

3.0 AFFECTED ENVIRONMENT

3.7 Water Resources/Quality

The environment of the Coachella Valley is a result of a complex interplay between its geophysical and geographic location. The Coachella Valley is part of the Colorado Desert system, and receives less than three inches of rainfall annually. At the same time, the Coachella Valley is resplendent with water, captured by the surrounding mountain ranges. There are various challenges facing the Coachella Valley with regard to water issues, including:

- ▶ availability of water sources for bighorn sheep during summer months and the need for artificial watering holes;
- ▶ extent and timing of noxious weed removal, especially tamarisk, to protect ground water supplies and sheep watering holes;
- ▶ working with federal, state, and local partners to ensure the health and viability of the Whitewater River, which drains into the Salton Sea; and
- ▶ initiating state approved nonpoint source management measures and helping to achieve federal standards for water quality as established by the 1997 Clean Water Action Plan.

The venturi effect caused by the meeting of the San Geronio and San Jacinto mountain ranges, brings strong winds to the Valley. While key to the Valley's blowsand habitat, and as a source of renewable wind energy, these winds also bring air pollution from the Los Angeles Basin. Moreover, the blowsand raises particulate matter concerns.

Hydrologic Units. The planning area is located within the Colorado River Basin Region. The basin is divided into planning regions. The Salton Sea Planning Area, the Anza - Borrego Planning Area, the Hayfield Planning Area and the Coachella Valley Planning Area are all within the Coachella Valley CDCA planning boundary. The planning areas contain subwatershed basins also called hydrologic units. The Salton Sea Planning Area and Hydrologic Units consists entirely of the Salton Sea which is a saline body of water between the Imperial and Coachella Valleys. The climate is arid and the average precipitation is 2.6 inches. The replenishment is from farm drainage and seepage, as well as significant storm events. Dos Palmas preserve is within this area. A small segment of the Anza-Borrego Planning Area and Hydrologic Units resides within the boundary of the plan amendment area under consideration. The Hayfield Planning Area and Hydrologic Units incorporate lands within the eastern portion of the Coachella Valley CDCA planning boundary. The Coachella Valley Planning Area and Hydrologic Units encompasses the Coachella Valley watershed proper.

Uses of water that support terrestrial ecosystems including, but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife water and food sources are considered beneficial uses of water by the Water Quality Control Plan. This

aspect of the plan provides an important connection between state water goals and the Bureau's own goals for supporting plant and wildlife habitat.

Watersheds. According to the most recent EPA's Index of Watershed Indicators (National Watershed Characterization, 1999), the Salton Sea Watershed was rated as the following:

- (1) **Watershed with More Serious Water Quality Problems** = Watersheds with aquatic conditions well below State or Tribal water quality goals that have serious problems exposed by other indicators, and
- (2) **Watershed with Lower Vulnerability to Stressors** = Watersheds where data suggest pollutants or other stressors are low, and, therefore there exists a lower potential for future declines in aquatic health. Actions to prevent declines in aquatic conditions in these watersheds are appropriate but at a lower priority than in watersheds with higher vulnerability.

Springs. Springs are located throughout the planning region. Springs are commonly located along the San Andreas Fault Zone which traverses the north-eastern portion of the Coachella Valley. Springs are also common in the Santa Rosa and San Jacinto Mountains area; some of these are seasonal springs. Springs are vital to wildlife seeking water in the hot summer months.

Surface Water. Surface water is most abundant in rivers coming from the Santa Rosa and San Jacinto Mountains, and the San Bernardino Mountains (such as Whitewater Canyon, Big Morongo Canyon). Surface water also occurs at Dos Palmas along Salt Creek and in anthropogenic ponds which provide habitat for endangered pupfish and rails.

Groundwater. Increased urbanization and accompanying recreational water usage in addition to desert agriculture has been reducing the level of the groundwater aquifer.

Perennial and Intermittent Streams. Visible only as dry desert washes for most of the year, "intermittent" streams provide habitat for a number of species. Streams also provide the means for seed dispersal of exotic plants such as tamarisk.

Best Management Practices. According to the Best Management Practices (BMP) outlined by the USDA Forest Service, existing and potential non-point potential water pollution sources will be identified and evaluated to determine the need for and type of treatments necessary to maintain water quality. Lands found to be in need of watershed improvement work will be scheduled for treatment as part of ongoing work/planning/budgeting process.

BMP's are designed to synthesize a number of directives into a process to be followed when addressing water quality of management areas. Each BMP consists of

(1) objectives, (2) an explanation with general considerations which are incorporated into the planning process of project design and (3) implementation guidelines. For example, prior to initiation of road construction activities, a BMP concerning the timing of construction would be implemented to minimize erosion and sedimentation. An additional BMP to control traffic during wet periods would further aid in limiting the potential damage to water quality.