

Sonoran Desert Scrub

VEGETATION ASSOCIATION: SONORAN DESERT SCRUB

BIOGEOGRAPHY

Sonoran desert scrub is distributed widely within the southwestern desert biomes from the Colorado Desert region to the Little San Bernardino Mountains (Holland 1986). This vegetation dominates arid landscapes at elevations below 760 or 910 m (Holland 1986). Sonoran desert scrub vegetation ranges from the northeastern edge of the Plan Area south and east into southern Arizona, Baja California, and Sonora, Mexico (Holland 1986). In southeastern San Bernardino County and eastern Riverside County, Sonoran desert scrub tends to intergrade with Mojave creosote bush scrub.

RANGE AND DISTRIBUTION WITHIN WESTERN RIVERSIDE COUNTY

Sonoran desert scrub Habitat is sparsely scattered over the southeastern portion of Western Riverside County, occupying approximately 0.02 percent (282 acres) of the Plan Area. The mapped locations of Sonoran desert scrub were limited specifically to the southeast corner of the Plan Area, located east of the City of Aguanga and Lake Riverside.

VEGETATION CHARACTERISTICS

The Sonoran desert scrub Habitat type typically is associated with a predominant floristic character comprised of microphyllous shrubs such as burro weed (*Ambrosia dumosa*), brittlebush (*Encelia farinosa*), crucifixion-thorn (*Canotia holacantha*) and Creosote scrub (*Larrea tridentata*) (Holland 1986; California Gap Analysis Report 1998). Stem and leaf succulents such as ocotillo (*Fouquieria splendens*) also are associated with Sonoran desert scrub (Holland 1986). Shrubs within this Habitat type prefer to grow in well-drained secondary soils of slopes, and fan and valleys where the soils are rich with biotic components. Sonoran desert scrub is very similar in appearance to the Mojave creosote bush scrub and the two often are mistaken for one another.

PHYSICAL ENVIRONMENT

Sonoran desert scrub encompasses great species and life form diversity, often displaying ephemeral, colorful annual flowers, microphyllous shrubs, and succulents following particularly wet winters (California Gap Analysis 1998). Flowers tend to bloom in late February and early March if seasonal rainfall is sufficient, which is earlier than in Mojave creosote bush scrub,



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whose flowers typically bloom from late March to early April (Holland 1986). Growth typically occurs from winter to early spring and is dependent on rainfall. If the seasonal rainfall is sparse, shrubs from this Habitat type may be dormant for long periods of time until proper resources are sufficient (Holland 1986). Under adequate growing conditions, Sonoran desert scrub vegetation can range in height from 0.5 to 3 m (Holland 1986).

In southern California, Sonoran desert scrub grows well on well-drained secondary soils of slopes, fans, and valleys rather than on upland sites with thin residual soils or sites with high soil salinity (Holland 1986). Plants within this community also inhabit areas with high alkalinity and rocky, unweathered substrate associated with steep, rocky environments (California Gap Analysis Report 1998).

THREATS

Threats to Sonoran desert scrub vegetation includes runoff from agricultural irrigation and upstream residential and commercial development projects; urban edge effects; pollution from residential and industrial runoff; and off-highway vehicle use.

LITERATURE CITED

Gray, Violet, David Stoms, and Frank Davis. 1998. California Gap Analysis Report - The Sonoran Desert Region. [http://www.biogeog.ucsb.edu/projects/gap/report/son_rep.html] Accessed 26 September 2000.

Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California Department of Fish and Game, Nongame-Heritage Program, Sacramento, California.

