Historic Biological Reports
Scan Control Sheet

County Project Number(s): II-5291

Report Type (check one):
- ☐ Initial Study
- ☐ Species Inventory/Survey
- ☒ Focused Study
- ☐ EIR
- ☐ Draft EIR
- ☐ EIS
- ☐ ND
- ☐ MND
- ☐ Other

Report Date (Month/Day/Year): 09/28/1994

Check if the following apply to the report:

- ☒ Wetland and/or aquatic habitat
- ☐ Within designated Coastal Zone
- ☒ Potential movement corridor for fish and/or wildlife

VENTURA RIVER TRAIL, VENTURA COUNTY, CALIFORNIA

BIOLOGICAL ASSESSMENT

Prepared for:

City of San Buenaventura
Public Works Department
501 Poli Street P.O. Box 99
Ventura, CA 93002-0099

Contact: Ms. Karen Bates-Traffic
Mr. Albert Carbon-Engineering

Prepared by:

Lawrence E. Hunt, Ph.D.
Consulting Biologist
372 Valdez Avenue
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(805) 967-8512

28 September 1994

Cover

Ventura River approximately two miles north of Main Street bridge, looking downstream. A variety of riverine habitats are shown, including open water, aquatic vegetation, aquatic emergent vegetation, persistent emergent wetland, floodplain willow forest and floodplain mixed scrub. The close association of riparian and adjacent upland habitats are important factors which contribute to high biological diversity within the Ventura River floodplain. Photograph taken April 1990.

LAWRENCE E. HUNT, CONSULTING BIOLOGIST

28 November 1994

Mr. Albert Carbon, Associate Engineer
City of San Buenaventura
501 Poli Street, Rm. 120, P.O. Box 99
Ventura, CA 93002-0099

Dear Mr. Carbon,

I have reviewed the revised project description for the proposed Ventura River trail. Routing the bicycle/pedestrian component of the trail to Olive Street and West Main Street and terminating the equestrian component at Shell Road mitigates the Class 1 impacts described in the Biological Assessment (dated 28 September 1994), to insignificant levels.

You also asked me to consider if extending the equestrian trail to Main Street, along the levee would create any environmental concerns for the Ventura River biota. I think extending the equestrian trail to Main Street would have a potentially significant impact on sensitive biological resources for the following reasons:

1) As discussed in the Biological Assessment, the presence of horses near the lower Ventura River riparian corridor has the potential to attract cowbirds (*Molothrus ater*), a known nest parasite on least Bell's vireo (*Vireo belli pusillus*) as well as several other sensitive riparian birds. This has the potential to exacerbate an already serious problem for nesting birds in this area. Terminating the equestrian trail at Shell Road would eliminate the need for an annual cowbird trapping program, the efficacy of which cannot be guaranteed.

2) The presence of an equestrian trail on or alongside the levee and which extends to Main Street will invite conflicting use by non-equestrian users. Once a formal trail is in place, it will be impossible to restrict access and limit use to riders. This will ultimately result in the same problem with the original pedestrian/bicycle trail route--uncontrolled access to sensitive riparian habitats.

For these reasons, the environmentally superior alternative is to terminate the equestrian trail at Shell Road.

Thank you for your patience in this matter and please don't hesitate to contact me if you require additional information or if you have any questions concerning the contents of this letter.

Sincerely,

Lawrence. E. Hunt, Ph.D.

Lawrence E. Hunt

372 Valdez Avenue, Goleta, California 93117 Voice and fax: (805) 967-8512

FOREWORD

The City of San Buenaventura wishes to establish a multiple use recreational trail that will link the existing Ojai Valley Trail to the Omer Rains Trail via an abandoned Southern Pacific Railroad right-of-way through the Ventura River valley. Much of the proposed trail route lies within or adjacent to the Ventura River floodplain. This report, "Biological Assessment of the Ventura River Trail, Ventura County, California", evaluates the potential impacts of the proposed trail on the biological resources of the Ventura River. Recommendations and mitigation measures presented in this report focus on minimizing impacts to these resources from operation of the proposed trail and protecting the wealth of biological diversity contained in Ventura River habitats.

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30 September 1994

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1.0 INTRODUCTION

The proposed Ventura River Trail is a combination equestrian, bicycle and pedestrian trail and linear park system along the Ventura River corridor. The trail would link the existing Ojai Valley Trail at Foster Park with the existing Omer Rains Trail along the Ventura River levee and shoreline and would be approximately 5.8 miles long. The trail would generally follow the existing 40-foot wide Southern Pacific Railroad right-of-way. The southern portion of the trail would be located within the City of San Buenaventura, while the segment generally located north of Stanley Avenue would be within the unincorporated Ventura County area. An equestrian component would be primarily located on the Ventura River levee and the eastern river bank (City of San Buenaventura, 1993).

The trail, along with other existing and proposed trails, will be part of a regional trail network. The City of San Buenaventura recognizes that this trail connection will be of great value to the community, both as a transportation corridor and as a recreational resource. The trail will become an important transportation facility, providing bicyclists a safer route between Foster Park and Ventura. The trail is expected to provide new park and recreation opportunities for residents of the Ventura Avenue community as well as other parts of the city (City of San Buenaventura, 1993).

The City of San Buenaventura completed the Ventura River Trail Alternatives Assessment Study and Master Plan in April 1993. The City contracted Fugro-McClelland Engineers, Inc. to conduct an Environmental Assessment and Initial Study. Fugro-McClelland Engineers, Inc. recommended a Mitigated Negative Declaration be prepared. The City's Environmental Impact Report Committee, upon review of the Initial Study, recommended that three areas be studied further, as an Expanded Initial Studies: archaeological and biological resources and hazardous materials.

A site visit of the equestrian and bicycle/pedestrian components of the proposed Trail was conducted on 11 July 1994, as part of the expanded Biological Assessment. The visit consisted of walking and driving most of the proposed route. Access problems prevented surveying the proposed equestrian trail from Shell Road south to its connection with the existing levee along the east side of the Ventura River. Because of the seasonal timing and short duration of the site visit, emphasis was placed on evaluating vegetation and habitat conditions for wildlife adjacent to the proposed Trail. In addition to the site visit, background research for this study include previous related biological investigations (Hunt, 1991; 1992; Hunt and Lehman, 1992), a review of previous literature, pertinent environmental documents and conversations with knowledgeable local biologists.

This report addresses the effects of the proposed Ventura River Trail on the plant and animal life in the vicinity of the Trail, especially the Ventura River. This report describes the biological resources within the Ventura River and floodplain that may be affected by construction and operation of the proposed Trail. Project-related biological impacts are identified and potential mitigation measures are presented.

2.0 REGULATORY ENVIRONMENT

Rare, or otherwise sensitive animal species and habitats are protected by federal, state and/or local regulations and policies. This section outlines regulations germane to this project.

2.1 Federal Regulations

The Federal Endangered Species Act of 1973, with subsequent revisions and amendments, protects animal species which are listed as "Threatened" or "Endangered". These laws were enacted to preserve plant and wildlife populations and their habitats that are in danger of extinction. According to this legislation, species and subspecies are listed as "Endangered" if they are facing extinction throughout all or a significant portion of their geographic range. Threatened species or subspecies are those which are on their way to becoming endangered in the near future. The U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) have jurisdiction over the federal program. Species which have received federal listing as "Threatened" or "Endangered" can be found on the most recent list of Federal Threatened and Endangered Plants and Animals (USFWS, 1993).

"Candidate" species are those proposed for listing and for which a regulation has been published in the Federal Register by the USFWS, but for which a final rule has not been determined. Species proposed for listing are granted limited protection under the Federal Endangered Species Act. Candidate species receive no formal protection under the Act however, state and local agencies generally recognize their status and afford some protective action for candidate species. Species or subspecies which are candidates for listing fall into one of two categories: Candidate 1 species are being considered for listing as Threatened or Endangered by the USFWS because they have on file sufficient information on the biological vulnerability and threats to the continued existence of a taxon. Candidate 2 species are taxa for which the USFWS has limited information which may warrant future listing, but where sufficient information on its biological vulnerability is lacking.

Wetlands consist of habitats with hydrophytic plants, hydric soils or a defined water regime. They are under the jurisdiction of the U.S. Army Corps of Engineers (Section 404 of the Clean Water Act) and the California Department of Fish and Game (Section 1603 of the Fish and Game Code) and, within the coastal zone, under the California Coastal Commission (or local agencies with a certified Local Coastal Program (Section 30233 of the Public Resources Code).

2.2 State Regulations

Plant and animal species are also listed as threatened or endangered by the California Endangered Species Act of 1984. The California Department of Fish and Game (CDFG) has responsibility for administering the State's Endangered Species Act. State-listed and candidate taxa are protected from removal or disturbance. Species which have received state-listed status as threatened or endangered can be found in CDFG (1992). The State of California has also identified wildlife species of "special concern" (CDFG, 1992; Jennings, 1987; Remsen, 1978; Williams, 1986; Moyle, et al., 1989). These species are rare, restricted in geographic distribution, or declining throughout their geographic range. Additionally, the California Native Plant Society (CNPS) has established a list of rare plants which are generally recognized by state and federal agencies and afforded various levels of protection.

Many plant and animal species qualify for formal protection under the California Environmental Quality Act (CEQA) of 1986, even if they are not subject to federal or state regulations. These include species that are identified as environmentally sensitive within the State of California, regardless of recognition by USFWS or CDFG.

2.3 Local Regulations and Policies

The Ventura County General Plan (Ventura County, 1993) contains goals and policies designed to protect significant biological resources. The General Plan Amendment 89-1 established protective goals and implementation policies for wetland and riparian habitats. Specific goals of the Biological Element of the General Plan include:

> Restoration and maintenance of the chemical, physical and biological integrity of surface and groundwater resources;
>
> Protection and, where feasible, enhancement of watershed and aquifer recharge areas;
>
> Discretionary development shall not significantly impact watersheds, groundwater recharge areas or groundwater basins;
>
> Preservation and protection of significant biological resources from incompatible land uses and development;
>
> Preservation and protection of habitats of state and federally-listed rare, threatened or endangered plant and animal species;
>
> Preservation and protection of plant and animal species and plant communities which are locally unique;

Preservation and protection of significant wildlife migration corridors.

Policy 1.5.2 of the Ventura County General Plan (County of Ventura, 1993) places the following requirements on discretionary development:

> Part 1.5.2.1 requires that qualified biologists be used to identify biological resources assess potential impacts and, if necessary, develop mitigation measures.
>
> Part 1.5.2.2 requires that all feasible measures to mitigate significant impacts to biological resources be implemented and if impacts cannot be reduced to insignificant levels, findings of overriding consideration must be made.
>
> Part 1.5.2.3 states that discretionary development that is proposed to be located within wetland areas be evaluated by a qualified biologist and development that would significantly impact wetlands would be prohibited unless mitigation measures could be adopted to reduce the impacts to insignificant levels.
>
> Part 1.5.2.4 states that discretionary development shall be located at least 100 feet from wetland habitats and this buffer zone may be expanded or decreased upon evaluation and recommendation of a qualified biologist.

The City of San Buenaventura Local Coastal Plan and the Comprehensive Plan Update (City of San Buenaventura, 1989) identify environmentally significant habitat areas, which protect major riparian corridors and upland habitats within the coastal zone. Policies 3.1-3.6 of the Comprehensive Plan identify and protects lands within the 100-year floodplain. Specifically, these policies are intended to limit the amount and type of development within the floodplain so as to reduce the need for flood protection improvements and protect natural attributes of the Ventura River. Policies 12.1-12.7 of the Comprehensive Plan specifically protect sensitive wetland, riparian and oak woodland wildlife habitat areas. The Land Use Element of the Comprehensive Plan specifically discusses the sensitive habitats found within and adjacent to the Ventura River Estuary.

Section 8174-9 of the Ventura County Local Coastal Plan Zoning Ordinance (City of San Buenaventura, 1991b) specifically states that within environmentally sensitive habitats associated with the Ventura River (which includes the Ventura River riparian corridor within the coastal zone), only the following uses are permitted: nature study; development where the primary function is habitat enhancement or restoration; passive recreational uses not involving structures; and scientific research.

The North Ventura Avenue Plan (County of Ventura, 1990) discusses the Conservation Element and the County Open Space Element as it pertains to the North Ventura Avenue area and the Ventura River. It restricts development within the mapped boundaries of the Ventura River floodplain (100 year flood event boundary).

The "floodplain" is not to be considered for urbanization until a floodplain ordinance is adopted. Additional development in "floodplain' areas with existing development may occur only if updated information can show that such development would be protected from a 100 year flood event given the existing level of flood control.

The City has recently completed the Ventura River Estuary Enhancement Plan which documents the existing physical, biological and recreational conditions within the floodplain from the mouth of the river northward to the Main Street bridge (City of San Buenaventura, 1992; 1994). The proposed Ventura River Trail should be evaluated within the context of the management proposals set forth in the Estuary Enhancement Plan, so as to minimize conflicting purposes.

3.0 EXISTING CONDITIONS

3.1 Regional Setting

The project area is situated in southwestern Ventura County within the lower portions of the Ventura River floodplain, which drains the southeastern coastal slopes of the Santa Ynez Mountains. The Ventura River is the northernmost major coastal stream in southern California. The drainage basin is fan-shaped, covers approximately 226 square miles and extends about 21 miles north from the Pacific Ocean with an average width of 11 miles. Upland portions of the watershed consist of steep, narrow canyons, while the main stem lies in a relatively broad valley. The main stem originates at the junction of Matilija and North Fork Matilija Creeks and is approximately 15 miles long. The gradient of the river ranges from about 40 feet per mile at the river mouth to about 90 feet per mile at its headwaters. The Ventura River flows in a southerly direction, terminating in a small estuary which is subject to tidal activity when not closed by a sand bar (Moore, 1980; Hill and McConaughy, 1988; Keller and Capelli, 1993).

The principal tributaries of the Ventura River include the North Fork, Matilija Creek, San Antonio Creek, Coyote Creek and Santa Ana Creek. The first two tributaries are impounded by the Matilija Dam. Coyote Creek and Santa Ana Creek are impounded by Casitas Dam. Combined dammed portions amount to about 42% of the drainage basin. The main stem of the river is classified as an interrupted stream, made up of perennial reaches with intervening intermittent reaches. A geologic discontinuity in the alluvial deposits in the vicinity of Casitas Springs and Foster Park causes groundwater to rise and flow as a surface stream. This source, along with natural flows from San Antonio, Live Oak Creek and Cañada Larga, several springs and 2,000,000 gallons per day of treated effluent from the Ojai Valley Sanitary District sewage treatment facility, combine to form a perennial surface flow from below the confluence of San Antonio Creek to the ocean (Moore, 1980; Hill and McConaughy, 1988).

The study area is a corridor that is bounded by the Ventura River on the west, Ventura Avenue on the east and extends from the Ojai Valley Trail in Foster Park to Main Street and a connection with the Omer Rains Trail. The five-mile long corridor passes through a variety of land uses including residential, commercial, agricultural, industrial and open space. The valley is contained by rolling open hills on both sides of the river, with most of the existing development occurring on the valley floor, to the east of the Ventura River levee. In the middle of the corridor is the mile-wide Ventura Avenue Field oil production area. This significant oil field, and others in the region, have supported a variety of petroleum-related industrial uses in the valley. Oil production is in decline in this area and large tracts of industrial land now lie vacant.

In the southern portion of the corridor is the Avenue Community, which includes a mixture of land uses including an ethnically diverse residential area (City of San Buenaventura, 1993b).

The trail is proposed to follow the Southern Pacific Railroad right-of-way (ROW), which was part of a branch line connecting Ojai and Ventura, and extends the length of the corridor. Southern Pacific has filed for abandonment of the right-of-way in anticipation of selling the land.

A portion of the equestrian trail is proposed to follow the Ventura River levee for approximately 1.7 miles, from a point opposite Park Row Avenue south to the intersection of the Ventura River levee with the Main Street bridge.

3.2 Wildlife Habitats Adjacent to the Proposed Trail Corridor

Various combinations of the proposed bicycle/pedestrian/equestrian trail would lie adjacent to the eastern side of the Ventura River riparian corridor. The Ventura River floodplain supports a number of floodplain and upland habitats of high wildlife value. Those found in and adjacent to the trail corridor are described below. The active channel is dynamic; seasonal storm events may significantly alter the distribution of vegetation types within the floodplain from year to year, so that riparian vegetation associated with the active channel forms a mosaic of successional stages (Ferren, et al., 1990).

Floodplain and upland habitats occur at different elevations within the Ventura River floodplain and differ radically in species composition and stature. Floodplain habitats include: *Persistent Emergent Vegetation*, *Mixed Scrub* and *Willow Forest* (riparian woodland). Upland habitats include: *Coastal Sage Scrub*, *Mixed Chaparral* and *Mixed Scrub*.

Wildlife habitats within the study area also can be divided into floodplain and upland categories. Floodplain habitats in the project area are subject to moderate to severe disturbance following storm events and include aquatic, aquatic emergent, mixed scrub and willow forest vegetation types. Upland areas are located beyond the banks of the river channel. Vegetation types found here include mixed scrub, mixed chaparral, coastal sage scrub and ruderal grassland/scrub habitats.

Natural, episodic storm events throughout the Ventura River floodplain, particularly in the lower reaches, control the composition of animal communities through their effects on plant communities (Ferren, et al., 1990; Hunt, 1991; 1992; Hunt and Lehman, 1992). Periodic flooding opens patches of ground for subsequent

colonization by early successional plant and animal species. Natural disturbance has positive long-term effects on regional biotic diversity.

Floodplain habitats generally recover rapidly following natural disturbance, such as flooding. Flooding replaces soils and plant propagules such as seeds, stolons and root mats. Bare ground is typically colonized by a variety of non-native weeds and forbs as well as native tree species. Under normal rainfall conditions, population densities of these early invaders, initially very high on open ground, undergo natural attrition due to intra- and interspecific competition. If disturbance is infrequent or absent, riparian tree species may become established and form mixed floodplain woodland in time. Upland habitat appear to recover from disturbance more slowly. Open ground away from the active channel, such as exposed cobble bar, is subject to prolonged occupation by invasive, non-native weed species that may prevent or limit establishment of native shrubs and trees (Hunt, 1992).

The Ventura River, in its natural state, formed a braided channel across the entire valley. Levees and other flood control structures were put in place to restrict the movement of the active channel to the western side of the valley in the late 1890's (City of San Buenaventura, 1993). These levees allowed agricultural development of the floodplain. In the 1930's, spurred by increased exploitation of large petroleum reserves beneath the valley, industrial and residential development increased westward in the valley and further restricted the Ventura River channel. The existing levee, extending from the mouth of the river northward to the vicinity of Stanley Avenue, was constructed in the 1950's and confines the Ventura River to its present channel. Agricultural, industrial and residential development in the valley has resulted in the alteration and elimination of riparian woodland and especially riparian scrub habitats associated with the formerly broad floodplain.

The proposed combined trail north of the Highway 33 overpass over Crooked Palm Road, and the equestrian trail south of this junction point, pass adjacent and through floodplain willow woodland, mixed upland scrub and ruderal grassland scrub vegetation.

The following discussion draws on previous studies of riverine and upland vegetation and wildlife habitats along the lower and middle portions of the Ventura River by Ferren, et al., (1990); Hendrickson (1991); Dames and Moore (1991); Hunt (1991) and Hunt and Lehman (1992). The following wildlife habitats are likely to be subjected to increased human disturbance if the trail follows its recommended placement:

3.3 Floodplain Plant Communities

These plant communities and the wildlife they support are highly susceptible to human disturbance. Locating the proposed trail adjacent to the riparian corridor has the potential to significantly increase human presence in the floodplain, with the following general impacts to wildlife and their habitats: direct trampling of ground cover vegetation, especially aquatic emergent plants; habitat fragmentation following establishment of semi-permanent trails, and; direct disturbance of wildlife by people and dogs.

Aquatic Vegetation

The active channel of the Ventura River contains riverine pools and associated aquatic vegetation which are increasingly rare in southern California due to alteration of natural watercourses. The riverine pools are generally fringed by a border devoid of emergent vegetation. Aquatic vegetation is limited to filamentous algae and several species of aquatic vascular plants. The latter provides important foraging habitats and cover for fishes. Riffle segments are located in higher gradient reaches of the river and have a cobble substrate which supports a diversity of aquatic plant species.

Persistent Emergent Vegetation

This vegetation type occupies habitat along the margins of the river channel, including open water or where flooded and saturated soil is present. Dominant plants include: water primrose (*Ludwigia uruguayensis*), wild celery (*Apium graveolens*), broadleaf cattail (*Typha latifolia*) and narrowleaf cattail (*Typha angustifolia*), arroyo willow (*Salix lasiolepis*) and willow smartweed (*Persicaria lapathifolium*). Seasonally flooded areas support a 'non-persistent emergent' type of vegetation (Ferren, et al., 1990). These areas are dominated by water primrose, willow smartweed, veronica (*Veronica anagallis-aquatica*), duckweed (*Lemna* spp.) and several types of filamentous and mat-forming green algae. Because these areas are only seasonally wet, weedy plants typical of upland and disturbed sites occupy these sites, including cocklebur (*Xanthium strumarium* var. *canadense*) and flax-leaved fleabane (*Conyza bonariensis*).

This habitat type is subject to periodic streambed scouring during storm events and is limited to portions of the river with a shallow gradient.

Photo 1. Ventura River channel from Foster Park bridge, looking downstream. This streambed section has a relatively high gradient and cobble bed. Note closed canopy coast live oak woodland on slope at right and floodplain willow forest and floodplain scrub vegetation on cobble bars. Floodplain habitats are subject to occasional flooding. The wide variety of aquatic and upland habitats in various stages of succession and in close proximity to one another, contributes to high floral and faunal diversity in the Ventura River watershed. Photo taken 30 April 1983.

Photo 2. Ventura River floodplain from Shell Road bridge, looking upstream. Note active channel meandering through extensive growth of aquatic emergent vegetation. This type of habitat supports large populations of arroyo chub (*Gila orcutti*), a "special concern" species, as well as small population of the southwestern pond turtle (*Clemmys marmorata pallida*), a Category 2 species. Photo taken 26 September 1994.

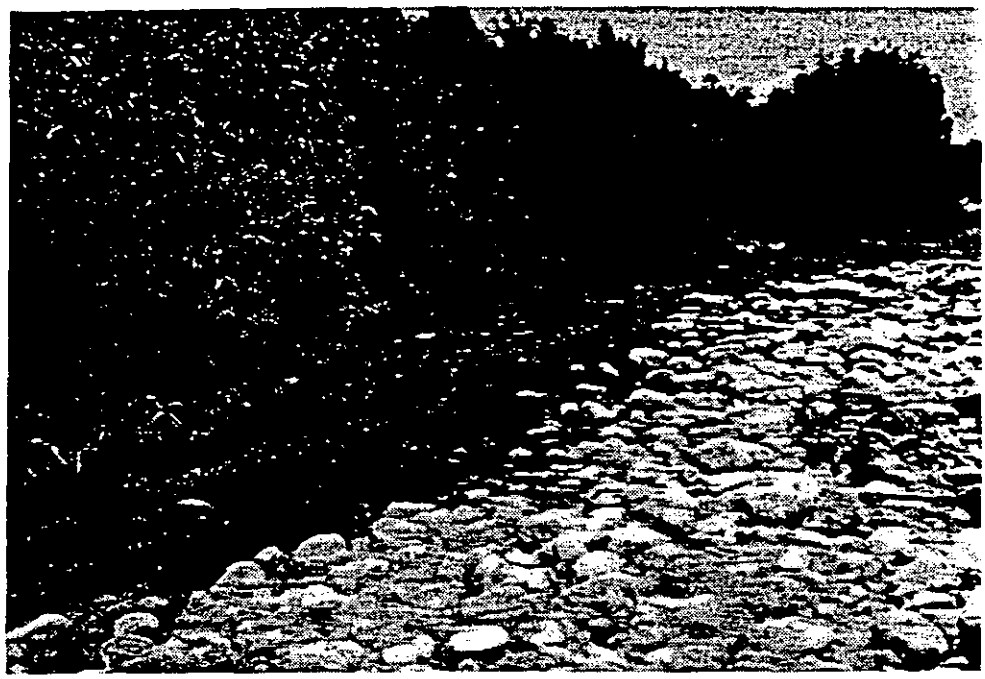

Photo 3. Ventura River channel above Main Street bridge, looking downstream. Note active channel meandering over exposed cobble bar adjacent to closed canopy floodplain willow forest. This floodplain habitat supports breeding populations of a number of protected riparian birds, including the least Bell's vireo (*Vireo pusillus belli*), a state and federal endangered species. Photo taken July 1993.

Photo 4. Ventura River floodplain north of Main Street bridge, looking upstream. Note edge of mixed floodplain willow and scrub vegetation adjacent to lower bench road and flood control levee. Photo taken 26 September 1994.

Floodplain Mixed Scrub

This habitat represents an early successional stage within the floodplain of the river. The floodplain mixed scrub community typically invades areas that have been scoured following winter flood events. Soil conditions range from dry to moist. Spatial variability in soil moisture may influence plant species diversity from site to site. Dominant species include: mulefat (*Baccharis salicifolia*), arroyo willow, Brewer's saltbush (*Atriplex lentiformis* ssp. *breweri*), scale-broom (*Lepidospartum squamatum*), flax-leaved fleabane and sweet fennel (*Foeniculum vulgare*). Species that are generally restricted to seasonally flooded, low-lying areas include: wild celery, coastal saltgrass (*Distichlis spicata* var. *spicata*), fleshy jaumea (*Jaumea carnosa*), water primrose and saltmarsh sand spurrey (*Spergularia marina*).

This habitat type occurs on both sides of the active river channel but is most extensive on the west side.

Floodplain Willow Forest

This habitat type occurs along the entire river channel from the margins of the river and ponded water to the outer reaches of the floodplain. In the absence of disturbance, it replaces early successional mixed scrub. Soil conditions are moist to saturated. Dominant species include: arroyo willow, yellow willow (*Salix lasiandra* var. *lasiandra*), mulefat and Brewer's saltbush. Also present in high densities are native species such as saltbush (*Atriplex patula* ssp. *hastata*), as well as non-native, weedy species such as dock (*Rumex conglomeratus*), giant reed (*Arundo donax*), white sweetclover (*Melilotus albus*) and sweet fennel. Present in very low numbers and with a widely scattered distribution are other tree species, such as white alder (*Alnus rhombifolia*), western sycamore (*Platanus racemosa*) and black cottonwood (*Populus trichocarpa* var. *trichocarpa*) and southern California black walnut (*Juglans californica*).

Various successional stages of this habitat type are found on both sides of the active channel, but reach maturity west of the active channel, where the floodplain is broader.

3.4 Upland Plant Communities

Upland coastal sage scrub and upland mixed chaparral vegetation will be affected by construction of the proposed equestrian trail north of the northern terminus of the Ventura River levee and by increased human presence along the railroad ROW.

Upland Coastal Sage Scrub

Within the vicinity of the project site, this plant community mostly occurs along the eastern side of the active channel. It also occurs on steep slopes and canyons outside the floodplain boundaries. Dominant species include: California sagebrush (*Artemisia californica*), Brewer's saltbush, California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), laurel sumac (*Malosma laurina*), lemonade berry (*Rhus integrifolia*), poison oak (*Toxicodendron diversilobum*) and giant rye (*Elymus condensatus*). The lower slopes have been influenced by both flood control practices and mining operations. These areas support plants typical of the sage scrub vegetation as described above as well as species ordinarily found within the floodplain mixed scrub community. These include: mulefat, heliotrope (*Heliotropium curassavicum* var. *oculatum*) and cocklebur.

Upland Mixed Chaparral

This plant community is found in association with upland mixed scrub habitats. This is a highly diverse habitat and was probably more common in the Ventura River floodplain prior to agricultural, industrial and residential development in the valley. A relatively undisturbed remnant of this formerly widespread habitat type occurs at the northern terminus of the bench road north of the flood control levee and west of Highway 33. Many of the plant species occurring at this location were not observed elsewhere on-site, including: lemonade berry, laurel sumac, western mountain mahogany (*Cercocarpus betuloides* var. *betuloides*), black sage (*Salvia mellifera*), ceanothus (*Ceanothus spinosus*), Nuttall's chaparral mallow (*Malacothamnus fasciculatus* var. *nuttallii*) and three-podded milk-vetch (*Astragalus trichopodus*).

Upland Mixed Scrub

This vegetation type occupies sites outside the floodplain closer to the mouth of the river. This community supports some of the same species found in mixed chaparral habitats, but is characterized by a more herbaceous flora. Non-native species are a dominant component of this habitat type. Disturbance is generally human-induced and originates from flood control construction and maintenance activities. This plant community is characterized by an herbaceous understory dominated by introduced annual grasses and forbs with scattered shrubs and trees. Dominant species include: Brewer's saltbush, castor bean (*Ricinus communis*), Bermuda grass (*Cynodon dactylon*), ox-tongue (*Picris echioides*), coyote bush (*Baccharis pilularis* ssp. *consanguinea*) and mulefat, scale-broom, flax-leaved fleabane, sweetclover and fountain grass (*Pennisetum setaceum*).

4.0 PROPOSED TRAIL CONSTRUCTION AND TRAIL ROUTE

Existing Trails

The county-operated Ojai Valley Trail is 9.5 miles long and runs from Foster County Park to Soule County Park in Ojai. The trail follows the abandoned southern Pacific Railroad right-of-way which was purchased by Ventura County from Southern Pacific Railroad in 1981. The trail was built in stages between 1983 and 1989. The trail is designed for multiple use to serve bicyclists, pedestrians and equestrians. It consists of a 10-foot wide asphalt path and a 10-foot wide wood chip equestrian path, separated by a 4-foot high wood rail fence. Approximately 327,000 persons used the trail in 1990 (City of San Buenaventura, 1993).

The Omer Rains trail was developed by the California Department of Parks and Recreation. This trail is 3.5 miles long and runs along the Ventura County coast from San Pedro Street in Ventura, across the Ventura River and through Emma Wood State Beach. The trail is mostly paved asphalt. It consists of a path along the beach to the Ventura River where it turns north and parallels the river along its east side on the river levee to Main Street and across the Main Street bridge. The trail is generally 10-feet wide and accommodates both pedestrians and bicyclists. There is no equestrian access to the trail and beach. Portions of the trail near the mouth of the Ventura River have been damaged by storm events and the trail may be relocated inland at this point into an adjacent parking lot or street. This trail is part of a larger trail and bicycle route network along coastal California (City of San Buenaventura, 1993).

Ventura County has begun a process of identifying trail opportunities to create a county-wide trails master plan. The Ojai Valley, Omer Rains, and proposed Ventura River trails will create a local trail system for the Ventura and Ojai areas. Additional trail proposals would eventually link these trails with other parts of Ventura County and the region (City of San Buenaventura, 1993).

Proposed Trail Corridor

The following trail corridor discussion is taken from the Ventura River Trail Study (City of San Buenaventura, 1993). The railroad right-of-way (ROW) extends northward from the Southern Pacific mainline near the Ventura County Fairgrounds northward to Foster Park where the Ojai Valley Trail begins. The majority of the ROW is 40-feet wide. The entire route is flat, rising at a grade of about 1% from an elevation of about 20 feet at Main Street to about 220 feet at Foster Park. The tracks are still in place from the Ventura County Fairgrounds to the railroad trestle at Cañada Larga. The proposed trail corridor splits into an equestrian route which remains

adjacent to the east side of the Ventura River and a bicycle/pedestrian route which follows the railroad ROW northward. The two routes diverge approximately adjacent to Olive Avenue (Appendix 3). The various proposals for the southern terminus connection to the existing Omer Rains Trail are shown in Appendix 2.

Equestrian Trail

The southern terminus of the equestrian trail would be at a trailhead rest area at the corner of Main and Peking Streets. The existing flood control levee runs along the east side of the Ventura River from its mouth to a point about 0.5 miles north of Stanley Avenue. On the north side of Main Street, the levee continues as a gated service road for a distance of approximately 1.7 miles. A parallel bench road runs along the west base of the levee within the floodplain of the Ventura River. The top of the levee is approximately 15 feet above the floodplain and has a smooth, compacted surface that is 15-20 feet wide. The bench road has a rougher surface of varying width. The top of the levee ends at a gated entrance from Highway 33. The lower bench road ends about 1000 feet further north at a drainage channel that passes under Highway 33 in two 10-foot wide by 8-foot high concrete box culverts. The bench road traverses moderately to severely disturbed mixed upland scrub/ruderal grassland habitat for most of its length until it reaches its northern terminus. Beyond this point the proposed equestrian trail would traverse a remnant stand of relatively undisturbed, high quality upland mixed chaparral/coastal sage scrub for approximately 1000 feet before following an existing oil field access road north to Shell Road. The Ventura River Trail Study proposes to cut a 12-foot wide trail through this remnant habitat to accommodate the separate equestrian trail south of Shell Road (City of San Buenaventura, 1993). The Trail Master Plan (City of San Buenaventura, 1993b), recommended Option 1 for the southern terminus of the proposed bicycle/pedestrian trail component (Appendix 2). This option calls for a combined equestrian/bicycle/pedestrian trail on top of a widened levee.

Bicycle/Pedestrian Trail

The existing Omer Rains Trail is built on top of the levee from the river mouth to Main Street, where it turns west and crosses the Main Street Bridge over the Ventura River. The recommended southern terminus, Option 1, would pass beneath the Main Street bridge then proceed northward along the existing flood control levee or a bench road running along its west bank for approximately 1200 feet to the proposed trail bridge over Highway 33.

The Highway 33/Olive Street on-off ramps cross the ROW at a sharp angle, after which the tracks run along the freeway for about 0.5 miles, passing the Westpark

Recreation Center on a raised embankment. The tracks continue north passing behind the Avenue residential community. The adjacent land uses become more industrial near Stanley Avenue, which is crossed at grade. North of Stanley Avenue the ROW enters the Ventura Avenue Field oil production area, passing through the OST trucking and pipeyard operation, which extends north to Shell Road. After a grade crossing at Shell Road, the tracks pass through a shallow cut behind the Shell Oil headquarters building and continue past several operating oil wells to Crooked Palm Road where the ROW curves west and under the Highway 33 overpass. There are a number of small grade crossings that provide access to businesses on the west side of the track. The tracks pass through approximately 0.3 miles of abandoned agricultural land, then pass through the center of the inactive USA Petroleum refinery. The refinery site is fenced, with gates crossing the tracks. North of the oil production area, steep banks and flood hazard make a trail following the river corridor unlikely.

The USA Petroleum refinery and the Ojai Valley Sanitary District sewage treatment facility are built with levees directly against the river bank, making a route between these facilities and the river impossible (City of San Buenaventura, 1993b; Hunt, pers. obs.). Between the north end of the USA Petroleum refinery site and Cañada Larga, the trail passes alongside and through willow woodland on the west side of the railroad embankment.

The trail crosses Cañada Larga on a heavily damaged wood and steel railroad trestle. The active channel of the river is less than 100 feet west of the railroad embankment in the vicinity of the bridge and is currently easily accessible to pedestrians in this area. Continuing north, the trail passes through abandoned citrus groves on the west side of the embankment, then between the Ojai Valley Sanitary District sewage treatment plant and the Ventura Avenue Water Treatment Plant. The access road to the sewage treatment plant parallels the ROW. Continuing north, the ROW parallels the west side of Highway 33 through ruderal grassland/scrub habitat to Casitas Vista Road at the south end of Foster Park. The ROW lies on a low embankment running northward between the main access road through the park and Highway 33 to the southern terminus of the Ojai Valley Trail at the north end of Foster Park.

5.0 WILDLIFE RESOURCES ADJACENT TO THE PROPOSED TRAIL CORRIDOR

The Ventura River habitats described in the previous section support one of the highest diversity of fishes, amphibians, reptiles, birds and mammals in southern California. Hunt (1991) and Hunt and Lehman (1992) documented at least 284 species of native and non-native vertebrates known to occupy habitats within the lower reaches of the Ventura River on a temporary or permanent basis, including at least 19 sensitive species within the middle and lower Ventura River floodplain. A list of animal species known or potentially occurring within and adjacent to the project site is provided in Appendix 1.

These resources provide unique interpretive and educational opportunities in close proximity to an urban area.

5.1 Regulatory Classification of Sensitive Species

This section details the occurrence of protected vertebrates within or adjacent to the study site. State and federal regulatory status for a particular taxon is listed in California Department of Fish and Game (CDFG, 1991) and United States Fish and Wildlife Service (USFWS, 1991) bulletins. The term "sensitive species" means that a particular vertebrate species falls into one or more of the following categories:

a) Officially listed under the State and or Federal Endangered Species Acts;
b) State or Federal candidate species for possible listing, and;
c) California Department of Fish and Game "Species of Special Concern" (CDFG, 1991).

The following status acronyms are used:

SE - State of California Endangered
ST - State of California Threatened
CSC - California Species of Special Concern
FE - Listed as Endangered by the Federal Government
FT - Listed as Threatened by the Federal Government

CATEGORY 1 - Candidate for Federal listing (i.e., taxa for which the USFWS has sufficient biological information to support a proposal to list as Endangered or Threatened)
CATEGORY 2 - Candidate for Federal listing (i.e., taxa for which existing information indicates may warrant listing, but for which substantial biological information to support a proposed rule is lacking).

The project site is used on a temporary or permanent basis by at least 18 taxa listed as sensitive by the CDFG (1993) and/or USFWS (1992).

5.2 Sensitive Wildlife Species

The following taxa are known to occur in the Ventura River floodplain and adjacent habitats. Option 1 of the Trail Master Plan will result in increased human presence within and adjacent to the riparian corridor, which may significantly impact the following sensitive species, in addition to wildlife resources in general. A serious concern is the potential for the trail to provide increased human and pet (specifically dog) access to riparian habitats and wildlife, especially along the southern portion of the trail.

The recommended trail route will potentially bring hundreds of thousands of users to the floodplain. Although fencing and signs designed to control or limit access are an integral part of the proposed trail plan, existing fences of a similar design pose no barrier to human access (e.g., Highway 33 barrier fence). Experience has shown that a small percentage of users will disregard any attempt to limit access. Given the potential number of trail users, even a small percentage has the potential to significantly impact floodplain habitats and wildlife.

5.2.1 Insects

Monarch Butterfly (*Danaus plexippus*)

STATE/FEDERAL STATUS: RARE/NONE

This migratory butterfly winters in riparian corridors and non-native eucalyptus stands along the central and southern California coast. Roost sites are known from scattered localities along the middle and lower reaches of the Ventura River. Small numbers of butterflies were observed in flight over the project site during the site visits and it is likely that this species uses the riparian corridors for winter roosts. Annual and perennial flowering plants found within the grassland and scrub habitats adjacent to the floodplain may be important nectar sources for overwintering and migratory individuals.

Impacts: Monarchs have been observed using willow forest habitats as temporary roosts along the east side of the Ventura River north of the Main Street Bridge (Hunt, pers. obs). Overwintering roost sites were not observed here; however, individuals are present in the area throughout the winter and are quite vulnerable to disturbance when air temperatures are low. Increased human presence in this area once the trail is

completed may disturb individuals that opportunistically roost in this habitat. This would constitute an adverse, insignificant impact.

5.2.2 Fishes

Steelhead Trout (*Oncorhynchus mykiss*)

STATE/FEDERAL STATUS: CSC/CATEGORY 1

Steelhead trout are an anadromous form of rainbow trout, spending a portion of their life cycle in the ocean and spawning in freshwater. This species is a winter-run form. During the winter period when freshwater outflows in the river are sufficiently high to maintain an open channel at the river mouth mature adults ascend the river to spawn. Steelhead trout are most common in the Ventura River from December to May (Moore, 1980), although sub-adults have been seen between the Main Street bridge and Foster Park in late June (Schultz, 1990) and August (Hunt, 1991). After spawning, most of the adults return to the ocean. Hatchling steelhead emerge from the spawning gravels in late spring after an incubation period of 3-4 weeks. Juvenile steelhead typically spend 1 year in the river, although some may remain for up to 3 years. They migrate back to the ocean during periods of high flow in winter and spring, where they remain for 1-2 years. They return to their home stream to spawn and may spawn one to two times during their adult lifespan (Moore, 1980; Reiser and Bjornn, 1979).

Steelhead, once abundantly distributed from Baja California to Alaska, are now rarely found south of Ventura County. Historically, they utilized nearly all accessible California coastal streams. Water diversion, channelization and other water development practices have virtually eliminated steelhead runs from coastal streams south of San Luis Obispo County. The Ventura River is believed to be one of the southernmost streams in California currently supporting a steelhead run in most years (Moore, 1980; Leidy, 1991).

The major tributaries of the Ventura River formerly were accessible to migrating steelhead and served as the principal spawning and rearing habitat in the river system (e.g., Matilija, San Antonio and Coyote Creeks). Historical estimates of steelhead densities annually entering Matilija Creek varied between 2,500 and 3,000 and between 5,000 and 6,000 individuals for the entire watershed (Clanton, et al, 1946; Evans, 1947). Prior to the construction of Matilija Dam in 1948, Matilija Creek was the primary spawning tributary. Reports by Moore (1980) and City of San Buenaventura (1990a) characterize the stretch of river between the confluence of San Antonio Creek and Foster Park as the most important steelhead spawning and rearing habitat currently accessible in the Ventura River. The Ventura River below San Antonio Creek currently supports a heterogeneous adult salmonid population consisting

of migratory steelhead and resident rainbow trout (Tippets, 1979; Moore, 1980; City of San Buenaventura, 1990a; 1991a).

Impacts: Increased access to the active channel may allow illegal take steelhead or interference with their movements within the channel, through the construction of small check dams across the river (Hunt, pers. obs.). This would constitute a significant, unavoidable impact because access to the river would be very difficult to control once the proposed trail is in place. The overpass at Park Row Avenue to the Ventura River levee, in particular would increase access to undisturbed Ventura River floodplain habitats and thus increase the incidence of fish and wildlife disturbance.

Arroyo Chub (*Gila orcutti*)

STATE/FEDERAL STATUS: CSC/NONE

This fish was native to the Los Angeles, San Gabriel, San Luis Rey, Santa Ana and Santa Margarita Rivers and Malibu and San Juan Creeks. It has been successfully introduced far outside its native range, often with trout plants, into the Santa Clara, Ventura, Santa Ynez, Santa Maria, Cuyama and Mohave River drainages and Malibu, Arroyo Grande and Chorro Creeks (Swift, et al., 1993). They are now absent from much of their native range and are abundant only in the West Fork of the San Gabriel River (Moyle, et al., 1989). It appears to prefer low gradient streams, concentrating in pools and backwaters.

Moderate numbers have been observed immediately upstream of the Main Street bridge (Hunt, pers. obs., 1991). It is listed as abundant in the Ventura River in City of San Buenaventura reports (1990a, 1991a).

Impacts: As per the previous account.

5.2.3 Amphibians

California Red-legged Frog (*Rana aurora draytonii*)

STATE/FEDERAL STATUS: ENDANGERED/ENDANGERED

This species was formerly found in freshwater habitats throughout the Coast Range and Sierra Nevada foothills of California. Habitat destruction, conversion of streams and other lentic habitats to ponded water, and the introduction of non-native predators such as largemouth bass (*Micropterus salmoides*) and bullfrog (*Rana catesbeiana*) to these aquatic environments, has eliminated this species from 75% of its

range. Populations that remain are small and fragmented. Only 3 populations remain in central and southern California that contain greater than 350 adults (Jennings and Holland, 1992). Red-legged frogs were probably present in freshwater habitats in the project area, but no longer occur there. Records from 1940-1950 document its presence in the main stem of the Ventura River (6.4 miles NE of Ventura and the Ventura River at Coyote Creek in Foster Park) and its tributaries (San Antonio Creek, 4 miles downstream from Ojai). These specimens are mostly tadpoles (Jennings, pers. comm.). There are more recent (1970-1980) records from tributaries in the upper Ventura River drainage: 0.5 mi S Matilija Dam (LACM No. 13499); Matilija Creek at the Hot Springs (UCSB). Several mid-1970's records exist for San Antonio Creek. Red-legged frogs may be extant in the upper portions of the watershed and in the headwaters of some of the tributaries of the Ventura River wherever bass and bullfrogs have not been introduced or cannot persist. San Antonio Creek and Cañada Larga are two such candidates. It has probably been extirpated from the main stem of the Ventura River (Jennings, pers. comm.).

Impacts: It is unlikely that this species currently occurs in the main stem of the Ventura River due to habitat alteration and establishment of large populations of non-native predators. The project could potentially increase human access to tributaries that may harbor remnant populations of this frog.

5.2.4 Reptiles

Southwestern Pond Turtle (*Clemmys marmorata pallida*)

STATE/FEDERAL STATUS: CSC/CATEGORY 1

This native turtle was formerly abundant in most freshwater and brackish watercourses from central California to Baja California. Although it inhabits a wide variety of permanent and intermittent natural and man-made aquatic habitats, in riverine systems individuals are typically found in slow-moving water and pools. Habitat alteration and the introduction of non-native predators and competitors (fish, bullfrogs and crayfish) has eliminated or reduced most populations south of Ventura County in California and severely reduced population densities and juvenile recruitment and fragmented more northerly populations (Holland, 1991; Jennings and Holland, 1992). The Ventura River is one the southernmost coastal drainages in California that support viable populations of turtles.

The reproductive ecology of this species is not well known. Females appear to take 7-9 years to reach sexual maturity in central California populations and a given female may only reproduce every other year if food conditions are not favorable. Both sexes overwinter outside the watercourse. Additionally, females leave the water in late

spring to construct nest sites and lay eggs. Typically, these sites are within 200 meters of the watercourse in dense soils on dry, south or southwest-facing slopes with grassland or open scrub vegetation (Rathbun, et al, 1992). Because of these specific nest site requirements, suitable nesting habitat may be limited along a watercourse and females may display site fidelity for particular nesting areas adjacent to the watercourse (Holland, 1991; Hunt, 1994). Females are sensitive to disturbance when nesting and may abandon the attempt if disturbed. The young emerge from the nest approximately 100 days later and may overwinter in the nest and move down to the watercourse the following spring. Hatchling and juvenile mortality is very high; hence in most populations juvenile recruitment is low (Holland, 1991).

Hatchling and juvenile turtles require specialized microhabitats, different from those of the adults. Because they are so vulnerable to predation, hatchlings and juveniles spend most of their time closely associated with mats of filamentous algae amongst aquatic emergent vegetation such as cattails (*Typha* spp.) adjacent to the shoreline of pools (Holland, 1991).

Turtles have been sighted at several locations within the study area between the Main Street bridge and Foster Park. Approximately 20-40 adult individuals were observed by Hunt (1991) between a point 1 mile upstream from the Main Street bridge and the Shell Road bridge and they are frequently observed basking on rock rip-rap on the western side of the river near the northern end of the former S P Milling Company lease site (Hunt, pers. obs.). Habitat alteration and collecting in the vicinity of Foster Park may be responsible for the lack of turtles in this area, where they previously occurred (UCSB Vertebrate Museum specimen records). Because of their breeding biology, the age distribution of most populations and the regional declines experienced by most populations, this species is very susceptible to unauthorized collecting pressures. The removal of even a few breeding adults, especially females, can easily mean the demise of a population over a period of a few years (Holland, 1991).

Impacts: Individual turtles can move long distances within and away from the riparian corridor and active channel (Rathbun, et al., 1992; Hunt, 1994). Although sight records are from a relatively restricted section of the Ventura River, turtles may move up and down the watercourse, using a significant portion of the study area as aquatic and upland habitat. Females attempting to nest in upland habitats and individuals of both sexes attempting to overwinter in these habitats along the east side of the river may come in contact with users of the proposed trail, particularly that portion which would be associated with the proposed overpass to the Ventura River levee. If this occurs, collecting or mortality of adults due to interactions with bicycles would constitute a significant unavoidable impact. Disturbance of nest sites and/or females attempting to nest is a prime concern. Signage warning persons not to handle or disturb this species would probably be minimally effective.

A complete picture of the impacts of the proposed trail on this species as well as the development of suitable mitigation measures can only be made after adult males and females are radio-tagged and followed to determine overwintering and nesting locations.

Increased human access to aquatic habitats along the river channel may disturb hatchling and juvenile microhabitats. This would constitute a significant impact to juvenile recruitment. These microhabitats are already limited in areal extent. Basking and foraging turtles are easily disturbed by the presence of humans or dogs. It is unlikely that access to the river could be restricted by fencing, particularly along the portions of the river adjacent to the southern terminus.

Coast Horned Lizard (*Phrynosoma coronatum*)

STATE/FEDERAL STATUS: CSC/NONE

Horned lizards inhabit open chaparral and coastal sage scrub habitats as well as open-canopy riparian woodlands that traverse scrub habitats. They seem to occur most commonly on sandy or friable substrates and are usually active on the surface between April and October, although emergence is dependent on local climatic conditions. Despite its wide distribution throughout the coastal slope of southern California, habitat destruction is responsible for increasing fragmentation and elimination of populations of the southern California subspecies, *blainvillei*, a federal Category 1 taxon. The central and northern California form, *P.c. frontale*, is also protected and the two subspecies may intergrade across central and northern Ventura and Los Angeles Counties. It has been collected in arid upland habitats around Ojai (LACM No. 101483) and west of Lake Casitas (UCSB) however, suitable habitat is generally lacking in the study area and if present, populations are small and fragmented. The greatest potential for occurrence is an area of ruderal grassland/upland scrub habitat extending from the access road to the Ojai Valley Sanitary District sewage treatment plant northward to Casitas Vista Road. The proposed trail would pass through this area.

Impacts: If they occur in the area described above, interactions with pedestrians (collecting), bicycles and dogs would constitute a significant impact to horned lizard populations of this species at this location. These impacts would occur between April and November when this species is active above-ground. Surveys to document the occurrence of this species within the study area should be conducted during this time.

Coastal western whiptail (*Cnemidophorus tigris multiscutatus*)

STATE/FEDERAL STATUS: CSC/CATEGORY 2

Climatic and habitat requirements for this subspecies in coastal California are similar to that of *Phrynosoma coronatum* and the two species are frequently syntopic. This subspecies is widely distributed throughout coastal southern California and is becoming increasingly uncommon due to development of coastal sage scrub habitats. The project site contains riparian scrub and upland scrub/chaparral habitat for this subspecies.

Impacts: Similar to those identified for California horned lizards.

Silvery legless lizard (*Anniella pulchra pulchra*)

STATE/FEDERAL STATUS: CSC/NONE

This unique lizard is found in a wide variety of coastal and montane habitats but requires specific microhabitat conditions. Legless lizards are typically found in loose soils on south-facing slopes or flats beneath shrubs and trees that form a well-developed leaf litter. They are generally absent from soils possessing a significant clay or silt component or from soils that experience periodic saturation, overlie a high water table or are subject to frequent physical disturbance. Surface activity is concentrated between November and June, however individuals are occasionally found in mid-summer to late summer following storm events (Hunt, pers. obs.). The regional and local distribution of this lizard is highly dependent on soil type, as determined by geology. It occurs in soils with a high (greater than 60%) sand content.

Impacts: Suitable surface soils (loose soils with a high sand content and abundant leaf litter beneath shrubs) occur within the project site, however the subsoil is typically cobble and the area is subject to periodic flooding. Although known from fluvial and aeolian sand deposits at the mouth of the Ventura River as well as sedimentary deposits west of Lake Casitas (Hunt, 1992 and Hunt, pers. obs.), it is unlikely to occur in the study area due to unsuitable substrate conditions.

Two-striped Garter Snake (*Thamnophis hammondii*)

STATE/FEDERAL STATUS: CSC/NONE

This aquatic snake is typically found in perennial and intermittent, including man-made watercourses, ranging from streams and ponds to water troughs. This

species has been eliminated from much of its range in southern California due to habitat conversion, flood control projects and the introduction of non-native predatory fish and bullfrogs to many permanent water sources. It usually occurs within the riparian corridor and is typically associated with aquatic emergent vegetation around pools. It may range into chaparral and other scrub and grassland habitats adjacent to watercourses (Baldwin, 1991).

This species has been collected along the west bank of the Ventura River opposite Casitas Springs (UCSB 15708) and has been observed on several occasions in the active channel of the Ventura River approximately 1-3 miles north of the Main Street Bridge (Hunt, pers. obs.). At the latter location, all individuals were found in slow-moving or ponded water. Moderate to high quality habitat occurs within the study area within and adjacent to the active channel.

Impacts: Increased human access to aquatic habitats may damage suitable microhabitat bordering pools throughout the middle and lower portions of the Ventura River and increase the incidence of unauthorized collecting. This would constitute a significant impact, particularly in the portion of the river made accessible by the proposed overpass from Park Row Avenue to the Ventura River levee. Elimination of the overpass and controlling access would mitigate this impact to insignificant levels.

5.2.5 Birds

Cooper's Hawk (*Accipiter cooperi*)

STATE/FEDERAL STATUS: CSC/NONE

This hawk is a regionally declining breeder that nests in riparian and oak woodland. It is a rare breeding species in Ventura County and is uncommon as a migrant and winter visitor. Two individuals were sighted in riparian woodland by Hunt (1991), 1-2 miles north of the Main Street bridge and in 1992 and 1993 in the riparian corridor between Shell bridge and Foster Park. Nesting likely occurs upstream in the Ventura River riparian corridor and adjacent oak woodland habitats beginning in the Cañada Larga area.

Impacts: Increased human presence adjacent to the riparian corridor in March may interfere with courtship and early nesting in this species and would constitute an adverse, although insignificant, impact.

Least Bell's Vireo (*Vireo belli pusillus*)

STATE/FEDERAL STATUS: ENDANGERED/ENDANGERED

This species is a summer resident of riparian woodland (primarily willow-cottonwood). It formerly bred from interior northern California (Red Bluff, Tehama County) south through the Sacramento and San Joaquin Valleys and Sierra Nevada foothills and in the coast ranges from Santa Clara County south to approximately San Fernando in Baja California Norte, Mexico and in scattered desert oases. The known breeding range is now restricted to two intermittent localities in the Salinas River Valley of Monterey and San Benito Counties, one population along the Amargosa River in Inyo County and numerous small populations from southern California (Santa Barbara, Ventura, Riverside, San Bernardino and San Diego Counties) into northwestern Baja California Norte (State of California, 1991).

Major statewide declines during the past fifty years result from the combination of riparian habitat loss and increased brood parasitism by the brown-headed cowbird (*Molothrus ater*). This species lays its eggs in the nests of other species. If the eggs of the host are not removed by the female cowbird when she lays her egg, the hatchling cowbird will frequently remove unhatched host eggs or hatchlings of the host. The adult host then feeds the cowbird hatchling as if it were its own. A single female cowbird is capable of laying dozens of eggs in a season. The impacts of cowbirds on Bell's vireos and a variety of other sensitive riparian nesting bird species is significant and cowbird removal programs have been implemented on a number of southern California watercourses, including the Ventura River (Sweetwater Environmental Biologists, Inc., 1992). Cowbirds have an affinity for livestock and livestock yards and feedlots. The birds can fly large distances searching for livestock. Apparently, the action of large ungulates moving through grasslands knocks grass and forb seeds to the ground where they are made available to foraging cowbirds. The birds follow herds of cattle and horses and congregate in feedlots and around barns to forage on livestock food.

In Ventura County, very small populations of Bell's vireo persist along the middle and upper portions of the Santa Clara River between Saticoy and the junction of the river and Interstate 5. Attempts to locate Bell's Vireos in the Ventura River floodplain between the river mouth and Ojai in 1986, and farther upstream in 1991, were unsuccessful (California Department of Fish and Game, 1991). Normal and above-normal precipitation between 1991 and 1993 apparently increased fledging success and consequently increased dispersal from "core areas" in southern California (Greaves, 1992). Changes in land-use practices along the lower Ventura River at this same time may have allowed vireos to re-occupy former nesting areas.

Nesting-season records from coastal Ventura County include a pair that nested in La Jolla Canyon in Point Mugu State Park in 1978 (Webster, Lehman and Bevier, 1980) and a singing male on territory within the boundaries of the study area along the Ventura River from 1 to 15 May 1981. This bird frequented dense riparian willow habitat approximately 100-200 feet inland from the main railroad bridge. No mate was seen. On 23 April 1993 two males and a female vireo were observed by Jim Greaves and Zev Labinger approximately 1.5 miles north of the Main Street bridge, on the west side of the Ventura River. All but one male carried leg-bands, indicating that they fledged from nests on the Santa Clara and San Luis Rey Rivers in 1992. The banded male and female constructed a nest and successfully fledged two young on 2 June 1993. Parasitism of the nest by cowbirds occurred but was prevented by human intervention. In late May-early June 1994 a nesting pair was again sighted in approximately the same location by Dave Haupt. The male was unbanded and may have been the same individual that was sighted in 1993 but the banding status of the female could not be determined. The nest of this pair was not located (Labinger, pers. comm., 1994).

In 1993 the nest was approximately 6 feet above ground in mulefat. Ground cover included Brewer's saltbush and a variety of forbs such as white sweetclover and wild mustard. Early to mid-successional willow scrub habitat, suitable for vireo nest sites, occurs along the west side of the Ventura River in the immediate vicinity of the project site. Instead of restricting their foraging activity to the immediate nest site as the 1993 pair did, the 1994 pair regularly foraged along the active channel of the Ventura River (Labinger, 1994).

Impacts: 1) Horses: An equestrian trail alongside the Ventura River riparian corridor would constitute a significant impact to least Bell's vireos as well as other sensitive breeding birds. The impacts could be mitigated by prohibiting the feeding of horses anywhere along the trail; however, cumulative impacts will remain as long as horses are allowed in the floodplain. Section 6.0 and Section 7.0 discuss other mitigation measures, including a cowbird trappping program, which taken together, may reduce this impact. These impacts could be largely avoided by terminating the equestrian trail at Shell Road.

2) Humans: Nest sites in 1993 and 1994 have been located on the west side of the river, opposite the proposed trail route. Regional increases in vireo populations may mean that this species is re-establishing small breeding populations along historically occupied watercourses. Increased human presence alongside and within the riparian corridor could interfere with nesting attempts between the former S P Milling Company lease site and Foster Park as well as riparian habitats adjacent to the estuary.

Yellow Warbler (*Dendroica petechia brewsteri*)

STATE/FEDERAL STATUS: CSC/NONE

This is a regionally declining riparian breeder and is typically found in the Ventura River riparian corridor during migration; however, a small number remain to breed in willow-cottonwood forest during the summer. In 1991, at least two singing birds were found during June in riparian woodland west of the Ventura River and south of Highway 101. One bird was present in the same vicinity in late June 1992. Three males on territory were observed on the west side of the Ventura River approximately 1.5 miles north of the Main Street bridge in late April-early May 1993 and again in late May-early June of 1994 (Z. Labinger, pers. comm.). Marginal nesting habitat for this species occurs in willow woodland along the west side of the project site. This species is also parasitized by the brown-headed cowbird.

Impacts: As per least Bell's vireo.

Yellow-breasted Chat (*Icteria virens*)

STATE/FEDERAL STATUS: CSC/NONE

This regionally declining breeding species is now an uncommon but occasional breeder in Ventura County. Probable breeding individuals were sighted at the mouth of the Ventura River on 27 April, 1 May and 13 July 1979 (Webster, pers. comm.). Four individuals were found in dense willow forest on the west bank of the Ventura River between the Southern Pacific Railroad bridge and the Main Street bridge in May and June 1991 and two birds were observed in the same area on 21 June 1992. At least 3 singing males were observed on the west side of the Ventura River approximately 1.5 miles north of the Main Street bridge in late April-early May 1993 and again in late May-early June of 1994 (Z. Labinger, pers. comm.). This species is also parasitized by the brown-headed cowbird.

Impacts: As per least Bell's vireo.

Tricolored Blackbird (*Agelaius tricolor*)

STATE/FEDERAL STATUS: CSC/CATEGORY 2

This species nests in cattail and reed beds bordering marshes, ponds and pools in streams and rivers. It typically forages in large flocks with other blackbird species, in agricultural fields and grasslands. Regional declines in numbers of tricolored

blackbirds have been attributed to the cumulative loss of wetlands in conjunction with consecutive years of below-normal precipitation between 1986 and 1991. At least 9 males and 8 females were sighted in a small freshwater marsh west of the Ventura River approximately 1.5 miles north of the Main Street bridge in late April through early June 1993 (Z. Labinger, pers. comm.). This habitat is gradually filling in from soil erosion from steep bluffs adjacent to the western edge of the marsh. Rainfall during the 1993/94 season was below normal. Consequently the area is naturally succeeding to willow scrub which is less suitable nesting habitat for this species.

Impacts: Small patches of suitable marshland nesting habitat are scattered throughout the Ventura River watercourse. Increased human access to riverine habitats afforded by the proposed trail may cause abandonment of these nest sites. This is expected to be an adverse but insignificant impact because the most extensive habitat patches are located on the west side of the river on private property.

This species forages in annual and ruderal grasslands. Small patches of suitable foraging habitat occur in abandoned agricultural fields and ruderal grassland/scrub habitats between the USA Petroleum refinery site and Foster Park. Although this species has not been sighted at these specific locations, the proposed trail passes through the middle of parts of this habitat and may interfere with foraging in these areas. This is expected to be an insignificant impact due to the large amount of suitable foraging habitat in uplands west of the floodplain.

5.2.6 Mammals

Pallid Bat (*Antrozous pallidus*)

STATE/FEDERAL STATUS: CSC/NONE

This is a widespread bat of coastal, desert and lower elevation montane habitats throughout the Pacific States. Old collection records include: Ventura (MVZ Nos. 4030-31; 9446; LACM No. 30244) and Fillmore (LACM No. 8929). It also occurs on Santa Cruz Island (Brown, pers. comm.). Large fecal pellets and insect remains found beneath expansion joints under the west side of the Main Street bridge on 3 July 1992 suggest that this site is used as a temporary nighttime roost by this species (Hunt, pers. obs.). The expansion joints are large enough in places to also provide daytime roosts (Brown, pers. comm.).

Impacts: Currently the area beneath the Main Street bridge is subjected to relatively low-density, albeit continuous, visitation by homeless persons. The placement of the proposed trail beneath the Main Street bridge will allow access to a large number of persons. The necessary trail lighting will interfere with nighttime bat foraging activity. Both of these constitute a significant impact which can be mitigated to some extent by

removing lights from beneath and adjacent to the bridge. A significant cumulative impact will remain because of increased human access to the vicinity of known bat roosts.

Pacific Western Big-eared Bat (*Plecotus townsendii townsendii*)

STATE/FEDERAL STATUS: CSC/CATEGORY 2

This species is locally common in coastal and lower montane habitats throughout California although detailed information of its distribution is limited (Williams, 1986). They roost in caves, crevices and man-made structures such as buildings and mines and forage by gleaning insects from vegetation (Ingles, 1965; Brown, 1980). Williams (1986) states that suitable habitat must include appropriate roosting, maternity and hibernacula sites in close proximity and free from human disturbance. A single visit by humans can cause these bats to abandon a roost. Suitable diurnal roost sites and possibly maternity and hibernation sites occur in clefts in vertical rock walls along the upper Ventura River watershed.

Impacts: This species is not known to roost beneath the Main Street bridge however, suitable roosting habitat occurs in exposed cliffs along the west side of the riparian corridor adjacent to the proposed rest area where Highway 33 crosses over Crooked Palm Road. It is unlikely that the project, as proposed, will affect this species.

***Eumops perotis californicus* (Greater Western Mastiff Bat)**

STATE/FEDERAL STATUS: CSC/CATEGORY 2

Mastiff bats are the largest bats in California, with a wingspan exceeding two feet. They occur from central California southeastward to central Mexico (Ingles, 1965; Hall, 1981). Old collection records include the Ventura River drainage, several miles upstream from the study area: Weldon Canyon (LACM No. 30253); however, old museum records are not indicative of their continued presence in an area because of regional population declines (Williams, 1986). It has also recently (spring, 1991) been sighted in upper Piru Creek in the Santa Clara River drainage (Sweet, pers. comm.) and heard foraging within the Camarillo city limits in August, 1992 (Brown, pers. comm.). This bat emits a distinctive 12-15 kHz echolocation call, audible to most people. This species requires rugged, rocky areas with suitable large crevices for diurnal roosting. The crevices must open downward to allow the bat to free-fall several feet from its roost before opening its wings (Brown, 1992). Buildings (even in cities) and hollow trees are also used as roost sites. Western mastiff bats breed in colonies, typically composed of fewer than 100 individuals (Krutzsch, 1955) and foraging areas

may extend more than 15 miles from a roost site (Vaughn, 1959). Suitable roost sites occur in the upper Ventura River basin and individual bats may forage along the middle and lower reaches of the Ventura River from these roosts.

Impacts: The project, as proposed, is unlikely to affect this species.

Spotted Bat (*Euderma maculata*)

STATE/FEDERAL STATUS: CSC/CATEGORY 2

Spotted bats range throughout western North America from southern British Columbia to Mexico. They occur throughout California in suitable habitat (arid desert and open pine forests in rough, rocky terrain). They typically roost in rock crevices and forage large distances from these roosts (Williams, 1986). The type locality (described in 1897) for this species is at the mouth of Castaic Creek, 8 miles east of Piru, Santa Clara Valley, Ventura County (Brown, pers. comm.). Suitable habitat occurs throughout the upper Matilija and Sespe Creek drainages and individuals may use the study area when foraging from roosts in these areas (Brown, pers. comm.).

Impacts: The project, as proposed, is unlikely to affect this species.

American Badger (*Taxidea taxus*)

STATE/FEDERAL STATUS: CSC/NONE

This large, carnivorous mustelid is widely distributed throughout California in arid grassland and scrub habitats containing friable soils and relatively open, uncultivated ground where it preys primarily on rodents. Most populations in southern California lowlands have been extirpated through direct killing and urban and agricultural expansion (Williams, 1986). Recently constructed burrows of this species were observed by Hunt (1991) in the Ventura River floodplain approximately 2 miles upstream from the study area and two badgers were collected in 1985 at the Casitas Municipal Water District pumping plant at Oakview with, "...6 gophers in stomach..." (SBNHM Nos. 2286-87). California ground squirrels (*Spermophilus beecheyi*), pocket gophers (*Thomomys bottae*) and other rodents are common throughout the Ventura River floodplain. It is likely that badgers either forage or have dens along the middle and upper reaches of the project site between the USA Petroleum refinery site and Foster Park.

Impacts: The proposed trail traverses suitable badger foraging habitat. Increased human presence through these areas, especially around dawn and dusk, would interfere

with foraging activity, constituting an significant impact that can be mitigated to insignificance if the proposed trail as close as possible to the access road and Highway 33 as it heads northward away from the Ojai Valley Sanitary District sewage treatment facility.

6.0 RECOMMENDATIONS

The proposed trail plan presented in City of San Buenaventura (1993b) is a well-designed proposal to increase recreational opportunities in the Ventura area. The City of San Buenaventura should not miss the opportunity to acquire and preserve an historic transportation corridor (the Southern Pacific railroad ROW) and adapt it for use as a bicycle/pedestrian/equestrian trail. However, the plan treats the Ventura River as a general recreational resource, and the design elements of the recommended trail plan do not adequately address the environmental impacts to sensitive habitats and species along the river. The Ventura River riparian corridor contains rich cultural, historical and environmental resources, which provide unique interpretive and educational opportunities. These opportunities however, can not be fully realized if the trail design and operations adversely impact these resources. Particularly vulnerable are the biotic resources of the Ventura River.

The current biological state of the Ventura River still largely to reflects pre-settlement conditions. A primary environmental concern of the proposed trail plan is unrestricted access to what has historically been a relatively undisturbed riparian corridor. The retention of these qualities is in large measure due to this isolation from extensive human contact.

The southern terminus option (Option 1), recommended in the Trail Master Plan would result in significant impacts to riparian habitats and wildlife along the southern reaches of the Ventura River. The recommended plan calls for construction of a bicycle/pedestrian overpass over Highway 33, connecting the railroad ROW with the flood control levee on the east side of the Ventura River. The report also states the "...impacts of the trail should not be substantially greater than existing activities that occur on the levee and in the floodplain." (p. 30). This statement appears to be predicated on the assumption that trail users will remain only on the trail and not enter the riparian corridor. Current efforts to restrict access to the river by fencing along Highway 33 have proven ineffectual.

The current homeless encampments, associated trash and continual human presence of humans and especially their pets (cats and dogs) have a significant impact on the watercourse, its habitats and animals (Hunt, pers. obs.; Hunt and Lehman, 1992). Increased, unregulated access to the floodplain could result in the loss of significant educational and scientific opportunities, in addition to further degradation of habitats and wildlife values along the Ventura River riparian corridor.

The following example demonstrates an attempt to improve recreational access to the Ventura River without fully analyzing the impacts:

Prior to the installation of the 328-car parking facility fronting the beach on the Ventura County Fairgrounds, access to the beach, estuary, dunes and other environmentally sensitive habitats was restricted because of lack of nearby parking. The development of the lot was the result of a complex planning and permitting process which was initiated with the California Coastal Commission's certification of the City of San Buenaventura's Local Coastal Program (LCP) in 1984. The LCP called for improved public access to the beach. Following completion of the Master Plan in 1985, an EIR/EIS was prepared to assess the potential impacts of the proposed project. The EIR/EIS was not based on field work and as a result, did not provide a complete list of plants and animals found in the area, an analysis of habitat use on a year-round basis by these species, or an assessment of the current level of human use of the site. The EIR concluded that the project would generate no significant impacts to sensitive biological resources within and adjacent to the estuary. Subsequent modifications allowed public access to the beach and estuary at all times. The project was approved by the California Coastal Commission and had been found consistent with CEQA, NEPA and the California Coastal Act (Capelli, 1991a).

Despite its proximity to a large urbanized area, the Ventura River estuary and adjacent habitats were relatively isolated due to lack of parking facilities adjacent to the beach. The area received only a low level of human pedestrian disturbance and as a result, plant and animal life and their habitats were effectively, albeit unintentionally, protected from extensive human contact. The construction of the 328-car parking facility dramatically changed the level and pattern of human use at the mouth of the Ventura River. This was not accurately predicted nor adequately assessed during the planning stage of the project. As a result, significant negative impacts have occurred since the opening of the lot in August, 1989, including:

- remnant dunes were destroyed during the construction of the parking facility, while unrestricted human access quickly degraded remnants that remained;

- users are free to walk over the levee and across the sand bar in the summer and fall months, disturbing Least tern rearing areas (an endangered bird species) at the mouth of the river;

- recreational use of the area is no longer limited to surfing and swimming but now includes jet skiing, wind-surfing and small boats; off-road vehicle use has become a problem;

- the cobble tidepools fronting the fairgrounds now experience substantial, unrestricted use--clam populations as well as populations of marine intertidal organisms in general, have been severely reduced in this area since the parking facility and beach access was constructed;

- the dramatic increase in the number of persons and their pets along the west side of the estuary has increased disturbance to wildlife and pet dogs have frequently been observed harassing flocks of roosting shorebirds along the margins of the estuary (Hunt, pers. obs.);

- the ease with which the estuary is accessible to drive-in visitors has also invited the release of domestic waterfowl into the estuary which can carry parasites and diseases detrimental to the native species (Capelli, 1991a).

While the Ventura County Fairgrounds parking lot impacts were not anticipated by project design or mitigation measures during the planning, environmental review or permitting stages, they became apparent after the facility was opened to the public. In order to protect and restore damaged remnant coastal dunes in the area, the City of San Buenaventura produced the "Ventura County Fairgrounds Shoreline Resource Management Plan", which has attempted to restrict and control public access to the estuary, beach and intertidal cobble habitats, after the fact (City of San Buenaventura, 1986).

This example illustrates how, in practice, the preservation of fragile coastal resources has not always received the same level of consideration as the provision of public access and development of recreational opportunities (Capelli, 1991a,b). In order not to repeat this experience at the Ventura River Estuary and compound the current resource conflicts along the Ventura River, the following recommendations are made:

1) The proposed bicycle/pedestrian trail should be routed away from the river. Particularly in areas with direct access from urbanized areas, an overpass connecting the levee with the residential community of Ventura Avenue will provide a conduit for large numbers of persons into the riparian corridor. Once access has been established, it will be impossible to effectively control and the floodplain will become the site of even more illicit activity than it currently experiences by homeless persons encampments. Of primary concern is the fact that biological resources along the river will be further degraded.

The effectiveness of fencing or signage as a mitigation measure to control access in this area is highly questionable. In order to effect any sort of controlled access, the fence must be a minimum height (six feet) and maintained on a regular basis. The recommended southern terminus option calls for a combined trail on top of a widened levee. The configuration of such a design presents additional flood control problems that may directly and indirectly impact biological resources. These additional problems are discussed in Appendix 4. The Ventura County Flood Control Department has, in the past, stated its objection to fencing along the top of the levee because is could restrict maintenance activities (Sheydayi, 1993).

Passive recreational activities which are compatible with the valuable wildlife resources of the Ventura River, such as bird-watching, nature education, nature hikes, photography and scientific research should be encouraged in the floodplain. Keeping the trail along the railroad ROW, as in Options 2, 3 or 4 of the proposed plan, would maintain controlled access to the river. Appropriate signage and docent-led tours could then introduce visitors to the unique biological, geological, historical and cultural values of the river and its associated habitats.

Options 2,3 and 4 in the Trail Master Plan (City of San Buenaventura, 1993b) are environmentally superior alternatives to Option 1, the recommended southern terminus configuration (Appendix 2).

2) The equestrian trail between Shell Road and Main Street presents another conflict, as discussed in the species accounts for the least Bell's vireo and other breeding riparian birds. The lower Ventura River is already subjected to low to moderate levels of cowbird nest parasitism, to the detriment of breeding efforts by the least Bell's vireo, yellow warbler, yellow-breasted chat and other birds. An active cowbird control program is currently in force on the Ventura River. Horses in the floodplain along this portion of the river act will attract cowbirds and further exacerbate the nest parasitism problem.

An environmentally superior alternate route would terminate the equestrian trail at Shell Road instead of Main Street. This would keep horses out of the lower Ventura River riparian corridor while still allowing equestrian access to the upper portions of the trail, outside the riparian corridor. It is important that the equestrian access to the river be controlled at all points along the proposed trail, including the portion between the Ojai Valley Sanitary District facility and Foster Park.

3) The trail along the estuary, which was damaged by storm flows, should be relocated to the adjacent parking lot and the area between it and the estuary planted with native trees and shrubs to screen the estuary from pedestrians. Additionally, any existing or proposed trail lighting should be directed away from the estuary and should be kept low to the ground. This mitigation would address the expected increased traffic along this portion of the trail as a result of connecting the Omer Rains and the Ojai Valley Trails.

4) The homeless situation in the floodplain must be addressed if wildlife and passive recreation values of the lower Ventura River are to be preserved and restored. The impacts of permanent human occupation, associated trash, pets, etc., on plant and animal resources in the floodplain are significant and have been discussed previously (Hunt and Lehman, 1992; this report). Roving groups of dogs are becoming an increasingly common sight in the floodplain. These animals pose an especially serious

problem for wildlife and may be partially responsible for the dramatic decline in deer sightings in the floodplain in the past two years (Hunt, pers. obs).

5) An exotic plant management program should be implemented for those portions of the floodplain adjacent to the proposed trail. Such a management plan would increase habitat quality and wildlife values and reduce flood hazards posed by non-native plants in the floodplain. Human-induced habitat disturbance throughout the Ventura River is responsible for replacement of extensive areas of riparian habitat with non-native, invasive plant species such as water primrose (*Ludwigia uruguayensis*), wild celery (*Apium graveolens*), giant reed (*Arundo donax*) and castor bean (*Ricinus communis*). Seeds are dispersed by water or wind and, once established, these species are difficult to eliminate. Natural succession by willows and other native riparian tree and shrub species may eventually reduce or eliminate the first two aquatic species by overshading.

Giant reed and castor bean are common invasive weeds throughout riparian and upland habitats on the project site. These species greatly reduce habitat heterogeneity and associated wildlife values of a particular site by forming dense, monotypic stands. Isolated individuals and large clumps occur throughout the Ventura River adjacent to the study area. Ferren, et al. (1990) identified impacts from invasive exotic weeds as one of the significant problems in reclamation of the Ventura River Estuary.

A combination of chemical and manual control procedures appears to be especially effective on these species. The stems of these plants are cut through and a systemic contact herbicide such as " Rodeo" or "Roundup", diluted with water, is sprayed onto the cut stems with a handgun connected to a backpack source with an extension hose. The herbicide enters the cut stems and leaves and interferes with metabolic processes. Control of these invasives requires repeated manual and chemical methods to be effective. Large plants should be cut down to smaller heights before treating the plants. Cut culms should be resprayed until growth discontinues and the colony dies (Ferren, et al., 1990). Removal efforts should be concentrated in the spring after new individuals have become established but before they have a chance to establish woody growth. After the herbicide has biodegraded, the immediate vicinity can be replanted with native trees and shrubs to reduce or prevent the chance of re-invasion.

The invasive control program should continue for the duration of a vegetation monitoring effort (3 years). Two visits/year (spring and late summer) would be sufficient to control these species. It will not be possible to completely eliminate these species on the project site because of the easy access that upstream populations have via the Ventura River. However, weed control along with the reclamation of open areas may limit the ability of these species to invade large areas. The success of small-scale

exotic plant control programs ultimately depends on adoption of a comprehensive control and management program throughout the Ventura River watershed.

6) Public understanding and appreciation of the natural resource values associated with the Ventura River Trail will be an important element in any mitigation program for the project. A comprehensive interpretive program (trail signs, kiosks, pamphlet literature, docent-led hikes, etc.) should be prepared and installed concurrently with the opening of the Ventura River Trail. This interpretive program should be flexible to allow for the provision of seasonal information or changing conditions along the Ventura River corridor. The biological information contained in this report, and those cited herein, should provide a basis for such an interpretive program.

7.0 SUMMARY OF MITIGATION MEASURES

The scope and configuration of the recommended trail plan is such that impacts to wildlife, especially sensitive species, may be significant and long-term. **Most or all of these impacts under the recommended trail plan arise from increased human presence in the Ventura River riparian corridor and its effect on wildlife, their habitats and microhabitats. Hence the following summary deals with the primary cause of these impacts: human disturbance.**

Impacts and mitigation measures specific to particular taxa and particular situations are discussed in Section 5.0. Specific recommendations aimed at reducing impacts to the Ventura River and its biota are presented in Section 6.0.

CLASS I IMPACTS: SIGNIFICANT UNAVOIDABLE IMPACTS THAT REQUIRE A STATEMENT OF OVERRIDING CONSIDERATIONS

Impact: Uncontrolled human access to riverine and other floodplain habitats will significantly impact riparian plant and animal communities in general and a number of sensitive animal species in particular.

Mitigation 1: Route the bicycle/pedestrian trail away from floodplain by adopting Options 2,3, or 4 of the trail plan (Figure 2 in Appendix 2). Install appropriate signage and possibly docent-led tours to encourage passive recreational use of the floodplain. Instruct users as to the educational and scientific value of the Ventura River.

Residual Impact: Some increased level of access to the floodplain is probably inevitable but routing the proposed trail away from the river will minimize this level of disturbance.

Mitigation 2: If Option 1 is adopted, fencing must be installed along the western edge of the proposed equestrian/bicycle/pedestrian trail from its junction with Main Street north to the proposed Highway 33 overpass. The fence would have to be at least 6 feet high in order to prevent unrestricted human access to the Ventura River. Signs describing the biological and scientific values of the lower Ventura River floodplain, in conjunction with fencing, should also be installed. The absence of fencing along the bicycle/pedestrian trail would have a very significant negative impact on lower Ventura River wildlife habitats.

The riparian corridor is still accessible along the upper end of the trail from immediately south of the Cañada Larga/Highway 33 overcrossing north to Foster Park.

The level of disturbance along this section of the trail will likely be relatively lower compared to sections further south which are adjacent to urban areas. Access will be difficult to control but may be managed by signs and fencing.

Residual Impact: 1) There will always be a small proportion of users who will abuse the controlled ROW. Given the projected annual number of trail users, this percentage could translate to significant impacts to the riparian biota. Previous and existing human habitation within the floodplain demonstrates how much disturbance can be created by low to moderate numbers of persons consistently entering these riverine habitats. Therefore, the long-term residual impacts may be significant, depending on human behavior and levels of unauthorized access.

Residual Impact: 2) Fencing within the floodplain may obstruct storm flows and may increase the level of disturbance sustained by plant and animal communities during storm events. The impact of fencing on flood control maintenance activities has not been evaluated.

Residual Impact: 3) A combined equestrian/bicycle/pedestrian trail on top of the levee presents a problem where the two components diverge at the proposed bicycle/pedestrian overpass over Highway 33. At this point a provision would have to be made in the fence to allow equestrian users to continue north along the levee and lower bench road. This modification would compromise the intent of the 6-foot high fence. Compromises in the configuration and integrity of the fence would also have to be made to accomodate the numerous access roads and storm drains that traverse the existing flood control levee (See attachment in Appendix 4 for additional comments on this factor).

CLASS II IMPACTS: SIGNIFICANT IMPACTS THAT CAN BE MITIGATED

Impact: The presence of horses in the lower Ventura River may attract cowbirds, a nest parasite on sensitive breeding birds in the riparian corridor and the object of intense control efforts. Hay and other feed, in addition to horse droppings deposited along the trail, will attract cowbirds.

Mitigation: Terminate the equestrian trail at Shell Road.

Residual Impacts: None.

Mitigation: Prohibit equestrian users from supplemental feeding of horses anywhere along the trail. Do not allow hay or other ground cover to accumulate along the trail and keep the trail clean of horse droppings. Allocate funds for the continuation of a cowbird-trapping program on the Ventura River. The current level-of-effort costs approximately $ 5,000 per year.

Residual Impacts: Impacts can be reduced by cowbird trapping, but as long as horses are allowed in the floodplain, they will continue to be an attractant to cowbirds.

Impact: The equestrian trail with a southern terminus at Main Street, would bisect a remnant patch of high quality mixed chaparral/coastal sage scrub habitat at the northern end of the bench road associated with the levee. This habitat contains several shrub species rare or absent from other parts of the immediate floodplain and represents a remnant of a vegetation type which formerly covered much of the floodplain prior to development in the valley.

*1) **Mitigation:*** Terminate the equestrian trail at Shell Road.

Residual Impact: None.

*2) **Mitigation:*** Route the trail to stay as close as possible to the fence line along Highway 33, where this habitat type has incurred the most disturbance. The placement and construction of this section of the trail should be supervised by a qualified biologist in order to minimize impacts to existing resources.

Institute a program of exotic plant control and restoration of native plant species in the vicinity of this section of the trail to replace what is lost during construction. Install educational signage at this point to illustrate the importance and former extent of this habitat type in the valley.

Residual Impacts: None if mitigation measures are accepted.

Impact: Equestrians may have easy access to large portions of the Ventura River and could significantly damage riverine and other wetland microhabitats that are important to a number of sensitive amphibian and reptile species known to inhabit the Ventura River.

Mitigation: Fence the equestrian trail and install signs instructing all users, riders and their horses not to enter river channel or riparian corridor.

Note: The impact of fencing on flood control maintenance activities and the physical presence of fencing along the levee as a potential floodwater obstruction has not been evaluated by the Ventura County Flood Control Department.

Residual Impacts: None.

CLASS III IMPACTS: ADVERSE IMPACTS THAT ARE NOT SIGNIFICANT:

NONE

CLASS IV IMPACTS: CUMULATIVE IMPACTS

Impact: The trail between Crooked Palm Road/Highway 33 overpass and Foster Park will provide unrestricted access to the riparian corridor and active river channel.

Mitigation: Fencing, signs and an active trail maintenance program may reduce this problem.

Residual Impact: Human access to the river along this section will be improved by the bike trail. However, these impacts will not be as severe as those farther south because the northern portions of the trail are outside urban areas, with a dense population of potential trail users.

8.0 CONCLUSIONS

Due to the patterns of residential growth and land use as well as the construction of a major transportation corridor effectively separating it from the City of San Buenaventura, the Ventura River floodplain has remained relatively isolated and undisturbed. In fact, for its size, perennial nature, proximity to a large urban area, diversity of plant and animal species and number of sensitive species found within and adjacent to the riparian corridor, the Ventura River is one of the very few watercourses left in southern California that bear any semblance to pre-settlement conditions.

Despite past flood control and land reclamation activities which have restricted the river to its present-day floodplain configuration along the west side of the valley as well as impounding approximately 42% of its watershed, the river remains an outstanding example of biological diversity. The following are some highlights:

- The diversity of plant communities contained within and adjacent to the floodplain is unique, and is a major factor in the animal diversity found therein.

- The river is home to at least 500 species of plants, an unknown number of invertebrates and 284 species of vertebrates. The tally continues to grow as the system is studied further. This includes at least nineteen sensitive species, including six species listed by state and federal agencies as threatened or endangered.

- The river is home to one of the largest known bat roosts in coastal southern California.

- The estuary supports the largest known population of the state and federally endangered tidewater goby (*Eucyclogobius newberryi*). Whereas other populations in California are on the verge of extinction, the Ventura River population is large enough to furnish samples for re-introduction to other estuaries.

- The river supports one of the few viable steelhead salmon runs remaining in southern California. This species is currently being proposed for listing as threatened.

- The state and federally endangered least Bell's vireo has resumed breeding in the lower Ventura River following abandonment of a sand and gravel mining operation, after a hiatus of at least 20 years.

- The river and/or its tributaries support viable populations of three key species whose common demise in California is a bellwether of riparian habitat alteration and elimination: the southwestern pond turtle, California red-legged frog and the two-striped garter snake.

- The river mouth provides critical foraging and roosting habitat for the endangered California brown pelican, snowy plover and California least tern.

- Remnant coastal sand dunes near the mouth of the river is a sensitive habitat which was formerly common but is now very rare in the Ventura area. These dunes harbor small populations of the silvery legless lizard, the only limbless lizard in the western United States.

- Within and adjacent to the mouth of the river is a rocky intertidal shoreline, which is a relatively rare habitat in southern California. This type of substrate provides critical attachment sites for a huge diversity of marine plants and intertidal invertebrates and supports a significant population of littleneck clams (*Protothaca staminea*) as well as other species of clams.

- The lower Ventura River provides one of the best examples remaining in southern California of the biological and geological interface between freshwater, marine and terrestrial environments that were formerly commonly afforded by major coastal streams and rivers.

- The biological value of the lower reaches of the river have recently been recognized by state and local agencies: A management plan has recently been approved that calls for the rehabilitation of habitats within and adjacent to the Ventura River estuary that have been damaged by previous human activities and non-native plant invasions (City of San Buenaventura 1992; 1994) and a habitat restoration plan is currently underway to restore biological values of sand and gravel mining sites on the lower reaches of the river (Hunt, 1992).

In short, the Ventura River is an outstanding example of a coastal riparian environment. Its biological resources, if properly managed, can provide a wealth of educational and research opportunities to the community as well as promote valuable opportunities for passive recreational activities. To regard it simply as a general recreational resource would be to overlook its biological significance.

The recommended trail route and southern terminus plan and an equestrian trail extending to the Main Street bridge, will result in significant impacts to the plant and animal resources along the Ventura River. This report proposes mitigation measures which will reduce or eliminate these impacts however, these measures are contingent on the placement of split-rail and cyclone fencing to restrict access to the floodplain riparian corridor. Ventura County Flood Control Department has not evaluated the placement of fencing along the toe of the existing flood control levee. **An environmentally superior alternative is to route the proposed bicycle/pedestrian**

trail to the east side of Highway 33 until it reaches Main Street and terminate the equestrian trail at Shell Road.

The mitigation measures proposed in this report are focused on effectively controlling access to fragile riverine habitats along the Ventura River, as well as preserving the biological values of the river for passive recreational pursuits which are more compatible with existing and future management plans.

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APPENDIX 1. VERTEBRATE SPECIES KNOWN OR EXPECTED TO OCCUR WITHIN OR ADJACENT TO THE PROJECT SITE

APPENDIX 1. This appendix contains species that were observed in the middle and lower portions of the Ventura River during the field surveys between June 1991 and July 1994 (Hunt and Lehman, 1992) and a survey of the study area on 11 July 1994. Species documented as occurring in or near the project site through literature and museum records and discussions with local biologists are also included. The bird list is derived from sight and auditory records gathered between 1979 and 1993. Occurrence of fish species is based on reports by the City of San Buenaventura (1990; 1991) as well as direct observations during field surveys. This list contains only species-level taxa. The text discusses sensitive races of these species.

The seasonal status of birds was rated as follows:

R = Permanent resident in project area

S = Summer resident [(*) = breeds in project area]

M = Spring and/or Fall migrant to project area

W = Winter visitor to project area

FISHES

NATIVE FRESHWATER SPECIES

SCIENTIFIC NAME	COMMON NAME
Family Petromyzontidae (Lampreys)	
Lampetra tridentata [1]	Pacific Lamprey
Family Salmonidae (Trout and Salmon)	
Oncorhynchus mykiss [1]	Steelhead Trout
Family Cyprinidae (Minnows and Carp)	
Gila orcutti	Arroyo Chub
Family Gasterosteidae (Sticklebacks)	
Gasterosteus aculeatus microcephalus	Partially-armored Stickleback

[1] = anadromous species

FISHES (continued)

NATIVE ESTUARINE SPECIES

SCIENTIFIC NAME	COMMON NAME
INTRODUCED FRESHWATER SPECIES	
Family Cyprinidae (Minnows and Carp)	
Cyprinus carpio	Common Carp
Family Ictaluridae (Catfish)	
Ictalurus punctatus	Channel Catfish
Ictalurus natalis	Yellow Bullhead
Family Poeciliidae (Livebearers)	
Gambusia affinis	Mosquitofish
Family Centrarchidae (Sunfishes)	
Lepomis cyanellus	Green Sunfish
Micropterus salmoides	Largemouth Bass

AMPHIBIANS

NATIVE SPECIES

Family Plethodontidae	
Aneides lugubris	Arboreal Salamander
Batrachoseps nigriventris	California Slender Salamander
Ensatina eschscholtzii	Ensatina
Order Anura	
Family Bufonidae	
Bufo boreas	Western Toad
Family Hylidae (Treefrogs)	
Hyla cadaverina	California Treefrog
Pseudacris regilla	Pacific Treefrog

INTRODUCED AMPHIBIANS

SCIENTIFIC NAME	COMMON NAME
Order Anura	
Family Ranidae (True Frogs)	
Rana catesbeiana	Bullfrog

REPTILES

NATIVE SPECIES

Order Squamata	
Suborder Testudinata (Turtles)	
Family Emydidae (Water Turtles)	
Clemmys marmorata pallida	Southwestern Pond Turtle
Suborder Sauria (Lizards)	
Family Iguanidae (Iguanids)	
Phrynosoma coronatum	Coast Horned Lizard
Sceloporus occidentalis	Western Fence Lizard
Uta stansburiana	Side-blotched Lizard
Family Scincidae (Skinks)	
Eumeces skiltonianus	Western Skink
Family Teiidae (Whiptails)	
Cnemidophorus tigris	Western Whiptail
Family Anguidae (Alligator Lizards and Allies)	
Gerrhonotus multicarinatus	Southern Alligator Lizard
Anniella pulchra	California Legless Lizard
Suborder Serpentes (Snakes)	
Family Leptotyphlopidae	
Leptotyphlops humilis	Western Blind Snake

REPTILES (continued)

Family Colubridae (Colubrids)

Coluber constrictor	Racer
Pituophis melanoleucus	Gopher Snake
Diadophis punctatus	Ringneck Snake
Hypsiglena torquata	Night Snake
Lampropeltis getulus	California Kingsnake
Lampropeltis zonata	California Mountain Kingsnake
Masticophis flagellum	Coachwhip
Masticophis lateralis	Striped Racer
Tantilla planiceps	Western Black-headed Snake
Thamnophis hammondii	Two-striped Garter Snake
Trimorphodon biscutatus	Lyre Snake

Family Viperidae (Rattlesnakes and Vipers)

Crotalus viridis	Western Rattlesnake

BIRDS

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	SEASON
NATIVE SPECIES			
Order Podicipediformes			
Family Podicipedidae (Grebes)			
Podilymbus podiceps	Pied-billed Grebe	U	M,W
Podiceps auritus	Horned Grebe	R	M,W
Podiceps nigricollis	Eared Grebe	U	M,W
Order Ciconiiformes			
Family Ardeidae (Herons)			
Ardea herodias	Great Blue Heron	U	M,W
Casmerodius albus	Great Egret	R	M,W
Egretta thula	Snowy Egret	U	M,W
Butorides striatus	Green-backed Heron	U	R
Nycticorax nycticorax	Black-crowned Night Heron	U	M,W
Order Anseriformes			
Family Anatidae (Swans, Geese and Ducks)			
Anas crecca	Green-winged Teal	U	M,W
Anas platyrhynchos	Mallard	C	R(*)
Anas acuta	Northern Pintail	U	M,W
Anas discors	Blue-winged Teal	R	M

BIRDS (continued)

NATIVE SPECIES (continued)

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	SEASON
Anas cyanoptera	Cinnamon Teal	U	M
Anas clypeata	Northern Shoveler	R	M,W
Anas strepera	Gadwall	R	M,W
Anas americana	American Widgeon	U	M,W
Aythya collaris	Ring-necked Duck	R	M,W
Aythya marila	Greater Scaup	R	M,W
Aythya affinis	Lesser Scaup	U	M,W
Bucephala clangula	Common Goldeneye	R	M,W
Bucephala albeola	Bufflehead	U	M,W
Mergus serrator	Red-breasted Merganser	U	M,W
Oxyura jamaicensis	Ruddy Duck	U	M,W
Order Falconiformes			
Family Cathartidae (Vultures)			
Cathartes aura	Turkey Vulture	R	M
Family Accipitridae (Kites, Hawks and Eagles)			
Accipiter striatus	Sharp-shinned Hawk	U	M,W
Accipiter cooperi	Cooper's Hawk	U	M,W
Buteo lineatus	Red-shouldered Hawk	R	M,W
Buteo jamaicensis	Red-tailed Hawk	U	M,W
Family Falconidae (Falcons)			
Falco sparverius	American Kestrel	U	M,W
Order Galliformes			
Family Phasianidae (Grouse, Quail and Ptarmigan)			
Callipepla californica	California Quail	X	R(*)
Order Gruiformes			
Family Rallidae (Rail, Gallinules and Coots)			
Porzana carolina	Sora	U	M,W
Fulica americana	American Coot	C	M,W

BIRDS (continued)

NATIVE SPECIES (continued)

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	SEASON
Order Charadriiformes			
Family Charadriidae (Plovers)			
Pluvialis squatarola	Black-bellied Plover	U	M,W
Charadrius vociferus	Killdeer	C	R(*)
Family Scolopacidae (Sandpipers)			
Tringa melanoleuca	Greater Yellowlegs	U	M,W
Tringa flavipes	Lesser Yellowlegs	R	M
Heteroscelus incanus	Wandering Tattler	R	M,W
Actitis macularia	Spotted Sandpiper	U,R	M,W
Numenius phaeopus	Whimbrel	U	M,W
Numenius americanus	Long-billed Curlew	R	M,W
Limosa fedoa	Marbled Godwit	C	M,W
Gallinago gallinago	Common Snipe	U	M,W
Phalaropus tricolor	Wilson's Phalarope	R	M,W
Family Scolopacidae (continued)			
Phalaropus lobatus	Red-necked Phalarope	R	M
Family Laridae (Gulls and Terns)			
Larus philadelphia	Bonaparte's Gull	U	M,W
Larus heermanni	Heermann's Gull	C	M,W
Larus canus	Mew Gull	C	M,W
Larus delawarensis	Ring-billed Gull	C	M,W
Larus californicus	California Gull	C	M,W
Larus argentatus	Herring Gull	R	M,W
Larus thayeri	Thayer's Gull	R	M,W
Larus occidentalis	Western Gull	C	R
Larus glaucescens	Glaucous-winged Gull	U	M,W
Sterna elegans	Elegant Tern	C	M
Sterna forsteri	Forster's Tern	U	M,W
Order Columbiformes			
Family Columbidae (Pigeons and Doves)			
Columba fasciata	Band-tailed Pigeon	R	M,W
Zenaida macroura	Mourning Dove	C	R(*)

BIRDS (continued)

NATIVE SPECIES (continued)

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	SEASON
Order Strigiformes			
Family Tytonidae (Barn Owls)			
Tyto alba	Barn Owl	?	R
Family Strigidae (Owls)			
Bubo virginianus	Great Horned Owl	?	R(*)
Asio flammeus	Short-eared Owl	X	M,W
Order Caprimulgiformes			
Family Caprimulgidae (Nightjars)			
Chordeiles acutipennis	Lesser Nighthawk	X	M
Order Apodiformes			
Family Apodidae (Swifts)			
Chaetura vauxi	Vaux's Swift	U	M
Aeronautes saxatalis	White-throated Swift	U	M
Family Trochilidae (Hummingbirds)			
Archilochus alexandri	Black-chinned Hummingbird	U	M
Calypte anna	Anna's Hummingbird	C	R(*)
Calypte costae	Costa's Hummingbird	R	M
Selasphorus rufus	Rufous Hummingbird	R	M
Selasphorus sasin	Allen's Hummingbird	U	S(*)
Order Coraciiformes			
Family Alcedinidae (Kingfishers)			
Ceryle alcyon	Belted Kingfisher	U	M,W
Order Piciformes			
Family Picidae (Woodpeckers)			
Sphyrapicus varius	Red-breasted Sapsucker	R	M,W
Picoides nuttallii	Nuttall's Woodpecker	R	R
Picoides pubescens	Downy Woodpecker	U	R(*)
Colaptes auratus	Northern Flicker	U	M,W

BIRDS (continued)

NATIVE SPECIES (continued)

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	SEASON
Order Passeriformes			
Family Tyrannidae (Tyrant Flycatchers)			
Contopus borealis	Olive-sided Flycatcher	R	M
Contopus sordidulus	Western Wood-Pewee	U	M
Empidonax traillii	Willow Flycatcher	R	M
Empidonax hammondii	Hammond's Flycatcher	R	M
Empidonax difficilis	Pacific-slope Flycatcher	U	M
Sayornis nigricans	Black Phoebe	U	R(*)
Sayornis saya	Say's Phoebe	U	M,W
Myiarchus cinerascens	Ash-throated Flycatcher	U	M
Tyrannus couiferans	Cassin's Kingbird	R	M
Tyrannus verticalis	Western Kingbird	U	M
Family Alaudidae (Larks)			
Eremophila alpestris	Horned Lark	R	M
Family Hirundinidae (Swallows)			
Tachycineta bicolor	Tree Swallow	U,R	M,S
Tachycineta thalassina	Violet-green Swallow	U	M
Stelgidopteryx serripennis	Northern Rough-winged Swallow	C	S(*)
Hirundo pyrrhonota	Cliff Swallow	C	S(*)
Hirundo rustica	Barn Swallow	U	M
Family Corvidae (Crows and Jays)			
Aphelocoma coerulescens	Scrub Jay	U	R(*)
Corvus brachyrhynchos	American Crow	C	R(*)
Corvus corax	Common Raven	U	R(*)
Family Paridae (Titmice and Chickadees)			
Parus inornatus	Plain Titmouse	?	?
Family Aegithalidae (Bushtit)			
Psaltriparus minimus	Bushtit	C	R(*)
Family Sittidae (Nuthatches)			
Sitta canadensis	Red-breasted Nuthatch	R	M,W

BIRDS (continued)

NATIVE SPECIES (continued)

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	SEASON
Family Certhiidae (Creepers)			
Certhia americana	Brown Creeper	R	M,W
Family Troglodytidae (Wrens)			
Salpinctes obsoletus	Rock Wren	U	M
Thryomanes bewickii	Bewick's Wren	C	R(*)
Troglodytes aedon	House Wren	U	M
Family Muscicapidae (Thrushes)			
Regulus satrapa	Golden-crowned Kinglet	R	M,W
Regulus calendula	Ruby-crowned Kinglet	C	M,W
Polioptila caerulea	Blue-gray Gnatcatcher	U	M,W
Catharus ustulatus	Swainson's Thrush	R	M
Catharus guttatus	Hermit Thrush	U	M,W
Turdus migratorius	American Robin	R	M,W
Chamaea fasciata	Wrentit	C	R(*)
Family Mimidae (Mimic Thrushes)			
Mimus polyglottos	Northern Mockingbird	C	R(*)
Toxostoma redivivum	California Thrasher	C	R(*)
Family Motacillidae (Pipits and Wagtails)			
Anthus spinoletta	American Pipit	C	M,W
Family Bombycillidae (Waxwings)			
Bombycilla cedrorum	Cedar Waxwing	U	M,W
Family Laniidae (Shrikes)			
Lanius ludovicianus	Loggerhead Shrike	U	M,W
Family Vireonidae (Vireos)			
Vireo belli	Bell's Vireo	X	S
Vireo solitarius	Solitary Vireo	R	M
Vireo huttoni	Hutton's Vireo	U	R(*)
Vireo gilvus	Warbling Vireo	U	M

BIRDS (continued)

NATIVE SPECIES (continued)

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	SEASON
Family Emberizidae (Warblers, Sparrows, Blackbirds and Orioles)			
Vermivora celata	Orange-crowned Warbler	U	M,W
Vermivora ruficapilla	Nashville Warbler	R	M
Dendroica petechia	Yellow Warbler	U	S(*)
Dendroica coronata	Yellow-rumped Warbler	C	M,W
Dendroica nigrescens	Black-throated Gray Warbler	R	M
Dendroica townsendi	Townsend's Warbler	U	M
Dendroica occidentalis	Hermit Warbler	R	M
Oporornis tolmiei	MacGillivray's Warbler	R	M
Geothlypis trichas	Common Yellowthroat	C	M,W
Wilsonia pusilla	Wilson's Warbler	U	M
Icteria virens	Yellow-breasted Chat	U	S(*)
Piranga ludoviciana	Western Tanager	U	M
Pheucticus melanocephalus	Black-headed Grosbeak	C	S(*)
Passerina amoena	Lazuli Bunting	R	M
Pipilo erythrophthalmus	Rufous-sided Towhee	C	R(*)
Pipilo crissalus	California Towhee	C	R(*)
Spizella passerina	Chipping Sparrow	R	M
Chondestes grammacus	Lark Sparrow	R	M
Family Emberizidae (continued)			
Passerella iliaca	Fox Sparrow	R	M,W
Melospiza melodia	Song Sparrow	C	R(*)
Melospiza lincolnii	Lincoln's Sparrow	U	M,W
Zonotrichia atricapilla	Golden-crowned Sparrow	C	M,W
Zonotrichia leucophrys	White-crowned Sparrow	C	M,W
Junco hyemalis	Dark-eyed Junco	U	M,W
Agelaius phoeniceus	Red-winged Blackbird	U	R(*)
Agelaius tricolor	Tricolored Blackbird	R	M,W
Sturnella neglecta	Western Meadowlark	C	M,W
Xanthocephalus xanthocephalus	Yellow-headed Blackbird	R	M
Euphagus cyanocephalus	Brewer's Blackbird	C	R(*)
Molothrus ater	Brown-headed Cowbird	C	R(*)
Icterus cucullatus	Hooded Oriole	R	M
Icterus galbula	Northern Oriole	U	M
Family Fringillidae (Finches)			
Carpodacus purpureus	Purple Finch	U	M,W

BIRDS (continued)

NATIVE SPECIES (continued)

SCIENTIFIC NAME	COMMON NAME	ABUNDANCE	SEASON
Family Fringillidae (continued)			
Carpodacus mexicanus	House Finch	C	R(*)
Carduelis pinus	Pine Siskin	R	M,W
Carduelis psaltria	Lesser Goldfinch	U	R(*)
Carduelis tristis	American Goldfinch	U	R(*)

INTRODUCED SPECIES

Order Columbiformes

Family Columbidae (Pigeons and Doves)

Columba livia	Rock Dove	C	R(*)

Order Passeriformes

Family Sturnidae (Starlings)

Sturnus vulgaris	European Starling	C	R(*)

Family Passeridae (Weavers)

Passer domesticus	House Sparrow	U	R(*)

MAMMALS

NATIVE SPECIES

SCIENTIFIC NAME	COMMON NAME
Order Insectivora	
Family Soricidae (Shrews)	
Scapanus latimanus	Broad-footed Mole
Order Chiroptera	
Family Vespertilionidae (Plainnose Bats)	
Antrozous pallidus	Pallid Bat
Eptesicus fuscus	Big Brown Bat

MAMMALS (continued)

NATIVE SPECIES

SCIENTIFIC NAME	COMMON NAME
Family Vespertilionidae (continued)	
Myotis yumanensis	Yuma Myotis
Myotis californicus	California Myotis
Myotis leibii	Small-footed Myotis
Myotis evotis	Long-eared Myotis
Myotis thysanodes	Fringed Myotis
Myotis volans	Long-legged Myotis
Lasiurus cinereus	Hoary Bat
Lasiurus borealis	Red Bat
Lasionycteris noctivagans	Silver-haired Bat
Pipistrellus hesperus	Western Pipistrelle
Plecotus townsendii	Big-eared Bat
Family Molossidae (Freetail Bats)	
Tadarida brasiliensis	Mexican Freetail Bat
Eumops perotis	Western Mastiff Bat
Order Lagomorpha	
Family Leporidae (Hares and Rabbits)	
Sylvilagus bachmani	Brush Rabbit
Sylvilagus audubonii	Audubon's Cottontail
Order Rodentia	
Family Sciuridae (Squirrels)	
Spermophilus beecheyi	California Ground Squirrel
Family Geomyidae (Pocket Gophers)	
Thomomys bottae	Botta's Pocket Gopher
Family Cricetidae (Mice)	
Reithrodontomys megalotis	Western Harvest Mouse
Peromyscus californicus	California Mouse
Peromyscus maniculatus	Deer Mouse
Neotoma fuscipes	Dusky-footed Woodrat
Microtus californicus	California Vole

MAMMALS (continued)

NATIVE SPECIES (continued)

SCIENTIFIC NAME	COMMON NAME
Order Carnivora	
Family Canidae (Dogs, Wolves and Foxes)	
Canis latrans	Coyote
Urocyon cinereoargenteus	Gray Fox
Family Procyonidae (Raccoons and Coatis)	
Procyon lotor	Raccoon
Family Bassariscidae (Ringtails)	
Bassariscus astutus	Ringtail
Family Mustelidae (Skunks)	
Mephitis mephitis	Striped Skunk
Spilogale putorius	Spotted Skunk
Mustela frenata	Long-tailed Weasel
Family Felidae (Cats)	
Felis rufus	Bobcat
Felis concolor	Mountain Lion
Family Ursidae (Bears)	
Ursus americanus	Black Bear
Order Artiodactyla	
Family Cervidae (Deer)	
Odocoileus hemionus	Blacktail Deer

INTRODUCED MAMMALS

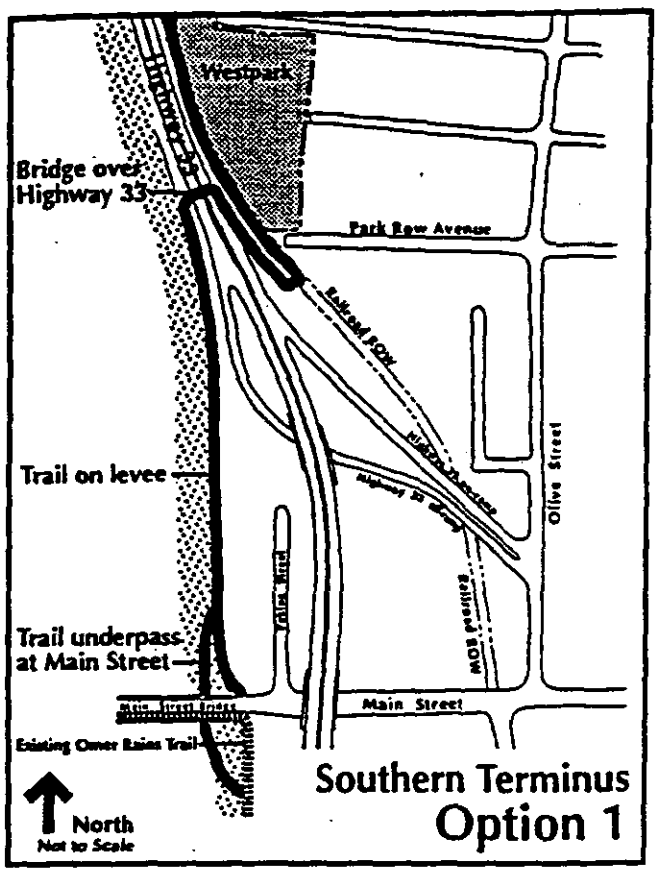
Order Didelphimorphia	
Family Didelphidae (New World Opossums)	
Didelphis virginianus	Virginia Opossum

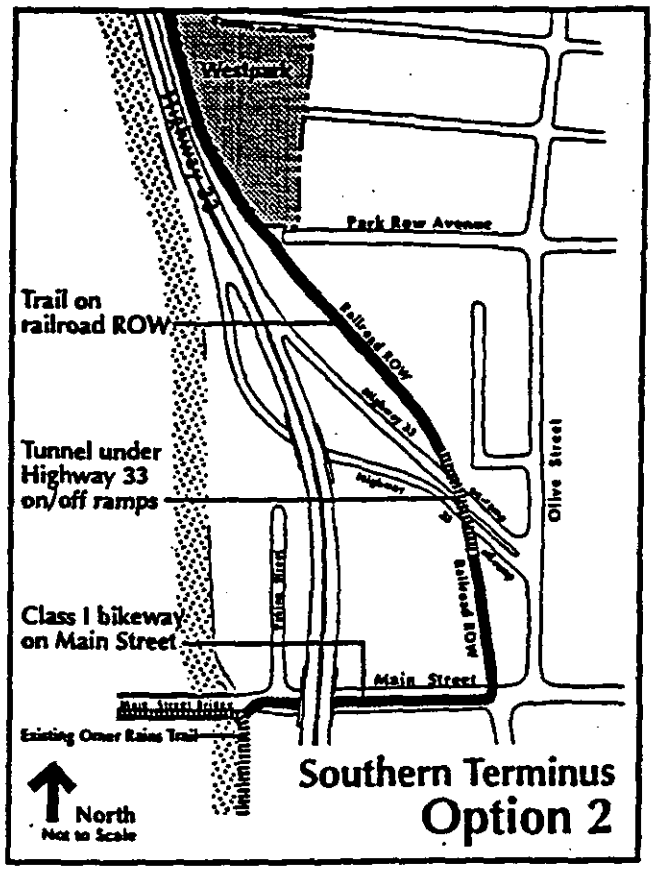
INTRODUCED MAMMALS (continued)

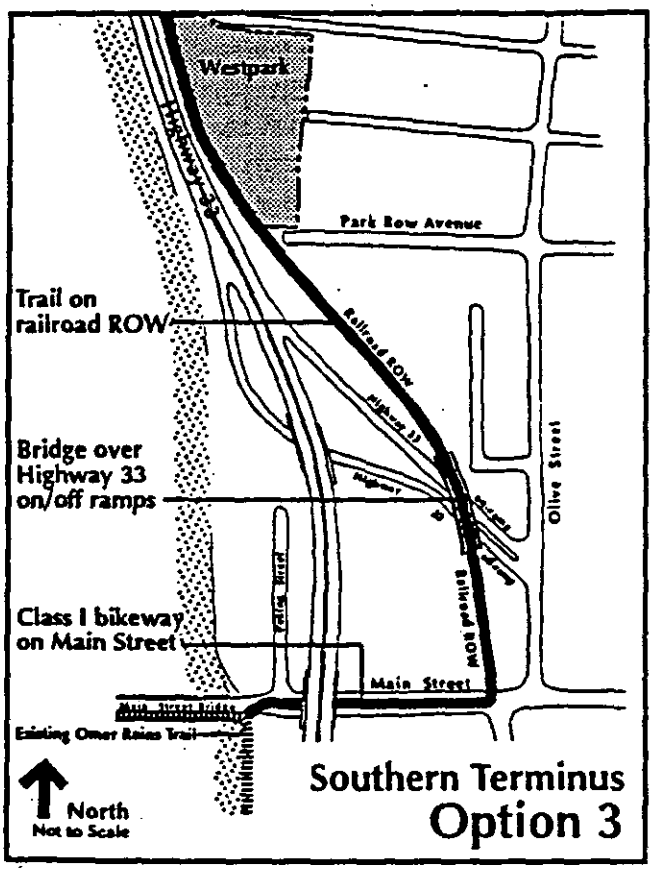
SCIENTIFIC NAME	COMMON NAME
Order Rodentia	
Family Muridae (Old World Rats and Mice)	
Mus musculus	House Mouse
Rattus rattus	Black Rat
Order Carnivora	
Family Canidae (Dogs, Wolves and Foxes)	
Canis familiaris	Feral Dog
Family Felidae (Cats)	
Felis catus	Feral Cat

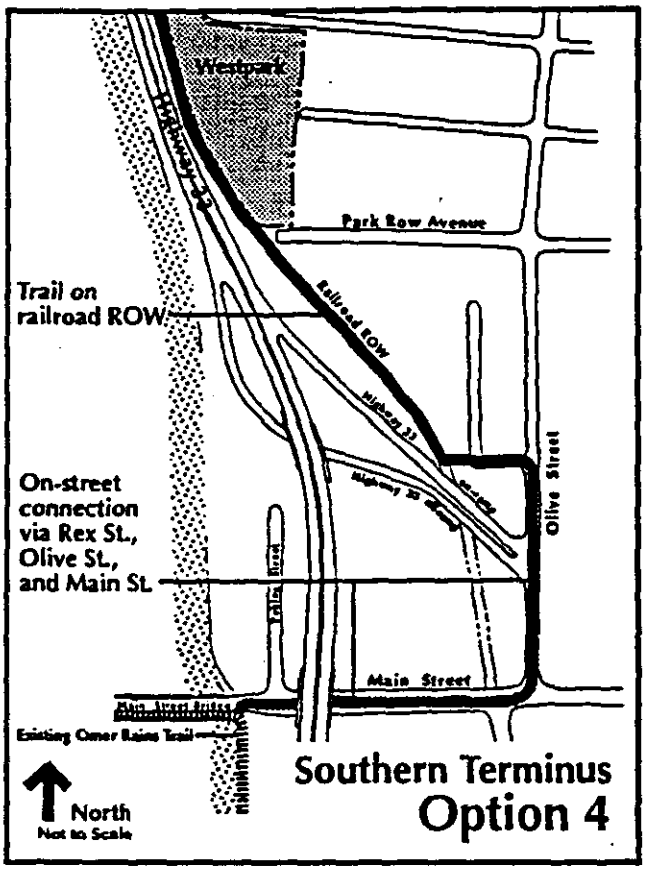
APPENDIX 2. SUMMARY OF SOUTHERN TERMINUS OPTIONS

(City of San Buenaventura (1993b)


Westpark
Bridge over Highway 33
Park Row Avenue
Railroad ROW
Trail on levee
Olive Street
Trail underpass at Main Street
Main Street
Existing Omer Rains Trail
North
Not to Scale
Southern Terminus
Option 1


Westpark
Park Row Avenue
Trail on railroad ROW
Railroad ROW
Tunnel under Highway 33 on/off ramps
Olive Street
Class I bikeway on Main Street
Main Street
Existing Omer Rains Trail
North
Not to Scale
Southern Terminus
Option 2


Westpark
Park Row Avenue
Trail on railroad ROW
Railroad ROW
Bridge over Highway 33 on/off ramps
Olive Street
Class I bikeway on Main Street
Main Street
Existing Omer Rains Trail
North
Not to Scale
Southern Terminus
Option 3


Westpark
Park Row Avenue
Trail on railroad ROW
Railroad ROW
On-street connection via Rex St., Olive St., and Main St.
Olive Street
Main Street
Existing Omer Rains Trail
North
Not to Scale
Southern Terminus
Option 4

APPENDIX 3. RECOMMENDED TRAIL PLAN

(City of San Buenaventura, 1993b)

APPENDIX 4. ADDITIONAL COMMENTS REGARDING PROPOSED TRAIL PLAN

Ms. Kathy Lowry
City of San Buenaventura
Planning Dept., Traffic Division
501 Poli Street
P.O. Box 99
Ventura, CA 93002-0099

2 September 1994

Dear Ms. Lowry,

In order to clarify our telephone conversation yesterday, I would like to again outline my recommendations regarding the southern terminus of the proposed Ventura River trail.

In my Biological Assessment of the project I misunderstood the proposed configuration of the bicycle/pedestrian and equestrian components of the trail in the vicinity of the flood control levee. I assumed that the equestrian trail would be a completely separate component from the bicycle/pedestrian trail. My misunderstanding was based on the configuration shown on the recommended trail plan map in the Master Plan report. As per our discussion yesterday, the Master Plan recommends a combined component trail on top of the levee that calls for widening the levee to at least 40 feet (Alternative D; Option 1). I have a number of problems with this configuration, consistent with the conclusions of my report:

1) If the recommended option is adopted and the trail follows the levee, a six-foot high fence is mandatory. A six-foot high fence extending from Main Street along the top of the levee on the river side will certainly reduce, but not eliminate, access to the riparian corridor. The large homeless population currently living in the floodplain crosses the levee and easily passes through several holes in the Highway 33 barrier fence in order to access the Ventura Avenue/Main Street area. I envision the same fate for the bicycle/pedestrian trail fence without constant patrolling. I certainly cannot predict human behavior or attest to the efficacy of fencing in reducing impacts to insignificant levels. Therefore I cannot state that adoption of this mitigation measure will reduce Class I impacts to insignificant levels.

2) A combined equestrian/pedestrian/bicycle trail on top of the levee presents a problem where the two components diverge at the proposed pedestrian/bicycle overpass over Highway 33. At this point a provision would have to be made in the six-foot high fence to allow equestrian users to continue north along the levee and lower bench road. This modification would compromise the intent of the six-foot fence in this area. The fact that the same sort of arrangement must be made where the combined-use trail diverges into separate components near Crooked Palm Avenue undercrossing, is not as serious a concern because the trail is some distance away from urban centers at this point.

3) The flood control levee currently has several access roads leaving it at oblique angles to access a series of storm drains that pass through the base of the levee. How would a six-foot high fence at the top of the levee negotiate these roads and still allow flood control maintenance operations?

4) The Master Plan calls for increasing the width of the levee to at least 40 feet to accommodate all users. This would involve a considerable modification of the existing levee structure in the form of fill and rip-rap protection. The plan to route the trail beneath the Main Street bridge by constructing ramps off the levee has already met

with strong objections from the Ventura County Flood Control District and environmental groups (letters from Alex Sheydayi, Director of Flood Control Department to Mary Lou Schill, City Parks and Recreation Department and Mark Capelli, Executive Director, Friends of the Ventura River, dated May 12, 1993 and May 18, 1993).

5) The existence of a cyclone fence at the base of the levee may increase disturbance to floodplain plant communities by impeding storm flows during severe flood events.

My report presented two environmentally superior alternatives: a) route the bicycle/pedestrian trail away from the vicinity of the river in the southern portion of the trail (Options 2,3 or 4). These options also minimize impacts to existing flood control structures; b) terminate the equestrian trail at Shell Road. This would eliminate the need for future funding of a cowbird trapping program and the need for restoration of native plant communities eliminated during construction of the equestrian trail along the levee.

In our meeting last week, I agreed that fencing, cowbird trapping and habitat restoration/exotic plant removal are mitigation measures appropriate if the trail is placed on the flood control levee. These measures will certainly reduce impacts associated with placing the trail here. Fencing will not however, reduce the Class I impact identified in my report to insignificant levels.

If the bicycle/pedestrian trail is routed east of Highway 33 and the equestrian trail is allowed to extend to the Main Street bridge, the proposed turnaround/rest area would have to be modified to limit access to equestrian users only.

I fully realize that there are conflicting views from the equestrian community, as well as a need to provide a safe connection between the southern terminus of the proposed trail and the Omer Rains Trail. It is my opinion that the significant biological resources of the lower Ventura River, the proximity of a large urban center adjacent to the eastern side of the southern portion of the proposed trail, and the current homeless situation in the floodplain, are overriding concerns that require placement of the proposed trail to areas east of Highway 33. These are the environmentally superior alternatives.

I hope this resolves any miscommunication or misunderstanding on my part. Please call me if you have any questions.

Sincerely,

Lawrence E. Hunt

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(805) 967-8512 (phone and fax)

cc: Karen Bates; Albert Carbon