DOCKETED

Docket Number:	15-AFC-02
Project Title:	Mission Rock Energy Center
TN #:	222720
Document Title:	Nina Danza Comments Cumulative Biological Impacts Analysis Requested
Description:	N/A
Filer:	System
Organization:	Nina Danza
Submitter Role:	Public
Submission Date:	2/25/2018 11:54:22 AM
Docketed Date:	2/25/2018

Comment Received From: Nina Danza
Submitted On: 2/25/2018
Docket Number: 15-AFC-02

Cumulative Biological Impacts Analysis Requested

Additional submitted attachment is included below.

Cumulative Biological Impacts Lower Santa Clara River

I am a member of the Santa Paula Alliance and am providing a summary of recent projects which I request be incorporated into a cumulative biological impact analysis with the MREC project as part of the PSA process. Note the biological study for Project B is complete (and available from the county) and contains similar impacts to plant and animal resources. It is essential that staff incorporate this information to ensure a thorough assessment of MREC.

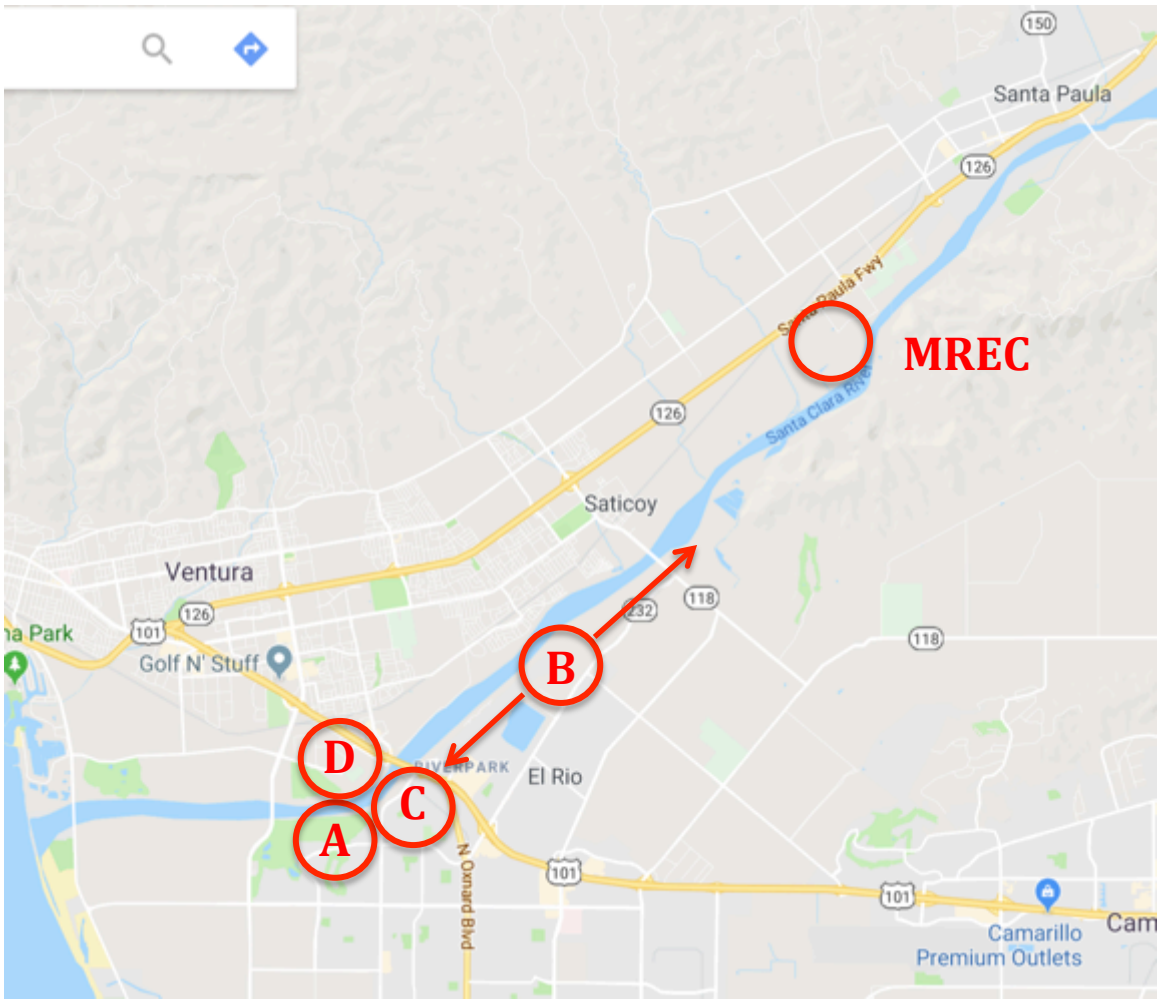
Each project is being reviewed separately and each suggests there are no unmitigable adverse effects. However, upon completion of all these projects including MREC there will be thousands of new residents, light pollution, vehicle trips and degraded habitat throughout the region. What are the changes to plant and animal population at that stage? And after 5 years, 10 years, 25 years due to these projects as a whole?

My own observations as an amateur ecologist leads to the obvious conclusion that disturbed, degraded and decreased habitat will result in permanent unmitigable impact. Wildlife will not simply move into replanted areas to forage and reproduce. Wildlife will not simply carry on as usual at the urban – wildlife interface. Decreased populations will occur of common species at first, then of endangered species that depend on the food chain. A scientific fact-based analysis is necessary to disclose the real effects.

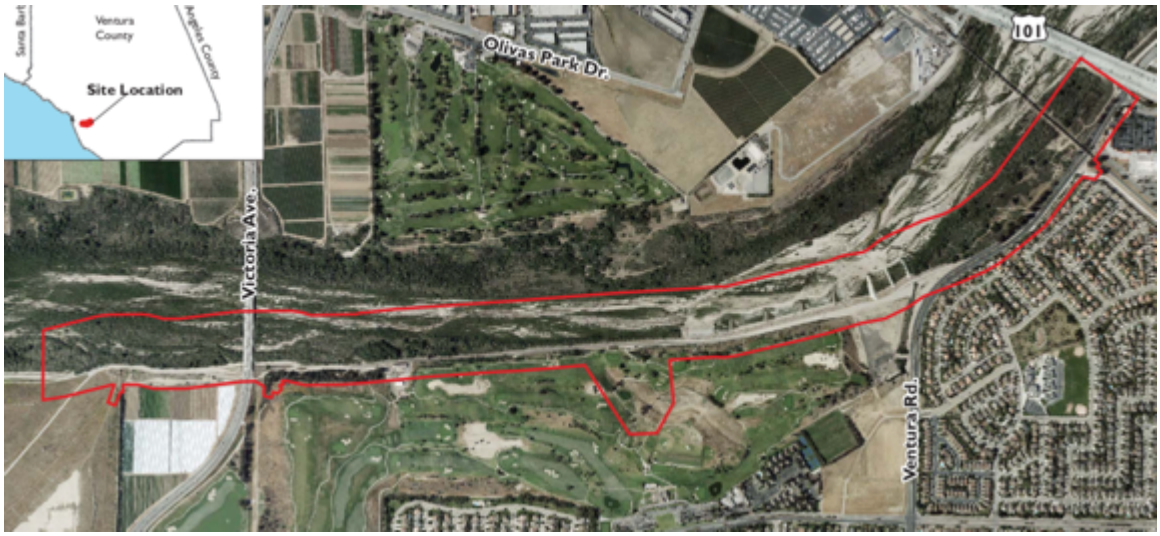
It is the responsibility of CEC to consider all these projects and their biological impacts as a whole with the MREC project.

SECTION	PROJECT
I.	PROJECT A – VENTURA COUNTY WATERSHED PROTECTION DISTRICT SCR-3 Levee (Hwy 101 to Victoria) DEIR Dec 2015 http://vclevees.com/doc/december_16_2015/00%20SCR3_Draft%20EIR%20120215.pdf
II.	PROJECT B - VENTURA COUNTY WATERSHED PROTECTION DISTRICT SCR-1 Levee (Hwy 101 to South Mountain)
III.	PROJECT C – CITY OF OXNARD Wagon Wheel Redevelopment (Hwy 101 at Ventura Blvd) https://www.oxnard.org/wp-content/uploads/2017/05/Oxnard-Village-FEIR-Vol-I.pdf https://www.oxnard.org/wp-content/uploads/2016/03/DRAFT-Supplemental-EIR-Tract-No.5745.pdf
IV.	PROJECT D – CITY OF VENTURA Olivos Park Dr Extension (Hwy 101 at Olivos Pk Dr) https://www.cityofventura.ca.gov/DocumentCenter/View/2238

KEY MAP



I. PROJECT A SCR-3 Levee (Hwy 101 to Victoria) DEIR Dec 2015
A. Biological Study Area



B. EIR Excerpts

All portions of the Study Area within the bed and banks of the Santa Clara River are mapped as critical habitat for the southwestern willow flycatcher (Empidonax traillii extimus) (CDFW, 2015d).

Least Bell's vireo, federally and state listed as endangered, has been documented nesting in the eastern portions of the Study Area (refer to Figure 3.2-6) during surveys conducted in 2013 and 2014. Early results from surveys started in April 2015 show that least Bell's vireo are nesting within the same general areas as identified in the previous year's surveys.

A singing willow flycatcher (Empidonax traillii), species undetermined, was detected in the eastern portion of the Study Area in 2013; the southwestern willow flycatcher subspecies, which has not been observed nesting in the Study Area, is federally and state listed as endangered.

Two California Fully Protected species, white-tailed kite (Elanus leucurus) and peregrine falcon (Falco peregrinus), have been observed foraging in the Study Area.

Several species listed as species of special concern by the CDFW have been identified in the Study Area, including northern harrier (Circus cyaneus), yellow-breasted chat (Icteria virens), loggerhead shrike (Lanius ludovicianus), and yellow warbler (Setophaga petechial).

Two special-status reptiles, western pond turtle (Actinemys pallida) and coast horned lizard (Phrynosoma blainvillii), have been observed in the Study Area; both are California Species of Special Concern

Table 3.2-10. Summary of Biological Resources Impacts and Mitigation Measures

Impacts	Mitigation Measures	Significance Conclusion
BIO-1: The Project would result in temporary and permanent losses of native vegetation	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management Practices. BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction Monitoring.	Class II
BIO-2: The Project would cause the loss of foraging habitat for wildlife	No mitigation measures are required.	Class III
BIO-3: The Project would result in disturbance to nesting birds or raptors	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management Practices.	Class II

	BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction Monitoring. BIO-3 Conduct Pre-construction Surveys for Nesting and Breeding Birds and Implement Avoidance Measures. NV-1a Movable Construction Noise Barriers. NV-1b Monitor Noise Levels.	
BIO-4: The Project would result in disturbance to wildlife in adjacent habitat	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management Practices. BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction Monitoring. BIO-3 Conduct Pre-construction Surveys for Nesting and Breeding Birds and Implement Avoidance Measures. NV-1a Movable Construction Noise Barriers. NV-1b Monitor Noise Levels.	Class II
BIO-5: The Project could disturb nesting southwestern willow flycatchers, least Bell's vireos, or their habitat	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management Practices. BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction	Class II

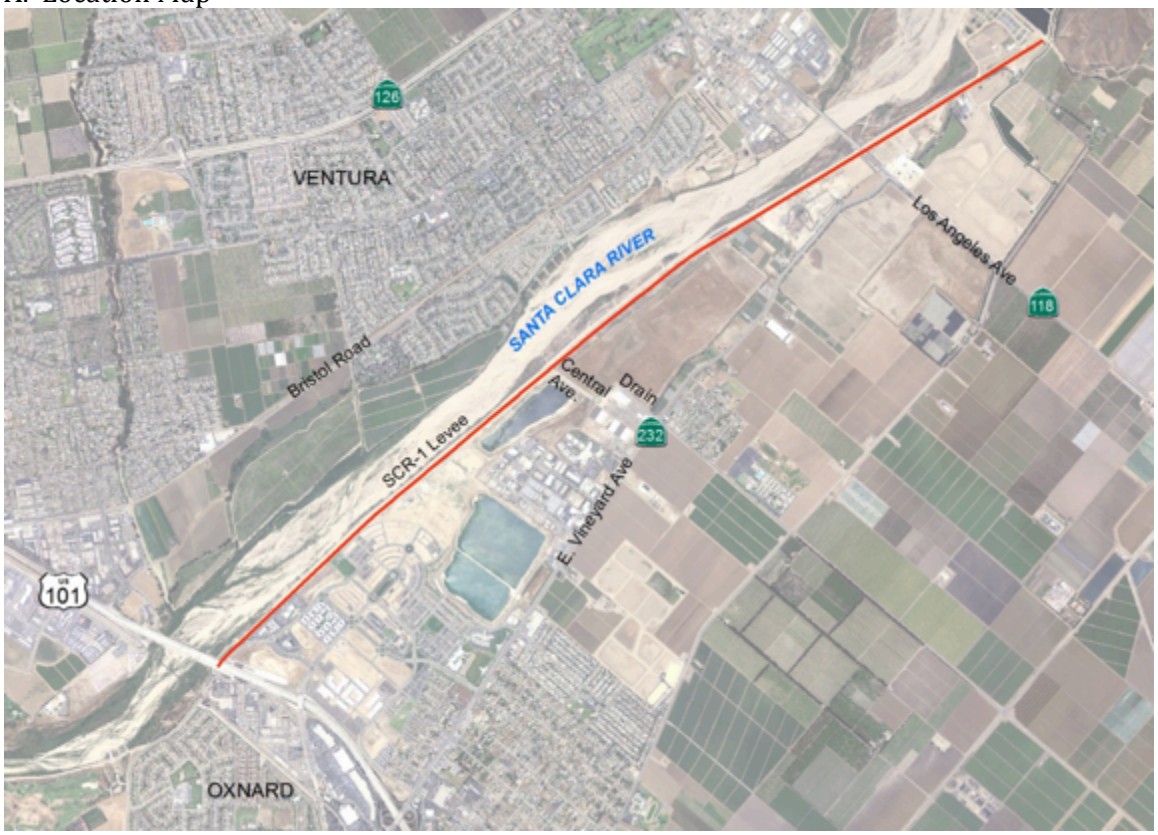
	Monitoring. BIO-3 Conduct Pre-construction Surveys for Nesting and Breeding Birds and Implement Avoidance Measures. BIO-5 Conduct Protocol Surveys for Least Bell's Vireo and Southwestern Willow Flycatcher and Avoid Occupied Habitat. NV-1a Movable Construction Noise Barriers. NV-1b Monitor Noise Levels.	
BIO-6: The Project could result in the loss of sensitive Lancetooth, Timema, and Shoulderband Snails or Monarch Butterfly	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management Practices. BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction Monitoring. NV-1a Movable Construction Noise Barriers. NV-1b Monitor Noise Levels.	Class II
Impact BIO-7: The Project could result in mortality or injury to southwestern pond turtles or a disruption of nesting habitat.	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management Practices. BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction Monitoring. BIO-7 Conduct Surveys for Southwestern Pond Turtle and Implement Monitoring, Avoidance, and Minimization Measures.	Class II
BIO-8: The Project could result in injury or mortality for two-striped garter	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management	Class II

snakes and south coast garter snake	Practices (BMPs). BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction Monitoring. BIO-8 Conduct Surveys for Two-Striped Garter Snakes and Implement Monitoring, Avoidance, and Minimization Measures.	
BIO-9: The Project could result in injury or mortality of amphibian and reptile species designated as California Species of Special Concern and/or Ventura County Locally Important Species	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management Practices. BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction Monitoring BIO-9 Conduct Surveys for Terrestrial Herpetofauna and Implement Monitoring, Avoidance, and Minimization Measures.	Class II
BIO-10: The Project could disturb nesting or migrant California Species of Special Concern, CDFW Special Animals or California Fully Protected bird species	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management Practices. BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction Monitoring. BIO-3 Conduct Pre-construction Surveys for Nesting and Breeding Birds and Implement Avoidance Measures.	Class II

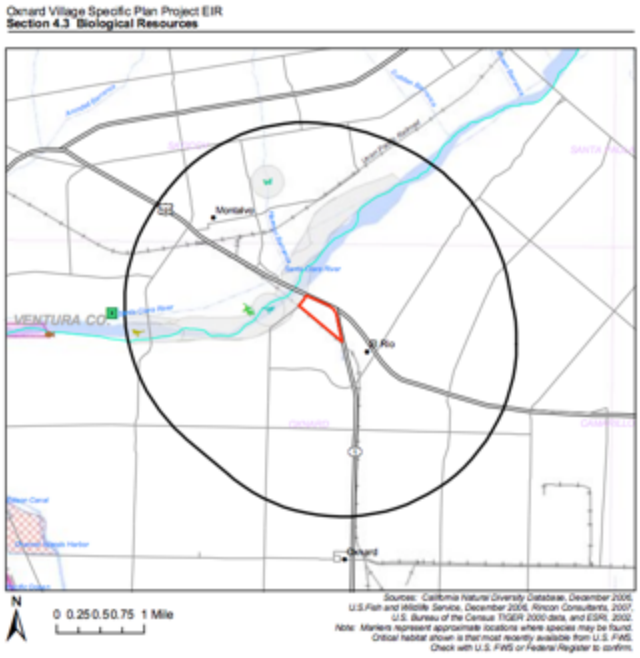
	BIO-5 Conduct Protocol Surveys for Least Bell's Vireo and Southwestern Willow Flycatcher and Avoid Occupied Habitat. NV-1a Movable Construction Noise Barriers. NV-1b Monitor Noise Levels.	
BIO-11: The Project could result in mortality of, and loss of habitat for, special-status bat species	BIO-1a Implement a Worker Environmental Education Program. BIO-1b Implement Best Management Practices. BIO-1c Compensation for Temporary Impacts to Sensitive Vegetation Communities. BIO-1d Compensation for Permanent Impacts to Sensitive Vegetation Communities. BIO-1e Implement Biological Construction Monitoring. BIO-11 Survey for Maternity Colonies or Hibernaculum for Roosting Bats. NV-1a Movable Construction Noise Barriers. NV-1b Monitor Noise Levels.	Class II

II. PROJECT B SCR-1 Levee (Hwy 101 to South Mountain)
BIOLOGICAL STUDY COMPLETED AVAILABLE FROM VCWPD
FORTHCOMING PUBLIC POSTING

A. Location Map



III. PROJECT C Wagon Wheel Redevelopment (Hwy 101 at Ventura Blvd)
A. Biological Study Area



Sensitive Elements Reported by the California Natural Diversity Database — Figure 4.3-1

B. EIR Excerpts
Oxnard Village Specific Plan FEIR Aug 2008
Oxnard Village Specific Plan Subdivision SEIR Dec 2014

The federally endangered Least Bell's vireo (Vireo bellis pusillus) is known to occur and nest in the riparian habitat along the Santa Clara River (CNDDB, 2007, and USFWS NOP response, 2006). The project site is 100 feet west of the Santa Clara River and is separated from the river by North Ventura Road. The proposed project's development footprint is well outside of the Santa Clara River; thus, project implementation would not have any direct effect on the Least Bell's vireo. However, the Least Bell's vireo has been sighted in the riparian areas of the Santa Clara River approximately 500 feet southwest of the project site (CNDDB, 2007). Increased human activity and the introduction of additional residential homes in close proximity to the river bottom as a result of project implementation is not anticipated to result in indirect effects to the Least Bell's vireo with respect to increased recreational use of the river bottom, introduction of pets, night lighting, noise, or increased

surface runoff and pollutants in surface water. Each of these issue areas is discussed in more detail below.

Recreational Use of the River Bottom. Human activity in Least Bell's vireo breeding habitat such as hiking and exploring can flush birds away from nests (USFWS, NOP Response, 2006). However, it is not anticipated that the proposed project would substantially increase the amount of human activity such as hiking or walking along or within the river bottom. The Rincon Consultants site visit conducted on February 13, 2007 included a visit to the Santa Clara River bottom across Ventura Road from the project site. Within the river bottom there was evidence of dumping, paintball use and graffiti, and several homeless encampments were observed. It is not anticipated that a substantial number of residents from the proposed project would choose to recreate in this area, due to its degraded state and general lack of active recreational opportunities. (It is possible that dumping, litter and illegal camping may cease in the future due to heightened enforcement of existing laws, and that in that event more residents may visit the area. In that event, the overall impact of new low-impact visitors would be offset by the decrease in high-impact dumping, camping etc.) In addition, planned new and readily available recreation areas such as parks and open space would be provided within the project site for use by future residents. Thus, it is anticipated that residents would choose to recreate in these areas over the degraded river bottom. For these reasons, secondary impacts to the Least Bell's vireo from recreational use of the river bottom by future project residents would be less than significant.

Introduction of Pets. Walking unleashed dogs can flush Least Bells vireo from nests or disturb adults to such a degree that reproductive attempts are unsuccessful. Free-roaming cats belonging to residents may prey on Least Bell's vireo adults, young, and eggs (USFWS, NOP Response, 2006). The existing project site vicinity is urban in character. A mobile home park exists within the project site, and a relatively high level of residential development is located to the south of the project site. Thus, under existing conditions, cats and dogs are currently present within the project site and within surrounding residential communities. While the proposed project would incrementally introduce additional pets such as cats and dogs into the area, it is not anticipated that this incremental increase would be substantial. The types of homes proposed under the project are exclusively attached dwelling units, including high-rise towers. These types of homes tend to have fewer pets associated with them than detached houses with yards, and those pets are more likely to remain indoors. In addition, it is not anticipated that dog owners would walk dogs in the river bottom as the river bottom is not an ideal place to recreate, due to the lack of an organized access, lack of developed facilities, and generally disturbed nature of this area. Furthermore, parks, open space and an extensive pedestrian network are proposed within the project site and would provide more desirable alternative locations for residents walking dogs. While cats could become introduced predators to birds living in the river bottom, North Ventura Road, which carries several thousand trips per day, would be an effective barrier to pet movement from the project to the river. In addition, new pets associated with the proposed project would be only a modest increase of such predators in relation to those likely to frequent the area from existing single family residences to the south and elsewhere. Overall, the proposed project would incrementally increase the number of cats and dogs within the project area; however, this incremental increase would not substantially affect wildlife in the riparian corridor for the reasons discussed above. Impacts would be less than significant.

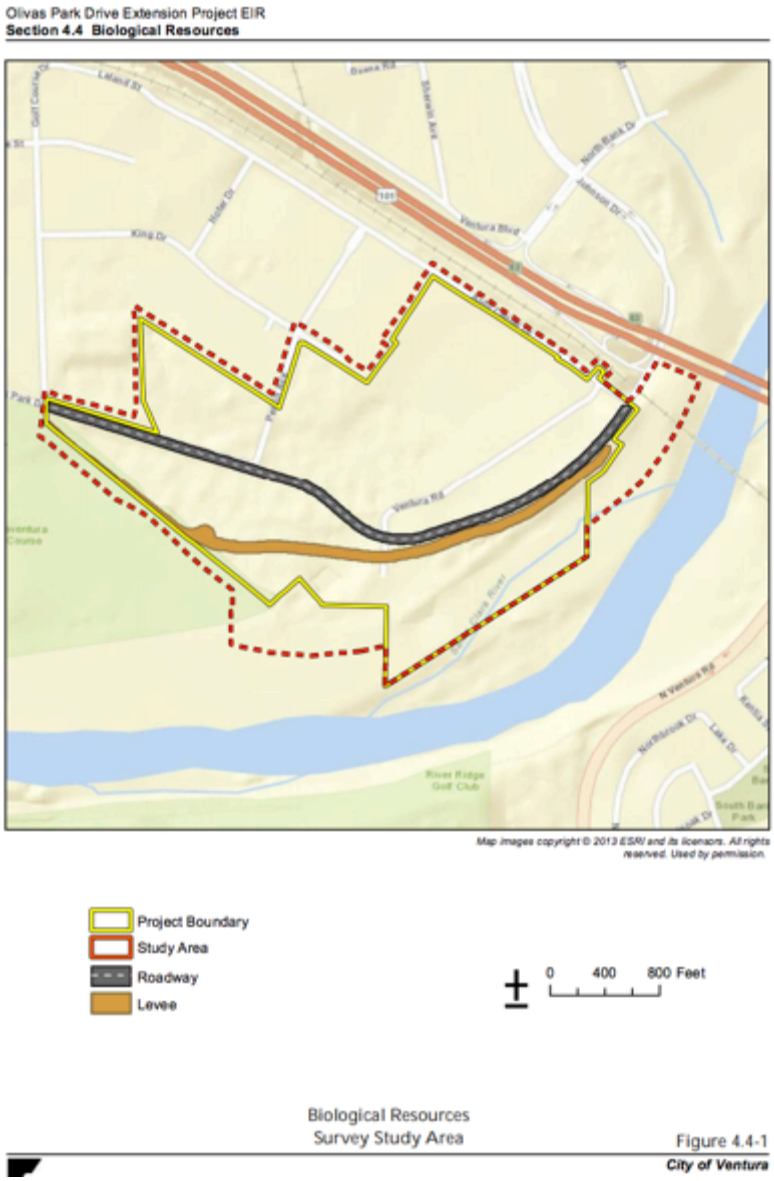
Night Lighting. Night lighting can lead to spatial disorientation and can interrupt

migration patterns of migratory birds such as the Least Bell's vireo. Within the portion of the project site that is near the Santa Clara River, the potential sources of lighting from the proposed project include the windows of the residential units as well as spillover light from street lighting. The project site vicinity is urban in character, with relatively high levels of existing lighting. Although the proposed project would not substantially alter this existing condition, especially near the river where high-rise development is not proposed, mitigation measures AES–3(a) and AES-3(c) identified in Section 4.1, Aesthetics, would minimize the potential for project-generated nighttime lighting to effect habitat areas within the river corridor. This would reduce any lighting impacts which could adversely affect biological resources within the Santa Clara River including, if present, the Least Bell's vireo to less than significant levels.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts		
Impact	Mitigation Measure	Residual Impact
BIOLOGY **Impact BIO-2** Site development would remove existing trees that may be used by nesting birds or by migratory birds as nesting habitat. This would be a Class II, potentially significant but mitigable, impact.	**BIO-2(a) Nesting Bird Survey.** If tree removal is to occur during the bird-breeding season (February 15- September 15), surveys shall be conducted prior to tree removal by a City approved biologist (a person with a biology degree and/or established skills in bird recognition). Surveys shall occur within two weeks prior to initial tree removal. A copy of the contracts and reports for these services shall be submitted to the Planning Department for review and approval prior to issuance of grading permits permits. **BIO-2(b) Establishment of Appropriate Buffers.** In the event that nesting birds are observed within 250 feet of a construction area, species-specific exclusion buffers shall be determined by a City-approved biologist, and construction timing and location adjusted accordingly until the nestlings have fledged. **BIO-2(c) Construction During the Bird Nesting Season.** Construction activities that would have a direct impact on bird nesting areas such as large trees, shall be conducted between October and February when nesting birds are least likely to occur. **BIO-2(d) Incorporation of Trees into Landscape Plan.** The project landscape plans shall include an inventory of mature trees that currently exist on the project site and shall include replacement of mature	Less than significant

	trees at a minimum of a 1:1 ratio. At maturity, landscape trees shall be of a comparable height and massing to the existing trees on the property so as not to diminish the bird nesting capacity of the property compared to current conditions. An arborist report shall be submitted, and the value of trees removed shall be added to the landscape plan to augment tree plantings.	

IV. PROJECT D Olivos Park Dr Extension (Hwy 101 at Olivos Pk Dr)
A. Biological Study Area



B. EIR Excerpts

Wildlife and Fish Habitats. The various natural, ruderal, agricultural, and developed habitats in the project area support a wide variety of reptiles, birds, amphibians, mammals, and fish. The relatively undisturbed native mulefat, willow, and cottonwood communities associated with the Santa Clara River are expected to support the widest variety of species. This riparian zone is expected to be used as a connective corridor by various species of wildlife occurring within the greater Santa Clara River habitat zones. Species expected to likely occur within these habitats include, but are not limited to, western skink (Eumeces siltonianus), alligator lizard (Elgaria multicarinatus), California newt (Taricha torosa),

black-bellied slender salamander (Batrachoseps nigriventris), ensatina (Ensatina eschscholtzii), western toad (Bufo boreas), chorus frog (Pseudacris cadaverina and P. regilla), horned lizard (Phrynosoma coronatum), redtailed hawk (Buteo jamaicensis), common yellowthroat (Geothlypis trichas), California thrasher (Toxostoma redivivum), yellow warbler (Setophaga petechial), least Bell's vireo (Vireo bellii pusillus), song sparrow (Melospiza melodia), northern Bryant's woodrat (Neotoma bryanti intermedia; formerly San Diego desert woodrat, Lepida intermedia), and bobcat (Lynx rufus). A number of common mammal species may also utilize the abutting ruderal habitat edges, including opossum (Didelphis virginiana), raccoon (Procyon lotor), skunk (Mephitis mephitis), and coyote (Canis latrans).

The Santa Clara River channel and its tributaries (e.g. the Moon Ditch outflow channel) within the project area provide suitable habitat for a number of aquatic and semi-aquatic species. These could include but are not limited to, arroyo chub (Gilia orcuttii), Santa Ana sucker (Catostomus santaanae), mosquitofish (Gambusia affinis), threespine stickleback (Gasterosteus aculeatus aculeatus), two-striped garter snake (Thamnophis hammondii), and western pond turtle (Emys marmorata). The wastewater treatment ponds associated with the MMID, detention basins, and agricultural ditches also provide limited habitat for a limited number of water associated species, particularly birds.

The ruderal, fallow-agricultural, and active agricultural communities would support a more limited number of upland species that are more tolerant of these historically and actively disturbed areas. Species that may be observed within these habitats would include, but not be limited to, western fence lizard (Sceloporus occidentalis), side blotched lizard (Uta stansburiana), California horned lark (Eremophila alpestris), house finch (Carpodacus mexicanus), lesser goldfinch (Carduelis psaltria), white-tailed kite (Elanus leucurus), burrowing owl (Athene cunicularia), loggerhead shrike (Lanius ludovicianus), Botta's pocket gopher (Thomomys bottae), Audubon cottontail (Sylvilagus audubonii), California ground squirrel (Otospermophilus beecheyi), and house mouse (Mus musculus).

Special Status Wildlife Species. Based on a review of the available literature, 18 special status wildlife species that are listed as Federal and/or State Threatened or Endangered, or State Fully Protected or Special of Special Concern, are known to occur within approximately five miles of the project site and have the potential to occur on site (Appendix C). Suitable habitat for the majority of these species is limited to the riparian and scrub habitats located within and adjacent to the east side of the site. Seven of these species are listed Threatened or Endangered: Santa Ana sucker (Catostomus santaanae; FT/SSC), tidewater goby (Eucyclogobius newberryi; FE/SSC), unarmored threespine stickleback (Gasterosteus aculeatus williamsoni; FE/SE/FP), southern steelhead – Southern California ESU (Oncorhynchus mykiss irideus; FE/SSC), western yellow-billed cuckoo (Coccyzus americanus occidentalis; Federal Candidate/SE), southwestern willow flycatcher (Empidonax traillii extimus; FE/SE), and least Bell's vireo (Vireo bellii pusillus; FE/SE). All three of these fish species, plus the Arroyo chub (Gila orcuttii; SSC), are or have been known to occur within the active channel of the Santa Clara River east of the project site. However, they are considered to have a low potential to occur within the project boundary due to the marginal suitable habitat that is limited to and associated with the Moon Ditch culvert outfall area, which eventually discharges to the river. The tidewater goby likely only has the potential to occur this far inland during periods of high flow and exceptional high tides. Suitable nesting and foraging riparian habitat exist on and adjacent to the site along the Santa Clara River for the three listed avian species. Due to the extent of available habitat,

both the southwestern willow flycatcher and least Bell's vireo are considered to have a moderate to high potential to occur. Due to the more limited amount of suitable habitat preferred and available to southwestern willow flycatcher, this species is considered to have moderate potential to occur. Western yellow-billed cuckoo have not been recorded within the region since 1942, and so are considered to have a low potential to occur on site or within the project vicinity.

Ten of the remaining 11 species listed as FP or SSC are either known to occur on site or are considered to have a high to moderate potential to occur. White‐tailed kite (Elanus leucurus; FP) are known to occur on site and several individuals have been observed each survey foraging throughout the ruderal and agricultural habitats in the central and eastern portion of the project site. Trees suitable for nesting and roosting occur primarily within the Santa Clara River habitat to the east of the site. However, it is possible that kites could utilize the windrow trees associated with the golf course along the southern project boundary, or those in the central north portion of the site between the ruderal and development areas. Burrowing owl (Athene cunicularia; SSC) were observed overwintering on site in 2012 in the eastern ruderal and northwestern agricultural areas. The species is no longer known to breed within the greater Ventura/Oxnard area, but the possibility cannot be completely ruled out. Suitable foraging habitat and the fossorial mammal burrows necessary for this species are located throughout most of the ruderal, fallow agriculture, active agriculture, and agricultural ditches on site. These habitats are also suitable foraging habitat for loggerhead shrike (Lanius ludovicianus; SSC), which was observed in 2012 along the southern project boundary between the golf course and the fallow agricultural area. Suitable nesting habitat for shrike is primarily located in the eastern portion of the site within the mulefat scrub. Yellow-breasted chat (Icteria virens; SSC) and yellow warbler (Setophaga petechial; SSC) are known to occur within the Santa Clara River corridor during the nesting season and so are considered to have a moderate potential to occur within the riparian (warbler) and scrub (chat) habitats on the eastern side of the project site.

Suitable habitat for coast horned lizard (Phrynosoma blainvillii; SSC) occurs on the east side of the project site within the mulefat scrub habitat. A coast horned lizard was observed within this habitat in 1995 and along the ruderal berm in 2012. Silvery legless lizard (Anniella pulchra pulchra; SSC), two-striped garter snake (Thamnophis hammondii; SSC), and western pond turtle (Emys marmorata; SSC) are considered to have a moderate to high potential to occur within the riparian habitat associated Santa Clara River on the east side of the project site. Within the project boundary, this habitat is limited to the Moon Ditch culvert outfall area and adjacent riparian habitat. Western pond turtle were observed in project vicinity in 1995. Western pond turtles also utilize sandy banks or grassy open fields to lay their eggs. Nesting can occur up to 1000 feet from aquatic sites, but the majority of nests are located within 500-600 feet. Slope of the nest sites range up to 60%, but most nests are on slopes <25%. Hatchlings require shallow water habitat in their first year with dense submergent or short emergent vegetation. Several areas with slopes suitable for nesting occur south and east of the existing and proposed road.

Northern Bryant's woodrat (Neotoma bryanti intermedia; formerly San Diego desert woodrat, Lepida intermedia; SSC) are considered to have a high potential to occur within the mulefat scrub and riparian habitat adjacent to the Santa Clara River. Focused small mammal trapping in 1995 verified the presence of this species adjacent (east) to the project site.

Raptors and Other Nesting Birds. Raptors (birds of prey), migratory birds, and other

native avian species, and their nests are protected by the California Fish and Game Code (CFGC) 3503 and the Migratory Bird Treaty Act (MBTA). The project site contains suitable nesting habitat for a variety of bird species, including those that nest on the ground in more open, ruderal areas (e.g. horned lark, burrowing owl), on structures (e.g. black phoebe, barn swallow), within shrubby habitats (e.g. loggerhead shrike, California thrasher), or in trees (e.g. northern mockingbird, Anna's hummingbird). Trees suitable for nesting raptors (e.g. red-tailed hawk, Cooper's hawk, white-tailed kite, great-horned owl [Bubo virginianus]) primarily occur along southern and eastern site boundary and their adjacent habitats, and to a lesser extent, the windrow trees in the central north portion of the site between the ruderal and development. These and other raptor species are expected to forage primarily throughout the ruderal, fallow agricultural, and active agricultural habitats on site. Colonial nesting species such as great egret (Ardea alba), great blue heron (Ardea herodias), snowy egret (Egretta thula), and black-crowned night-heron (Nycticorax nyticorax) are known to forage throughout the open, semi-vegetated portions of the project site. However, no nesting or over-night rookery sites were observed on site or within the adjacent Santa Clara River habitat along the eastern project boundary.

Sensitive and Critical Habitats. The CNDDB identified three sensitive plant communities within a 5-mile radius of the project site: Coastal and Valley Freshwater Marsh (G3/S2.1), Southern Coastal Salt Marsh (G2/S2.1), and Southern Riparian Scrub (G3/S3.1; Figure 4.4-4). Of these, only southern riparian scrub occurs within and adjacent to the project site. This habitat (mapped as arroyo willow, mulefat, and cottonwood forest habitats, Figure 4.4-2, and described above) is located along the eastern portion of the project site and is associated with the Santa Clara River. This habitat is moderately diverse and dense and thus provides moderate to high quality habitat for species that are restricted to riparian scrub communities.

Designated critical habitat for two species occurs within the project vicinity: southern steelhead – Southern California ESU and southwestern willow flycatcher. Both of these habitats occur throughout the Santa Clara River habitat along the eastern portion of the project site. Steelhead are considered to have a low potential to occur on site due to the limited suitable aquatic habitat associated with the Moon Ditch culvert outfall area. Southwestern willow flycatcher are considered to have a moderate potential to occur due to the extent of suitable riparian habitat along the Santa Clara River. Neither species has been observed within the project site but their presence is assumed based on the designation of critical habitat within the river.

Table ES-1 Summary of Environmental Impacts and Mitigation Measures

Impact	Mitigation Measure	Residual Impact
BIOLOGICAL RESOURCES **Impact BIO-1** The proposed project would result in the reduction of native plant communities and man-made habitats, which could affect special status and protected wildlife species. This impact would be Class II, significant but mitigable.	**BIO-1(a) Preconstruction Special Status Wildlife Surveys and Construction Monitoring.** Not more than one week prior to vegetation clearing and initial ground disturbance activities within the project site, focused preconstruction surveys for special status wildlife species shall be conducted by qualified biologists within the construction footprint and within a 200-	Less than significant

	foot survey buffer area. The surveys shall include mapping of current locations of special-status wildlife species for avoidance and relocation efforts and to assist construction monitoring efforts. CDFW species of special concern, which are not federally listed, shall be captured by qualified biologists, when possible, and relocated to adjacent appropriate habitat to the project area (at least 200 feet from the grading limits). In addition, during any construction activities involving vegetation clearing or initial ground disturbance activities, the applicant shall contract with a biologist or biological consulting firm to conduct biological monitoring to avoid and minimize impacts to special status wildlife and protected nesting birds in the path of construction. Wildlife observed during construction activities shall be captured by qualified biologists, when possible, and relocated to suitable habitat onsite at least 200 feet from the grading limits. If active woodrat nests are found during the peak nesting season (February 1 through May 31), a 50-foot radius buffer area shall be established around the nests and land clearing activities shall be postponed until the end of peak nesting season to protect the nest. Outside of the peak nesting season, nests shall be relocated under the direction of a qualified biologist. Nest material shall be carefully and slowly picked up to allow any woodrats to escape and placed in similar suitable habitat at least 100 feet from the project boundary. CDFW shall be notified and consulted regarding the presence of any special status wildlife species found onsite during the preconstruction surveys or during biological monitoring. If a federally listed species is found prior to or during grading of the site, the USFWS shall also be notified. Only a USFWS approved biologist shall be allowed to capture and relocate listed species.	

	The methods and results of the preconstruction surveys and any relocation efforts during those surveys shall be documented in a brief letter report and submitted to the City no later than three weeks following the completion of the last survey. The methods and results of the biological monitoring and any relocation efforts conducted during construction shall be documented in a brief letter report and submitted to the City upon completion of vegetation clearance and initial ground disturbance activities. **BIO-1(b) Conduct Nesting Bird Surveys, Provide Establish Active Nest Avoidance Buffers, and Monitor Active Nests.** Vegetation clearing, construction activities, grading activities, staging/mobilization activities (collectively, "development activities") shall avoid any nests of native birds. To the extent feasible, development activities shall be planned to avoid the breeding and nesting season (February 1 – August 31). If the City determines that breeding season avoidance is not feasible, a qualified biologist shall conduct a minimum of three nesting bird surveys, within two weeks, and no more than three days prior to the start of vegetation or nesting habitat disturbance. Weekly bird nesting surveys shall be reinitiated if land clearing and disturbance activities are delayed for more than one week. The nesting bird survey area shall include a buffer around the grading limits of 500 feet. If an active bird nest is found, an appropriate buffer shall be established surrounding the nest(s) and shall be flagged for avoidance. The avoidance buffer shall be determined by the monitoring biologist based upon the species nesting and the activity being conducted. If an active nest of a special status bird species is found, a suitable buffer area will be determined in coordination with CDFW/USFWS. If active bird nests are found	

	and avoidance buffers are established, construction work shall be delayed within these areas until after the nesting season or until the young are no longer dependent upon the nest site. Alternatively, construction within the buffer area may be conducted at the discretion of a qualified biological monitor. The biologist shall monitor the active nest(s) during initial disturbance activities and/or development activities to determine if the recommended avoidance buffers are adequate and that the nests are not being stressed or jeopardized. The methods and results of the nesting bird surveys, any nesting bird avoidance efforts as a result of those surveys, and the success of the avoidance buffers shall be documented in a brief letter report and shall be submitted to the City no later than three weeks following the completion of active nest monitoring activities. **BIO-1(c) Conduct Least Bell's Vireo and Southwestern Willow Flycatcher Surveys.** Development activities within 500 feet of the Santa Clara River riparian corridor shall be avoided during the least Bell's vireo (April 10 to July 31) and southwestern willow flycatcher (May 15 to July 17) breeding season. If the City determines that breeding season avoidance is not feasible, a permitted biologist shall conduct focused presence/ absence surveys in accordance with the USFWS protocols for least Bell's vireo (2001) and southwestern willow flycatcher (2003). Any survey methodology that deviates from these protocols shall be approved by the USFWS prior to initiation of the first survey. Surveys shall focus on riparian habitat associated with the Santa Clara River within the project site and adjacent suitable habitat out to 500 feet. Protocol surveys shall be conducted within one year of start of construction (i.e. breeding season prior to), and will continue annually until completion of construction activities if presence is documented in the first year. Documentation of findings, including a negative finding must be submitted to the USFWS for review. If neither species is detected, no further actions	

	are required. If least Bell's vireo or southwestern willow flycatcher are found nesting within the survey area, all project activities shall be halted within 500 feet of the nest site and territory for the remainder of the breeding season. The USFWS and CDFW shall be notified immediately. Should development activities within this zone be required during the breeding season, than additional consultation with USFWS and CDFW shall be required to establish suitable monitoring procedures and buffers to ensure that "take" does not occur. If "take" of least Bell's vireo or southwestern willow flycatcher is necessary to complete development activities, the applicant is required to obtain the applicable regulatory take permit(s). Compensatory mitigation, if necessary, would be determined in coordination with the wildlife agencies. **BIO-1(d) Conduct Burrowing Owl Surveys.** A qualified biologist shall conduct preconstruction clearance surveys prior to ground disturbance activities within all suitable habitat to confirm the presence/absence of burrowing owls (maybe conducted concurrently with BIO1(a)). The surveys shall be consistent with the recommended survey methodology provided by CDFW (2012). Clearance surveys shall be conducted within seven days prior to construction and ground disturbance activities. If no burrowing owls are observed, no further actions are required. If burrowing owl are detected during the preconstruction clearance surveys, avoidance buffers will be implemented in accordance with the CDFW (2012) and Burrowing Owl Consortium (1993) minimization mitigation measures. Coordination with the CDFW by a qualified biologist shall occur to establish the appropriate avoidance buffer distances specific for the project's activities and level of expected disturbance.	

	If avoidance of burrowing owls is not feasible, a Burrowing Owl Exclusion Plan and Mitigation and Monitoring Plan will be developed by a qualified biologist in accordance with the CDFW (2012) and Burrowing Owl Consortium (1993). The Plan shall be approved by the applicable local CDFW office prior to implementation. A qualified biologist shall coordinate with the CDFW to determine the appropriate exclusion methods (passive or active relocation) for the project to relocate burrowing owls to a suitable offsite location. Relocation of owls can only occur during the non-breeding season. **BIO-1(e) Provide Restoration/ Compensation for Impacts to Native Vegetation Communities.** Development activities shall avoid the loss of native scrub habitat wherever feasible. Avoidance shall be achieved through fencing of areas to be protected with a minimum 50 foot buffer. No construction activities, equipment or materials staging, or any other construction related activities shall be allowed within the protected native scrub areas or the surrounding buffers. Where avoidance is not feasible, the project applicant shall coordinate with the appropriate regulatory agencies, as necessary, regarding appropriate compensation for replacement of lost habitat. Compensatory mitigation for impacts to native vegetation would be determined in coordination with the wildlife agencies (e.g. providing onsite habitat creation through a HMMP or offsite payment into an in-lieu fee program for loss of habitat). **BIO-1(f) Exclude Invasive Species.** Final landscape design for developed areas shall be prepared by a qualified landscape architect such that project landscaping does not introduce invasive nonnative plant species into the vicinity of the project site. The plan shall be reviewed by a qualified botanist and approved by the City prior to installation of any plant materials.	

	BIO-1(g) Sensitive Resources Education. Prior to initiation of all development activities, a qualified biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of all listed and sensitive resource issues on site and within the project area, as well as the general measures that are being implemented to protect these resources. A fact sheet covering these issues, as well as construction BMPs, shall be prepared by the developer for distribution to all contractors, their employees, and other personnel involved with construction of the project. **BIO-2(a) Riparian/Wetland Habitat Impact Avoidance.** To the extent practicable, the project shall be designed to avoid impacts to the jurisdictional waters within the project area. The following avoidance/minimization measures are required: Any material/spoils from project activities shall be located away from jurisdictional areas or sensitive habitat and protected from stormwater run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. Only the minimal amount of material needed for the project shall be stored. Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank. Any spillage of material will be stopped if it can be done safely. The contaminated area will be cleaned and any contaminated materials properly disposed of. For all spills the project foreman or designated environmental representative will be notified. The extent of riparian/wetland vegetation/jurisdictional areas shall be shown on all project plans. Riparian/wetland habitat adjacent to construction areas that will not be	

	disturbed by the project shall be demarcated with highly visible orange construction fencing installed by the construction contractor under the guidance of a qualified biologist. The fencing shall be maintained throughout the duration of the project and shall be inspected weekly to ensure it is in proper working condition. **BIO-2(b) Secure Resource Regulatory Permits for Impacts to Jurisdictional Areas.** If jurisdictional waters cannot be avoided, minimization measures shall be applied and all necessary resource agency permits shall be obtained. This includes a 401 Certification or WDR from the RWQCB and a SAA from CDFG. **BIO-2(c) Jurisdictional Habitat Mitigation.** Prepare a Habitat Mitigation and compensatory mitigation approach for the project in coordination with the RWQCB and CDFG. Impacts to jurisdictional waters shall be mitigated at a minimum 2:1 ratio. It is noted that the final mitigation ratio required by the RWQCB and CDFG for acquisition of regulatory permits may differ. The HMMP shall identify portions of the site (potentially along the eastern edge of the levee adjacent to the Santa Clara River) that contain suitable characteristics (e.g. hydrology) for restoration and provide adequate acreage to compensate for the anticipated project impacts. It shall provide measurable performance criteria for determining success of the mitigation effort and recommend remedial measures to ensure the performance criteria are met, if necessary. If mitigation must be implemented offsite, suitable mitigation lands shall be identified and purchased in the local vicinity of the site or watershed. The Plan shall discuss preservation of the site through a conservation easement and identify an approach for funding assurance for the long-term management of the conserved land.	
Impact BIO-3	**BIO-3(a) Lighting and Sound**	Less than significant

Implementation of the proposed project could result in indirect impacts to wildlife movement through the Santa Clara River corridor. Impacts would be Class II, significant but mitigable.	**Restrictions.** New sources of lighting and glare shall comply with City standards. The project shall incorporate lighting design features to the extent possible that will reduce the amount and intensity of night lighting in open space areas adjacent to the development. This will involve using lighting only to the extent necessary, using low intensity lights, placing lighting close to the ground when possible, using shields to reduce glare and direct lighting downward, and pointing lights away from open space areas. Light from onsite sources shall not exceed 0.01 foot-candles as measured at three feet above the ground at the edge of the development. Sound amplification equipment shall be shielded from the Santa Clara River habitat to reduce effects on wildlife movement. Sound levels shall not exceed a Leq of 65 dBA as measured at the edge of the project boundary. Prior to approval of the lighting and sound plans, a qualified biologist shall review lighting and sound plans to ensure that the proposed levels minimize potential impacts on wildlife movement. Within one year after completion of construction when each new development is in operation, a report shall be submitted to the City that, through light and sound level monitoring, confirms that installed equipment do not exceed the specified criteria. **BIO-3(b) Invasive Weed Prevention.** Applicants shall develop and implement an Invasive Weed Prevention and Management Program to prevent invasion of undeveloped native habitat areas by nonnative plant species. A list of target species shall be included, along with measures for early detection and eradication before any species can gain a foothold and outcompete native plant species for resources. All temporarily disturbed areas shall be hydroseeded with a mix of locally native species upon completion of work in those areas. In areas where construction is	

	ongoing, hydroseeding shall occur where no construction activities have occurred within six (6) weeks since ground disturbing activities ceased. If exotic species invade these areas prior to hydroseeding, weed removal shall occur in consultation with a qualified biologist and in accordance with the restoration plan. **BIO-3(c) Fencing.** Fencing shall be installed along the south and eastern project boundaries adjacent to the Santa Clara River (e.g. at the east toe of the levee slope) to prevent unnecessary and unrestricted pedestrian, vehicular, bicycle, equestrian, or urban wildlife access across the levee and into the river area. **BIO-3(d) Construction Best Management Practices (BMPs).** The following BMPs shall be implemented: • Construction fencing shall be installed five (5) feet outside of the disturbance limits of active grading areas. The disturbance areas and fencing shall not encroach closer than 30 feet to sensitive habitats. • Establish appropriate BMPs along construction boundaries to provide erosion and sediment control and contain onsite. • A 15 mph speed limit shall be designated in all construction areas. • All equipment washout and fueling areas shall located within the limits of grading at a minimum of 200 feet from the ephemeral drainage. Washout areas shall be designed to fully contain polluted water and materials for subsequent removal from the site. • Mufflers shall be used on all construction equipment and light trucks shall be in good operating condition. • Spill kits shall be onsite at all times. • Drip pans shall be placed under all stationary vehicles and mechanical equipment.	

	• All trash that may attract predators shall be properly contained, removed from the work site weekly, and disposed of regularly. • Sensitive vegetation removed by accident during construction shall be restored. • Comply with the NPDES State General Construction Permit, the project's Storm Water Pollution Prevention Plan (SWPPP) BMPs to control the discharge of pollutants, including sediment, into local surface water drainages **BIO-3(e) Storm Drain BMPs**. To minimize the degradation of water quality which could impact sensitive fish and other aquatic resources, all future private and public storm drain facilities that would drain into the Santa Clara River shall incorporate protective BMPs for sediment and pollution control.	
Impact BIO-4 Implementation of the proposed project could result in tree removal, branch trimming, and/or ground disturbances within driplines. Impacts would be Class III, less than significant but mitigable.	**BIO-4 City Tree Coordination**. Prior to initiation of future development projects, applicants shall confirm that the City of Ventura has not approved a tree protection ordinance that is applicable to any trees within the project area. Furthermore, applicants will coordinate with the City's Parks Division for project activities involving the planting, pruning, or removal of any tree located in an existing parkway or easement. Per the City's recommended tree planting requirement for specific roadways with City limits, any trees installed within the Olivas Park Drive right-of-way shall be restricted to island live oak (Quercus tomentella).	Less than significant.