

## 4.0 ENVIRONMENTAL CONSEQUENCES

This chapter addresses the direct, indirect and cumulative impacts on elements of the human environment from actions proposed in the CDCA Plan Amendment. This chapter is organized by environmental element, followed by a description and comparison of impacts from the relevant plan element alternatives.

Land use plans, such as the CDCA Plan Amendment, developed in accordance with Title 43 Code of Federal Regulations, provide landscape level decisions for managing the BLM-administered public lands. As a result, the impact analysis for land use plans level actions tends to be cumulative by nature.

### 4.7 Water Resources/ Quality

**Wild and Scenic River Eligibility Recommendations.** Proposed Plan (Alternatives A, B and C). The proposed eligibility recommendations apply only to BLM-managed public lands, which are already under conservation management, such as the Big Morongo Canyon ACEC, Whitewater Canyon ACEC, wilderness areas, and the Santa Rosa and San Jacinto Mountains National Monument. The recommendation of eligible rivers, in and of itself, would have no adverse effect on local or regional water resources or quality in the planning area.

No Action Alternative (D). Deferral of eligibility determinations could affect water resources/quality where areas are not already under conservation management; protective measures to preserve free-flowing characteristics and Outstandingly Remarkable Values could be degraded. However, the location and extent of such effects are expected to be minor since subject river segments on BLM-managed lands are largely within protected areas such as wilderness or the National Monument.

All Alternatives. If the proposed rivers or portions thereof were later studied and found suitable for designation, existing dams and other impoundments or diversions would be unaffected. However, Section 7 of the Wild and Scenic Rivers Act expressly prohibits the Federal Energy Regulatory Commission (FERC) from licensing the construction of new dams, water conduits, reservoirs, powerhouses, transmission lines, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is designated as a component of the national wild and scenic rivers system. Furthermore, no federal department or agency would be permitted to assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such designation was established. Therefore, the Proposed Plan or other alternatives are not expected to have an adverse impact on water resources or quality.

**Visual Resource Management.** Proposed Plan (Alternatives A, B and C) and No Action (D). No impacts to water resources or quality would occur as the VRM classifications, whether designated or assigned on an interim basis, are based on analyses of existing land uses and quality of landscapes.

**Land Health Standards and Air Quality.** Proposed Plan (Alternatives A, B and C) and No Action (D). The implementation of land health standards, which include protection of water resources and quality, would help identify specific management needs, such as improvement of soil conditions and maintenance of appropriate hydrologic conditions, within areas with important surface and ground water resources. Additional mitigation measures may be required to meet these standards. Land health standards may not be used to permanently prohibit allowable uses established by law, regulation or land use plans.

**Multiple-Use Classification.** Proposed Plan (Alternatives B and C), Alternatives A and No Action (D). The modification of Multiple-Use Classes or retention of existing designations would have no effect on water resources or quality. Although Multiple-Use Classes provide broad guidance with respect to permitted uses of the public lands, current laws and regulations and other actions proposed through this Plan Amendment have a greater effect on water resources and quality within the planning area.

**Habitat Conservation Objectives.** Proposed Plan (Alternatives B and C). The implementation of habitat conservation objectives would help define compatible land uses within conservation areas. The proposed objectives seek to preserve 99% to 100% of the important habitats identified in the Plan Amendment and the CVMSHCP, including riparian and wetland habitats. The proposed objectives will protect vegetative cover, preclude or greatly limit habitat and soil disturbance, and preclude most development with the potential to adversely impact water quality.

Additional mitigation measures may be required to meet these objectives where water resources and/or quality may be affected within conservation areas in order to protect or minimize impacts to sensitive species and their habitats. Such measures would likely result in increased design and construction costs, depending upon the location of the water management facilities relative to sensitive species, multi-species habitat conservation areas, and important ecological process areas, such as sand transport corridors.

Alternative A and No Action (D). If habitat conservation objectives are not adopted, or for areas outside conservation areas, water management projects would still have to mitigate for impacts to listed species, cultural, and other sensitive resources. Mitigation measures would be assessed on a case-by-case basis. Additional mitigation measures related to landscape level habitat management would not likely be imposed.

**Fire Management.** Proposed Plan (Alternatives B and C). The Proposed Plan is designed to optimize vegetative cover and suppress fire in a manner and location consistent with underlying habitat needs. No impacts to water resources and quality would occur as the fire management categories are based on analyses of existing land uses and vegetation types, with priority placed on protecting life and property.

Alternative A and No Action (D). Managing fire in accordance with the CDCA Plan and the California Desert District-wide Fire Management Plan would result in no impacts to

water resources as all fire management plans must consider public lands management objectives, historic fire occurrence, natural role of fire, proposed degree of suppression, and acceptable suppression techniques.

**Special Area Designations.** Proposed Plan (Alternative A), Alternatives B and C. No direct impacts to water resources or quality would occur. The designation of wildlife habitat management areas or ACECs may further protect and prevent irreparable alterations to natural hydrologic systems or processes, depending upon area-specific management prescriptions. The designation of such areas would not automatically preclude the development of water management facilities. Compatible uses within wildlife habitat management areas and ACECs would be determined based on the management prescriptions adopted for a particular special area, and would not be determined by the designation itself.

No Action Alternative (D). Compatible uses within existing ACECs are identified in management plans prepared for the respective areas. Impacts to water resources or quality would not be anticipated to occur in the ACECs. Where public lands do not fall under management prescriptions developed for a special area, proposed uses would be required to comply with the NEPA review process and mitigate potentially adverse impacts to water quality, addressed on a case-by-case basis.

**Land Tenure: Exchange and Sale Criteria.** Proposed Plan (Alternatives B and C). The Proposed Plan would establish strict criteria for exchanges or sales of BLM lands, including benefits to conservation areas and the preservation of public ownership of land with priority public benefit, consideration in coordination with local jurisdictions. Such criteria would limit future sales and exchanges, which would continue to be subject to NEPA review, including consideration of potential adverse impacts to regional water resources and quality. No impacts to water resources or quality would occur as a result of adopting land exchange and sale criteria.

Alternatives A and No Action (D). No impacts to water resources or quality would occur upon public land disposal in accordance with the CDCA Plan. Addressing land disposal on a case-by-case basis would continue to be subject to NEPA review, including consideration of potential adverse impacts to regional water resources and quality.

**Land Tenure: Acquisition Criteria.** Proposed Plan (Alternatives B and C). The Proposed Plan would establish strict criteria for acquisition of lands by the BLM, including acquisition that would benefit Coachella Valley conservation areas either directly by augmenting conservation areas or by diverting more intense land uses to less sensitive areas, result in improvements to biotic and abiotic habitat components, including surface and ground water resources and quality. Such criteria would facilitate BLM's participation in assembly of conservation lands and thereby reduce potential adverse impacts to regional water resources and quality. The adoption of land tenure acquisition criteria would result in no impacts to water resources or quality processes.

Alternatives A and No Action (D). Addressing land acquisition on a case-by-case basis could increase potential for adverse impacts to water resources and quality with the

absence of a unified multi-jurisdictional approach to assembling conservation lands.

**Management of Acquired Lands.** Proposed Plan (Alternatives A, B and C). The Proposed Plan would assure that acquired or formerly withdrawn lands would be managed in conformance with the CDCA Plan, including placement of lands in conservation or making lands with important mineral or energy resources available for development consistent with habitat conservation objectives, land health standards (including water resources and quality) and NEPA performance standards. Proposed acquisitions would be subject to NEPA review, including assessment of proposed classifications and/or use potential impacts on regional water resources and quality. No impacts to water resources or quality would occur as a result of the Proposed Plan.

No Action Alternative (D). Management direction relative to an overall conservation strategy would be less-clearly established for the newly-acquired parcels than under the Proposed Plan. However, proposed uses on these lands would be required to comply with the NEPA review process and mitigate potentially adverse impacts to water quality.

**Communication Sites and Utilities.** Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The designation of areas for wind parks, utilities, and communication sites under the Proposed Plan would not in and of itself affect surface or ground water resources or quality, or associated hydrology processes. However, the future construction of such facilities and their access roads under all alternatives could result in increased soil erosion and/or the alteration of existing drainage patterns, rates and/or amounts of runoff, thereby impacting associated water resources. Where such development is proposed within conservation areas, additional mitigation measures may be required to minimize impacts to sensitive water resources and hydrologic processes, consistent with habitat conservation objectives. If no areas were designated at this time, mitigation measures would be taken into consideration on a project-by-project basis, and potential land use conflicts may arise within conservation areas.

**Sand and Gravel Mining.** Proposed Plan (Alternative B), Alternatives A, C and No Action (D). The designation of areas for sand and gravel mining, in and of itself, will not result in impacts to water resources or quality, or related hydrology processes (Proposed Plan). However, the future development of such mining facilities may result in the alteration of existing drainage patterns, availability and quality of ground water resources, and rates and/or runoff quantities, thereby impacting local water resources (all alternatives). Where such development is proposed within conservation areas, additional mitigation measures may be required to minimize impacts to water resources and hydrologic processes, consistent with habitat conservation objectives. If no areas were designated at this time, mitigation measures would be determined on a project-by-project basis, and potential land use conflicts may arise within conservation areas.

**Livestock Grazing.** Proposed Plan (Alternative A), Alternatives B, C and No Action (D). The Proposed Plan or other alternatives would have no effect on livestock grazing within the planning area. With regard to livestock grazing, no new impacts to regional water resources or quality are expected to result from any alternative.

**Wild Horse and Burro Program.** Proposed Plan (Alternative B) and Alternative C. Due to the limited number of wild horses and burros occupying the Palm Canyon and Morongo Herd Management Areas, deletion of these HMAs would have only a limited impact on minimizing soil erosion and associated alterations in drainage patterns, rates, and/or runoff quantities. No significant impacts to water resources or quality are expected to result from this component of the CDCA Plan amendment.

Alternative A and No Action (D). Maintaining horses within Palm Canyon would continue the limited but overall insignificant soil erosion process and associated hydrologic effects occurring on steeper slopes.

**Motorized Vehicle Area Designations.** Proposed Plan (Alternative B) and Alternative C. The Proposed Plan and Alternative C would eliminate vehicular “free-play” activities on public lands within the planning area. However, based upon current distribution of vehicle use, current knowledge and understanding of this use and its potential to impact surface and/or ground water resources, it is not believed that these alternatives would result in significant water resource/quality impacts.

Alternatives A and No Action (D). Based upon current distribution of vehicle use, as well as current knowledge and understanding of this use and its potential to impact surface and/or ground water resources, it is not believed that motorized-vehicle use under these alternatives would result in significant impacts to water resource or quality.

**Motorized Vehicle Route Designations.** Proposed Plan (Alternative B) and Alternative C. Potential impacts to water resources and quality associated with proposed amendments to this CDCA Plan element are limited by the management strategy incorporated into the Proposed Plan. The Proposed Plan would reduce the number and miles of currently available routes of travel for motorized vehicles to 47 miles from the current 73 miles; under Alternative C, it would be reduced from 73 miles to 27 miles, thereby greatly reducing the miles available for this activity. The average level of use on these routes of travel has been estimated for high and low-activity periods: 5 average daily trips (ADT) on weekdays and during all days in the summer; and 25 ADT on weekends and during hunting seasons. Based upon current knowledge and understanding of this use and its potential to impact surface and/or ground water resources, it is not believed that the Proposed Plan or Alternative C would result in significant water resource/quality impacts. Nonetheless, the BLM would apply management provisions and regulations to the use of such routes.

Alternative A and No Action (D). Based upon current knowledge and understanding of this use and its potential to impact surface and/or ground water resources, it is not believed that these alternatives would result in significant water resource/quality impacts.

**Special Recreation Management Area.** Proposed Plan (Alternative B), Alternatives A and C. The Proposed Plan and Alternatives A and C would designate the Mecca Hills

and Orocopia Mountains Wildernesses and adjacent public lands as a Special Recreation Management Area (SRMA). The proposed management strategy would include minimized motorized and mechanized equipment intrusions into designated wilderness, and prescriptive measures to protect wilderness values. Given the location of this area in a region of very low annual precipitation and surface runoff, the Proposed Plan and other alternatives would not be expected to have a significant impact on surface or ground water resources or quality. Designation of the Meccacopia SRMA would result in no significant impacts to water resources or quality, or hydrology processes.

No Action Alternative (D). Existing OHV use patterns and levels would result in the same impacts as described for the Proposed Plan.

**Stopping, Parking and Vehicle Camping.** Proposed Plan (Alternatives A and B), Alternatives C and No Action (D). Limiting stopping, parking, and vehicle camping to specified distances from the roadway centerline would reduce soil erosion and associated hydrologic disturbances, such as alterations to drainage patterns and rates. Said activities are prohibited altogether within wilderness areas. The impacts to water quality would be essentially the same as those identified for motorized vehicle area and route designations (see above). Therefore, potential impacts to regional water resources and quality associated with this component of the Proposed Plan are expected to be less than significant.

**Peninsular Ranges Bighorn Sheep Recovery Strategy.** Proposed Plan (Alternative B), Alternatives A, C and No Action (D). These alternatives would provide additional water resources for bighorn sheep, whether through habitat restoration or installation of artificial sources, thereby improving their survivability during the hot, dry summer months. These benefits would generally be location-specific. However, water resources on a regional basis and the quality of these resources would not be largely affected.

**Hiking, Biking and Equestrian Trails.** Proposed Plan (Alternatives A, B and C). Although some soil erosion and alterations in drainage patterns and rates can be attributed to trail use and new trail development, these occurrences are also a product of trail design, quality of trail maintenance, weather conditions, and other factors. Proposed limitations on trails use within Peninsular bighorn sheep habitat would result in only minimal reductions in soil erosion and associated hydrologic effects. Mitigation measures to minimize soils and hydrologic impacts would be addressed as site-specific trail projects are proposed, which are expected to keep potential impacts to water resources and quality below levels of significance.

No Action Alternative (D). Continuing use of all trails may result in some soil erosion and alterations in drainage patterns and rates, though not to a large degree given the area's very low annual precipitation and surface runoff.