General Plan Draft EIR, Volume 2, Biological Resources, pages 5.12-5/6 and 5.12-23/24

Woodland Habitats
Woodland habitats are located primarily at middle and lower elevations in the western half of El Dorado County. The four major woodland habitats are montane hardwood-conifer, montane hardwood, blue oak-foothill pine, and blue oak woodland. These habitats combined cover 252,400 acres in El Dorado County. Woodland habitats range in structure from open savannah to dense forest. Sensitive woodland habitats in the county include montane riparian, valley-foothill riparian, aspen, and valley oak woodland. These habitats are discussed under Sensitive Biological Resources below.

Montane hardwood-conifer, which covers 49,100 acres, includes vegetation associated with both coniferous and hardwood habitats and is a transitional habitat between the montane hardwood, mixed chaparral, and woodlands of low elevations and the coniferous forests of high elevations. Habitat composition is generally defined as including a minimum of one-third coniferous trees and one-third broad-leaved trees. Typically, conifers dominate the upper canopy, ranging up to 200 feet in height, and broad-leaved trees form a sub-canopy at 30–100 feet elevation. Common tree species associated within this habitat type include black oak, ponderosa pine, Douglas-fir, white fir, and incense cedar. In the northern Sierra Nevada, montane hardwood-conifer is found between 1,000 and 4,000 feet elevation.

Montane hardwood covers 155,900 acres. This habitat usually occurs at lower elevations than montane hardwood-conifer and is often associated with major river canyons. Montane hardwood is composed of a mixture of trees that occur on rocky, poorly developed and well drained soils. The structure ranges from dense to open tree cover with a poorly developed shrub understory. At low elevations, common species include canyon live oak, foothill pine, madrone, and California bay. Black oak and Douglas-fir may occur at higher elevations. Common shrubs in montane hardwood habitat include wood rose, snowberry, manzanita, and poison-oak.

Blue oak-foothill pine covers 4,200 acres and is characterized by a mixture of hardwoods, conifers, and shrubs. This habitat is found generally in the foothills where it intergrades with blue oak woodland and annual grassland at lower elevations, extending up to about 3,000 feet elevation, where it frequently intergrades with mixed chaparral. The understory is commonly characterized by clusters of mixed shrubs with interspersed openings dominated by annual grasses. Blue oaks are dominant at lower elevations but are usually outnumbered by foothill pines at higher elevations. Associated tree species include interior live oak, canyon live oak, and California buckeye. Interior live oaks are present on alluvial soils associated with river floodplains, low foothills, and upland slopes. Canyon live oaks are present on low foothills, mountain canyons, upland slopes, and exposed ridges.

Blue oak woodland covers 43,200 acres and is found mostly below 3,000 feet elevation on shallow, rocky, and infertile soils. Blue oak woodland includes an understory of annual grasses or a poorly developed shrubby understory featuring species such as poison-oak, California coffeeberry, and buckbrush. Interior live oaks and canyon live oaks are often found in blue oak woodland. These species can also be the dominant tree species where they may be considered as distinct habitats. Interior live oaks are often associated with river floodplains, low foothills, and upland slopes. In low-elevation foothill woodlands, interior live oaks occur as widely spaced trees or clumps that may be concentrated around rock outcrops. Interior live oak becomes a more significant part of the blue oak woodland canopy with increasing

elevation, particularly on north-facing slopes. Canyon live oaks are found on low foothills, mountain canyons, upland slopes, and exposed ridges.

Sensitive Habitats

Sensitive habitats in the county were identified through a review of the CNDDB (CDFG 2002) and FRAP land cover data (CDF-FRAP 2002). In some cases sensitive habitats in the CNDDB correspond directly with the CWHR classification system used by FRAP, but typically, the classifications of vegetation in the CNDDB are more detailed. In other words, the sensitive habitats discussed below are generally described at a more specific level of classification than the major habitat types discussed above. Both FRAP and CNDDB data was used to map sensitive natural habitats (Exhibit 5.12-7).

The list of *California Terrestrial Natural Communities Recognized by the CNDDB* (CNDDB 2002) was used to identify CNDDB communities (or their corresponding CWHR habitat type) that are listed as high priority for inventory by the CNDDB (i.e., rare and worthy of consideration).Sensitive habitats of extremely limited distribution in El Dorado County that are located on USFS land and are therefore not discussed below include sphagnum bog and fen; both ofthese communities are listed as high priority for inventory in the CNDDB. Known locations for sphagnum bog and fen reported to the CNDDB are shown in Exhibit 5.12-7.

Sensitive habitats discussed below include montane and valley-foothill riparian habitat, aspen, valley oak woodland, wet meadow, and vernal pools. The extent of montane riparian habitat in the county was calculated using the FRAP land cover data. Estimates of acreage for aspen, valley oak woodland, and wet meadow are also provided in Table 5.12-1. The amount of valley-foothill riparian has not been quantified and is not shown on Exhibit 5.12-7 because it is difficult to distinguish using remote-sensing imagery (Saving, pers. comm., 2002). No acreage total is given for vernal pools, and they are not included on the exhibits, because their seasonal nature (they are typically depressions in grasslands seasonally inundated by rainwater) of vernal pools makes them difficult to quantify and map at this scale. The distribution of the other sensitive habitats in the county is shown in Exhibit 5.12-7.

Valley-foothill riparian habitat is typically found at lower elevations (i.e., below 3,000 feet elevation) in western El Dorado County. It is found along many of the rivers and streams that flow through the valleys and rolling foothills in this region. Plant diversity within valley foothill riparian varies considerably depending upon hydrological factors, soils, and other environmental conditions. Dominant tree species may include Fremont cottonwood, willow, and valley oak. The understory typically consists of a shrub and herbaceous layer. Common shrubs and vines include wild rose, blackberry, blue elderberry, poison-oak, wild grape, California coffeeberry, and willows. Common wildlife associated with valley-foothill riparian habitat include black-headed grosbeak, bushtit, striped skunk, raccoon, and gray fox. Special status wildlife species that depend on valley-foothill riparian habitat include the northwestern pond turtle, Cooper's hawk, and foothill yellow-legged frog.

Valley oak woodland covers 3,300 acres at lower elevations in El Dorado County. This habitat, which is dominated by valley oaks, varies from savanna-like to forest-like stands with partially closed canopies. Valley oak woodland is composed mostly of winter-deciduous, broad-leaved species. Denser stands typically grow in valley soils along natural drainages. In the foothills, valley oak woodland often intergrades with blue oak woodland or blue oak-foothill pine habitats. Trees frequently associated with this habitat include western sycamore, box elder, Northern California black walnut, blue oak, and interior live oak. Valley oak woodland, like most oak woodland habitats, supports numerous wildlife species. It is particularly important

for species that feed on acorns, are cavity-nesters, or otherwise dependent on valley oaks for food and/or breeding habitat. Wildlife found commonly in valley oak woodland includes gopher snake, acorn woodpecker, oak titmouse, white-breasted nuthatch, California quail, and western gray squirrel. Valley oak woodland is classified by both the CNDDB and CWHR, and is listed as a high-priority community for inventory by the CNDDB.