

G. VEGETATION AND WILDLIFE

This section describes the vegetation and urban wildlife within the project area and evaluates the impacts that would result from the implementation of the proposed project. Mitigation measures are recommended, where appropriate.

1. Existing Setting

The following section discusses the existing vegetation and wildlife within the project site. The discussion includes biotic resources, special-status plant and wildlife species, and mature trees.

a. Biotic Resources on the Project Site. The majority of Greater Downtown contains urban development covered with buildings, pavement, and associated landscaping. The project area also includes a few landscaped urban parks. The primary remaining “natural” habitats are associated with the approximately 9,000 linear feet of the Guadalupe River and 3,750 linear feet of Los Gatos Creek that pass through Downtown San Jose (see Figure III-5). The River and Creek and the surrounding riparian corridors provide the majority of the significant habitat for vegetation and wildlife in Greater Downtown.

The segments of the Guadalupe River between Interstate 280 (I-280) and Coleman Avenue in the project area lie within the project boundary of the Guadalupe River Flood Control Project. The flood control project has been initiated and the segments within the Downtown area are under construction as of January 2004. According to the proposed activities of the flood control project, portions of the Guadalupe River will include an armored bank and/or an armored river bottom and a constructed low-flow channel. Other parts of the river will retain its natural river bottom and most of Los Gatos Creek will also retain its natural river bottom. A major component of the flood control project is the protection, where possible, and restoration of riparian habitat along the creek. The Guadalupe River Flood Control Project provides mitigation for impacts to water quality, riparian and aquatic habitat, and special-status species. Some of the mitigation has been implemented, such as the creation of riparian habitat downstream of the project site, while other mitigation measures will be completed in conjunction with construction activities in progress.¹

(1) Vegetation. Native vegetation along the Guadalupe River and Los Gatos Creek includes riparian and shaded riverine aquatic cover vegetation. The habitat along the river and creek is classified as great valley mixed riparian forest.² The riparian vegetation corridor extends from the river’s edge to the top of the banks with a usual width of approximately 100 to 200 feet. Within the project area, the Guadalupe River and Los Gatos Creek riparian corridors contain approximately 13 acres and 6 acres of riparian vegetation, respectively.

The structure of the vegetation consists of a tall tree canopy, a midstory layer, and an understory layer. Native trees include Fremont’s cottonwood (*Populus fremontii*), black walnut (*Juglans*

¹ U.S. Army Corps of Engineers, Santa Clara Valley Water District, and San Jose Redevelopment Agency, 2003. Guadalupe River Flood Control Project, San Jose, California. Available on the internet at: <http://www.spk.usace.army.mil/civ/guadalupe/index.html>.

² Holland, R.F., 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Unpublished Report. State of California, The Resources Agency, Department of Fish and Game, Natural Heritage Division, Sacramento, California.

hindsii), willow (*Salix* sp.), box elder (*Acer negundo*), and sycamore (*Platanus racemosa*). Native midstory and understory vegetation includes cottonwood, willow, black walnut, elderberry (*Sambucus mexicana*), and coyote brush (*Baccharis pilularis*). Non-native canopy and midstory vegetation includes blue gum eucalyptus (*Eucalyptus globulus*), elm (*Ulmus* sp.), black locust (*Robinia pseudoacacia*), and Himalayan blackberry (*Rubus procerus*). Understory vegetation consists of mugwort (*Artemisia douglasiana*), rice grass (*Oryzopsis miliacea*), fennel (*Foeniculum vulgare*), black mustard (*Brassica nigra*), and several other annual grasses and forbs.³

Shaded riverine aquatic cover vegetation occurs along the banks and stream channel at the interface between a river and the adjacent riparian vegetation. Typical characteristics of shaded riverine aquatic cover vegetation include overhead and instream cover with natural substrate, overhanging vegetation, partially submerged vegetation, woody debris (exposed roots, branches, trunks), detritus, leaf litter, aquatic plants, gravel and cobble substrates, undercut banks, and a stream channel with variable water velocity and depth. The width of shaded riverine aquatic cover vegetation in the Guadalupe River is typically equivalent to the width of the entire river.⁴ Shaded riverine aquatic cover vegetation increases habitat complexity and provides fish with protective cover from predators, an insect prey source for fish, and shade to help maintain water temperatures.

The Guadalupe River Flood Control Project provides mitigation for impacts to riparian and shaded riverine aquatic cover vegetation.^{5,6} Mitigation measures include a setback for development established along the Guadalupe River and Los Gatos Creek in accordance to the recommendations specified in the City's *Riparian Corridor Policy and the Redevelopment Agency's Master Plan Draft Development Guidelines for the Guadalupe River and Gardens*. The setbacks would protect and enhance the riparian corridor. Another mitigation is an underground bypass system that would be constructed to divert flood flows through Downtown San Jose and limit impacts to riparian habitat. Parts of the Guadalupe River would retain their natural river bottom and would include shaded riverine aquatic cover mitigation plantings. Most of Los Gatos Creek would also retain its natural river bottom. Riparian vegetation mitigation habitat with plantings and shaded riverine aquatic cover vegetation have been planted along the Guadalupe River corridor downstream (north) of Greater Downtown to replace impacts to vegetation in the project area.

(2) Wildlife. The Guadalupe River and Los Gatos Creek support several species of fish, mammals, reptiles, amphibians, and birds. The Guadalupe River and Los Gatos Creek support several species of native and non-native fish. The more common of the native fish species include Pacific lamprey (*Lampetra tridentata*), Sacramento sucker (*Catostomus occidentalis*), prickly sculpin (*Cottus asper*), riffle sculpin (*Cottus gulosus*), California roach (*Hesperoleucus symmetricus*), and hitch (*Lavinia exilicauda*). Non-native fish species include large-mouthed bass (*Micropterus salmoides*), mosquito fish (*Gambusia affinis*), green sunfish (*Lepomis cyanellus*), carp (*Cyprinus carpio*), goldfish (*Carassius auratus*), brown bullhead (*Ictalurus nebulosus*), and pumpkinseed (*Lepomis gibbosus*).

³ Santa Clara Valley Water District, 2001. *Final General Re-evaluation & Environmental Report for Proposed Project Modifications, Guadalupe River Project, Downtown San Jose, California, Vol. 1.*

⁴ Ibid.

⁵ Ibid.

⁶ U.S. Army Corps of Engineers, Santa Clara Valley Water District, and San Jose Redevelopment Agency. 2003, *op. cit.*

Common mammals expected to occur within the project site include opossum (*Didelphis marsupialis*), California ground squirrel (*Citellus beecheyi*), fox squirrel (*Sciurus niger*), Botta's pocket gopher (*Thomomys bottae*), muskrat (*Ondatra zibethica*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), Trowbridge shrew (*Sorex trowbridgei*), broad-footed mole (*Scapanus latimanus*), and house mouse (*Mus musculus*).

Reptiles and amphibians within the project site include western fence lizard (*Sceloporus occidentalis*), western toad (*Bufo boreas*), Pacific tree frog (*Hyla regilla*), arboreal salamander (*Aneides lugubris*), California slender salamander (*Batrachoseps attenuatus*), and bullfrog (*Rana catesbeiana*).

Bird species in Downtown San Jose are predominantly introduced and urban adapted species such as European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), and pigeon or rock dove (*Columba livia*). However, a number of native bird species are still present within the riparian habitats along the creek corridors. These species include mourning dove (*Zenaidura macroura*), Brewer's blackbird (*Euphagus cyanecephalus*), American crow (*Corvus brachyrhynchos*), American robin (*Turdus migratorius*), belted kingfisher (*Ceryle alcyon*), yellow warbler (*Dendroica petechia*), California towhee (*Pipilo crissalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Carduelis psaltria*), California quail (*Callipepla californica*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), yellow-rumped warbler (*Dendroica coronata*), and ruby-crowned kinglet (*Regulus calendula*).

b. Special-Status Plant and Wildlife Species. Special-status plant and wildlife species are those listed under the State and Federal Endangered Species Acts, plants listed by the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California, and wildlife designated as Species of Special Concern by the California Department of Fish and Game.

(1) Special-Status Plant Species. Special-status plant species reported in the San Jose area are found primarily in natural communities associated with serpentine and valley foothill grasslands. Serpentine grasslands are not present on the project site and the remaining valley foothill grasslands on the site are marginal in habitat value and have been highly disturbed by urban development. Based on a search of the California Natural Diversity Database and prior field surveys, no special-status plants or potentially suitable habitat for these species are known to occur in the project area.⁷

(2) Special-Status Wildlife Species. Several special-status wildlife species could inhabit the project area. Most of these species would only occur within the Guadalupe River and Los Gatos Creek riparian corridors within the project area. These special-status wildlife species are listed on Table V.G-1.

Steelhead and Chinook Salmon. The federally threatened Central California Coast evolutionary significant unit (ESU) of steelhead trout (*Onchorhynchus mykiss*) and chinook salmon (*Oncorhynchus tshawytscha*), a candidate species for threatened status, are known to occur in the

⁷ Ibid.

Table V.G-1: Special-Status Wildlife Species Known to Occur or Potentially Occurring in the Downtown San Jose Area

Species	Status (Federal/State)	Habitat	Potential for Occurrence
Steelhead Trout <i>Oncorhynchus mykiss</i>	FT/-	Clear, cool streams with pools and riffles, with coarse gravel beds for spawning.	Known to occur on the project site, in the Guadalupe River and Los Gatos Creek
Chinook Salmon <i>Oncorhynchus tsawhyscha</i>	FC/-	Clear, cool streams with pools and riffles, with coarse gravel beds for spawning.	Known to occur on the project site, in the Guadalupe River and Los Gatos Creek
California Red-Legged Frog <i>Rana aurora draytonii</i>	FT/CSC	Creeks with deep pools and riparian vegetation, ponds.	Historically known to occur in the Guadalupe River and Los Gatos Creek. Unlikely to occur due to the presence of nonnative predators.
Western Burrowing Owl <i>Athene cunicularia hypugaea</i>	-/CSC	Open country, nests and roosts in ground squirrel burrows.	Not likely to occur on the site due to the lack of suitable habitat.
Southwestern Pond Turtle <i>Clemmys marmorata pallida</i>	-/CSC	Streams with deep pools, ponds, marshes, with basking sites and suitable upland areas for egg laying.	Historically known to occur in the Guadalupe River and Los Gatos Creek. Unlikely to occur due to the presence of nonnative predators and limited suitable habitat.
Cooper's Hawk <i>Accipiter cooperi</i>	-/CSC (nesting)	Woodland habitats, often seen in wooded suburban areas during winter and may nest in these trees.	Expected to occur occasionally as a transient, but may nest within riparian habitat of the Guadalupe River and Los Gatos Creek.
Sharp-shinned Hawk <i>Accipiter striatus</i>	-/CSC (nesting)	Woodland habitats, often seen in well wooded suburban areas during the winter.	Expected to occur occasionally as a transient, but may nest within riparian habitat of the Guadalupe River and Los Gatos Creek.

Notes: FT = Federally Threatened
CSC = California Species of Special Concern
FC = Federal Candidate for listing

Source: LSA Associates, Inc., 2003.

Guadalupe River. The Endangered Species Act fully protects steelhead in the Guadalupe River. The Central Valley fall and late-fall chinook salmon ESU for the Guadalupe River is considered a federal candidate species under the Endangered Species Act. The National Marine Fisheries Service protects and enhances habitat for chinook salmon, such as in the Guadalupe River, through the “essential fish habitat” provisions of the Magnuson-Stevens Fishery Conservation and Management Act.

Both of these fish are anadromous and migrate to and from the San Francisco Bay and spawn in the Guadalupe River. Migratory adult steelhead are present in the River between mid-December and late April and juvenile steelhead are present during the entire year. Adult chinook salmon are more likely to occur in the River between mid-October and mid-January, but could potentially occur from mid-June to mid-October, and juvenile chinook salmon occur in the River from January through May.⁸

⁸ Ibid.

Steelhead and chinook salmon require highly specified conditions for migration, spawning, and rearing young. Important factors associated with preferred stream channel conditions include temperature, velocity, depth, gravel substrate, and water quality. Shaded riverine aquatic cover vegetation is considered to be extremely important for maintaining cooler water temperatures needed to sustain steelhead and salmon, especially in lower elevation areas such as the lower Guadalupe River. Typically high water temperatures, low surface flow of water, low levels of dissolved oxygen, and low sediment input can be detrimental to steelhead and chinook salmon populations. Generally, temperatures exceeding 77.0° F and 75.2° F are considered lethal for rearing juvenile steelhead and chinook salmon, respectively.⁹

Although considered suitable habitat, the Guadalupe River, and the Downtown section in particular, provides less than optimal conditions for steelhead and chinook salmon. Water temperatures often reach lethal levels depending on the particular section of the river and the time of the year. Water temperatures exceeding 77° F, which are considered lethal to rearing steelhead, occur over 40 percent of the time between Almaden Lake and Downtown San Jose at I-280. However, temperatures rarely exceed lethal limits in the river downstream from the Guadalupe River-Los Gatos Creek confluence. The instream habitats also limit the value of the river in this reach. The river is characterized by 60 to 80 percent of pool habitat separated by short riffles, which is not ideal for fish rearing. The relatively shallow and high sand- and silt-sized particles in the gravel substrate also limit the abundance and diversity of invertebrates and may limit spawning success. Weirs, culverts, stream crossings, gabions, and dams could limit migration. Over the years, sediment input has been reduced and channel erosion has increased. High levels of toxic pollutants, which are present in the channels, could reduce prey and cause direct fish mortality.

The Guadalupe River Flood Control Project provides mitigation for impacts to spawning habitat, including stream-channel flow and stream-channel temperatures.^{10,11} As part of the project, water depth necessary for migration would be maintained in the natural channel and barriers to natural fish passage would be removed. Low-flow channel structures in areas of river-bottom armoring and invert stabilization structures would be created. Weirs, grade control structures, and a low flow channel would provide the proper depth and velocity for fish passage. Lost gravel used for spawning would be replaced and new gravel spawning areas would be created. Sediment and gravel levels would be maintained and monitored.

Incremental flow would occur during water diversions. Mitigation included in the Guadalupe River Flood Control Project outlines that aquatic species would be moved to suitable habitat available upstream and downstream from the project area, and all large invertebrates, vertebrates, and fish would be relocated prior to complete dewatering.

Mitigation included in the Guadalupe River Flood Control Project outlines that temperatures of the stream channels would be monitored during construction. Planted shaded riverine aquatic cover vegetation would increase shade and reduce water temperatures in the channels. Changes in water

⁹ Ibid.

¹⁰ Santa Clara Valley Water District, 2001. *Final General Re-evaluation & Environmental Report for Proposed Project Modifications, Guadalupe River Project, Downtown San Jose, California*, Vol. 1.

¹¹ U.S. Army Corps of Engineers, Santa Clara Valley Water District, and San Jose Redevelopment Agency. 2003, *op. cit.*

temperature would not impact migrating adult and juvenile anadromous fish from November through February because water temperatures would remain similar to pre-project conditions that support migration. Changes in water temperature would be relatively small from October through May, when most anadromous fish life stages are present. Water temperatures after the completion of construction, from March to May, would remain suitable for juvenile chinook salmon. Juvenile chinook salmon would be able to move to suitable habitat upstream, in deeper pools, or in areas of local cool water flows during isolated, temporary increases in water temperature.

In addition, The Guadalupe River Flood Control Project provides mitigation for impacts to water quality.^{12, 13} Best Management Practice measures would be implemented to reduce potential impacts of water quality due to suspended particles or toxic constituents.

California Red-Legged Frog. The federally threatened California red-legged frog (*Rana aurora draytonii*) could inhabit the Guadalupe River and Los Gatos Creek riparian corridors, although this species is generally considered to be absent of the floor of the Santa Clara Valley. The California red-legged frog has been observed in the project area's portion of the Guadalupe River in 1904, 1922, an unspecified time before 1980, and in the Los Gatos Creek, approximately 10 miles upstream from its confluence with the Guadalupe River, in 1989. More recent field surveys conducted in the 1990s reported no red-legged frogs within the downtown portion of the Guadalupe River.¹⁴ The presence of non-native predators (bullfrogs, large-mouthed bass, green sunfish), the pollution in the river and creek, and the close proximity of the river and creek to urban development would likely preclude California red-legged frogs from occurring within the project area.

Southwestern Pond Turtle. The southwestern pond turtle (*Clemmys marmorata pallida*) is a Federal species of concern and State species of special concern. The pond turtle inhabits scrub, grassland, and savanna uplands, ponds, and slow moving shallow streams with emergent vegetation. The sections of the Guadalupe River and Los Gatos Creek within the project area contain poor quality aquatic and upland habitat with limited habitat for nesting and basking. The presence of non-native plant species, non-native predatory fish and bullfrogs, competing non-native turtle species, pollution from storm runoff, and the proximity to urban development have reduced habitat quality and limited the number of pond turtles within the Guadalupe River watershed. Although pond turtles have been recorded upstream in the Guadalupe River and could potentially migrate to the project area, field surveys in the 1980s and 1990s resulted in no observed pond turtles.¹⁵

Western Burrowing Owl. The western burrowing owl (*Athene cunicularia hypugaea*), a Federal and State species of concern, inhabits California ground squirrel and pocket gopher burrows in grassland and riparian habitat. Burrowing owls have been recorded in the Guadalupe River watershed in areas outside of the project area; however, the Downtown portion of the Guadalupe

¹² Santa Clara Valley Water District, 2001, op. cit.

¹³ U.S. Army Corps of Engineers, Santa Clara Valley Water District, and San Jose Redevelopment Agency. 2003, op. cit.

¹⁴ Ibid.

¹⁵ Ibid.

River contains only marginal burrowing owl habitat, with no or few potential burrows and a continued disturbance from development.¹⁶ Due to these factors in the Guadalupe River watershed and due to the lack of suitable, undisturbed grassland habitat, it is unlikely that burrowing owls would occur on the project site.

c. Ordinance-Size Trees. Many ordinance-size trees are present throughout the project area. The City of San Jose Tree Removal Controls Ordinance (San Jose Civil Code, Sections 13.31.010 to 13.32.100) is intended to protect all trees having a trunk that measures 56 inches or more in circumference (18 inches in diameter) at the height of 24 inches above the natural grade of slope. The ordinance protects both native and non-native tree species. A permit is required from the City of San Jose for the removal of ordinance-size trees.

2. Impacts and Mitigation Measures

This section outlines potential impacts to vegetation and wildlife. Less-than-significant impacts are addressed first, followed by significant impacts. Since the majority of the project area is highly urbanized, most of the potential impacts to natural habitat focus on the Guadalupe River Park and Los Gatos Creek Trail System projects.

a. Criteria of Significance. Implementation of the proposed project would have significant impacts on vegetation and wildlife if it would have any of the following effects:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, regulations or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS);
- Conflict with any applicable habitat conservation plan or natural community conservation plan; or
- Conflict with the provisions of approved local, regional, or State policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

b. Less-Than-Significant Vegetation and Wildlife Impacts. Future construction along the Guadalupe River and Los Gatos Creek corridors could increase the disturbance to vegetation and wildlife. However, in general, the wildlife inhabiting the riparian corridors along the river and creek are habituated to high levels of disturbance because of the proximity of urban development and associated noise and activity. As long as future development/redevelopment maintains the current setbacks as established under the flood control project, no significant disturbance impacts are anticipated. At the time that specific development projects are proposed, a setback for development would be established along the Guadalupe River and Los Gatos Creek in accordance to the recommendations specified in the City's Riparian Corridor Policy and the Redevelopment Agency's Master Plan Draft Development Guidelines for the Guadalupe River and Gardens. The setbacks would protect and enhance the riparian corridor. Impacts would be less than significant.

c. Significant Vegetation and Wildlife Impacts. The following significant impacts would result from the proposed project.

¹⁶ Ibid.

Impact VEG-1: Future development envisioned by the proposed project could adversely impact special-status plant and wildlife species during construction. (S)

Should future construction associated with new development require intrusions into the established creek corridors, special status species could be adversely impacted by construction activities.

Mitigation Measure VEG-1: The following measures can be implemented to minimize disturbance impacts to special status species. These measures are applicable to projects that require construction activities within the riparian corridors and associated setbacks along the Guadalupe River and Los Gatos Creek. Avoidance and minimization measures include:

- Instream work shall be allowed only during specified work windows from June 1 to October 15 (unless specifically allowed by an exception granted by the Santa Clara Valley Water District) during low flow conditions.
- Fill material, including concrete, shall not be allowed to enter any waters. Any concrete piers, footings, or other structure shall be poured in tightly sealed forms and shall not be allowed contact with surface waters until the cement has fully cured. This process takes a minimum of 14 to 28 days.
- Channel disturbance shall be minimized and material shall not be left in the channel. If bridge footings are to be protected by rip-rap the channel bottom elevation shall not be elevated above the natural channel bottom.
- For bridge removal, no portions of the old structure shall be left in the channel. Where abutments are removed, no depressions shall be left; instead they shall be filled in with clean gravel of an appropriate size (>½ inches to 4 inches).
- Where practicable, bridge design shall be full span and avoid impacting channel hydraulics. Bridge and road design shall prevent direct discharge (such as culverts or bridge drains) of any untreated stormwater runoff directly into any surface waters.
- Construction best management practices (BMPs) and erosion control methods (including revegetation of all bare soil prior to the rainy season) shall be implemented to insure no increase in sediment enters any waters.
- If coffer dams are to be used, water pumped out of the dam which may be turbid shall not be allowed to re-enter the channel unless sediment has settled out resulting in no increase in turbidity in any waters.
- Construction sites shall be monitored to insure no salmonids are present (and subject to harm). If salmonids are present, a qualified fishery biologist shall be required to capture and relocate juvenile fish.
- Where column repairs are to be done, materials used shall be non-toxic to aquatic life.
- All equipment refueling and maintenance shall occur outside the creek channel and riparian corridor.

- Water that contacts wet concrete and has a pH greater than 9 shall be pumped out and disposed of outside the creek channel.

If these measures are implemented for future construction within the creek corridors and established setbacks, impacts would be less than significant. (LTS)

Impact VEG-2: Future development envisioned by the proposed project would result in the removal of existing mature trees. (S)

Mitigation Measure VEG-2: For existing trees meeting the size criterion of the City's ordinance, that cannot be incorporated into new landscaping, a City of San Jose Tree Removal Permit shall be obtained prior to removal of trees from the site. Loss of ordinance size trees will be mitigated by implementation of landscaping plans approved by the City of San Jose, in conformance with the City of San Jose landscaping guidelines and City of San Jose Planning Department specifications. The City of San Jose requires replacement for ordinance-size trees at a ratio of 4:1 (trees planted to trees removed). (LTS)

Impact VEG-3: Future development within the Downtown area could alter the water quality and temperature of the Guadalupe River and impact the survival rates of steelhead trout and chinook salmon. (S)

Currently, temperatures within the Guadalupe River can regularly exceed lethal limits for juvenile steelhead and chinook. Any activities that would increase stream temperature directly or indirectly could result in prolonged periods of unsuitable temperatures and increased fish mortality. The primary period of concern is the period from March through October when juvenile fish may be present in the river and warmer weather conditions are present. Increased water temperatures could result from the dewatering of construction sites or reduced shaded riverine aquatic or increased thermal radiation associated with the construction of new bridges or potentially tall buildings adjacent to the river corridor.

Increased shade from tall buildings or other structures could affect riparian vegetation growth along the Guadalupe River. Prolonged periods of shade such as occurs under many bridges can limit or preclude riparian vegetation from growing. Tall buildings could result in similar conditions. The Shade and Shadow Analysis conducted for this EIR (see Section E), indicates that significant increases in shading of the riparian vegetation along the river corridor is unlikely under the current assumptions for future Downtown development, especially given the established riparian setbacks along the river. However, should future development assumptions change or additional bridges or other structure across or adjacent to the river be required, riparian vegetation and shaded riverine aquatic could be adversely affected by increased shade. Any loss or reduction of shaded riverine aquatic and riparian vegetation would constitute a significant impact.

Implementation of the following two-part mitigation measure would reduce this potential impact to a less-than-significant level.

Mitigation Measure VEG-3a: Between March 1 and October 31, the discharge of water from new construction sites into the Guadalupe River or Los Gatos Creek either directly or through discharge into local storm drains that discharge to these waterways shall be prohibited if the

temperature of the water exceeds 72° F unless modeling studies and monitoring demonstrates that the volume of the discharge will not increase the maximum daily stream temperatures above 75.2° F. Applicants shall be required to monitor discharges and shall be required to stop discharges of water above 75° F if maximum daily stream temperatures in the discharge area are exceeded. Discharges shall be prohibited until the discharge water is cooled below the average daily stream temperature at the discharge point or maximum daily stream temperatures drop below 75° F.

Mitigation Measure VEG-3b: Future development proposals for parcels adjacent to the River corridor shall be reviewed for consistency with the Shade Analysis assumptions in Section E. If the proposed activities or building envelope are different from those assumed herein, applicants shall be required to assess the affects of the structures (shading and thermal radiation) on riparian vegetation and creek temperatures. Projects that will result in a 20 or more percent increase in shade or any increase average daily temperature within the river corridor, shall be required to: 1) alter their design to reducing shading; or 2) implement other measures to reduce instream water temperatures. Such measures could include planting of additional shaded riverine aquatic along the Guadalupe River or Guadalupe Creek. (LTS)