTIAL, LOW OIL AND GAS POTENTIAL, NO OIL AND GAS LEASES
-  LOW GEOTHERMAL POTENTIAL, LOW OIL AND GAS POTENTIAL, NO OIL AND GAS LEASES
-  LOW GEOTHERMAL POTENTIAL, LOW OIL AND GAS POTENTIAL, OIL AND GAS LEASES
-  LOW GEOTHERMAL POTENTIAL, MODERATE OIL AND GAS POTENTIAL, OIL AND GAS LEASES
-  LOW GEOTHERMAL POTENTIAL, MODERATE OIL AND GAS POTENTIAL, NO OIL AND GAS LEASES

SECTIONALIZED TOWNSHIP

6	9	12	15	18	21
7	8	10	11	12	
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36







MAP 3-18

STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

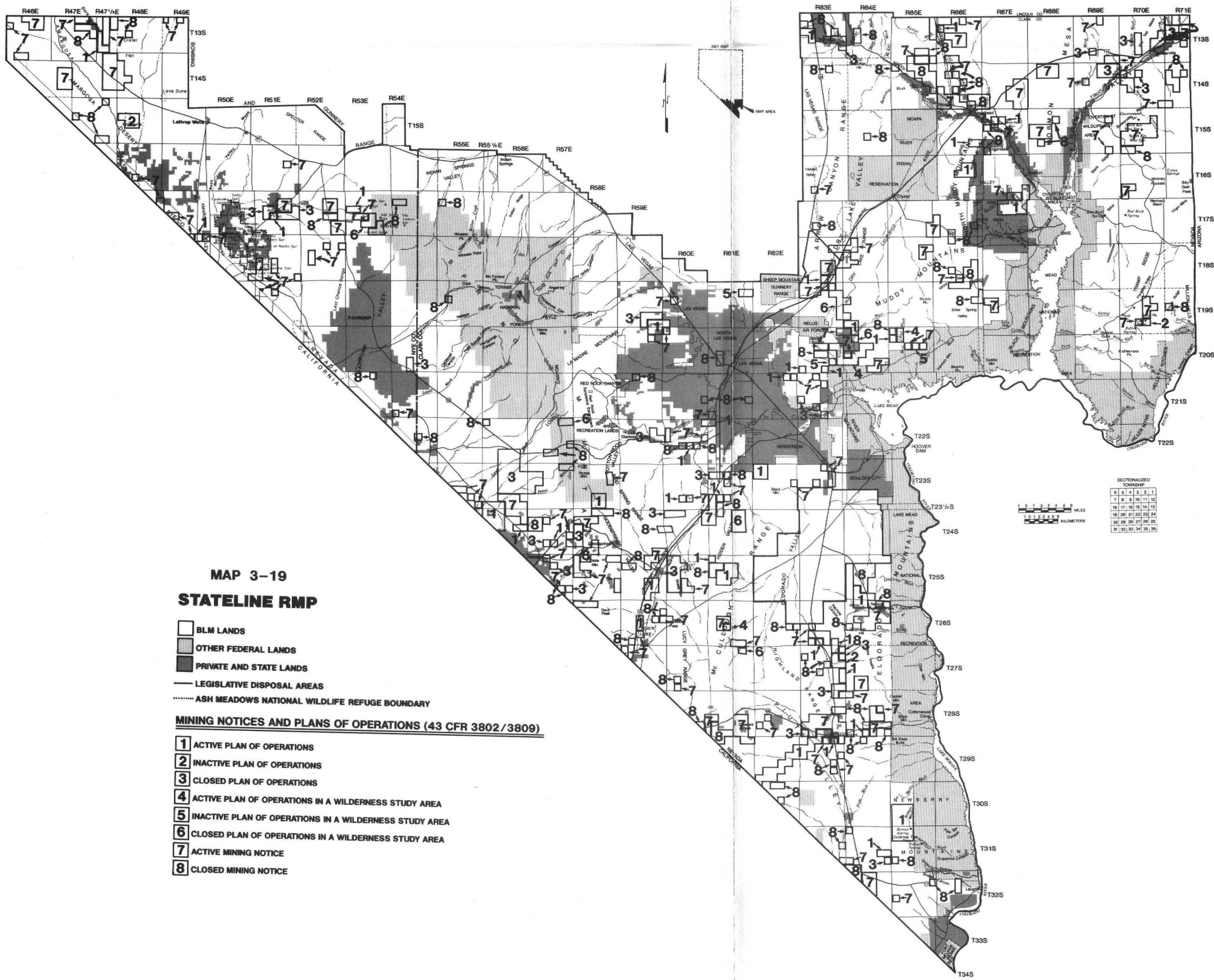
**SALEABLE MINERAL POTENTIAL,
LOCATABLE MINERAL POTENTIAL**

- 1** HIGH POTENTIAL FOR SALEABLE MINERALS
LOW POTENTIAL FOR LOCATABLE MINERALS
- 2** MODERATE POTENTIAL FOR SALEABLE MINERALS
LOW POTENTIAL FOR LOCATABLE MINERALS
- 3** LOW POTENTIAL FOR SALEABLE MINERALS
LOW POTENTIAL FOR LOCATABLE MINERALS
- 4** LOW POTENTIAL FOR SALEABLE MINERALS
MODERATE POTENTIAL FOR LOCATABLE MINERALS
- 5** LOW POTENTIAL FOR SALEABLE MINERALS
HIGH POTENTIAL FOR LOCATABLE MINERALS

SECTIONALIZED
TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 3-19
STATELINE RMP

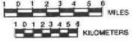
- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

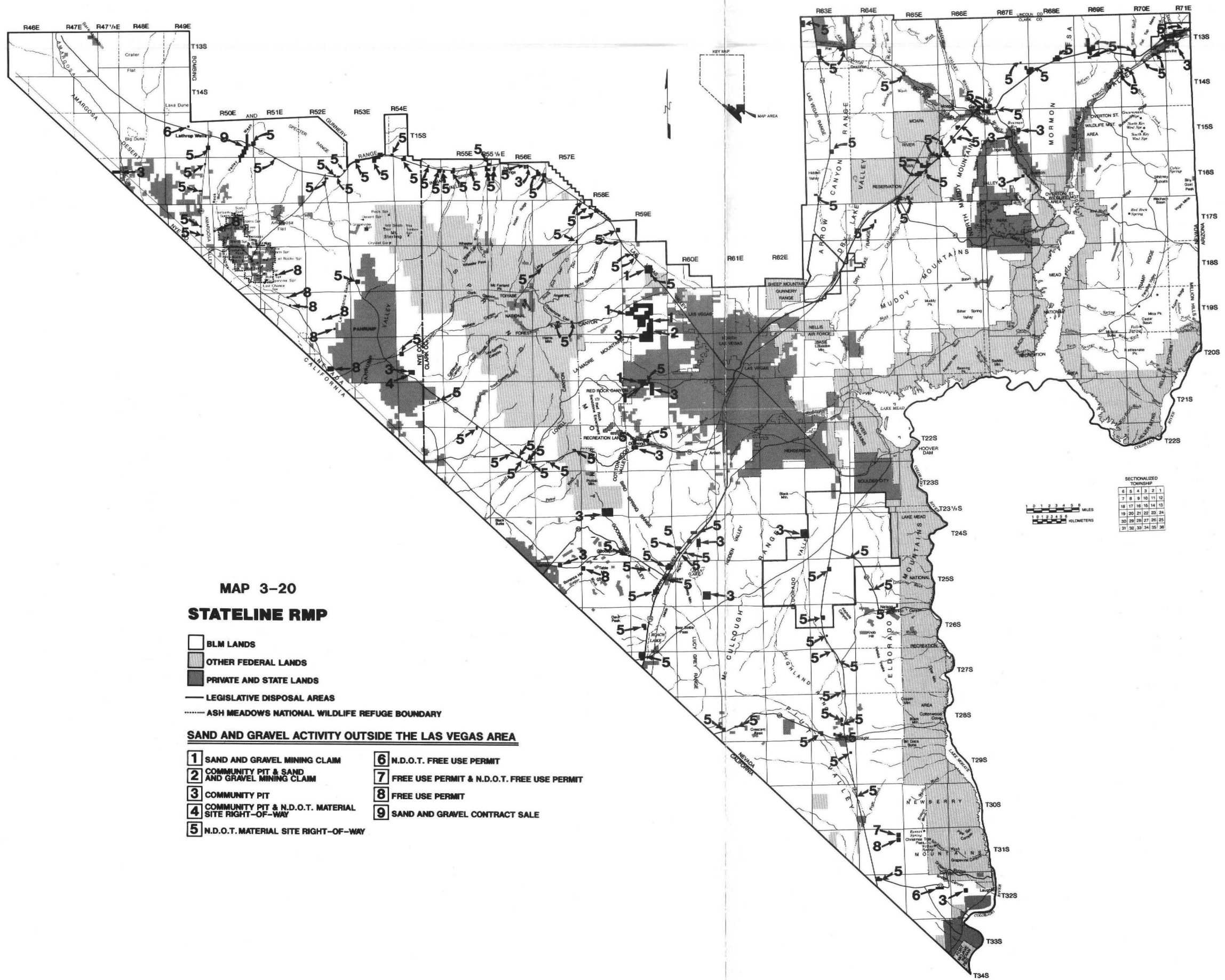
MINING NOTICES AND PLANS OF OPERATIONS (43 CFR 3802/3809)

- 1** ACTIVE PLAN OF OPERATIONS
- 2** INACTIVE PLAN OF OPERATIONS
- 3** CLOSED PLAN OF OPERATIONS
- 4** ACTIVE PLAN OF OPERATIONS IN A WILDERNESS STUDY AREA
- 5** INACTIVE PLAN OF OPERATIONS IN A WILDERNESS STUDY AREA
- 6** CLOSED PLAN OF OPERATIONS IN A WILDERNESS STUDY AREA
- 7** ACTIVE MINING NOTICE
- 8** CLOSED MINING NOTICE

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36





MAP 3-20
STATELINE RMP

- BLM LANDS
- OTHER FEDERAL LANDS
- PRIVATE AND STATE LANDS
- LEGISLATIVE DISPOSAL AREAS
- ASH MEADOWS NATIONAL WILDLIFE REFUGE BOUNDARY

SAND AND GRAVEL ACTIVITY OUTSIDE THE LAS VEGAS AREA

- | | |
|--|--|
| <ul style="list-style-type: none"> 1 SAND AND GRAVEL MINING CLAIM 2 COMMUNITY PIT & SAND AND GRAVEL MINING CLAIM 3 COMMUNITY PIT 4 COMMUNITY PIT & N.D.O.T. MATERIAL SITE RIGHT-OF-WAY 5 N.D.O.T. MATERIAL SITE RIGHT-OF-WAY | <ul style="list-style-type: none"> 6 N.D.O.T. FREE USE PERMIT 7 FREE USE PERMIT & N.D.O.T. FREE USE PERMIT 8 FREE USE PERMIT 9 SAND AND GRAVEL CONTRACT SALE |
|--|--|

SECTIONALIZED TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36



SAND AND GRAVEL ACTIVITY IN THE LAS VEGAS AREA



COMMUNITY PIT



COMMUNITY PIT & N.D.O.T. FREE USE PERMIT.



COMMUNITY PIT & N.D.O.T. FREE USE PERMIT
& MINING CLAIM.



N.D.O.T. FREE USE PERMIT & N.D.O.T. MATERIAL SITE
RIGHT-OF-WAY.



COMMUNITY PIT & N.D.O.T. MATERIAL SITE
RIGHT-OF-WAY.



N.D.O.T. MATERIAL SITE RIGHT-OF-WAY.



FREE USE PERMIT & N.D.O.T. MATERIAL SITE
RIGHT-OF-WAY.



FREE USE PERMIT.



FREE USE PERMIT & MINING CLAIM.



MINING CLAIM.



COMMUNITY PIT & MINING CLAIM.



COMMUNITY PIT & PRE PUBLIC LAW 84-167
MINING CLAIM.



PRE PUBLIC LAW 84-167 MINING CLAIM.



MILLSITE CLAIM.



SAND AND GRAVEL LEASE.

R 58 E

R 59 E

R 60 E

R 61 E

R 62 E

R 63 E

R 64 E

