Table D-23 US National Vegetation Classification (USNVC) Macrogroup Vegetation Information

USNVC Macrogroup	Common Name (SWAP Conservation Targets)	Ecological Description	CWHR Classification	Geographic Occurrences (Provinces)	SWAP Province Selected as Priority Conservation Target
California Annual and Perennial Grassland	California Grassland and Flowerfields	This macrogroup includes all annual forb/grass vegetation native and non-native, as well as native perennial grasslands growing within the California Mediterranean climate. This does not include the cool-moist north coastal terrace prairies, the montane meadow/upland grasslands, and non-native perennial pasture grasses. Stands of this macrogroup include everything from wildflower fields in the San Joaquin Valley and adjacent South and Central Coast Ranges, poppy fields of the western Mojave Desert, needlegrass grasslands of the foothills, valleys and coast ranges, and the largely non-native annual grasslands and weed patches in the dry, warm summer regions of California.	Perennial Grassland	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast
California Chaparral	Chaparral	This includes all chaparral (evergreen sclerophyll-leaved shrublands) below the zone of regular snow accumulation in the mountains. The chaparral occurs throughout Mediterranean climate parts of California from the Klamath Mountains to the Mexican Border. It is represented by a wide variety of floristic alliances, but in general can be grouped into coastal (maritime), xeric (dry, sunny slopes), mesic (cooler, shady slopes), and lower montane (somewhat frost sensitive) types. All these groupings have different characteristic species and fire regimes.	Mixed Chaparral	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Bay Delta and Central Coast Central Valley and Sierra Nevada
California Cliff, Scree, and Other Rock Vegetation	Outcrop Vegetation	Vegetative cover is generally < 2% cliffs and outcrops west of the deserts and inland from the immediate coast, south of central California. Rock surfaces or rapidly eroding unstable slopes are characteristic. Stands do not include alpine or subalpine sparse, rocky vegetation, and also do not include the sparsely vegetated portions of the warm and cold deserts.	• Barren	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast 	Bay Delta and Central Coast Central Valley and Sierra Nevada
California Coastal Scrub	Coastal Sage Scrub	This is the other main macrogroup of California shrublands. It differs from chaparral by being composed of drought-deciduous shrubs, which typically are smaller with less extensive root systems and shorter life spans. Many of the members of this macrogroup are also found in the warm deserts and show similar adaptations to hot-dry summer conditions.	Coastal Scrub	 North Coast and Klamath Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Bay Delta and Central Coast
California Forest and Woodland	and Woodlands	Includes all Mediterranean climate woodlands and forests in California from sea level to the point where snow and frost in combination with high winter precipitation enables cool temperate species of trees to dominate the overstory layer. This macrogroup ranges throughout the state west of the deserts and below the higher mountains where snow is the main form of precipitation. This includes the Central and South Coast Ranges, the Northern California Interior Coast Ranges, the Sierra Foothills, Central Valley, and lower elevations of the west slope of the Sierra, the Southern Cascades, the Southern Klamath Mountains, and the Transverse and Peninsular Ranges.	Blue Oak Woodland Blue-Oak-Foothill Pine Closed-Cone Pine- Cypress Coastal Oak Woodland Juniper Montane Hardwood Montane Hardwood Valley Oak Woodland	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	 North Coast and Klamath Central Valley and Sierra Nevada Bay Delta & Central Coast
Californian–Vancouverian Montane and Foothill Forest	North Coastal Mixed Evergreen and Montane Conifer Forests	This broad macrogroup is representative of the cool-temperate forests which occur in the Pacific states from the Puget Sound area south into the higher mountains of southern California and adjacent Baja, Mexico. In California these range inland from the immediate coast and experience warm, relatively dry summers and cool rainy to cool snowy winters. All of these forests average cooler and wetter than the previous macrogroup (California Foothill and Valley Forests and Woodlands).	 Douglas-Fir Eastside Pine Jeffrey Pine Klamath Mixed Conifer Montane Hardwood Montane Hardwood-Conifer Ponderosa Pine Sierran Mixed Conifer White Fir 	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Central Valley and Sierra Nevada Cascades and Modoc Plateau
Cool Interior Chaparral (formerly Western North American Cool/Montane Sclerophyllous Evergreen Scrub)		This macrogroup is characterized by sclerophyllous leaved shrubs with wider geographic range than California. Many occur throughout the western mountains to the Rockies. These are cold-adapted and occupy successional relationships to various coniferous forests on productive sites, or persist in rocky or other poor soil sites.	Montane Chaparral	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Central Valley and Sierra Nevada

Table D-23 US National Vegetation Classification (USNVC) Macrogroup Vegetation Information (continued)

USNVC Macrogroup	Common Name (SWAP Conservation Targets)	Ecological Description	CWHR Classification	Geographic Occurrences (Provinces)	SWAP Province Selected as Priority Conservation Target
Cool Semi-Desert Wash and Disturbance Scrub	High Desert Wash and "Rangeland" Scrub	This is a cool desert macrogroup which is most common in the eastern portions of the state from Modoc Plateau, southward and east of the Cascades and Sierra into the mountains of the Mojave Desert. Stands form when fire or other clearing and disturbance remove stands of Artemisia, (in the big sagebrush scrub) or other shrubs characteristic of the Great Basin Upland Scrub macrogroup.	Bitterbrush Low Sage Sagebrush	 Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	• Deserts
Great Basin Saltbush Scrub Macrogroup (formerly Western North American Cool Semi-Desert Shrubland, Shrub-Steppe)	Shadscale-Saltbush Scrub	The shrubby cool desert saltbush species often form distinct bands above closed basins and below extensive sagebrush belts in the Great Basin Desert. This macrogroup addresses those saltbush scrubs, which typically are not growing in strongly saline or alkaline soils, but do tolerate higher pH (alkalinity) and often finer soil texture than Artemisia tridentata and related taxa of sagebrush.		 Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Deserts Central Valley and Sierra Nevada
Intermountain Basins Pinyon–Juniper Woodland	Great Basin Pinyon-Juniper Woodland	Includes all mixed and pure pinyon and juniper stands in trans-montane California. These are largely found in the Mojave Desert mountains, and in the mountains of the Modoc Plateau, and Great Basin. They also occur on the eastern slopes of the Sierra Nevada and the Peninsular Ranges and the northern slopes of the Transverse Ranges. Outliers occur west of the Sierra Crest in Kings Canyon, and in the mountains of Ventura and Santa Barbara Counties.		 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Cascades and Modoc Plateau Deserts
Inter-Mountain Dry Shrubland and Grassland	Great Basin Upland Scrub	This macrogroup occurs in the cooler Mojave Desert mountains, the uplands of the Great Basin and Modoc Plateau, and in isolated pockets of the inner South Coast Ranges such as Temblor Range and Carrizo Plains. It is composed of shrublands with cool desert affinities but has been segregated from the short and tall species of sagebrush (Artemisia spp.). Most of the vegetation in this macrogroup occurs well beyond the eastern borders of CA into the Great Basin Province. Successional relationships exist between the several groups of alliances in this macrogroup, some are disturbance followers and may also occur in episodic washes. Some are persistent resprouting shrubs, which recover well after fire, and some are fire and browsing-sensitive with longer recovery times. Some perennial desert grasslands are also part of this macrogroup and increase with short fire intervals.	• Sagebrush	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Cascades and Modoc Plateau Deserts
Mojavean–Sonoran Desert Scrub	Mojave and Sonoran Desert Scrub	This is an upland desert scrub found on hill slopes and alluvial fans throughout the arid Southwest where winter temperatures are not as cold as in the Great Basin Desert and summer temperatures are very hot. The Mojave has frost and occasional winter snows, the Sonoran rarely has any frost. The warmer Sonoran desert tends to have more summer rain, and more distinctive emergent arborescent species, such as saguaro, ocotillo, and the Mojave is cooler with fewer large cacti and large thorny trees, but has Joshua trees and other Yucca species.	Desert Scrub Desert Succulent Scrub Joshua Tree	North Coast and Klamath Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts	• Deserts
North American Pacific Coastal Salt Marsh	Salt Marsh	Salt marshes are generally tied to coastal tidally influenced wetlands in California. They have salinities similar to ocean water and do not develop the higher concentrations of salts characteristic of the Salt marsh meadow macrogroup. Many salt marsh species are widespread, and species diversity is relatively low. Individual alliances within the macrogroup tend to sort out based on inundation frequencies and maximum water depths.		 North Coast and Klamath Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Bay Delta and Central Coast
North American Warm Semi- Desert Cliff, Scree, and Other Rock Vegetation	Sparsely Vegetated Desert Dune	This macrogroup is characteristic of the desert dunes and contains both annual and perennial species with special strategies to deal with the shifting sands and the dry and unpredictable climate. Vegetation cover is variable depending upon unpredictable rainfall patterns.	• Barren	 North Coast and Klamath Cascades and Modoc Plateau Central Valley and Sierra Nevada South Coast 	• Deserts
North American Warm-Desert Xero-Riparian Macrogroup (formerly Madrean Warm Semi- Desert Wash Woodland/Scrub)	Desert Wash Woodland and Scrub	This macrogroup includes the warm desert washes of the Sonoran and Colorado Desert. These have trees and large shrubs associated with them while the cooler Mojave desert has fewer trees but several shrub species. Stands vary depending upon subsurface water availability, minimum winter temperature, and intensity and frequency of flooding.	Desert Scrub Desert Wash	 North Coast and Klamath Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	• Deserts

Table D-23 US National Vegetation Classification (USNVC) Macrogroup Vegetation Information (continued)

USNVC Macrogroup	Common Name (SWAP Conservation Targets)	Ecological Description	CWHR Classification	Geographic Occurrences (Provinces)	SWAP Province Selected as Priority Conservation Target
Rocky Mountain Subalpine and High Montane Conifer Forest	Subalpine Aspen Forests and Pine Woodlands	This macrogroup represents the cold but less snowy subalpine to high montane forests of the Sierra, Cascades, Klamath, Transverse, and Peninsular Ranges of California. It is a wide ranging macrogroup, including similar forests and woodlands in the Rocky Mountains, and the high mountains of the Great Basin.	AspenLodgepole PineSubalpine Conifer	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	North Coast and Klamath
	Brackish (Estuarine) Submerged Aquatic Vegetation (strategies from Marine target "Embayments, Estuaries, and Lagoons" apply to this macrogroup)	This macrogroup is poorly defined currently in California, but should include both hard and soft bottom intertidal settings.	• Estuarine	North Coast and KlamathBay Delta and Central CoastSouth Coast	• Marine
Vancouverian Alpine Scrub, Forb Meadow, and Grassland, and Rocky Mountain Alpine Scrub, Forb Meadow, and Grassland	Alpine Vegetation	This macrogroup is representative of the state's alpine zone in the Sierra, Cascades, White, Sweetwater, and Klamath Mountains. It either occurs above timberline or is found localized within subalpine areas in cold air drainages (e.g. N-facing slopes, often near long persisting snowbanks). The characteristic species are either herbaceous (many are cushion plants, some tufted or rhizomatous graminoids) or low prostrate or dwarf shrubs. Different groups segregate based on substrate type (scree, talus, felfield) and moisture regime (snowbank, felfield, etc.).	Alpine Dwarf-Shrub	 North Coast and Klamath Cascades and Modoc Plateau Central Valley and Sierra Nevada South Coast Deserts 	North Coast and Klamath
Vancouverian Cliff, Scree, and Other Rock Vegetation	Northwest Coast Cliff and Outcrop	Taken to describe coastal cliffs on headlands and islands of the north coast.	• Barren	Cascades and Modoc Plateau Bay Delta and Central Coast	Bay Delta and Central Coast
Vancouverian Coastal Dune and Bluff	Coastal Dune and Bluff Scrub	Stands of coastal dune and bluff vegetation are limited to salty, rocky or sandy settings immediately adjacent to the open coast. Adaptations to salt spray, wind and shifting sands, result in several lifeforms including succulent or hairy leaves, long underground roots and stolons (adaptation to shifting sands), and good colonization of relatively unstable and sterile substrates.	Coastal Scrub	 North Coast and Klamath Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast 	North Coast and Klamath Bay Delta and Central Coast South Coast
Vancouverian Flooded and Swamp Forest (formerly Western Cordilleran montane–Boreal Riparian Scrub and Forest)	North Coastal and Montane Riparian Forest and Woodland	This is a new synthesis of parts of the older concept treated under Western Cordilleran montane–boreal riparian scrub and forest. Revisions of the NVC have split the tree-dominated forest and woodlands of the cool temperate parts of the state from the riparian scrubs. These riparian forests occur along the major rivers and streams in the outer and middle North Coast Ranges, and along the foothill and lower montane reaches of rivers and streams in the Klamath, Cascades, Sierra Nevada, Modoc Plateau, Transverse, and Peninsular ranges. Unlike the Warm Southwest Riparian Forest Macrogroup, surrounding upland vegetation is mainly conifer dominated and not broadleaf evergreen or deciduous woodland/forest.		North Coast and Klamath Cascades and Modoc Plateau Central Valley and Sierra Nevada	North Coast and Klamath
Vancouverian Lowland Grassland and Shrubland	North Coast Deciduous Scrub and Terrace Prairie	This macrogroup includes a combination of grasses and shrubs, which tend to intermix in stands along the immediate coastal strip from central California to north of the Oregon border. Cool foggy summers and rainy winters, coupled with salty winds tend to preclude forest development along the immediate coast, but inland these stands only persist through regular disturbance such as clearing, grazing/browsing. Stands also commonly occur adjacent to upland Coastal Dune and Bluff scrub. However, that macrogroup is characterized by more evergreen shrubs, which occur in well-drained exposed settings (exposed bluffs and dunes).	Coastal Scrub Perennial Grassland	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Bay Delta and Central Coast
Vancouverian Rainforest	Pacific Northwest Conifer Forest	This is the Pacific Northwest temperate rainforest, which includes the giant conifer forests ranging from central California coast, all the way up to southeast Alaska. Mild winters with massive amounts of rain (and some snow north of California) and a maritime climate, with cool summers with either fog (in California) or some summer rain (north of California) are typical.	• Redwood	North Coast and Klamath Bay Delta and Central Coast	North Coast and Klamath
Vancouverian Subalpine Forest	Pacific Northwest Subalpine Forest	Includes montane conifer forests and woodlands adapted to very high winter snowfall, from montane to subalpine altitudes. Snow loads are the greatest anywhere in North America, and persist well into the summer. Tree germination is also limited in some cases by the short period the ground is not covered by snow.	Red FirSubalpine Conifer	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada 	North Coast and Klamath Central Valley and Sierra Nevada

Table D-23 US National Vegetation Classification (USNVC) Macrogroup Vegetation Information (continued)

USNVC Macrogroup	Common Name (SWAP Conservation Targets)	Ecological Description	CWHR Classification	Geographic Occurrences (Provinces)	SWAP Province Selected as Priority Conservation Target
Warm Interior Chaparral	Desert Transition Chaparral	These chaparral stands occur in the "rain-shadow" of the Mountains including the inland sides of the inner South Coast Ranges, the southern Sierra, Tehachapi, Transverse, and Peninsular Ranges. Compared to California chaparral the stands are less dense, contain a mix of other non-chaparral shrubs with desert affinities, and tend to have less frequent and less intense fires. Several of the characteristic species are also found in Arizona, New Mexico, and adjacent northern Mexico in similar "desert-margin" settings, and are thus, different floristically and ecologically from typical California Chaparral, although the two macrogroups may intermingle in some areas.	Chamise-Redshanks Chaparral Mixed Chaparral	Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts	Central Valley and Sierra Nevada
	Salt Marsh Meadows (strategies developed for Salt Marsh apply to this macrogroup)	This macrogroup includes herbaceous and shrubby perennial vegetation associated with saline or alkaline wetlands in the desert or along the upper edges of coastal salt marshes. The overlap between salty desert basins and coastal "high" salt marsh becomes more pronounced as one proceeds southward. In coastal southern California precipitation is only 10 inches per year and solar insulation and evaporation concentrate surface salts to similar levels found on or at the edges of many desert playas. Seeps of fresh or brackish water in either setting account for denser herbaceous growth indicative of one group of alliances in this macrogroup, while the evaporative flat pannes and playas of the coast and the desert are the home of the phreatophitic shrubby indicators of the other group in this category.		Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts	Bay Delta and Central Coast
Warm Southwest Riparian Forest (formerly Southwestern North American Riparian, Flooded and Swamp Forest)	American Southwest Riparian Forest and Woodland	The Great Valley, South Coast, and warm desert riparian forests and thickets are included in this macrogroup. The range of the main indicator trees and shrubs are the southwestern United States and northern Mexico. Most stands of this macrogroup occur below 4,000-feet elevation and are replaced by the cool-temperate version of riparian (Montane and North Coast Riparian Forest and Scrub) in the mountains and on the north coast.	Palm Oasis Valley-Foothill Riparian	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts
Western Cordilleran Montane Shrubland and Grassland	Montane Upland Deciduous Scrub	This macrogroup includes several widespread western alliances that occur in rocky settings at mid to higher elevations. Stands occur in Klamath, Cascade, Sierra, higher inner North Coast Ranges and the Transverse and Peninsular Ranges. Stands are often adjacent to montane chaparral (which is largely evergreen) but often shows greater affinity to more mesic sites such as rocky canyons, north-facing slopes, or areas of greater snow accumulation. Some vegetation types are successional to forest, others persist due to avalanche disturbance, or poor soils, which preclude productive tree growth.	Montane Chaparral	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	North Coast and Klamath
Western North America Dwarf Sage Shrubland and Steppe	Great Basin Dwarf Sagebrush Scrub	This macrogroup occurs in cool desert or even high mountain settings from the Eastern Sierra, Cascades, Modoc Plateau, southward into the southern Great Basin Mountains, and the desert side of the Transverse Ranges. It is characterized by low subshrub species in the genus Artemisia (sagebrush). These species form stands on poor soils, or exposed slopes and ridges where larger sagebrush species are unable to grow.	• Low Sage	North Coast and Klamath Cascades and Modoc Plateau Central Valley and Sierra Nevada Deserts	Cascades and Modoc Plateau
Western North America Tall Sage Shrubland and Steppe		This macrogroup is emblematic of the valleys and lower slopes of the Great Basin Desert and enters California in the Modoc Plateau, south and east of the Cascades and Sierra, into the higher mountains of the Mojave Desert. It also occurs in isolated patches in the Transverse and Peninsular ranges, the south and the inner north Coast Ranges sporadically northward to the eastern Klamath Mountains.		 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Cascades and Modoc Plateau Deserts
Western North America Vernal Pool	Vernal Pools	Vernal pools are widespread in 17 different regions in the state from the Mediterranean climate pools of south-coastal through the Great Valley up to the cool temperate Modoc Plateau and Sierra Valley areas of the Northeastern part of the state. Pools generally fill and dry several times per winter, but generally are completely dry in the summer months. Vegetation is seasonally varied and also varies yearly due to fluctuating and unpredictable water levels. Most pools are small, but can be many acres in size in some areas such as the Modoc Plateau.		Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast	Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast

Table D-23 US National Vegetation Classification (USNVC) Macrogroup Vegetation Information (continued)

USNVC Macrogroup	Common Name (SWAP Conservation Targets)	Ecological Description	CWHR Classification	Geographic Occurrences (Provinces)	SWAP Province Selected as Priority Conservation Target
Western North America Wet Meadow and Low Shrub Carr	Wet Mountain Meadow	Wet meadows are typical of low-lying sites in the mountains and in some lower elevation valleys and depressions. Saturated soil or standing water through the growing season are key characteristics. Long-persisting standing water tends to convert sites to Freshwater Marsh macrogroup. Many wet meadow vegetation types occur in the mountainous areas of the state where cool snowy winters and short growing seasons prevail. However, there is a warmer winter lower elevation analog, and also one with invasive exotic species. This macrogroup is widespread throughout the state wherever freshwater meadows and seeps occur.	• Wet Meadow	 North Coast and Klamath Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	Central Valley and Sierra Nevada North Coast and Klamath
Western North American Freshwater Aquatic Vegetation	Freshwater Aquatic Vegetation (strategies from Freshwater Marsh apply to this macrogroup)	This macrogroup is poorly defined in the state, many wetland vegetation stands are best kept in the Freshwater marsh macrogroup. However, deeper water species which do not cover large areas of water surface would fall into this macrogroup.	Lacustrine Riverine	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	North Coast and Klamath Bay Delta and Central Coast South Coast
Western North American Freshwater Marsh	Freshwater Marsh	Freshwater is present throughout all or most of the growing season, species are widespread and tend to be tall emergent forms at lower elevations, but when water depth is > 1 m most vegetation is either anchored or floating hydrophytes (water lilies, duckweed, pondweed, etc.)	Fresh Emergent Wetland	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	 North Coast and Klamath Bay Delta and Central Coast South Coast Central Valley and Sierra Nevada South Coast
Western North American Montane/Boreal Peatland	Fen (Wet Meadow)	Fens (often mistakenly called "bogs") are hydrologically and chemically unique wetlands, which are typically nutrient-poor and support many endemic vascular and non-vascular plants. (mostly mosses) Fens are typically small in size in California, and in California have only been well described from the Sierra, Klamath, and Cascade ranges. They also occur along the cool north coast.	Fresh Emergent Wetland Wet Meadow	 North Coast and Klamath Cascades and Modoc Plateau Central Valley and Sierra Nevada 	North Coast and Klamath
Western North American Montane-Subalpine Wet Shrubland and Wet Meadow (formerly Western Cordilleran Montane-Boreal Wet Meadow)	Mountain Riparian Scrub and Wet Meadow	This macrogroup contains montane meadow grasses, graminoids, and forbs and shrublands associated with meadows, riparian terraces, and seeps in the higher mountains of the state from the Peninsular and Transverse Ranges through the Sierra-Cascade Ranges and including the higher mountains of the Modoc Plateau, the Klamath Mountains and the high Inner North Coast Ranges. The vegetation tends to make small stands sorting ecologically based on moisture availability and on tolerance of disturbance. This concept joins both low riparian shrublands and associated wet meadows based on their overlap in ecologies and floristic composition.	Montane Riparian Wet Meadow	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada South Coast Deserts 	North Coast and Klamath
Western North American Temperate Grassland and Meadow	Western Upland Grasslands	This macrogroup applies to vegetation dominated by grasses, which are typically not restricted to moisture conditions that are higher than the surrounding landscape (not seeps, riparian, or wet meadows). In general, these grasslands are also widespread outside of California in surrounding states with cool-temperate climatic conditions. This vegetation occurs in the hills and mountains of the north Coast Ranges, Klamath Mountains, lower montane Sierra Nevada, Modoc Plateau, Great Basin, and southward to the Transverse and Peninsular Ranges.	Annual Grassland Perennial Grassland	 North Coast and Klamath Cascades and Modoc Plateau Bay Delta and Central Coast Central Valley and Sierra Nevada 	North Coast and Klamath Cascades and Modoc Plateau Central Valley and Sierra Nevada