# Chapter 4 Alternatives

#### Introduction

This chapter discusses the process Reclamation used to formulate alternatives to the proposed Federal action, describes the alternatives in detail, and provides a summary comparison of the effects of the alternatives on resources and environmental factors within the study area (table 4.1, located at the end of this chapter).

As stated previously, Reclamation management goals and objectives and associated management actions were formulated to respond to issues and concerns raised by the public, agency consultation and coordination, and review of its programs and policies. The proposed management actions are described in detail for each alternative. Chapter 5 contains an analysis of the effects of the alternatives on resources and environmental factors.

#### **Alternative Formulation**

The Council on Environmental Quality's (CEQ) regulations implementing NEPA require the consideration and evaluation of a range of reasonable alternatives to a proposed Federal action. The alternatives should meet the purpose of and need for the proposed action while avoiding or minimizing environmental impacts.

The NEPA *alternative formulation* process facilitates the *planning* process by providing a means by which Reclamation, with interested agencies and the public, can formulate alternative management plans in response to identified issues. The basic goal in formulating alternatives is to develop various combinations of land uses and resource management actions that respond to the issues identified during the planning process.

Reclamation developed planning criteria to help formulate and select combinations of land uses and management actions (alternatives) that could be reasonably implemented. Based on the following planning criteria, each action alternative would do the following:

 Meet the public need as expressed during the planning and NEPA compliance process (e.g., during open houses, public meetings, and in correspondence) and meet the goals and objectives formulated in response to the issues and concerns identified

- Comply with applicable Federal, State, and county laws, regulations, and policies, while not interfering with authorized Reclamation project purposes
- Maintain Coachella Valley Water District's ability to operate and maintain the Coachella Canal
- Allow for continued recreation management pursuant to existing agreements with Coachella Valley Recreation and Park District and Riverside County and provide for possible expansion of recreation activities on Coachella Canal Area lands
- Allow compatible uses of Reclamation lands
- Provide for partnership opportunities and shared responsibilities
- Balance user needs, environmental protection, and anticipated funding and personnel limits
- Be achievable within the 10-year life of the resource management plan

Using these planning criteria as a guide, Reclamation developed three action alternatives (i.e., alternatives that prescribe a change in resource management).

In addition to the action alternatives, Reclamation also formulated a No Action Alternative, as required by CEQ regulations implementing NEPA. The No Action Alternative describes the management of the study area if a new RMP were not implemented. Reclamation originally presented a No Action Alternative and three action alternatives to the public for review and comment; however, after public comment and internal review of the alternatives, Reclamation modified the Natural Resources Conservation/Protection with Limited Recreation Development (Alternative D) and selected it as the preferred alternative. The modified Alternative D contains essentially the same elements as in the No Action Alternative (Alternative A), along with many of those in Alternative B.

Reclamation decided to include a preponderance of elements from the No Action Alternative in the preferred alternative because Reclamation must continue to manage the Coachella Canal Area lands for the congressionally authorized primary purposes of the Boulder Canyon Project Act and because the limited land base within the study area does not allow for the maximization of recreation facilities, programs, and opportunities. In addition, actions included in the modified preferred alternative related to the protection and conservation of the natural and cultural resources will not adversely affect Boulder Canyon Project Act purposes and are consistent with other efforts in the Coachella Valley to protect the existing natural resources pursuant to the *Draft Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan.* 

Reclamation formulated the following alternatives:

- No Action Alternative (Alternative A)
- Natural Resources Conservation/Protection Alternative (Alternative B)
- Recreation, Community, and Commercial Development Alternative (Alternative C)
- Modified Natural Resources Conservation/Protection with Limited Recreation Development Alternative (Alternative D)

#### **Alternative Elements and Management Actions**

A Reclamation interdisciplinary team developed alternative "elements" that would best respond to identified public and Reclamation issues and concerns. Each alternative is made up of a unique combination of elements and associated management actions. Each alternative would achieve a different desired future condition in the study area, if implemented.

This section first lists management actions common to all alternatives, followed by brief narrative descriptions of the No Action Alternative and the three action alternatives. The elements and management actions common to all alternatives are used on a limited basis to help describe each alternative, but the descriptions focus on the major differences among the alternatives. **Attachment C** provides more detailed descriptions of all the elements and management actions included in each alternative. The alternative elements discussed in **attachment C** are further grouped under issue categories, as described in Chapter 3, "Planning Issues, Constraints, and Opportunities." Alternative elements considered but eliminated from further consideration are described at the end of this chapter.

**Note:** Some parcels may be used for more than one purpose. For example, parcels B, C, D, E, F, G, H, I, J, K, L, M, and R may be used as borrow pit areas, open space, and passive types of recreation. At the same time, some of these same parcels also may be used for protective dike purposes (i.e., parcels G, I, J, K, L, M, and R).

#### Management Actions Common to All Alternatives

Following are those management actions that are common to all alternatives, i.e., these management actions would be implemented under any alternative.

• Continue to operate the lands within the study area for the primary purposes authorized by the Boulder Canyon Project Act

- Continue to manage lands according to Reclamation's Policies and Directives and Standards; Federal laws, rules and regulations; Executive orders; and State and county laws, regulations, and ordinances
- Continue to conduct site-specific NEPA compliance for proposed lands uses to ensure that surface and ground water quality and other natural resources are protected
- Continue to seek non-Federal entities to manage recreation on Coachella Canal Area lands
- Consider soil conditions and other limiting factors and adjacent land uses when placing future facilities on lands within the study area
- Continue to follow existing land use authorization application requirements and procedures
- Continue to consider applications for specific land uses submitted by potential recreation partners, private developers, and utility companies, etc.
- Continue to allow only those land uses that do not adversely affect Reclamation project features or the delivery of water by CVWD
- Continue to prohibit private, exclusive use of Reclamation lands within the study area
- Continue to prohibit land uses that adversely affect Indian trust assets unless proper mitigation measures are achieved and all environmental clearances are obtained
- Continue to avoid Indian sacred sites and traditional cultural properties when issuing land use authorizations
- Continue to prohibit land uses that adversely affect threatened and endangered or other special status species or critical habitat unless proper mitigation measures are achieved and all environmental clearances have been obtained
- Continue to honor the terms and conditions of the existing agreements with CVWD, CVRPD, and Riverside County, as well as the land use authorizations dealing with, among other things, utility, road, and bridge crossings
- Continue to follow the necessary procedures to authorize land uses on lands where easements were acquired from underlying fee owners

- Continue to follow the updated 2001 Federal Fire Management Policy and the Secretary of the Interior's 2001 policy letter; and develop a fire management plan for all Coachella Canal Area lands
- Continue to consult with the Service pursuant to the Endangered Species
   Act concerning threatened and endangered species and special status
   species and associated habitats. Coordination with the Service on projects
   that may affect listed and sensitive species or their habitats will be
   initiated early in the process.
- Continue to cooperate with CDFG and the Service on special status species and habitat management
- Ensure that Reclamation actions are consistent with other planning efforts in the Coachella Valley, including, but not limited to, the CVMSHCP/ NCCP when compatible with project purposes and as required by applicable laws and regulations.
- Continue to work with the Service and other concerned entities on mutually agreed upon tamarisk removal and mesquite restoration projects
- Continue to cooperate with State, county, and local entities as well as other Federal agencies in matters of mutual concern
- Continue to consult with the California State Preservation Officer under sections 106 and 110 of the National Historic Preservation Act
- Continue to consult with area Indian tribes and the Bureau of Indian Affairs concerning Indian trust assets, Indian sacred sites, and traditional cultural properties
- Reclamation will coordinate with the BIA and Indian tribes in future environmental compliance activities in a manner that protects Indian trust assets and avoids adverse impacts when possible. When adverse impacts cannot be avoided, Reclamation will provide appropriate mitigation or compensation.
- Continue to promote the Crime Witness Protection Program

Reclamation and CVWD would continue to do the following under all alternatives:

- Use parcels B, C, D, E, F, G, H, I, J, K, L, M, and R for potential borrow pits to be used for Project purposes
- Retain parcel H for a potential water treatment facility for the benefit of the Project and water conservation purposes
- Retain parcels O and P to be used in conjunction with Lake Cahuilla

- Use all canal access roads for operation and maintenance purposes and use parcels G, I, J, K, L, M, Q, R, S, and T for protective dike purposes
- Retain parcel F for Imperial Irrigation District's management of an electrical substation
- Retain parcels E, K, R, and portions of parcels S and T for CVRPD recreation management purposes
- Even though parcel U is not currently within the study area, it should be noted that Reclamation and CVWD will retain a portion of parcel U for Project purposes. Parcel U was identified in the 1993 RMP and is located south of the study area in section 32, T. 7 S., R. 8 E. Since 1993, a portion of parcel U was returned to BLM through the withdrawal review process. Refer to page 19, "Disposition of Reclamation Lands" for an explanation of the process.

#### No Action Alternative (Alternative A)

Under the No Action Alternative, Reclamation would continue to manage the lands and resources within the Coachella Canal Area according to Reclamation's Policies and Directives and Standards; Federal laws, regulations and Executive orders; and State and county laws, regulations, and ordinances. In cooperation with CVWD, Reclamation would ensure that the congressionally authorized Boulder Canyon Project Act purposes are protected and that any land uses authorized on Coachella Canal Area lands are compatible with those authorized purposes. In perpetuity, Reclamation would continue to honor its contractual obligations with CVWD in its effort to care for, operate, maintain, and replace Coachella Canal appurtenant water delivery structures, facilities, and protective works.

Parcels within the study area that have been designated as borrow pit, dike, and recreation areas would continue to be designated for such purposes. Reclamation would retain parcel H for a potential water treatment facility for the benefit of the Project and water conservation purposes. Parcels O and P would continue to be used as a Lake Cahuilla recreation complex and terminal reservoir. Imperial Irrigation District would continue to use parcel F for the purpose of maintaining an electrical substation. CVWD would continue to use all canal access roads for the O&M of the Coachella Canal.

Because of legislative limitations as discussed in Chapter 2, "Management Framework," Reclamation would continue to rely on existing non-Federal partners to manage recreation facilities and opportunities on Coachella Canal Area lands. Reclamation would continue to honor its contractual obligations with Riverside County in its effort to operate and maintain an existing recreation complex near Lake Cahuilla and with CVRPD in its effort to operate and maintain

three separate areas within the study area for recreation purposes. Reclamation would not establish any social, physical, environmental, or facility carrying capacities within the study area. All other existing land use agreements concerning the use of Reclamation lands for bridges, fences, power and transmission lines, water and power lines, etc. would continue to be honored. Reclamation would continue to seek other non-Federal government entities to assist in managing recreation facilities on Coachella Canal Area lands.

Reclamation would continue to conduct site-specific NEPA compliance for proposed land uses to ensure that surface and ground water quality and other natural resources are protected. Reclamation would continue to allow only those land uses that do not adversely affect Project features or the delivery of water to Coachella Canal water users. Reclamation would continue to prohibit land uses that adversely affect Indian trust assets and endangered or other special status species and critical habitat unless proper mitigation measures are achieved. Reclamation would continue to avoid Indian sacred sites and traditional cultural properties when issuing land use authorizations and continue to avoid or minimize developments and land use that could affect suitable windblown sand habitat and associated special status species. Reclamation would continue to manage undisturbed desert habitat as it has in the past and continue to conduct environmental compliance activities that could affect identified habitat. Reclamation also would avoid or minimize developments that would adversely affect suitable Peninsular bighorn sheep, cottonwood willow oases, and desert shrub habitats.

Reclamation would continue to cooperate with BLM and the cities of Indio, La Quinta, Coachella, Thermal, and Mecca on matters of mutual concern; the Service pursuant to ESA; SHPO pursuant to section 106 of the National Historic Preservation Act; CDFG on special status species and habitat management; and area Indian tribes and BIA concerning Indian trust assets, Indian sacred sites, and traditional cultural properties.

Reclamation would continue to work with BLM on identifying Reclamation withdrawn public lands that might be returned to BLM for its management pursuant to section 204 of the Federal Land Policy and Management Act of 1976.

Reclamation would continue the current level of management of unauthorized use of Coachella Canal Area lands by OHV users. No multi-use trails would be constructed within the study area; no public interpretation of the natural resources, wildlife, and Project features would be authorized other than what is currently allowed at Coral Mountain Regional Park; and many of the Coachella Canal Area parcels would continue to be used for undeveloped and passive recreation use.

Reclamation would continue to maintain the current number of signs within the study area, continue the current level of mosquito abatement procedures, continue

with the current level of weed control, continue to promote the Crime Witness Protection Program, and continue its current level of trash removal.

## Natural Resources Conservation/Protection Alternative (Alternative B)

In addition to many of the management actions included in Alternative A, Reclamation would initiate a land use development strategy that conserves and protects lands from recreation, community, and commercial development. Reclamation would ensure that public use and development are consistent with the goals and objectives of the RMP and other approved planning documents and that land management decisions are made for the benefit of the Project and the general public. Reclamation would continue to manage the lands and resources within the Coachella Canal Area according to Reclamation's Policies and Directives and Standards; Federal laws, regulations and Executive orders; and State and county laws, regulations, and ordinances. In cooperation with CVWD, Reclamation would ensure that the congressionally authorized Boulder Canyon Project Act purposes are protected and that any land uses authorized on Coachella Canal Area lands are compatible with those authorized purposes. In perpetuity, Reclamation would continue to honor its contractual obligations with CVWD in its effort to care for, operate, maintain, and replace Coachella Canal appurtenant water delivery structures, facilities, and protective works.

Reclamation would conduct periodic land management reviews and other monitoring efforts to ensure that Coachella Canal Area lands are being used pursuant to existing agreements and land use authorizations and to assist in identifying user conflicts and investigate corrective measures to prevent further conflicts from occurring. Reclamation would implement the management actions in the RMP within a 10-year planning period.

Reclamation would limit future land use authorizations and agreements to those that benefit natural and cultural resources in the study area and phase out land uses that may adversely affect natural resources.

Parcels within the study area that have been designated as borrow pits, dikes, and recreation areas would continue to be designated for such purposes. Reclamation would retain parcel H for a potential water treatment facility for the benefit of the Project and water conservation purposes.

Parcels O and P would continue to be used as a Lake Cahuilla recreation complex and terminal reservoir. Imperial Irrigation District would continue to use parcel F for the purpose of maintaining an electrical substation. CVWD would continue to use all canal access roads for the O&M of the Coachella Canal.

Reclamation would initiate a comprehensive weed control program and rehabilitate damaged and degraded habitat, including unauthorized OHV use areas

and other areas of past intense use. OHV use would be eliminated, except for emergency situations, and the public would be limited to using existing public roads. If necessary, Reclamation would work with other entities to install fencing and barriers to prevent future use. Reclamation would work with others to install proper fencing to protect the health and safety of the public and Project features and structures.

Reclamation would continue to cooperate with BLM and the cities of Indio, La Quinta, Coachella, Thermal, and Mecca on matters of mutual concern; the Service pursuant to ESA; SHPO pursuant to section 106 of the National Historic Preservation Act; CDFG and the Service on special status species and habitat management; and area Indian tribes and BIA concerning Indian trust assets, Indian sacred sites, and traditional cultural properties.

Reclamation would continue to work with BLM on identifying Reclamation withdrawn public lands that might be returned to BLM for its management pursuant to section 204 of the Federal Land Policy and Management Act of 1976.

In consultation with the California SHPO, Reclamation would assess the adequacy of existing heritage resource inventories and conduct intensive surveys in areas not adequately covered. Reclamation would develop a systematic process for site and local monitoring of cultural resource sites and would implement systematic reporting of damages. Until systematic investigations and evaluations are completed, Reclamation would conduct site-specific investigations to determine if cultural sites eligible for the *National Register of Historic Places* (Register) are present in locations where developments, terrestrial habitat restoration or improvements, or focused public use would occur. Reclamation will provide cultural resource surveys to other entities, including CDPR, for their information and use.

Under this alternative, Reclamation would inventory all sand habitat types to ascertain presence or absence, habitat suitability for special status species, and restoration potential and avoid or minimize developments that could affect suitable habitat. Reclamation would conduct long-term monitoring of identified suitable windblown sand habitat. As necessary, Reclamation would provide fencing to protect suitable habitat for special status species, develop a restoration plan in cooperation with other entities, and mitigate and compensate for impacts of development activity on suitable and occupied sand habitat.

Reclamation would avoid impacts to undisturbed desert shrub habitat and also desert wash and other habitats that provide linkages and biological corridors. Peninsular bighorn habitat and an appropriate disturbance buffer would be protected from development. Reclamation would inventory all cottonwood willow habitat to determine the presence or absence of suitable habitat for special status species, evaluate sites to determine if they have restoration potential, and conduct long-term monitoring of identified suitable habitat. In cooperation with

other entities, Reclamation would increase efforts to protect all suitable habitats from OHV use and other ground-disturbing activities.

Reclamation would implement measures to protect Peninsular bighorn sheep, identify key habitat and disturbance buffers, and restrict all developments in key habitats, allowing only passive recreation<sup>1</sup> use in adjacent buffer habitat. Reclamation would implement seasonal closure and fencing, in necessary, and install interpretive signs.

Reclamation would continue to honor existing agreements and land use authorizations, such as those with CVRPD and Riverside County, for the management of areas that are being used for recreation purposes. Reclamation would not seek additional recreation partners for expansion of recreation facilities and opportunities within the study area. Reclamation would establish carrying capacities and use GIS mapping to assist in minimizing natural resource degradation in the study area. No additional recreation development planning would be initiated, and no multi-use trails would be constructed. Reclamation would implement a limited interpretive program to better educate the public about the value of resource protection and conservation. Reclamation would encourage non-Federal partners to expand interpretive information services to the public and provide printed and Internet materials that are bilingual, as needed. The parcels designated for developed recreation purposes and for general open space<sup>2</sup> and passive recreation under Alternative A would continue to be used for those purposes.

Reclamation would increase its efforts to work with BLM in controlling unauthorized OHV use on lands with shared boundaries and work with CDGF to develop and implement inventory, monitoring, and protection plans for special status species and habitats. Under this alternative, Reclamation also would continue to work with other entities, such as BLM, the Service, BIA, SHPO, and CDGF and surrounding city governments, on matters of mutual concern.

Reclamation would inventory signing needs and, as needed, post bilingual signs with rules and regulations regarding the use of Reclamation lands and, as needed, post bilingual signs at areas that have been closed to OHV use. Reclamation would increase its efforts to enforce rules and regulations and promote proactive law enforcement of unauthorized uses.

Reclamation would cooperate with the Coachella Valley Mosquito and Vector Control District in its effort to reduce or eliminate conditions conducive for

<sup>&</sup>lt;sup>1</sup> Passive recreation is defined as recreational opportunities that occur in a natural setting that require minimal development or facilities. The importance of the environment or setting for the activities is greater than in developed recreation settings. Examples of passive recreation activities include walking, bicycling, horseback riding, bird watching, and photography.

<sup>&</sup>lt;sup>2</sup> Open space is defined as a parcel of land that has public value because the land offers important opportunities for recreation. Open space may also have value as a visual amenity to the landscape or backdrop of an outdoor natural setting.

mosquito breeding; increase efforts to remove existing trash from the study area; and increase efforts to keep the study area free of trash through signing and strict enforcement.

### Recreation, Community, and Commercial Development (Alternative C)

As well as many of the management actions included in Alternative A and some of the management actions included in Alternative B, Alternative C focuses on a land use planning strategy that maximizes recreational opportunities afforded by study area resources. Reclamation would ensure that public use and development are consistent with the goals and objectives of the RMP and other approved planning documents and that land management decisions are made for the benefit of the Project and the general public.

Reclamation would continue to manage the lands and resources within the Coachella Canal Area according to Reclamation's Policies and Directives and Standards; Federal laws, regulations, and Executive orders; and State and county laws, regulations, and ordinances. In cooperation with CVWD, Reclamation would ensure that the congressionally authorized Boulder Canyon Project Act purposes are protected and that any land uses authorized on Coachella Canal Area lands are compatible with those authorized purposes. In perpetuity, Reclamation would continue to honor its contractual obligations with CVWD in its effort to care for and operate, maintain, and replace Coachella Canal appurtenant water delivery structures, facilities, and protective works.

Reclamation would work with CVWD in its effort to favor land use authorizations that maximize the development of study area lands for recreation, community, and commercial development.

The cultural resources actions included in Alternative B would be implemented under Alternative C, except Reclamation would develop a comprehensive public archeology interpretive program within the study area to enhance visitor experience and implement a program to interpret the heritage resources. The management actions included in Alternative B that are associated with windblown sand habitat, undisturbed desert shrub habitat, desert wash habitat, cottonwood and willow oases, and Peninsular bighorn sheep habitat would be implemented under Alternative C, except that impacts to habitats from potential ground disturbing activities could be minimized or mitigated rather than avoided; however, the first priority would be to avoid critical habitat as opposed to mitigating potential adverse impacts.

Reclamation would provide private parties (concessionaires) the opportunity to supply recreation-related goods and services to the public on Coachella Canal Area lands. Reclamation would work with CVRPD, Riverside County, and other potential recreation partners to expand recreation opportunities within the study

area. Potential recreation partners include other State and county as well as local city government entities. Reclamation would require non-Federal partners to prepare site-specific recreation master plans prior to any comprehensive facility development. Carrying capacities also would be determined prior to any development.

Reclamation would expand efforts to seek trail partnerships with local government entities and local trail interest groups to help identify alternatives and local needs and expectations to maximize multi-use trail development within the study area. In cooperation with a single government entity or a variety of entities, Reclamation would authorize construction of non-motorized, multi-use trails throughout the study area. Strict trail development and design criteria would be used to ensure that trails and trail users do not adversely affect natural resources, wildlife, critical habitat, or CVWD project purposes. Reclamation would cooperate with the Service to ensure that trails are sited in a manner that continues to avoid and minimize effects to Peninsular bighorn sheep. Portions of trails would be paved or hardened to provide easy access for all users, including those with disabilities. A comprehensive trail plan would be developed that takes into consideration existing and planned trails within the Coachella Valley.

In cooperation with non-Federal partners, Reclamation would prepare a comprehensive interpretative master plan that would result in providing interpretive information describing the unique natural resources and the Project and its relationship with CVWD.

Essentially, Reclamation would allow recreation facilities to be developed, operated, and maintained on parcels A, B, C, D, K, E, and F as long as such development(s) would not interfere with Boulder Canyon Project Act purposes or the natural and cultural resources within the study area. Parcels that have existing recreation development would be retained for continued recreation purposes (i.e., those areas currently managed by Riverside County and CVRPD). Reclamation would authorize expansion of existing facilities for areas currently managed by CVRPD and Riverside County. For these areas and other areas within the study area, a strict process would be followed before any recreation development was authorized.

A comprehensive sign plan would be prepared for the study area. Reclamation would inventory signing needs and, as needed, post bilingual signs at visitor contact areas such as OHV use areas. Signs would include information such as the rules and regulations governing the proper use of Reclamation lands and emergency contact numbers.

Reclamation would work with BLM to investigate the possibility of establishing OHV use areas on lands with shared boundaries and cooperate on law enforcement efforts dealing with areas not authorized for OHV use. Reclamation

would prepare a comprehensive OHV plan and officially open certain study area lands for OHV use. Before opening any lands for OHV use, a non-Federal government entity would have to enter into an agreement with Reclamation for O&M of designated OHV areas, including a commitment to provide an appropriate level of law enforcement. Reclamation would prepare a travel management plan designating OHV trails and roads to be used by OHV users. To prevent unauthorized OHV use in other areas, fencing and barriers would be installed.

Reclamation would continue to cooperate with BLM and the cities of Indio, La Quinta, Coachella, Thermal, and Mecca on matters of mutual concern; the Service pursuant to ESA; SHPO pursuant to section 106 of the National Historic Preservation Act; CDFG on special status species and habitat management; and area Indian tribes and BIA concerning Indian trust assets, Indian sacred sites, and traditional cultural properties.

Reclamation would continue to work with BLM on identifying Reclamation withdrawn public lands that might be returned to BLM for its management pursuant to section 204 of the Federal Land Policy and Management Act of 1976.

Parcels within the study area that have been designated as borrow pits, dikes, and recreation areas would continue to be designated for such purposes. Reclamation would retain parcel H for a potential water treatment facility for the benefit of the Project and water conservation purposes. Parcels O and P would continue to be used as a Lake Cahuilla recreation complex and terminal reservoir. Imperial Irrigation District would continue to use parcel F for the purpose of maintaining an electrical substation. CVWD would continue to use all canal access roads for the O&M of the Coachella Canal.

When recreation developments take place on Reclamation lands, Reclamation would ensure that project coordinators take into account how much water will be required to create and maintain the facility and how this water will be accounted for.

Reclamation would implement measures to protect Peninsular bighorn sheep, identify key habitat and disturbance buffers, and restrict all developments in key habitats, allowing only passive recreation use in adjacent buffer habitat. Reclamation would implement seasonal closure and fencing, in necessary, and install interpretive signs.

## Modified Natural Resources Conservation/Protection with Limited Development (Alternative D, Preferred Alternative)

As well as many of the management actions included in Alternative A and most of the management actions included in Alternative B, Alternative D focuses on a land use planning strategy that allows for limited recreational opportunities

afforded by study area resources. Reclamation would ensure that public use and development are consistent with the goals and objectives of the RMP and other approved planning documents and that land management decisions are made for the benefit of the Project and the general public.

Reclamation would continue to manage the lands and resources within the Coachella Canal Area according to Reclamation's Policies and Directives and Standards; Federal laws, regulations and Executive orders; and State and county laws, regulations, and ordinances. In cooperation with CVWD, Reclamation would ensure that the congressionally authorized Boulder Canyon Project Act purposes are protected and that any land uses authorized on Coachella Canal Area lands are compatible with those authorized purposes. In perpetuity, Reclamation would continue to honor its contractual obligations with CVWD in its effort to care for, operate, maintain, and replace Coachella Canal appurtenant water delivery structures, facilities, and protective works.

Reclamation would continue to honor existing agreements with CCVD, CVRPD, and Riverside County and phase out land uses that are not compatible with Project purposes. Reclamation would issue future land use authorizations that allow for limited recreation development and that do not adversely affect natural resources and Project purposes. Reclamation would conduct periodic land management reviews and other monitoring efforts to ensure study area lands are managed pursuant to existing agreements and land use authorizations. User conflicts would be identified, and corrective measures would be initiated to prevent further conflicts.

Reclamation would work with CVRPD in developing additional facilities within the three areas currently under lease with Reclamation and with Riverside County to improve recreation facilities within the study area currently under lease with Reclamation (i.e., Lake Cahuilla recreation area). In addition, Reclamation would work with Riverside County in authorizing expansion of facilities managed by the county. Depending on land status, Reclamation would assess the need to work with existing and with other qualified recreation partners to expand a limited number of recreation opportunities on all parcels of land within the study area if appropriate demand exists. When planning for recreation development, Reclamation partners would follow up-to-date design standards and criteria. Reclamation would consider proposals from qualified recreation partners to provide for passive types of recreation opportunities and to provide assistance in enforcing unauthorized OHV use. Appropriate recreation management agreements would be entered into with any new non-Federal entities.

Reclamation's recreation partners would provide appropriate information related to social, physical, environmental, or facility capacities for proposed developments. Existing and potential qualified recreation partners would prepare and submit appropriate planning documents to Reclamation prior

to any facility development. Reclamation would ensure that visitor health and safety is the main focus during facility planning.

Reclamation would encourage existing and potential recreation partners to provide interpretation of the natural resources, wildlife, and Project features to better educate the public. Reclamation and its partners would provide an appropriate level of interpretation as required to fulfill mitigation measures associated with Project and recreation facility development.

Reclamation would eliminate all OHV use except for emergency situations. As funding becomes available, Reclamation would close and rehabilitate OHV roads and unauthorized use areas. The public would be restricted to existing public roads, and needed fencing and barriers would be installed to prevent future OHV use.

Reclamation would expand efforts to seek trail partnerships with local government entities and local trail interest groups to help identify alternatives and local needs and expectations to maximize multi-use trail development within the study area. In cooperation with a single government entity or a variety of entities, Reclamation would authorize construction of non-motorized, multi-use trails throughout the study area. Strict trail development and design criteria would be used to ensure that trails and trail users do not adversely affect natural resources, wildlife, critical habitat, or CVWD project purposes. Portions of trails would be designed to accommodate a variety of uses, such as hiking, biking, and horseback riding.

Parcels within the study area that have been designated as borrow pits, dikes, and recreation areas would continue to be designated for such purposes. Reclamation would retain parcel H for a potential water treatment facility for the benefit of the Project and water conservation purposes. Parcels O and P would continue to be used as a Lake Cahuilla recreation complex and terminal reservoir. Imperial Irrigation District would continue to use parcel F for maintaining an electrical substation. CVWD would continue to use all canal access roads for the O&M of the Coachella Canal. Acceptable stabilization techniques would be used for active borrow pits to ensure that offsite impacts are avoided. Unused and abandoned borrow pits would be reclaimed after a reasonable period of non-use.

Reclamation would continue to cooperate with BLM and the cities of Indio, La Quinta, Coachella, Thermal, and Mecca on matters of mutual concern; the Service pursuant to ESA; SHPO pursuant to section 106 of the National Historic Preservation Act; CDFG on special status species and habitat management; and with area Indian tribes and BIA concerning Indian trust assets, Indian sacred sites, and traditional cultural properties.

Under this alternative, Reclamation would complete all the cultural resource actions included in Alternative A, except complete site-specific investigations, as

needed, to enable implementation of the RMP management actions and restoration efforts when compatible with Project needs and purposes. Reclamation would provide cultural resource surveys to other entities, including CDPR, for their information and use. On a case-by-case basis, or as required by a mitigation requirement, Reclamation would implement interpretation at sites for public interest and education.

All elements and management actions related to conservation and protection of natural resources included in Alternative B would be implemented under this alternative. The elements and management actions include initiating a comprehensive weed control program and rehabilitating damaged and degraded habitat, including unauthorized OHV use areas and other small areas of past intense use. Elements and actions also include (1) inventorying all sand habitat types to ascertain their presence or absence, habitat suitability for special status species, and restoration potential and (2) avoiding or minimizing impacts that could affect suitable habitat. Reclamation would conduct long-term monitoring of identified suitable windblown sand habitat. As necessary, Reclamation would provide fencing to protect suitable habitat for special status species, develop a restoration plan in cooperation with other entities, and mitigate and compensate for impacts of development activity on suitable and occupied sand habitat.

Reclamation would avoid impacts to undisturbed desert shrub habitat and also desert wash and other habitats that provide linkages and biological corridors. Peninsular bighorn habitat and an appropriate disturbance buffer would be protected from development. Reclamation would inventory all cottonwood willow habitat to determine the presence or absence of suitable habitat for special status species, evaluate if sites may have restoration potential, and conduct long-term monitoring of identified suitable habitat. In cooperation with other entities, Reclamation would increase efforts to protect all suitable habitats from OHV use and other ground-disturbing activities.

Reclamation would implement measures to protect Peninsular bighorn sheep, identify key habitat and disturbance buffers, and restrict all developments in key habitats, allowing only passive recreation use in adjacent buffer habitat. Reclamation would cooperate with the Service to ensure that trails are sited in a manner that continues to avoid and minimize effects to Peninsular bighorn sheep. Reclamation would implement seasonal closure and fencing, in necessary, and install interpretive signs.

Reclamation would continue to work with BLM on identifying Reclamation withdrawn public lands that might be returned to BLM for its management pursuant to section 204 of the Federal Land Policy and Management Act of 1976.

Reclamation would work with BLM to address legal public access across Reclamation lands so that access to recreation trails and public use areas managed by BLM is not hindered.

Reclamation would coordinate mosquito abatement activities within the study area with the Coachella Valley Mosquito and Vector Control District, increase efforts to control unauthorized trash dumping, promote the Crime Witness Protection Program, and increase efforts to enforce rules and regulations to discourage unauthorized use within the study area.

Reclamation would encourage existing and future partners to use a variety of media to communicate with the public, including printed materials, maps, photographs, brochures, and Web sites and encourage partners to provide additional programs for public enjoyment (e.g., wildlife observation and interpretative programs).

When recreation developments take place on Reclamation lands, Reclamation would ensure that project coordinators take into account how much water will be required to create and maintain the facility and how to account for this water.

### Alternative Elements Considered but Eliminated From Further Consideration

Members of the public and other agencies made several suggestions and comments about elements that should be included in the RMP. Reclamation considered these suggestions and comments but eliminated them from further consideration for the following reason(s).

Mention Dos Palmas Area of Critical Environmental Concern and its related resource values in the RMP: Although the Dos Palmas ACEC is adjacent to the Coachella Canal, it is located near the Salton Sea, considerably south and east of the Coachella Canal Area study area. Reclamation did not include the ACEC as an alternative element or prescribe any management actions related to this area because it is not under its jurisdiction. Reclamation did, however, acknowledge the Dos Palmas ACEC area in Chapter 2, "Management Framework," as it relates to BLM's management of an area that lies outside the Coachella Canal Area.

Mention the Bradshaw Trail and analyze the impacts that management actions for the Coachella Canal Area may have on access to the trail by the general public: The Bradshaw Trail is approximately 70 miles long and lies primarily on BLM land. The trail segment runs from the Salton Sea Recreation Area east to Wiley's Well Campground near the Mule Mountains. Access to the trail is not through Coachella Canal Area lands within the study area. It lies considerably south of the study area, near the Salton Sea and the Dos Palmas ACEC described previously; therefore, Reclamation did not analyze impacts of proposed RMP actions on access to the Bradshaw Trail.

Address the possibility of using parcel D as part of the development of the "College of the Desert" campus: Because Reclamation has not received

any formal request for such use, this element is not specifically addressed in any of the alternatives.

Mecca Hills, Orocopia Mountains, and Santa Rosa Mountain Wilderness Areas should be referenced on all RMP maps: Although Joshua Tree Wilderness is shown on the study area maps, these other wilderness areas are not close enough to the study area to be included in the maps. These wilderness areas are managed by other agencies and not under the jurisdiction of Reclamation; therefore, Reclamation felt there was no immediate need to change the scale of its maps to show areas managed by other entities.

There is concern that management prescriptions affecting existing routes within the study area may cause an impact to the maintenance of the big game guzzler located in the northwest quadrant of Township 7 South, Range 9 East:

Reclamation believes that the location provided in the comment letter referring to the northwest quadrant of Township 7 South, Range 9 East may be incorrect because the city of Mecca is in the northwest quadrant, and the Orocopia Mountains are, at the very least, 10 miles to the east of Mecca (i.e., east of Box Canyon Road). Reclamation believes this is outside the study area boundary and not affected by any decisions reached in this RMP. For this reason, Reclamation did not specifically address this issue in its analysis. Reclamation did, however, formulate a management action in the preferred alternative that states that "Reclamation will initiate efforts to cooperate with BLM on identifying legal access across Reclamation lands or interest in lands so that access to recreational trails and public use areas on BLM lands east of the study area are not hindered."

Attention appears to focus on developed recreation on the west side of the study area and does not translate well to the eastern side of the study area where there are no developed camping facilities: Reclamation did not specifically address the disparity between camping facilities on the western side and eastern side (i.e., near the cities of Mecca and Coachella etc.) of the study area. Reclamation does not have specific authority to develop and maintain recreation facilities on Coachella Canal Area lands. See Chapter 3, "Planning Issues, Opportunities, and Constraints," which discusses Reclamation's limitations associated with recreation development. Chapter 3 also discusses the opportunities that are available to Reclamation in providing recreation in cooperation with other entities. In the case of Coachella Canal Area lands, Reclamation would rely on partnerships with non-Federal government entities to provide recreation on its lands. The preferred RMP alternative identifies the parcels on the eastern side of the study area that can be used for open space, passive recreation, and developed recreation. If a non-Federal government entity were to submit a proposal for development of recreation opportunities on the eastern side of the study area, Reclamation would review that proposal based on qualifications of the entity, public need, and potential impact to the Boulder Canyon Project Act and natural and cultural resources in the area.

Table 4.1 - Coachella Canal Area RMP/EA summary of effects of alternatives on resources and environmental factors

Resource/Factor	No Action (Alternative A)	Natural Resources Conservation/ Protection (Alternative B)	Recreation, Community, and Commercial Development (Alternative C)	Modified Natural Resources Conservation/Protection with Limited Development (Alternative D) (Preferred)
Surface Water and Ground Water	Same as under current conditions.	About the same or slightly better than under No Action Alternative	Moderately adverse effects on quantity and quality	Overall, no effect.
Land Use	Effects on land use about the same as under current conditions; continued increases in administrative cost of operating and maintaining the Coachella Canal Area resulting from continued urban encroachment and the issuance of land use authorizations and adversely affect the potential listing of the canal as a National Historic Place	Least adverse effects on land use. Urban encroachment would result in continued increases in administrative costs, but issuance of land use authorizations for the benefit of natural and cultural resources could lessen those administrative costs and protect the historical significance of the canal	Greatest adverse effects on land use; greatest increases in administrative costs and greatest adverse effect on potential listing of the canal as a National Historic Place	Fewer adverse effects on land use, administrative costs, and potential listing of the canal as a National Historic Place than under Alternatives A or C but potentially greater than under Alternative B.
Vegetation and Wildlife	Probable continued degradation of vegetation and habitat from unregulated public use.	Greatest benefits to vegetation and wildlife. Probable improvement of degraded vegetation and wildlife habitat from restoration.	Greatest adverse effects to vegetation and wildlife from emphasis on developments, OHV use, and recreational development.	Moderate adverse effects to vegetation and wildlife from recreational developments. Probable improvement of degraded vegetation and wildlife habitat from restoration.
Special Status Species	Same as under current conditions. Probable continued degradation of special status species habitat from unregulated public use	Greatest benefits for special status species. Probable improvement of degraded special status species habitat from restoration	Greatest adverse effects to special status species from emphasis on development, OHV use, and recreational developments	Moderate adverse effects to special status species from recreational developments Probable improvement of degraded special status species habitat from restoration
Recreation	Same as under current conditions	Public demand for open spaces, natural areas for outdoor recreation, and community recreation areas would be unmet. Unauthorized OHV users would be displaced to other areas outside the study area.	Public demand for open spaces, natural areas for outdoor recreation and community recreation areas would be better met; greater user conflicts would occur than under Alternative A or B; diminished recreation experience for those seeking solitude.	Public need and demand for urban recreation (i.e., golf courses, play fields, tennis courts, highly developed trails) could be partially met. Fewer user conflicts would occur than under Alternative C and better recreation experience for those seeking solitude than under Alternative C. Unauthorized OHV users would be displaced to other areas outside the study area.

undiscovered cultural resources Modified Natural Resources Conservation/Protection with (Alternative D) (Preferred) Alternatives A or C but not as About the same as under No Action Alternative. great as under Alternative B. Overall, less wind erosion of **Limited Development** avoidance, protection, and soils than under No Action mitigation of recorded and Alternative, with additional Same as under No Action Better protection of visual emphasis on the careful in parcels J, K, and O-T Same as Alternative B. Table 4.1 – Coachella Canal Area RMP/EA summary of effects of alternatives on resources and environmental factors (continued) resources than under About the same as Little to no effect. Alternative C. Alternative. No effect. Recreation, Community, erosion of soils than under No Action Alternative. Public demand and need for access would be fully met. Slight benefit because of limited short-term employment for minority or low-income individuals Greatest adverse effects on visual resources. Greatest adverse effects to air quality. Moderately greater wind Greater deterioration of cultural resources than and Commercial (Alternative C) Development Little to no effect. under No Action Alternative. No effect. Less wind erosion of soils Same as under No Action Public demand and need Best protection of visual Maximum benefits to air quality. Natural Resources than under No Action (Alternative B) Conservation/ for access would be minimally met. Same as No Action Alternative. Protection Little to no effect. Alternative. Alternative. resources. No effect. Continued conflicting land uses and exceedence of Same as under current conditions. Same as under current Same as under current conditions Same as under current conditions. Same as under current conditions. Same wind erosion of soils as under current (Alternative A) No Action carrying capacities. conditions. conditions. No effect. **Environmental Justice** Resource/Factor Indian Trust Assets Cultural Resources Regional Economy Transportation Visual Quality Air Quality Soils