RECLAMATION

Managing Water in the West

Newlands Project
Draft Resource Management Plan and Environmental Impact Statement

U.S. Department of the Interior
Bureau of Reclamation
Lahontan Basin Area Office

May 2013

Executive Summary

Introduction

The US Department of the Interior (DOI), Bureau of Reclamation (Reclamation), Lahontan Basin Area Office (LBAO) has prepared this draft resource management plan (RMP) and environmental impact statement (EIS) for the Newlands Project Planning Area (Figure ES-1).

The Newlands Project provides irrigation water from the Truckee and Carson Rivers for cropland in the Lahontan Valley near Fallon and benchlands near Fernley in western Nevada through a series of diversions, canals, dams, and reservoirs. The Newlands Project Planning Area encompasses approximately 442,000 acres surrounding the Newlands Project facilities and is composed of all Reclamation-administered lands, including waterbodies, managed as part of the Newlands Project. The Truckee-Carson Irrigation District (TCID) does not manage lands.

Reclamation possesses state permits to store water in its reservoirs but does not own any water rights in the Newlands Project. The operation and maintenance of the Newlands Project are conducted through a contract with the TCID and are not addressed in the RMP. This RMP only addresses the use of Newlands Project lands. This RMP concerns the uses of federal lands administered by Reclamation in the planning area that are ancillary to the primary purpose of providing water for irrigation. The water resource itself and the operation and maintenance of the facilities and infrastructure used in the storage, transport, and delivery of the irrigation water are excluded from this RMP.

This RMP provides a range of alternatives for managing Reclamation-administered lands in the Newlands Project Planning Area, which is in the west-central Nevada counties of Washoe, Storey, Lyon, and Churchill. The EIS is an analysis of the environmental effects that could result from implementing any of the alternatives defined in the RMP. The Newlands Projects lands have been administered to date in accordance with applicable directives and standards. This document will be the first RMP for the Newlands Project lands administered by LBAO.

The RMP/EIS will facilitate public understanding of the range of resources that Reclamation manages. It also will help the public understand the constraints and legal requirements that provide the framework in which Reclamation must manage these lands. The RMP/EIS will provide the basis for consistent and integrated decisions for managing Reclamation-administered lands in the planning area. The guidance provided will help managers administer the Newlands Project lands in fulfillment of Reclamation's mission,

Figure ES-1 Newlands Project Planning Area

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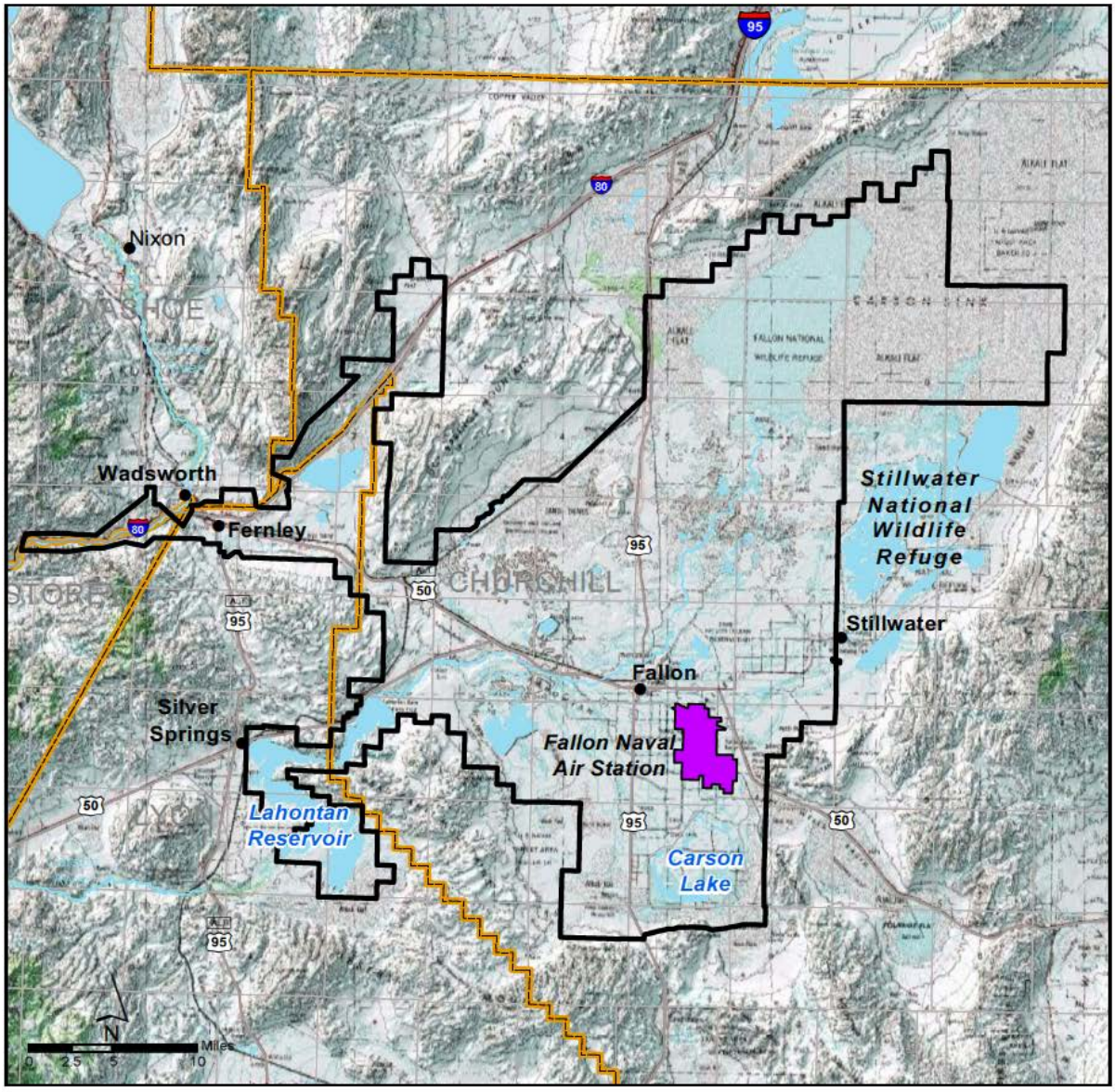
U.S. Department of the Interior
Bureau of Reclamation

Newlands Project Lands



Reclamation lands of the Newlands Project, excluding water, encompass approximately 359,393 acres.

The project does not address the 14 acres of Reclamation Easement at Tahoe Dam

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County
Newlands Project Boundary
City
Interstate Highway
State Highway

which is "to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public."

The RMP will also facilitate the relationships that exist with Reclamation's partners. For example, recreation at the Lahontan Reservoir and the Fernley Wildlife Management Area is managed by the State of Nevada (Nevada State Parks [NSP] and the Nevada Department of Wildlife [NDOW], respectively). A Comprehensive Recreation Management Plan for Lahontan Reservoir will be prepared by NSP within five years of the completion of this RMP.

This RMP/EIS addresses the interrelationships among the various resources in the Newlands Project Planning Area and provides management options to balance resource management between Reclamation's mission and authority, and the needs of the public to use these lands. Reclamation's authority to prepare the RMP is outlined in the Reclamation Recreation Management Act of 1992 (Public Law 102-575, Title 28). This RMP/EIS meets the requirements of the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 Code of Federal Regulations [CFR], Parts 1500-1508; CEQ 1978) and the DOI's regulations for implementing NEPA (43 CFR Part 46).

The land use planning-level decisions that Reclamation will make regarding this RMP are programmatic, based on analysis that can be conducted only on a broad scale. Because of the broad scope, impact analysis of planning-level decisions is speculative with respect to projecting specific activities. Subsequent documents tiered to this RMP will contain a greater level of detail and will be subject to NEPA analysis and compliance.

Purpose and Need

The purpose of the Newlands Project RMP is to provide a single, comprehensive land use plan that will guide contemporary resource needs of the federal lands administered by Reclamation in the Newlands Project planning area. The RMP will help support the Project's authorized purposes: water supply, recreation, water quality, support of fish and wildlife, and any other purposes recognized as beneficial under the laws of Nevada.

The purposes of the Newlands Project RMP are as follows:

- Provide a framework to ensure Reclamation plans and activities comply with all appropriate federal, state, and local laws, rules, regulations, policies, and directives;
- Provide for the protection and management of natural and cultural resources and of public health and safety;
- Provide for non-water based recreation management and development and other uses consistent with contemporary and professional resource management and protection theories, concepts, and practices; and

- Be consistent with Reclamation's fiscal goals and objectives.

The RMP is needed because no unifying management plan exists to guide Reclamation in achieving the demands listed above.

Planning Issues

The following issue statements were developed to summarize the concerns brought forth by the public during the scoping process and by Reclamation during project planning. These statements are designed to state concisely those issues that appear to be of most concern to the public and to Reclamation staff, and to encompass the scoping comments. The statements reflect planning topics that Reclamation addressed when creating the goals, objectives, and management actions identified in Chapter 2. (The issue statements are listed in the order in which they were developed, and are not listed in any order of priority.)

- How will Reclamation manage natural resources, especially sensitive species and wetlands?
- How will Reclamation manage noxious and invasive plant species?
- How will Reclamation manage any cumulative impacts on the area's wetlands?
- What types of cultural resources and Indian Trust Assets are on Reclamation-administered lands, and how will the resources and assets be managed?
- How will Reclamation address its "checkerboard" lands in the project planning area?
- How will Reclamation manage relationships with neighboring landowners, communities, and agencies to meet its management commitments?
- How will Reclamation manage open space and maintain consistent land use policies?
- How will Reclamation manage trespassing, encroachment, and illegal activities on its lands?
- How will Reclamation manage grazing, particularly in Harmon pasture?
- How will Reclamation protect the area's watershed and water quality?
- What kind of cooperative management strategies can Reclamation develop with federal, state, and local agencies?
- What types of recreation activities will Reclamation manage in the Newlands Project area?
- How will Reclamation support agricultural endeavors and ensure irrigation in its management practices?

- How can Reclamation's Newlands Project RMP support local economies?
- How will Reclamation address oil and gas, mineral, geothermal, mill site, and renewable energy development?

Public Involvement

Public involvement is a critical element in developing the Draft RMP. Reclamation's goal is to gain input from a cross section of the user public.

Scoping is a two-component process to determine the extent of issues and alternatives to be addressed in a NEPA document. The first component, internal scoping, is conducted in an agency or with cooperating agencies to determine preliminary and anticipated issues and concerns. Reclamation held an interagency meeting in March 2007, with an interdisciplinary team of LBAO staff, its contractors for the RMP, and cooperating agencies to identify the anticipated planning issues and the methods, procedures, and data to be used in compiling the RMP/EIS.

The second component of scoping involves the public. In order to educate the public about the RMP process for the Newlands Project Planning Area and to solicit its input, Reclamation held a public scoping meeting in Reno on September 18, 2007, and in Fallon on September 19, 2007, to solicit issues and concerns that would be considered in the RMP. Most comments focused on planning and the NEPA process, on general resource protection, and on biological resources. Input from both internal and public scoping was compiled into a list of potential issues for Reclamation to address in this RMP/EIS.

Public input and participation help ensure that the plan will meet the needs of the stakeholders, while providing for development and management of the Newlands Project Planning Area. Reclamation will use public and agency review of this Draft RMP/EIS in finalizing the RMP.

Management Alternatives

Three management alternatives were developed to address the major planning issues. Each alternative provides direction for resource programs based on the development of specific goals and management actions. Each alternative describes specific issues influencing land management and emphasizes a different combination of resource uses, allocations, and restoration measures to address issues and resolve conflicts among users. Resource program goals are met in varying degrees across alternatives. Management scenarios for programs not tied to major planning issues or mandated by laws and regulations often contain few or no differences in management between alternatives.

The alternatives vary in the degree to which activities are allowed or restricted, the amount of access allowed for activities, and the amount of mitigation or restoration required for authorized activities. Grazing is where the alternatives differ the most and was of most interest to the public during scoping. These differences are summarized in the paragraphs following the discussion of Management Actions Common to All Alternatives.

Management Actions Common to All Alternatives

Each of the alternatives has different components and management actions that would attain the direction of that alternative. However, several components and management actions are common to the No Action and action alternatives.

Under all alternatives, Reclamation would comply with all applicable laws and regulations, including those relating to air and water quality, hazardous materials, fish and wildlife, special status species, trespass, health and safety, transportation, recreation, cultural resources, social and economic resources, and environmental justice. After selection and implementation of an alternative, Reclamation will continue to work with appropriate agencies and entities to adequately manage the Newlands Project Planning Area. Further, the Newlands Project will continue to be designated and managed as a Special Use Area, in accordance with 43 CFR, Part 423.

Alternative A (No Action—Continue Current Management)

The current levels, methods, and mix of multiple use management of Reclamation-administered lands in the Newlands Project Planning Area would continue, and resource values would generally receive attention at present levels.

Under Alternative A, the issuance of grazing leases, including the associated terms and conditions, would be brought into compliance with Reclamation's current directives and standards. Seasonal and annual grazing leases would be issued for a maximum of one year through a noncompetitive renewal process. Range improvements would have to be compatible with directives and standards and with project purposes.

Alternative B (Agency Preferred)

Alternative B is intended to balance management of resource uses with management of natural and cultural resources. This alternative was developed by combining those aspects of Alternatives A and C that provide the most balanced outcome for managing Reclamation-administered lands in the Newlands Project Planning Area. Alternative B incorporates many management objectives and actions from the other two alternatives and may include new management direction as necessary. This alternative also generally would allow for more uses and active resource management than under Alternative C but less than under Alternative A.

Under Alternative B, a Grazing Management Plan would be developed with public input to balance grazing with restoration of land health in grazing areas. The plan would

include decision criteria concerning allotment boundaries, length of leases and renewals, lease terms and conditions, fees, management during extreme conditions (e.g., droughts and fires), and the needs for maintaining sustainable rangeland health and protecting sensitive habitats. When the plan is approved, current leases and allotments would be reevaluated in accordance with the criteria in the plan. Reclamation would manage grazing in accordance with the plan. Range improvements and maintenance responsibilities would be inventoried and managed, and new improvement authorizations would be carried out in accordance with the plan.

Alternative C (Conservation)

Alternative C deemphasizes recreation, access, and mineral and energy development goals in favor of natural resource values. There would be more restrictions on these resource uses than under the other alternatives. Off-road vehicle (ORV) use would be completely prohibited on Reclamation-administered lands.

Under Alternative C, all grazing on Reclamation-administered lands would be phased out and eliminated within two years. Rangeland improvements would be removed where appropriate and where the improvements are no longer needed. Degraded rangelands would be identified for revegetation and restoration.

Environmental Consequences

Alternative A (No Action Alternative) would be a continuation of current management. Alternative B would allow for many uses to continue but could constrain certain activities in order to maintain or improve natural and cultural resources. Alternative C would have a lesser impact on physical and biological resources but a greater impact on the potential for development and recreation in the Newlands Project Planning Area.

Taking no action (i.e., choosing the No Action Alternative) would prohibit Reclamation from implementing management measures needed to both protect resources and to address concerns related to recreation and other resource use pressure.

Detailed descriptions of impacts of the three alternatives are provided in Chapter 4, along with a discussion of the cumulative impacts, irretrievable and irreversible commitments of resources, and unavoidable adverse impacts of the alternatives.

Rationale for Identifying the Preferred Alternative

Alternative B is Reclamation’s preferred alternative and the proposed action alternative. Reclamation selected the preferred alternative based on interdisciplinary team recommendations, environmental consequences analysis of the alternatives, and public input during scoping.

Alternative A, the No Action Alternative, minimally addresses current and relevant issues identified through public scoping and required components of the land use planning document. Alternative A was not the preferred alternative because it does not adequately address issues and concerns identified by the public or required planning components and concerns of the planning team.

Alternative C addresses the identified relevant issues and required components necessary in a land use planning document focusing on conservation of the public land. Alternative C also addresses the public's issues and concerns through identified management direction, as well as the purpose and need, but lacks a balance between resource conservation and resource use allocations.

At this time, Alternative B, the preferred alternative, provides the most reasonable and practical approach to managing the Newland Project land resources and uses, while addressing the relevant issues and purpose and need. This alternative incorporates many management objectives and actions from the other alternatives and may include new management direction, as necessary. Alternative B balances project lands management with an appropriate level of flexibility to meet the overall needs of the resources and use allocations. This alternative represents management that is proactive and provides flexibility to adjust to changing conditions over the life of the plan, while emphasizing a level of protection, enhancement, and use of the resources into the future.

Comparison and Summary of Alternatives and Environmental Consequences

This section is a summary of key differences in environmental effects among the alternatives discussed in detail in Chapter 4

Air Quality

Impact: Carbon monoxide emissions.
Alternatives Comparison: The management of Newland Project lands would not affect residential wood burning under any of the alternatives and, therefore, would not affect the levels of carbon monoxide in the planning area.

Impact: Fugitive dust emissions.
Alternatives Comparison: Under Alternatives B and C, management of geological resources, hydrological resources, vegetation, livestock grazing management, and transportation would reduce the generation of dust, compared to Alternative A. With respect to transportation management under all alternatives, Alternative C would be the most restrictive on access and would thereby reduce the amount of dust emissions the most.

Noise

Impact: Noise from transportation, recreation, mineral exploration and extraction, and other land use activities.
Alternatives Comparison: Noise levels would remain reduced under Alternatives B and C compared to Alternative A. Under Alternative B, management actions would reduce the number of noise sources and noise levels. Under Alternative C, there would be a greater reduction in the number of noise sources and noise levels due to greater restrictions on resource use activities.

Geological Resources

Impacts: Destruction or vandalism of unique geological features.
Alternatives Comparison: Under Alternative C, there would be less disturbance and potential for vandalism to unique geologic features than under Alternatives A or B.

Impact: Compaction of soils and biological crusts.
Alternatives Comparison: Alternative C would have the least soil compaction and impacts on biological crusts from livestock. Biological crusts that have been eliminated could regenerate over time. Alternative B would have more soil compaction from livestock than Alternative C, but less than Alternative A.

Impacts: Soil health and erosion of soils.
Alternatives Comparison: Alternatives B and C would close some roads and restrict public access to others, reducing the resulting erosion and the impacts on soils. Alternatives A, B, and C would prohibit ORV operation except by special use permit and would limit the amount of travel on unpaved roads and off road. These restrictions would limit the resulting erosion and unvegetated areas. There would be greater restrictions on access under Alternative C than under the other alternatives, with a commensurate reduction in impacts on soils.

Alternative B includes more actions than Alternative A to improve rangeland health conditions, remediate areas of contamination, and reduce erosion. Alternative C would reduce or eliminate grazing, and include more actions to improve rangeland health conditions and reduce erosion than Alternative B.

Mineral Resources

Impact: Less area for geothermal leasing.
Alternatives Comparison: Alternatives A, B, and C would restrict geothermal leasing close to Newlands Project facilities.

Impact: Harder to develop mineral resources.
Alternatives Comparison: Under Alternatives B and C, locatable minerals activities would be restricted in flood zones and wildlife management areas and near Newlands Project facilities, roads, trails, crops, streams, recreation developments, rights-of-way (ROWs), and irrigation facilities. Mineral development would be prohibited in wetlands and riparian habitat, thus reducing the area available for mining and drilling.

Transportation management actions would close some roads, which could result in more difficult access for mineral development and operations. Alternative A does not include these restrictions as policy, only on a case-by-case basis.

Alternative C would restrict all surface drilling near Newlands Project facilities.

Hydrological Resources

Impact: Improvement of surface water quality.
Alternatives Comparison: Alternatives A, B, and C would designate sensitive biological, cultural, and hazardous areas as exclusion or avoidance zones, minimizing surface-disturbing activities in those areas. These designations could result in a commensurate reduction in impacts on soils and associated impacts on surface water quality.

The soil health conditions and reduction of erosion, with the resulting improvement of surface water quality, would be greatest under Alternative C.

Visual Resources

Impact: Alteration of natural landscape.
Alternatives Comparison: Alternatives A, B, and C would prohibit mineral development and occupancy of the surface or surface drilling in designated areas. This prohibition would continue to protect the natural landscape from mineral development capable of altering visual resources. Alternative C would prohibit more activities in more areas and therefore protect more visual resources.

Cultural Resources

Impact: Disturbance of cultural resources.
Alternatives Comparison: Alternative C is most protective of cultural resources and would phase out grazing, which would eliminate a source of potential disturbances. Under Alternative C, actions that emphasize resource conservation and protection, and that restrict incompatible actions, would best protect significant cultural resources, followed by Alternative B, and then Alternative A. Alternative B, in almost all instances, provides more actions and proactive planning than Alternative A, which would result in additional protection for cultural resources. Alternative A would not change current management or provide any additional protections for cultural resources.

Fish and Wildlife (including Threatened and Endangered Species)

Impacts: Loss or alteration of native habitats; decreased food and water availability and quality; increased habitat fragmentation; changes in habitat and species composition, behavior, reproductive fitness; or increased susceptibility to predation and other mortality.

Alternatives Comparison: Under all alternatives, habitat for special status species would be protected, conserved, and enhanced. Alternative A does not have specific actions for the management of general fish and wildlife.

Alternative B would consider effects on wildlife habitat when allowing activities and land use authorizations. Key habitats, such as riparian areas and wetlands, would be inventoried and managed to protect these areas. Alternative B would also identify and protect mule deer winter habitat in the project area.

Alternative C would prioritize avoiding impacts on wildlife habitat when allowing activities. This prioritization would add additional protections to wildlife habitat over Alternatives B and A. Alternative C would also develop strategies to improve aquatic habitat. Alternative C would have the most protections on fish and wildlife, followed by Alternatives B, then A.

Vegetation (including Invasive Species and Weeds)

Impacts: Disturbance of habitat and removal of vegetation.
Alternatives Comparison: Surface disturbance removes vegetation, reduces vegetation diversity, production, and desirable plant cover; increases opportunities for noxious weeds and invasive species establishment; and increases dust affecting vegetation health and vigor. Alternative A would allow ORV use only is designated areas.

Alternative B would provide more protection to vegetation than Alternative A by prohibiting surface disturbing action in more areas; managing public access; applying more best management practices (BMPs) to prevent contamination and surface disturbance; and including limiting impact to vegetation in the management of other resources. Alternative B would restrict activities to protect the biocrust.

Closing roads and managing public access under Alternative B would reduce human disturbance, trampling, or removal of vegetation and illegal activities that could damage or destroy vegetation, reduce vegetative health and vigor, or introduce or spread weeds.

Alternative C would provide the greatest protection to vegetation by prohibiting surface-disturbing action in the largest area; prohibiting ORV use; imposing the greatest limitations to public access; applying the most stringent BMPs to prevent contamination and surface disturbance; and including protection of vegetation in the management of other resources. Alternative C would also eliminate surface disturbances during dry seasons to protect biocrust.

Impacts: Increase in noxious weeds and invasive plant species; increases in mortality; reduced vigor of native plants from herbicides.
Alternatives Comparison: Alternatives B and C would implement an integrated weed management program to effectively reduce or eliminate weeds in certain areas and would prevent the weeds' introduction and spread. Alternative B includes biological, manual, cultural, and herbicidal techniques for control of invasive species and noxious weeds which could have effects on nontarget species. Alternative C weed control would have

effects similar to those described under Alternative B, except herbicides would not be used, eliminating risks to nontarget species. Alternative C would have less effective control of certain weed species.

Impact: Restoration of plant habitat.
Alternatives Comparison: Alternative B includes managing vegetation to maintain healthy range conditions and standards for land reclamation to reestablish native vegetation on disturbed sites after mineral development, remediate identified areas of contamination, and help restore and maintain native vegetation.

Alternative C would include managing to improve range conditions, implementing closures and exclusion zones to improve land health standards, protecting and expanding native plant communities, restricting clearing of native plant communities, and protecting and restoring wetlands, and would seek to expand areas with native vegetation. Alternative C would be the most effective alternative in protecting, improving, restoring, and enhancing native plants.

Impacts: Trampling and overgrazing of vegetation by livestock.
Alternatives Comparison: Alternative A's custodial type of management would be the least effective approach in preventing effects on vegetation caused by livestock grazing. Alternative B would include managing grazing within the land's carrying capacity and would prevent effects from overuse of the land, such as vegetation trampling and removal, soil compaction, and weed introduction or spread. Alternative C would have the fewest effects on vegetation caused by livestock grazing, since grazing would be phased out in the Newlands Project planning area.

Indian Trust Assets

Impacts: Changes to Indian Trust Assets (ITAs)
Alternatives Comparison: Tribal economic interests on reservation lands would not be affected or may be enhanced by actions contemplated in the RMP/EIS. Anticipated economic growth in the planning area is expected to be incremental among all the alternatives, with the most potential growth under Alternatives B and C, and then under Alternative A, which does not address measures leading to relinquishing land.

Livestock Grazing

(Note: Impacts from reductions in grazing are primarily social and economic and are discussed under Socioeconomics and Environmental Justice.)
Impacts: Reduction in amount of land available for grazing, or the amount of livestock allowed to graze.
Alternatives Comparison: Alternative A would implement a custodial type of management which would be the least restrictive to livestock grazing. It would also be least effective in maintaining healthy forage and ensuring that lands are being grazed within the carrying capacity.

Under Alternative B, a more flexible grazing management plan would be implemented to ensure a healthy and sustainable rangeland system, considering annual adjustments in such aspects as season of use, area available for grazing, and carrying capacity. The plan would likely reduce the overall number of lease holders, the area available for grazing, and the number of livestock on Newlands Project lands. In addition, implementation of use authorization fees, in accordance with the grazing management plan, could change the costs to lease holders. Effects would depend on the locations and specific changes that were made. The plan would manage forage conditions over the long term, indirectly improving livestock health and increasing conception rates.

Alternative C would phase out and eliminate grazing on Reclamation-administered lands within two years.

Land Use and Status

Impacts: Conflicting land use.
Alternatives Comparison: Alternative A would minimize land use conflicts involving land use, mineral resources, public health and safety, and recreation. Alternative B would also minimize land use conflicts involving geological resources, hydrological resources, cultural resources, fish and wildlife, vegetation, livestock grazing, energy development, fire, and transportation, as well as potential land use conflicts with neighboring land users. While Alternative C would manage for land use conflicts in the same manner as Alternative B, there would be a greater amount of area with restrictions, thus allowing greater control of potential land use incompatibilities.

Energy Development

Impacts: ROW exclusion areas limiting renewable energy development.
Alternatives Comparison: Alternative B ROW restrictions, use authorization limitations, and exclusion and avoidance areas could limit energy development and ROWs for renewable energy in areas where those limitations apply. In general, impacts on energy development under Alternative C either would be similar to Alternative B or would be slightly more likely to restrict renewable energy development.

Fire Management

Impact: Increased fuel load for potential fires.
Alternatives Comparison: Alternative A would both reduce fine fuels though grazing and increase fine fuels through the spread of invasive plants and weeds that are not consumed by livestock, thus increasing fire activity and need for fire suppression, along with the need for restorative treatments following fire.

Effects on fire management from grazing under Alternative B would be the same as under Alternative A, except that establishing healthy range conditions would reduce fuels.

Alternative C would eliminate grazing, resulting in additional grasses and fine fuels, but would reduce the spread of invasive plants and weeds. Alternative C would be slightly less effective than Alternative B in control of weeds and invasive plants due to the former alternative's restrictions on the use of herbicides. Alternative C would result in somewhat more fuel load.

Grazing would affect fire management because it reduces fine fuels, such as grasses, where livestock consume the available forage. This reduction could affect fire behavior. On the other hand, grazing could increase the spread of invasive plants and weeds, which may add more fine fuels, particularly when the plants and weeds are of species that livestock do not readily consume.

Impact: Reduction in sources of fire ignition.
Alternatives Comparison: Alternative A would allow access to public roads and trails, but would not control access on these routes, likely leading to additional fire ignition.

Alternative B would eliminate the general public's access and confine public vehicles to appropriate roadways, thus reducing the area with public access.

Alternative C would reduce accidental and human-caused wildfires more than Alternative B, because additional roads would be closed.

Transportation

Impacts: Limitations to visitor access.
Alternatives Comparison: Alternatives A, B, and C would limit visitor access to sensitive wildlife areas and to areas with sensitive habitats or historic resources, to minimize impacts to these resources.

Alternatives B and C would likely increase access and travel routes to meet recreational user demand over Alternative A, and would result in additional roads to provide access to new utility corridors, but they would restrict access within those corridors. Alternatives B and C would confine all public vehicles to appropriate roadways.

Alternative C would prohibit all ORV use, reduce the amount of traffic on trails, and limit access to users in the planning area.

Impact: Protection of roads and trails.
Alternatives Comparison: Alternatives A, B, and C provide similar prohibitions regarding geothermal leasing near Newlands facilities and would prohibit occupancy of the surface or surface drilling near roads and trails in the planning area. These provisions would also provide a buffer around drilling activity and travel routes. The protected area would be slightly greater under Alternative C.

Impacts: Limits to location of routes.
Alternatives Comparison: Under Alternatives B and C, protection of wildlife areas, wetlands, and riparian habitats could affect the planning of future roads and trails.

Public Health and Safety (and Illegal Activities)

Impact: Increased public safety.
Alternatives Comparison: Under Alternative A, Reclamation would continue to implement a program of public safety information, education, and contact through such means as signs, pamphlets, maps, and public notices. Reclamation would continue to maintain the current level of law enforcement.

Under Alternatives B and C, Reclamation would additionally identify any hazards associated with abandoned mines, contaminated soils, and hazardous materials. Reclamation would increase law enforcement and monitoring on its lands.

Recreation

Impacts: Reduced ORV access.
Alternatives Comparison: Under Alternatives A and B, all ORV use on lands administered by Reclamation would be prohibited, except where authorized by special use permits as currently allowed per 43 CFR 420 "Off-Road Vehicle Use."

Alternative C would confine all vehicles to roadways and would prohibit all ORV operation.

Impact: Reduction in areas where hunting would be allowed.
Alternatives Comparison: Under Alternatives A and B, hunting would continue to be allowed, consistent with Reclamation policy and federal, state, and local laws.

Alternative C would restrict hunting in the planning area to protect resources, which would result in fewer opportunities for hunters and possibly would increase hunter densities in other areas.

Impacts: Potential conflicts between recreation and other resources or resource uses.
Alternatives Comparison: Under Alternatives A, B, and C, restrictions on geothermal development in some areas would reduce the potential for conflict with recreation in those areas. The amount of area with restrictions is slightly higher under Alternative C.

Under Alternative A, current uses would continue with some potential for conflicts between grazing or mineral development and recreation. The impacts under Alternative B would be similar to those of Alternative A. Alternative C would eliminate all grazing on Reclamation land and would result in the most recreation opportunities in the planning area, since there would be no potential conflict between recreationists and livestock.

Under Alternatives B and C, mineral development would not be allowed in wetlands, wildlife areas, and riparian habitats. This prohibition would improve the scenic qualities of the area and the recreation setting.

Impacts: Limits to recreation.
Alternatives Comparison: Alternative B would manage recreation in the planning area consistent with Reclamation policies and would identify areas suitable for recreation

based on facility needs, public interest, and the protection of natural and cultural resources. This would limit the overall amount of recreation allowed on Reclamation land.

Alternative C would restrict recreation the most of any of the alternatives. Areas identified as suitable for recreation would be based solely on natural and cultural resource needs. This selection process would result in the least amount of land being available for recreation and would limit the overall recreation opportunities in the planning area. If more areas were closed to recreation, the number of people recreating in the areas that are open would increase, thereby changing visitor use patterns and decreasing overall opportunities for solitude in the planning area.

Socioeconomic and Environmental Justice

Recreation (including hunting), minerals and energy development, and livestock grazing are sources of economic activity in the planning area. Under all alternatives, restrictions to protect environmental and human resources could enhance these resources and the associated socioeconomic value to visitors, but the same restrictions could also limit the economic contribution of resource uses.

Impact: Reduction in the economic contribution of resource uses on Reclamation lands
Alternatives Comparison: Alternative A proposes the lowest level of restrictions for resource protection and would, therefore, be the least likely of the alternatives to increase costs for livestock grazing or minerals operations.

Alternative B would retain grazing; however, there would be less land available for grazing than under Alternative A, with the possibility of increased costs to ranchers. Stipulations on geothermal, locatable minerals, and mineral materials development could reduce the economic contribution of minerals on planning area lands under Alternative B. Alternative B calls for lower levels of restrictions to protect sensitive resources than Alternative C.

Grazing would be eliminated under Alternative C, which would impact individual ranchers, the local economy, and the social values of the local area. Also, this elimination could result in environmental justice effects if increased ranching costs were to result in a loss of jobs and reduced income to low-income or minority populations.

Alternative C recommends the greatest area of restrictions to protect other resources, and could increase the costs of minerals and energy development to avoid restricted areas. The result could be fewer minerals and energy operations and jobs generated on planning area lands than under the other alternatives and a lower contribution to the local economy.