Chapter III.

ENVIRONMENTAL RESOURCES

BIOLOGICAL RESOURCES ELEMENT

PURPOSE

Government Code Section 65302(d) requires the General Plan to include an element that provides for the conservation and preservation of wildlife resources and establishes inventories of natural vegetation, fish and wildlife, including rare and endangered species and their habitats.

The Biological Resource Element evaluates and identifies Biological Resources that exist within the Town of Apple Valley and its Sphere of Influence. For the purpose of this document, Biological Resources include plants and wildlife species, their habitats, the ecosystems, and ecosystem functions that support those habitats. This element is intended to identify the variety of biological resources within the Town and vicinity, and provide management strategies for the preservation and protection of the natural environment and the many biological resources that are present in the area.

This Element provides a basis for understanding the biological resource issues that are inherent to the planning area, offering information and sources that are intended to promote the protection of biological resources and also allow for orderly build-out of the general plan. The element is designed to guide decision makers towards land use decisions that protect critical environmental resources. Goals, policies and programs are set forth within this element that ensure the long-term preservation of biological resources.

BACKGROUND

Major policy issues presented within the Biological Resources Element are directly related to the Land Use, Open Space/Conservation, and Soils/Geotechnical Elements. This Element is also pertinent to the Parks and Recreation Element.

The Town of Apple Valley and the Sphere of Influence are located within the planning area for the West Mojave Habitat Conservation Plan. Once established West Mojave Plan will be the largest habitat conservation plan developed in the United States. The plan covers 9.3 million acres in Kern, Los Angeles, Inyo, and San Bernardino Counties. The habitat conservation plan is a regional effort designed to protect and plan for the preservation of the region's biological resources including plant and animal species and their habitats. It should be noted that the plan is only active on Federal Lands, and that a complimentary plan is being developed for private lands within the WEMO planning area.

The Biological Resources Element has been prepared in conformance with and is supportive of the West Mojave Habitat Conservation Plan with regard to public lands. The Element has been designed to influence and contribute to the effective implementation of conservation strategies, goals, policies and programs within the Town of Apple Valley. The Town is also actively working to develop a Multi-Species Habitat Conservation Plan to protect local environmental resources.

Federal and state laws establish a number of regulations that govern and protect biological resources, including habitat and wildlife species. Among the most effective laws for protecting species and their habitat are the State and federal Endangered Species Acts, which establish laws and regulations that directly and indirectly protect plant and wildlife species through the identification of threatened and endangered species, and protection of listed species and their habitat(s). In addition to the Endangered Species Acts, California has several regulatory agencies responsible for encouraging the preserving biological resources including state enforcement of the federal Clean Water Act, the Migratory Bird Treaty Act, and California Fish and Game Code.

REGIONAL SETTING AND THE PHYSICAL ENVIRONMENT

Apple Valley lies in the High Desert, between the City of Victorville and the communities of Lucerne Valley on the southeast and Hesperia on the southwest. There is a mix of private and public lands within the Town limits and its surrounding Sphere of Influence. Private lands tend to predominate within the Town of Apple Valley and Federal lands, managed by the U.S. Bureau of Land Management (BLM), form the largest land blocks within the surrounding Sphere of Influence. These Federal lands are natural areas managed as open space, which both benefit and characterize the overall setting of the Town.

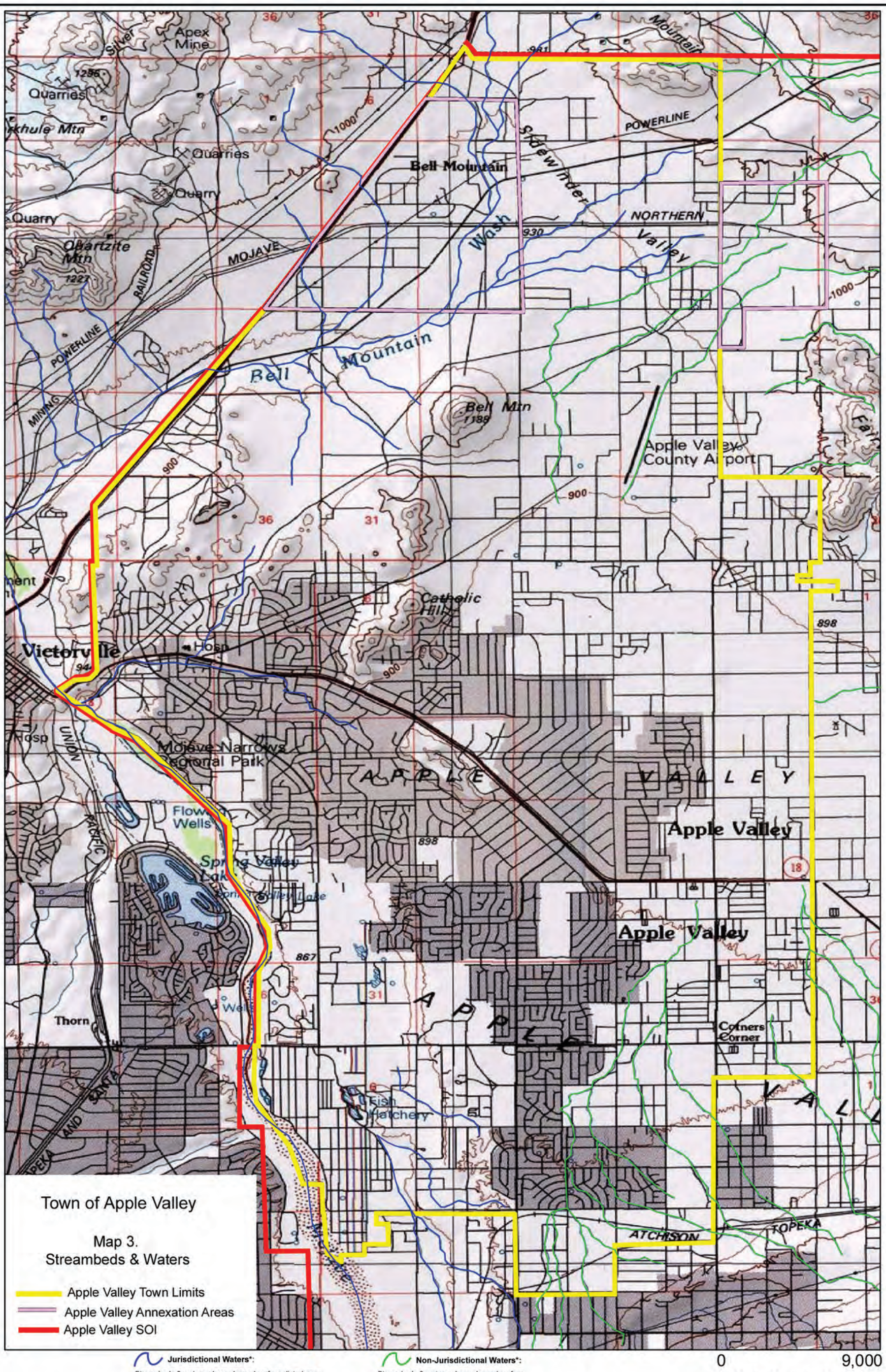
Climate

The planning area is located in the southern portion of the Mojave Desert. The Mojave Desert is considered a high desert with elevations ranging from 2,000 to 5,000 feet above mean sea level. (MSL). Climate within the planning area is representative of a high desert ecosystem, including extreme fluctuations of daily temperature, strong seasonal winds, and less than 5 inches of annual precipitation.

Topography

Elevations within the Town and vicinity range from 2,550 to 4,800 feet above MSL. The north face of the San Bernardino Mountains, south of Apple Valley, contains some of the higher elevations in the region. Generally terrain within the boundary of Apple Valley consists of lower elevations ranging from 2,550 to 3,186 feet above MSL, while the Sphere of Influence contains elevated terrain as high as 4,800 feet. There are scattered mountains north and east of the planning area as well. The lowest elevation within the planning area is associated with the Mojave River, located on the west side of Town.

The mountain drainages and ephemeral streams associated with the Mojave River have contributed to the topography of the region. The Mojave River is a federally regulated waterway that contains several associated tributary dry washes, including the Bell Mountain/Knolls wash, which contains a partially lined concrete drainage basin that ultimately drains into the Mojave River. Other watercourses in the planning area flow into the Apple Valley Dry Lake. Most of these are considered to be ephemeral in that they rarely contain overland water flow and generally have poorly defined banks. An exhibit showing potential streambed and appropriate jurisdiction is shown in Exhibit III-4.

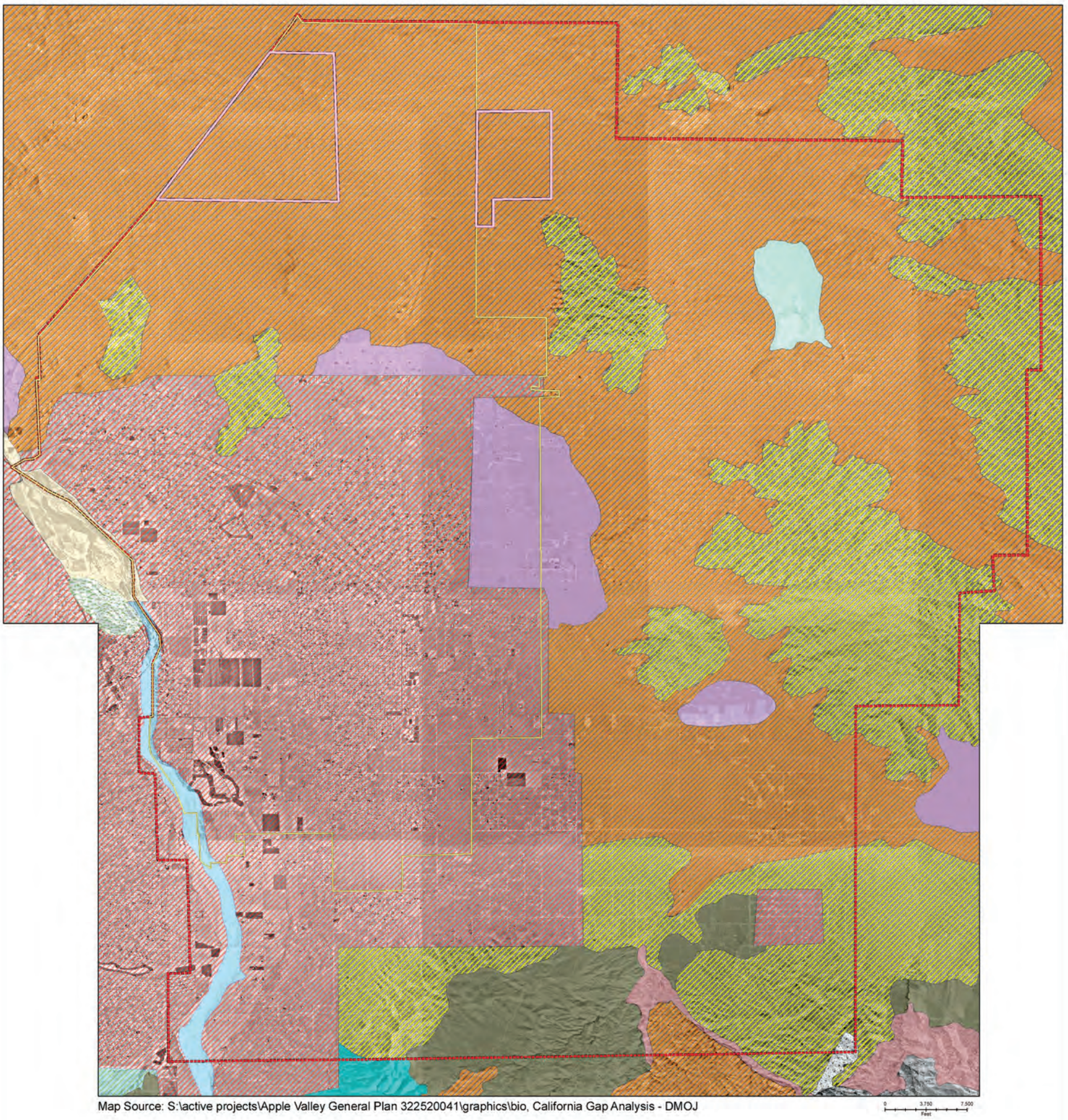


Source: AMEC 11.2007

TERRA NOVA®
Planning & Research, Inc.

Apple Valley General Plan
Streams, Washes, and Waterways
Apple Valley, California

Exhibit
III-4



Legend

- Apple Valley Town Limits
- Apple Valley SOI
- Apple Valley Annexation Areas

Regional VegetationType

- Pinyon-Juniper & Desert Wash
- Pinyon-Juniper
- Juniper
- Montane Hardwood-Conifer
- Annual Grassland & Saltbush Scrub
- Mojave Riparian Forest
- Mojave Mixed Woody Scrub
- Urban/Rural
- Saltbush Scrub
- Creosote Bush Scrub
- Lacustrine
- Mojave River Sand Fields

Source: AMEC 11.2007

TERRA NOVA®
Planning & Research, Inc.

Apple Valley General Plan
Natural Communities by Vegetation Type
Apple Valley, California

Exhibit
III-5

Regional Habitats And Natural Communities

General vegetation types within the Town of Apple Valley have been classified into distinct natural communities. Minimally disturbed areas in Apple Valley support a Saltbush Scrub plant community in lower elevation areas, Creosote Scrub in mid-elevation areas, and a low-diversity Mojave Mixed Woody Scrub or Joshua Tree Woodland in the highest elevations. Joshua Trees occur as a minor component in these plant communities, with the densest Joshua Tree stands occurring in the southwestern portion of Apple Valley. The western portion of Apple Valley contains Mojave Riparian Forest, which is associated with the Mojave River. Landscaped areas and more disturbed areas are classified as non-native communities. The several separate natural communities represented in the Apple Valley General Plan planning area include:

Saltbush Scrub

This type of vegetation is found within the eastern portion of the Town limits and the Sphere of Influence. It is generally comprised of Saltbush, Allscale, and Shadscale. Joshua Tree, Cheesebush, Anderson Boxthorn, and Cholla are also sometimes a component of this vegetation type.

Mojave Riparian Forest

This habitat consists of small areas of water-dependent plants, and is supported by the Mojave River that flows through the western portion of the planning area. Specifically, the Upper Narrows River contains an extensive Mojave Riparian Forest. This community is dominated by Cottonwood, Willow, Saltcedar, Quailbush, Rabbitbrush, and Saltgrass. Although this habitat represents only a small proportion of the planning area, it is valuable for the diversity of wildlife that it supports.

Wash Vegetation

There are a number of small washes within the Town of Apple Valley and the Sphere of Influence that support specific species including Rabbitbush, Cheesebrush, and Brickellbush. This community type may be associated with Mojave Riparian Forest species and usually contains some non-native grasses and flowering plants.

Sandfield Plant Community

This community assemblage is found within the upstream area of the Mojave River where water flow is primarily subsurface, except during times of heavy rainfall. Vegetation is generally limited to short lived annual plants, and lacks perennial species. Representative species include Sand Verbena, Tiquilia, Sandpaper Plant, Saltbush, and Ricegrass.

Joshua Tree Woodlands

Found on alluvial slopes with sandy/loamy soils, this community type often contains California Buckwheat, Green Ephedra, Desert Needlegrass, Paperbag Bush, and may contain Mojave Yucca. This vegetation type is observed south of the Town within the Sphere of Influence.

Creosote Bush Scrub
This community type is the predominant vegetation type within the Town of Apple Valley and the Sphere of Influence. This community is composed of Creosote Bush, Burrobush, Golden Cholla, Pencil Cholla, Beavertail, Cheesebush, Boxthorn, Rabbitbrush, and may contain Joshua Trees.

Mojave Mixed Woody Scrub
This community assemblage is limited to small patches within the Town limits, and occupies larger swaths of land within the Sphere of Influence east of the Town. Steep and rocky soils that are shallow and overly drained tend to support this community. Buckwheat, Bladderpod, Beavertail, Goldenbush, Cheesebush, and some cactus species such as Clustered Barrel Cactus and Hedgehog Cactus are representative of this vegetation type.

Montane Woodlands
Located southwest of the Town limits is a small community of this vegetation type, which extends south in the vicinity of the Sphere of Influence. This open woodland vegetation type is dominated by California Juniper, Joshua Tree, and a number of shrubs including Blackbush, Cliffrose, Turpentine Broom, and may contain an understory that is typical of Mojave Mixed Scrub species.

Non-native Communities
The Town and Sphere of Influence contain non-native species interspersed within natural assemblages. Within urbanized areas, non-native species tend to be associated with landscaping, slope stabilization, and abandoned or vacant lots. Immediately adjacent to the Apple Valley Airport and in disturbed land within residential areas of the Town, ruderal or weedy flora predominate, with a few components of former native plant communities occasionally represented. In the Sphere of Influence non-native species may occupy abandoned farmland, or washes. Although not native, this community type provides open space and habitat and foraging opportunities for a variety of common species.

WILDLIFE HABITAT AND FAUNA

Wildlife habitat in the Town and Sphere of Influence generally follow the natural community descriptions. Within the Town and Sphere of Influence primary habitat is found within the fragmented assemblages of Creosote, Saltbush, and Mojave Mixed Woody Scrub. These natural communities are critical habitat types for numerous plant and animal species.

Developed and urban lands also provide habitat to a number of common species that are able to survive in ruderal (weedy) plant communities or in proximity to urban development.

Common animal species identified in Apple Valley include invertebrates, amphibians, reptiles, birds and mammals. Invertebrates include insects, such as ants (Harvester and Crater-nest ant), beetles (Broad-necked Darkling beetle), bees (Honey and Bumble bees), scorpions (Sand and Desert Hairy scorpions), as well as spiders (Daddy Longlegs, Black Widow, Desert Tarantula, and orb weaver spiders) are located throughout the area. Amphibians primarily include frogs (Pacific Tree frog and Bullfrog) and toads (Western and Red-spotted toad) commonly found in the Mojave River corridor and various periodically wet habitats within the Town and Sphere of Influence. Reptiles include lizards (western Whiptail, Zebra-tailed, Western Fence, Desert Night, Southern Alligator, Desert Horned, and Side-blotched lizards), iguanas (Desert iguana), and snakes (Western Patch-nosed, Spotted Leaf-nosed, Coachwhip, Glossy, Gopher, Sidewinder, Mojave Rattle, and Speckled Rattle snakes), which can be found in habitats ranging from sand, boulders, and Creosote scrub, to old woodpiles in more urbanized areas. Various bird species can be found throughout Apple Valley, nesting in developed and undeveloped areas, including common landscape features found in residential areas. Three hundred and one bird species have been documented in and around the Town of Apple Valley (Myers 2007), and include sparrows, finches, woodpeckers, and hawks, to name a few. And finally, mammals identified in the Town and Sphere of Influence include larger species such as rabbits (Black-tailed jackrabbit and Desert Cottontail), skunks (Spotted and Striped skunks), raccoons (Ringtail), fox (Kit fox) and coyotes, as well as smaller species including mice (Pocket, Southern Grasshopper, and Deer mice), rats (Kangaroo rat and Desert Woodrat), gophers (Botta's Pocket gopher), and squirrels (White-tailed Antelope and California Ground squirrels).

An assemblage of wetland-dependent species and associated riparian habitat is located in the western portion of Apple Valley in conjunction with the Mojave River. The River is a significant north/south corridor that links a number of natural communities within the planning area. Similarly, hills, ridges (i.e., The Knolls, Falchion Boulderlands, Bell Mountain, Catholic Hill, Bass Hill) and associated washes serve as important corridors for movement between Turtle and Black Mountains located north of the planning area; Fairview Mountain to the northeast; the Granite Mountains to the southeast; and the Juniper Flat foothills located within the San Bernardino Mountains to the south. Linkage corridors are further discussed below.

Sensitive, Rare, And Endangered Species

A number of plant and animal species occurring within the Planning Area have been termed Special Status Species due to a variety of designations issued by federal, state and/or local governing authorities. Rapid urbanization in the region has led to the listing of some plant and animal species as threatened, or endangered, while other species have been designated as sensitive species.

Future development in Apple Valley must comply with laws and regulations affording protection to special status and sensitive species. Land with potential habitats for these species is to be evaluated prior to surface disturbance. Non-listed biological features, such as state streambeds/federal waters, Joshua Trees and rare plants/animals, are also to be evaluated in site-specific environmental reviews, which identify all final necessary mitigation and permitting requirements. The following briefly describes Apple Valley's sensitive, rare, and/or endangered species.

"Endangered" species are those considered in imminent danger of extinction due their limited numbers or loss of habitat, while "Threatened" species refers to those likely to become endangered within the foreseeable future, primarily on a local scale, and "Sensitive" species are those that are naturally rare or have been locally depleted or put at risk by human activities. Tables III-5 through III-10 provide a list of sensitive species that have been reported by federal and state wildlife agencies and quasi-public conservation organizations as potentially occurring within the Town and Sphere of Influence.

Table III-5
Special Status Plant Species from the Vicinity of Apple Valley

Species Name	Habitat	Local or CDFG Status	Federal Status	Reported Within Planning Area (PA)
Camissonia boothii **ssp. *Boothii*** **Booth's Evening Primrose**	Sandy habitats	CNPS List 2		Yes (West Edge PA)
Cymopterus Deserticola **Desert Cymopterus**	Sandy habitats	CNPS List 1B		Yes (Central PA along Hwy 18)
Yucca Brevifolia **Joshua Tree**	Creosote Bush, Saltbush, Mojave Mixed Woody, Scrub	Apple Valley Ordinance		Yes (PA)
Saltugilia Latimeri **Latimer's Woodland-gilia**	Creosote Bush Scrub	CNPS List 1B.2		No
Opuntia basilaris **var. *bracyclada*** **Short-jointed Beavertail**	Joshua Tree Woodland	CNPS List 1B.2		No
Scutellaria bolanderi ssp. austromontana **Southern Skullcap**	Meadows, riparian habitat	CNPS List 1B.2		Yes (Mojave River at Upper Narrows)
Symphyotrichum defoliatun **San Bernardino Aster**	Meadows, riparian habitat	CNPS List 1B.2		No

Table III-6
Special Status Invertebrate Species from the Vicinity of Apple Valley

Species Name	Habitat	Local or CDFG Status	Federal Status	Reported Within Planning Area (PA)
Plebulina Emigdionis **San Emigdio Blue [butterfly]**	Saltbush Scrub & riparian habitat			Yes (reported from west edge PA along Mojave River)
Helminthoglypta Mojaveana **Victorville Shoulderband**	Granite boulders base of Mojave River			Yes (reported from west edge PA along Mojave River at Upper Narrows)

Table III-7
Special Status Amphibian Species from the Vicinity of Apple Valley

Species Name	Habitat	Local or CDFG Status	Federal Status	Reported Within Planning Area (PA)
Rana aurora Draytonii **California Red-legged Frog**	Wetlands with deep water & adjacent Riparian habitat	Special Concern	Threatened	No (reported historically from Mojave River at Upper Narrows)
Bufo californicus **Arroyo Toad**	Streams with sandy banks	Special Concern	Endangered	No (historically southwest of PA within Mojave River)

Table III-8
Special Status Reptile Species from the Vicinity of Apple Valley

Species Name	Habitat	Local or CDFG Status	Federal Status	Reported Within Planning Area (PA)
Phyrnosoma coronatum (blainvillei population) **Coast Horned Lizard**	Friable, rocky or shallow sandy habitats with ants	Special Concern		No (reported southwest PA along dry portions of the Mojave River)
Sauromalus ater **Chuckwalla**	Rocky habitat, Creosote Bush Scrub			Yes (from Mojave River Narrows)
Gopherus Agassizii **Desert Tortoise**	Creosote Bush Scrub	Threatened	Threatened	Yes (from central west of Mojave River and north PA)
Actinemys marmorata pallida **Western Pond Turtle**	Wetlands & adjacent riparian areas	Special Concern		Yes (reported from west edge PA at Upper Narrows)

Table III-9
Special Status Mammal Species from the Vicinity of Apple Valley

Species Name	Habitat	Local or CDFG Status	Federal Status	Reported Within Planning Area (PA)
Lasiurus cinereus **Hoary Bat**	Dense foliage of large trees next to open habitats	Special Concern		Unknown (from west edge PA, exact location unknown)
Spermophilus Mojavensis **Mojave Ground Squirrel**	Creosote Bush & Saltbush Scrub	Threatened		No (1955 report just southeast of the PA)
Microtus Californicus Mojavensis **Mojave River Vole**	Wet herbaceous Habitat	Special Concern		Yes (reported from west edge PA along Mojave River)
Corynorhinus Townsendii Pallescens **Pale Big-eared Bat**	Crevices, Mineshafts, Creosote Bush Scrub near water	Special Concern		No (reported southeast of PA)
Chaetodipus fallax pallidus **Pallid San Diego Pocket Mouse**	Sandy habitats rocks/ coarse gravel, wash habitat, succulent scrub	Special Concern		Possibly (reported from west edge PA & Granite Mountains)

Table III-10
Special Status Bird Species from the Vicinity of Apple Valley

Species Name	Habitat	Local or CDFG Status	Federal Status	Reported Within Planning Area (PA)
Toxostoma Bendirei **Bendire's Thrasher**	Joshua Tree Woodland, Mojave Mixed Woody Scrub	Special Concern		Yes (reported from North PA)
Myiarchus tyrannulus **Brown-crested Flycatcher**	Riparian woodland	Special Concern		Yes (reported from Mojave River)
Athene Cunicularia **Burrowing Owl**	Burrows/abandoned foundation structures, Creosote Bush & Ruderal Scrub	Special Concern		Yes (reported throughout PA)
Accipiter cooperii **Cooper's Hawk**	Riparian habitat with large cottonwoods	Special Concern		Yes (west edge PA; Mo River at Upper Narrows)
Vireo vicinior **Gray Vireo**	Dry chaparral, Pinyon-juniper Woodland, Mojave Desert Mountains	Special Concern		No (reported from north slope San Bernardino Mountains)
Vireo bellii pusillus **Least Bell's Vireo**	Riparian habitat, willow trees, seep-willow scrub	Endangered	Endangered	Yes (reported from west edge PA along Mojave River)
ToxostomaLecontei **Le Conte's Thrasher**	Shrubs, washes, Creosote Bush Scrub	Special Concern		Yes (reported throughout PA)
Asio otus **Long-eared Owl**	Riparian habitat next to open fields	Special Concern		No (reported south west of PA along Mojave River)
FalcoMexicanus **Prairie Falcon**	Cliff faces (nesting), Open habitats for Foraging	Special Concern		Yes (from northeast PA spring/summer; throughout PA during winter)
Empidonax traillii Extimus **Southwestern Willow Flycatcher**	Riparian habitat	Endangered	Endangered	Yes (reported from west edge PA along Mojave River)
Piranga rubra **Summer Tanager**	Riparian habitat	Special Concern		Yes(reported from west edge PA along Mojave River)
Buteo swainsoni **Swainson's Hawk**	Riparian Habitat (Migration)	Threatened		Yes (from Mojave River Corridor)
Pyrocephalus Rubinus **Vermillion Flycatcher**	Riparian habitat	Special Concern		Yes (reported from west edge PA along Mojave River)

Table III-10 (Cont'd)
Special Status Bird Species from the Vicinity of Apple Valley

Species Name	Habitat	Local or CDFG Status	Federal Status	Reported Within Planning Area (PA)
Coccyzus americanus occidentalis **Western Yellow-billed Cuckoo**	Riparian habitat with Large cottonwood and willow canopy	Threatened	Candidate for listing	Yes (reported from west edge PA along Mojave River)
Icteria virens **Yellow-breasted Chat**	Riparian habitat	Special Concern		Yes (reported from west edge PA along Mojave River)
Dendroica Petechia brewsteri **Yellow Warbler**	Riparian habitat	Special Concern		Yes (reported from west edge PA along Mojave River)

Habitat: terrestrial natural community descriptions per Holland (1986) as modified by general observations of the planning area in 2007.

State of California and Local Status: Endangered, Threatened, Protected, Special Concern status per the California Fish and Game Code of 2007, as well as all species protected by local Town of Apple Valley Ordinance.

California Native Plan Society (CNPS) listing rankings (CNPS 2001) are described as follows:

List 1B: Plants considered rare and endangered in California and throughout their range. All of the plants constituting List 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code and are eligible for state listing. It is mandatory that these plant species be fully considered during preparation of environmental documents pertaining to the California Environmental Quality Act.

List 2: Plants considered rare, threatened or endangered in California but which are more common elsewhere.

Federal Status: Endangered, Threatened and Candidate for listing status per the Endangered Species Act of 1973 (as amended). It is mandatory that federally listed plant species be fully considered during preparation of environmental documents pertaining to the California Environmental Quality Act, or National Environmental Policy Act, or any federal authorization.

Reported within Planning Area: Includes observations by AMEC personnel, reports by knowledgeable individuals, entries in the California Natural Diversity Database (CDFG 2007) and San Bernardino Museum records.

Ecosystem Management and Biodiversity Protection

Ecosystems are composed of complex interactions between species and the natural environment that represent the culmination of evolutionary processes including soil formation, waste disposal, air and water purification, nutrient cycling, solar energy absorption, and biogeochemical and hydrological cycles. While the complexity of the earth's ecosystems are not fully understood, it is clear that every part of an ecosystem fills an important role and helps to maintain a balanced and healthy system.

Ecosystem management integrates ecological, economic, and social goals in a unified manner, which is an important step towards protecting biodiversity and encouraging healthy ecosystems.

Successful management operates under the principle that environmental components are interrelated. Legislation, policies, and management plans that seek to restore, maintain, and safeguard ecological systems will preserve environmental integrity for future generations.

Public Land Agencies and Ecosystem Management

Public land agencies aid in ecosystem management and biological resource protection. The primary objective for these agencies is the safeguarding of cultural, scenic and biological resources.

There are a number of public land agencies in the Town of Apple Valley and the vicinity that work together to manage the region's open space lands. Federal agencies include the National Park Service, the United States Forest Service, United States Fish and Wildlife Service, and the Bureau of Land Management. On a state level, agencies include the California Department of Fish and Game, State Water Quality Control Board, and the California Department of Parks and Recreation. Lands owned and managed by these agencies and organizations may, among other uses, provide for recreational uses, which has the potential to impact and disturb the land to varying degrees.

Endangered Species Acts

Endangered Species Acts establish laws and regulations that directly and indirectly protect plant and wildlife species through the identification of threatened and endangered species, protection of listed species, and their habitat(s). The U.S. Endangered Species Act (ESA), enacted in 1973, established powerful legislation for the protection of biological resources. This act set forth regulations that required identification of all endangered species and populations with an emphasis on "game" animals in order to preserve as much biodiversity as possible. The Department of Commerce, through the National Oceanic and Atmospheric Administration, is responsible for marine mammals and anadromous fish, while the U.S. Department of the Interior, through the U.S. Fish and Wildlife Service, is responsible for the protection of most threatened and endangered species. The structure of the Endangered Species Act contains the following components:

1. Listing of species and designation of critical habitat;
2. Recovery planning; and
3. Prohibitions and exceptions to prohibitions.

A wide range of activities involving endangered species is regulated by the ESA, including accidentally or intentionally "taking" (harassing, harming, pursuing, hunting, shooting, trapping, killing, capturing or collecting), importing into or exporting out of the United States (possessing, selling, transporting or shipping), and selling or offering for sale any endangered species. Violators of the ESA are subject to fines up to $100,000 and one-year of imprisonment. As of February, 2008, the United States had 1,351 species on its endangered and threatened species lists, 9 proposed for listing, and about 283 candidate species waiting to be considered.

Private land is essential in the protection of endangered species, since nearly eighty percent of habitat for more than half of all listed species occurs on such properties. Regulatory agencies have been successful in establishing precedent for the protection of species on private lands. In

1995, the Supreme Court ruled that destroying habitat is as harmful to endangered species as directly taking them. In order to provide a nexus for private land owners with threatened or endangered species or habitat present on their land, the USFWS has been negotiating Habitat Conservation Plans (HCPs) with public entities and private landowners, wherein a portion of their land can be disturbed as long as the species benefit overall. Impacts to listed species can also be addressed through a Section 7 consultation where a project includes a federal action.

California Endangered Species Act

At the state level, the Department of Fish and Game regulates and manages endangered species through the provision set forth in Code Sections 2050 et. seq, which define the California Endangered Species Act (CESA). State laws regulate the "take" of any endangered or threatened species per Section 2080 of the Fish and Game Code where Take is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" a protected species. CESA allows for take incidental to otherwise lawful development projects, and emphasizes early consultation with the Department to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset losses of listed species populations and their essential habitats caused by projects.

Section 2080 of the Fish and Game code allows the agency to authorize permits or memorandums of understanding for individuals, public agencies, universities, zoological gardens, and scientific or educational institutions, to import, export, take, or possess any endangered species, threatened species, or candidate species of plants and animals for scientific, educational, or management purposes.

This state law largely parallels the federal law, by providing similar requirements and mandates as those described in the ESA. In addition, CESA prohibits the taking of endangered species and species petitioned for listing at the state level. Plant species are also included under protection within CESA, whereas the federal ESA only protects plants on federally owned lands or, where there is a federal nexus on private lands. Such a nexus might include the existence of a federally regulated resource or facility.

Town Responsibility under ESA and CESA

To ensure development projects minimize impacts to the environment, the Town of Apple Valley is responsible for regulating development. In fulfilling this responsibility, the Town must make certain that all proposed projects conform with the standards and mandates of both the federal and state acts, as applicable. The Western Mojave Habitat Conservation Plan and the Apple Valley Multi Species Habitat Conservation Plan (see below) must also conform to the standards of both laws. In addition, both habitat conservation plans will assist the Town in implementing its responsibilities under these laws.

Habitat Protection

Habitat protection, along with land conservation and ecosystem management, provides for maximum biological diversity, ensuring the long-term protection of all species. Over the last few years, advances in the field of conservation biology have given rise to a new discipline of restoration ecology, which seeks to repair or reconstruct ecosystems that have been damaged by human or natural forces. Restoration of degraded natural communities is an important factor in reversing habitat loss and improving wildlife diversity and ecosystem functions. However, the preservation of intact environmental systems, natural communities, and habitats before they are degraded provides greater surety that these values do not have to be eventually recreated at a greater cost to the Town. An important element in habitat preservation and restoration is the connectivity of that habitat with the greater ecological system.

Habitat fragmentation is a severe threat to species' survival. Fragmentation of natural communities results in an overall decrease in habitat and creates isolated pockets of natural land surrounded by human impacted areas. Habitat fragmentation leads to smaller populations with less genetic diversity, and reduced biodiversity. Ecosystems become unstable when fragmented and may result in negative changes, including increased predators, competitors and parasites. Due to urbanization and human population growth, habitat fragmentation is one of the greatest threats to species and the ecosystems upon which they rely.

Habitat Connectivity

Providing an interconnected network with established corridors is crucial in minimizing biodiversity losses due to fragmentation.

The Town of Apple Valley and the Sphere of Influence contain areas of valuable habitat that support special status species. These areas are identified in Exhibit III-6, and should be preserved as open space, require species specific surveys for other land uses, and/or provide mitigation, if impacted. Development of the Apple Valley MSHCP will provide important guidelines and criteria for these habitats.

The Apple Valley MSHCP will establish guidelines for the preservation and maintenance of wildlife movement corridors within the Town and vicinity. In the interim the Town will apply standards set forth in the CEQA Guidelines for projects within or adjacent to Special Linkage areas. The Mojave River corridor is an important linkage area within the western portion of the Town and Sphere of Influence in that it links a number of natural communities within the planning area. Washes also can serve as important corridors for movement between Turtle and Black Mountains located north of the planning area; Fairview Mountain to the northeast; the Granite Mountains to the southeast; and the Juniper Flat foothills located within the San Bernardino Mountains to the south.

There are a number of special survey areas within the Town and Sphere of Influence that should require species-specific surveys as part of the application process for projects and/or should be considered for preservation as open space. These areas are depicted on Exhibit III-6, and include the following species: Desert Tortoise, Mojave Ground Squirrel, Burrowing Owls. Joshua Trees, and/or Migratory/Nesting/Other Protected Birds. In addition to the, washes and streams

delineated in Exhibit III-4, (Streams, Rivers, and Washes) special surveys using appropriate agency methodology should conducted prior to development to delineate other jurisdictional areas.

Habitat Conservation Planning

West Mojave Habitat Conservation Plan

The West Mojave Conservation Plan was developed by the Bureau of Land Management and is the largest habitat conservation plan ever developed in the United States, encompassing 9.3 million acres of land within San Bernardino (including Apple Valley), Kern, Los Angeles, and Inyo counties. This plan provides a comprehensive strategy to conserve and protect state and federally listed species, as well as other special status species and their habitats.

Conservation of lands for specifically covered species, like the Desert Tortoise, Mojave Ground Squirrel, Le Conte's Thrasher, Burrowing Owl, etc., is mandated in the framework of this plan. The approved West Mojave HCP is currently only applicable to federal lands, as it has only completed NEPA certification. Local, state, and federal entities are in the process of developing a private lands counterpart to the West Mojave Plan. However, the private lands HCP will have a significantly reduced scope when compared to the federally adopted West Mojave Plan.

Apple Valley Multi-Species Conservation Plan

There are approximately 30 sensitive species found throughout the Town and within the Sphere of Influence, including state and/or federally listed species such as the desert tortoise and the Least Bell's vireo. These listed species are protected by the state and/or federal Endangered Species Acts (ESAs). Currently in the Town of Apple Valley, each individual development project (private or public) that may impact a listed species is processed separately through the state and/or federal permit processes to address compliance with the CESA and/or ESA. Depending on the project and the biological impacts associated with it, the process takes a year or more to complete. The processes are both time consuming and expensive.

On a parallel track with the General Plan Update, the Town is undertaking the preparation of a Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP will provide a means to address impacts to sensitive and listed species in order to ensure that the updated General Plan can be implemented, which will enable the Town to streamline the development entitlement process while ensuring protection of sensitive environmental resources.

Map 14. Town of Apple Valley: Recommended Conservation Emphasis Open Space Areas

0 4,800
Feet

Apple Valley Town Limits
Apple Valley SOI
Apple Valley Annexation Areas
Study Areas

Source: AMEC 11.2007

TERRA NOVA®
Planning & Research, Inc.

Apple Valley General Plan
Habitat Areas Requiring Additional Biological Study
Apple Valley, California

Exhibit
III-6

FUTURE DIRECTIONS

Participation in the Western Mojave Habitat Conservation Plan, and development of the Apple Valley MSHCP is an important step by the Town for the long-term protection of important biological resources on a local and regional level. The Western Mojave Plan establishes a regional ecological preservation system that will be able to support important and intact ecosystems and communities, while the Apple Valley MSHCP will provide for local preservation within the Town, while encouraging thoughtful development. Through implementation of the General Plan, and adherence to policies and programs, the Town can continue to grow in a manner that is compatible with the natural environment.

GOALS, POLICIES, AND PROGRAMS

Goal 1

Establish a pattern of community development that supports a functional, productive, and balanced relationship between the manmade environment and the natural environment.

Policy 1.A
Habitat for endangered, threatened, and sensitive species shall continue to be protected and preserved as Open Space by the Town.

Program 1.A.1
The Town shall continue to work on identifying critical habitat areas, biological corridors, and ecosystems functions that must be preserved to maintain a healthy, self-sustaining environment.

Program 1.A.2
The Town shall continue to contribute and participate in the local and regional conservation plans including the Western Mojave Habitat Conservation Plan.
Responsible Agency: Planning Division
Schedule: Ongoing

Program 1.A.3
The Town shall continue developing and eventually adopt a MSHCP.
Responsible Agency: Planning Division
Schedule: Ongoing

Program 1.A.4
Once the Western Mojave Habitat Conservation Plan and/or the Apple Valley MSHCP have been finalized, they shall be used to maintain an accurate and regularly updated map of sensitive plant and animal species and for management of biological resources within the Town.
Responsible Agency: Planning Division
Schedule: 2009-2010, Ongoing

Program 1.A.6
Biological resource surveys and assessments shall continue to be required by Town staff as part of the application process for new development especially within or adjacent to linkage corridors or, special survey areas and potential jurisdictional areas.
Responsible Agency: Planning Division
Schedule: Ongoing

Program 1.A.7
Areas containing valuable habitat shall be managed accordingly for the preservation and protection of their biological and natural resources, and if not already designated as Open Space such lands shall be considered for an open space land use designation as appropriate.
Responsible Agency: Planning Division
Schedule: Continuous

Policy 1.B
The Town shall promote the use of native vegetation for landscaping to enhance and create viable habitat for local species.

Program 1.B.1
The Town shall require developers to recover, preserve, or utilize native vegetation within the project or shall require that viable vegetation is transplanted to other appropriate sites in conformance with its Native Plant Ordinance.
Responsible Agency: Planning Division
Schedule: Ongoing

Program 1.B.2
Native and drought tolerant plant materials, including vegetation that provides or enhances habitat for local species, shall be incorporated into project landscaping and design.
Responsible Agency: Planning Division
Schedule: Ongoing

Program 1.B.3
A comprehensive list of planting materials that emphasizes native vegetation, but may also include non-native plants that are compatible with the local environment, shall be made available at the Town Hall. A list of invasive exotics that shall not be planted also will be made available. In addition, information on salvaging and transplanting native species shall also be made available.
Responsible Agency: Planning Division
Schedule: Ongoing

Policy 1.C
The Town shall continue to promote biodiversity by protecting natural communities with high habitat value, protecting habitat linkages to prevent further fragmentation, and encouraging an appreciation for the natural environment and biological resources.

Goal 2

The Town shall work with local, state, and regional agencies to protect, preserve, and manage biological resources, especially threatened, endangered, and sensitive plants and wildlife species and their habitats.

Policy 2.A
The Town shall coordinate with CDFG and USFWS when working on projects that are proposed to be located within or adjacent to linkage areas or special survey areas.

Policy 2.B
The Town shall support and cooperate with other agencies in establishing multiple use corridors that link open space areas through drainage channels and utility easements, thereby encouraging the connectivity of natural communities.

Program 2.B.1
Through consultation and coordination with the County of San Bernardino Flood Control District, utility companies, and public and private land owners, the Town shall designate a network of multiple use corridors for movement of people and wildlife between open space areas.
Responsible Agency: Planning Division, San Bernardino County Flood Control District, and BLM.
Schedule: Ongoing

Policy 2.C
The Town shall work with CDFG and the USFWS to approve and implement a MSHCP for the Town and Sphere of Influence.

Program 2.C.1
Through consultation and coordination with the CDFG and the USFWS, the Town shall complete and adopt an MSHCP that addresses species of concern and sets forth policy and regulation to manage important habitat, linkage corridors, and special survey areas.
Responsible Agency: Town of Apple Valley, CDFG, USFWS, and BLM.
Schedule: Ongoing until MSHCP is adopted.

Policy 2.D
The Town shall work with CDFG and USFWS to ensure that state and federal protections required by the Migratory Bird Treaty Act addressed during the planning process.

Policy 2.E
The Town shall work with CDFG, RWQCB and ACOE to ensure that state and federal jurisdictional areas are properly identified.