**VEGETATION ASSOCIATION:** RESIDENTIAL/URBAN/EXOTIC

**MAPPED SUBASSOCIATIONS:** None

## DATA CHARACTERIZATION

Because the County maintains land-use information per parcel, the mapping of urban and residential areas is probably very accurate. Abandoned lots are also most likely well mapped because they usually occur in urban settings rather than isolated patches.

## BIOGEOGRAPHY

The first urban areas were situated along the coastlines or major rivers (McBride and Reid 1988). Currently, urban areas are most often on what were historically grassland or scrub environments on generally flat slopes (McBride and Reid 1988).

## RANGE AND DISTRIBUTION WITHIN WESTERN RIVERSIDE COUNTY

The largest areas of developed land are in the cities of Temecula, Murrieta/Murrieta Hot Springs, Lake Elsinore (Canyon Lake, Meadowbrook, Alberhill, El Cariso and Lakeland Village), Hemet, East Hemet and Valle Vista, in Moreno Valley, and along the SR-91 corridor from Riverside through Corona and Norco. More medium-sized tracts of developed land are located in the communities of Canyon Lake, Quail Valley, Sun City, Homeland, in Perris along I-215, Mead Valley, Gavilan Hills, Woodcrest, Beaumont, Banning, Cherry Valley, and Calimesa. Small and scattered occurrences include in the southeast portion of the Plan Area along SR-371 in Terwilliger Valley, Sage, Aguanga and Anza, east of Temecula, and in the Sedco Hills.

## VEGETATION CHARACTERISTICS

There is a variety of ways to classify vegetation within urbanized areas. One method is presented here along with a discussion of weed communities.

McBride and Reid (1988) divide vegetation within developed areas into four categories: tree grove, street strip, shade tree/lawn, and shrub cover. Tree groves are in parks, green-belts, and cemeteries where a continuous or intermittent canopy is formed and ground coverage varies (McBride and Reid 1988). Street strips and shade trees and lawns generally do not have a continuous cover and vary widely in species and structure (McBride and Reid 1988). These

two categories are distinguished by their location. Shrub cover is the most limited vegetation type also occurring as a variety of species and structures (McBride and Reid 1988). A result of these largely ornamental plantings is the establishment of escaped exotics, defined as species originally planted for ornamental or agricultural purposes which have invaded historically natural plant communities. Some commonly escaped exotic species include: acacias *(Acacia* spp.), pepper-trees *(Schinus* spp.), pampas grass *(Cortaderia* spp.), brooms *(Cytisus* spp.), and English ivy *(Hedera helix)* (Holland and Keil 1995). In addition to the community types listed above, many areas do not support any vegetation (McBride and Reid 1988).

Weed communities are also common in urban areas, often occurring on roadsides and abandoned areas. In larger areas these weed populations may represent the early stages of natural succession (Holland and Keil 1995). Some of these areas are known as ruderal communities. A ruderal community occupies waste areas, roadsides often on heavily compacted soils with little available oxygen (Holland and Keil 1995). Typical species include pineapple-weed *(Chamomilla suaveloens),* common knotweed *(Polygonum arenastrum)*, sow-thistle *(Sonchus oleraceus)*, horseweed *(Conyza canadensis)*, and goosefoot *(Chenopodium* spp.) (Holland and Keil 1995). Escaped ornamentals also may proliferate in ruderal communities (Holland and Keil 1995). The weed flora in California represents one-sixth of all plant species (Holland and Keil 1995).

## PHYSICAL ENVIRONMENT

Heat zones form in the most densely populated areas where conditions are 3° to 5°C higher than normal (McBride and Reid 1988). Wind velocities often are lessened in urban areas compared with areas supporting native plant communities (McBride and Reid 1988). A major part of the physical environment in urban areas is human-created such as repeated disturbances from vehicles, trampling, oil, dust, etc. (Holland and Keil 1995).

## ECOSYSTEM PROCESSES

Most sites maintain the same set of weedy species and herbaceous structure due to human disturbance activities (McBride and Reid 1988). Weeds often become established in disturbed areas due to the large quantities of seeds produced by these plants and lack of natural pests (Holland and Keil 1995). Weedy exotic plants have several reproductive advantages over most natives. The seeds of weedy plants may have effective dispersal mechanisms, may remain dormant in the soil, or the plants themselves may be self-fertile or reproduce apomictically, increasing their ability to compete (Holland and Keil 1995). When human disturbance is

suspended or ceased, invasive exotic and some native species often invade (McBride and Reid 1988).

## LITERATURE CITED

Holland, V. L. and David J. Keil. 1995. California Vegetation. Kendall/Hunt Publishing Company. Dubuque, Iowa.

McBride, Joe R. and Chris Reid. 1988. Pasture. *In* A Guide to Wildlife Habitats of California. ed. Kenneth E. Mayer and William F. Laudenslayer, Jr. California Department of Forestry and Fire Protection, Sacramento, California. 142-143.