APPENDIX D

WRITTEN COMMENTS RECEIVED ON DRAFT REPORT

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March 13, 2003

TO: Kindra Loomis, ENTRIX, Inc.

FROM: Mark H. Capelli, Recovery Coordinator

RE: Draft Priorities, Ventura River Watershed Technical Investigations, March 2003

The following responds to your request for comments of the priorities developed as part of the Ventura River Watershed Technical Investigations prepared for the City of San Buenaventura under a Department of Fish and Game and Proposition 13 grant.

According to the Scope of Work developed for this investigation, detailed studies are to be made of steelhead habitat in order to prioritize site-specific enhancement proposals. It was not clear from the Scope of Work if these studies were conducted with specific projects, or types of projects in mind, or if the identified prioritized project/proposals were to be carried out by or under the auspices of the City of Ventura. It should be recognized that different agencies carrying out steelhead restoration projects may have differing obligations and standards. It was not clear how the identified priorities would be viewed in the light of priorities identified by other entities responsible for steelhead recovery such as NOAA Fisheries.

The following specific comments are directed at the section of the larger report entitled "Proposed Recommendations" which you provided dated March 7, 2003.

Proposed Recommendations

Regarding the basic priority ranking by geographic area (First - Habitat above Robles, Second- San Antonio Creek, and Third - "Live Reach"), is it not clear how these broad priorities were determined. We note, however, that the lower river below Foster Park was not included in the geographic areas; the lower reach includes the estuary which is owned in part by the City of Ventura, and supports important steelhead habitat functions. Also, some of the projects ranked as "Med" in the Third geographic priority, may in fact be more important to steelhead recovery than some projects ranked as "Med" or "High" in the First geographic priority (e.g., riparian vegetation and floodplain management vs. passage at Wheeler Gorge) (See additional comments below.)

The draft indicates that the list of priorities is intended to guide the expenditure of monies on restoration projects in a manner that would provide the highest biological benefits. However, the ranking does not provide any indication of what relative biological benefits would be realized by the individual proposals (e.g., amount of spawning and rearing habitat which would be restored, the numbers of fish which would be supported, or the amount of riparian habitat which would be restored, etc.) Without some type of metric it is difficult to understand why some projects are ranked "High", "Med", and "Low". Some of the projects are couched in very general terms, and as a result it is not possible to have a clear idea of what is proposed (e.g., "migration flow in mainstem", "ramping of Matilija", etc.)

Finally, the draft indicates that the entire Coyote/Santa Ana Creek drainage is excluded from the recommendations because of the infeasibility of laddering Casitas Dam, or providing access around the dam. This conclusionary statement should be deleted. No formal studies or evaluations have been made regarding the feasibility or desirability of providing fish passage at Casitas Dam to reconnect the upper portions of Coyote Creek/Santa Ana Creek with the main Ventura River. Nor have any investigations been conducted regarding the restoration of flows below the Casitas Dam into the lower two miles of Coyote Creek. Because Coyote/Santa Ana Creeks comprise approximately 40% of the Ventura River watershed, and supported approximately 50% of the historic steelhead spawning habitat (and still contains a large amount of high quality habitat), decisions regarding the role of these tributaries in the recovery of the Ventura River steelhead runs, and the southern California Evolutionary Significant Unit, must be based upon detailed studies, and the outcome of the NOAA Fisheries steelhead recovery planning process.

First Priority – Habitat Above Robles Diversion (including access to habitat)

It is not clear why habitat above the Robles Diversion has been identified as a first priority for steelhead restoration within the context of these investigations. A majority of this habitat is within the Los Padres National Forest, and as a result is relatively undisturbed. Additionally, several of the priority projects identified are already being undertaken by local or Federal agencies (e.g., fish passage at Robles Diversion, retrofitting of Wheeler Gorge crossing, Matilija Dam removal, and removal of the OVSD sewer-line). While the area above Robles Diversion has a significant amount of steelhead habitat, the geographic priorities should also reflect the need for restoration of steelhead habitat as well as opportunities for restoration. Of the three geographic areas covered in the list of priorities, the areas not already being addressed with the most need of restoration (because of the extent of prior degradation) and therefore with the greatest potential for improvement of steelhead habitat are the mainstem of the Ventura River (including the estuary) and San Antonio Creek.

Access

As noted above, the Robles Diversion, Wheeler George Campground road crossing, OVSD sewer line removal, and removal of Matilija Dam are projects which are currently being actively pursued by the respective responsible agencies, that is, BOR/CMWD, U.S. Forest Service, OVSD, and County of Ventura, respectively. We would note, however, that there are other steelhead access issues within this geogrpahic areas which should be identified, e.g., periodic temporary agricultural diversion dams immediately above and below the Robles Diversion.

<u>Habitat</u>

The potential restoration projects included in this section are described in very broad terms, and as a result it is not clear where they are located, or how much of the stream reach is involved (e.g., "bank undercut at Highway 33", "riparian restoration of lower reaches", and "purchase of conservation easements"). Given the lack of specificity it is difficult to judge the relative merits of their ranking (Med, Low). Also, the list does not include a number of potential habitat restoration projects for this geographic area. These include:

- Revegetate approximately 1/8 mile of stream frontage of the Ojai/Schmidt Rock Quarry along the North Fork of Matilija Creek. Because of the denudation of riparian vegetation and destabilization of the steep slopes, this site contributes significant amounts of fish sediments into the North of Matilija Creek and the Ventura River.
- Install steelhead/watershed interpretive facilities along Highway 33; this is a major point of public contact with the Ventura River system and provides outstanding opportunities for public out-reach and education regarding steelhead and steelhead recovery efforts.

Second Priority- San Antonio Creek and Tributaries

San Antonio Creek is the only major tributary to the Ventura River that has not been cut off from the mainstem of the Ventura River. While historically this tributary probably did not provide the same quality and quantity of steelhead habitat as the Matilija/Coyote/Santa Ana drainages, it nevertheless remains an important element in the Ventura River system for steelhead (e.g., providing significant steelhead attraction flows in the lower reach of the Ventura River, etc.). Both because this tributary has been significantly degraded, and has the potential for significant restoration, its second geographic ranking for restoration projects is appropriate.

Access

In addition to the potential steelhead access crossings noted in the list, there are additional steelhead access projects which should be identified. These include:

- Retrofit the Boardman Road Crossing over Thatcher Creek.
- Retrofit or remove the impassible dam on San Antonio Creek north of Highway 150.

<u>Habitat</u>

The three most important types of habitat modification on San Antonio Creek are: (1) loss of riparian vegetation to road construction and stream-side development (and related introduction of non-native invasive species); (2) the introduction of elevated levels of fine sediments as a result of grading for roads, residential development, and agriculture on steep highly erosive slopes (and the extensive development of horse facilities on the stream terraces in the lower reaches of San Antonio Creek); and (3) modification of the natural hydrologic regime, principally through groundwater extractions and urbanization of portions of the San Antonio Creek floodplain, a number of activities such as seasonal construction of small recreational gravel dams, and introduction of exotic species of aquatic organisms (e.g., turtles, various warm-water species of fishes) has further compromised the steelhead habitat in San Antonio Creek.

The list of potential restoration projects should include the following:

- Remove non-native invasive vegetation (e.g., *Arundo donax*).
- Revegetate public road embankments and bridge abutments with native riparian species.
- Perform sedimentation and nutrient assessments to identify sources and quantify cumulative loading of these pollutants.
- Develop creek development standards to ensure adequate set-backs and appropriate land-uses in the buffer areas.
- Identify and quantify surface and groundwater extractions to determine how and to what extent water resources can be managed to protect in-stream flows within San Antonio Creek.
- Remove and control introduced aquatic species (coupled with public education and outreach to provide continued management of introduced species).
- Acquire miscellaneous parcels along San Antonio Creek (e.g. Rancho Arnaz adjacent to Girls Scott Camp, etc). The Ojai Valley Land Conservancy has already acquired at least one parcel, and the County of Ventura is considering a flood-plain management plan which would involve acquisition or conservation easements of flood-prone parcels to obviate the need to do emergency instream flood control work.

Third Priority - Live Reach

Presumably, this geographic area refers to the Casitas Springs/Foster Park Reach, which extends from approximately one-half mile above the confluence of San Antonio Creek downstream to and including Foster Park. As we have noted in previous communications, this moniker is misleading because there are other reaches of the mainstream of the Ventura which maintain a perennial surface flows in all but the most severe drought years; these are (1) the reach that extends downstream from the confluence of the North Fork of Matilija Creek and the mainstem of Matilija Creek downstream to a point approximately one-half mile below the Robles Diversion; (2) the reach that extends from approximately one-half mile above the confluence of San Antonio Creek downstream to the Foster Park Bridge; and (3) the reach that extends downstream from Foster Park Bridge to the estuary at the mouth of the Ventura River. Note: the third reach is supplemented by a tertiary discharge from the Ojai Valley Sanitary District, but its perennial surface flow is not dependent upon this discharge.

Access

The steelhead access through the lower mainstem Ventura River is affected primarily by flows that have been reduced by surface diversions and groundwater extractions. However, there are a number of artificial obstructions that affect migration in the lower reaches during low or moderate flow conditions. These include: (1) private temporary surface diversion dams located approximately 1 mile upstream from the mouth; (2) the Southern California gas line across the lower river, approimately1.5 miles upstream from the mouth; and (3) the City of Ventura's surface diversion at Foster Park when surface diversion operations are being conducted; and periodically when the pattern of deposition of sediments lowers the channel bottom below the surface dam.

<u>Habitat</u>

Different reaches of the mainstem of the Ventura River present different restoration opportunities. Some of those that should be reflected in the document are briefly noted below, arranged by reach:

Upper Robles Reach

• Remove non-native vegetation, control surface and groundwater extraction activities), and provide public interpretive facilities along the three-mile reach of the mainstem of the Ventura River (immediately downstream from the Robles Diversion). This reach is currently in the process of being purchased by the Ojai Valley Land Conservancy and the Coastal Conservancy (and is expected to be acquired this Summer). Currently, however, there are no specific plans for restoring or managing this 3-mile, 1,500 acre reach of river. A public access program could be developed which would include supervised public visits to the proposed fish passage facilities at the Robles Diversion.

Casitas Springs/Foster Park Reach

- Re-establish riparian vegetation along the two mile long flood-control levee in Casitas Springs. This levee was built under emergency conditions with FEMA funds without mitigation. The levee was constructed along the alignment of the eastern bank of the Ventura River channel, and either eliminated the pre-existing riparian vegetation, or isolated the vegetation from the active channel. It is owned and maintained by the Ventura County Watershed Protection District which is currently planning to retrofit the levee, including increasing its height, and adding a vehicular turn-around.
- Acquire a privately held parcel at the confluence of the Ventura River and the mouth of San Antonio Creek containing largest in-tact stand of sycamore, cottonwood, and other native riparian species within the Casitas Springs Foster Park Reach. The California Coastal Conservancy is currently exploring the acquisition of this site (and several contiguous parcels), but will need a local sponsor, and a restoration and management plan (both for resource protection and public access).
- Retrofit City of Ventura's Foster Park Diversion and groundwater facilities. The operation of these facilities have affected steelhead habitat in the Casitas Springs Foster Park Reach by reducing surface flows (through both direct diversion and groundwater extraction) and in the past through periodic construction of a gravel berm to direct low into the intake. The surface dam and intake, and related berm, and can physically impede both up-and downstream migration of fish during low flows. The City is currently considering a series of projects associated with the retrofitting of this facility, including eliminating the surface diversion, notching the sub-surface dam, etc.
- Remove non-native invasive vegetation throughout the Casitas Springs/Foster Park Reach, particularly *Arundo donax*.
- Re-design and vegetate the bridge abutments at the Foster Park/Casitas Vista Bridge. Following heavy flows in 1995, the Ventura County Department of Transportation removed native riparian vegetation reinforced the abutments to this bridge, placing grouted revetment on the eastern abutment.
- Develop bio-engineered bank stabilization for the County of Ventura's day-use facilities at Foster Memorial Park. The County is currently developing plans to rip-rap approximately ¹/₄ mile of the eastern border of the park which could eliminate approximately one-half dozen mature riparian trees (primarily sycamores, cottonwood, and alders)

Lower Ventura River

The lower Ventura River contains important steelhead habitat that has been degraded by variety of industrial, agricultural, and miscellaneous urban developments. Some of the restoration projects that should be included in a list of priorities are:

- Remove non-native invasive vegetation and revegetate disturbed riparian areas with native species (e.g., private access road on the west side of the river below the Foster Park bridge; in the vicinity of the Ojai Valley Sanitary District Plant; above and below the Shell Road Bridge, in the vicinity of the former Chem-O-Lene plant and the de-commissioned USA Petroleum refinery).
- Acquire and restore three key properties along the lower Ventura River to restore the continuity of the riparian corridor. The top candidates are:
 - (1) USA Petroleum refinery site (which is adjacent to the largest steelhead holding holes in the lower river);

(2) Crown-Zellerbach (former owner) property immediately upstream of Main Street on the west side of the river (which includes a one-half mile reach of river frontage); and

(3) Ventura-Beach recreational vehicle park between the U.S. 101 and Main Street. This property includes the upper end of the Ventura River estuary, and with its public acquisition, would place the entire estuary into public ownership (the other portions currently owned by the California Department of Parks and Recreation and the City of Ventura).

• Control of non-point sources of pollution entering the lower Ventura River and Ventura River estuary through a series of storm drains placed within the Ventura River levee; these drains deliver significant amounts of fine sediments as well as toxic pollutants such as oil and pesticides from the Ventura Avenue area to the Ventura River and estuary.

Ventura River Estuary

The estuary at the mouth of the Ventura River is an important component in the Ventura River system, and plays a critical role in the life-cycle of steelhead, both as an acclimation environment, and historically as a rearing area. Several restoration projects should be initiated in the estuary.

• Remove non-native invasive vegetation, including *Arundo donax*, and re-vegetation with native species.

• Install interpretive facilities; this is a major point of public contact with the Ventura River system and provides outstanding opportunities for public out-reach and education regarding the role of the estuary in the steelhead life-cycle.

Watershed Level Priorities

There are a number of steelhead restoration projects/initiatives which are applicable through all or large portions of the watershed. Some of these are identified in the draft, at least at a general level (e.g., public education on a variety of land use practices, *Arundo donax* removal, and conservation easements). However, there is no prioritization indicated for these potential projects.

As noted above, on a watershed-wide basis, two of the most significant factors degrading steelhead habitat are the reduction of flows and production of elevated levels of fine sediments. These two influences, along with encroachment onto the floodplain, and the proliferation of exotic invasive vegetation within the riparian corridor, should be the focus of significant steelhead restoration efforts. Major access issues (e.g., Robles Diversion, Matilija Dam) are currently being actively addressed in other planning initiatives.)

Finally, the draft identified a "conservation hatchery" as a possible watershed-wide restoration measure. Reduction of steelhead production in the Ventura River watershed has been primary the result of habitat degradation or elimination. NOAA Fisheries' basic approach to steelhead recovery is to restore natural processes which will lead to naturally self-sustaining populations. Because the creation of a separate artificial steelhead propagation facility to boost depleted steelhead stocks in the Ventura River watershed is unlikely, this project should be eliminated from the set of recommendations at this time.

Broader Watershed – Low Level Efforts to Consider Further

Two of the items listed here (watershed management plan and regulatory mechanisms to control creek-side development) should be rated as high, rather than low, priorities. Because steelhead utilize and depend upon all reaches of the river system to complete their life-cycle (estuary, mainstem, and tributaries), and the quality of these habitats is a direct function of the natural processes and human activities carried on throughout the watershed (not only immediately adjacent to the active channel), effectively restored steelhead habitat will depend upon both watershed-wide management plans and regulations which preserve and restore riparian corridors. It is through such plans that steelhead restoration measures are integrated into the larger land-use planning efforts for which local governments are principally responsible.

"Jim Engel" <ovic@ojai.net>
03/10/2003 04:13 PM
To: <KLoomis@entrix.com>
cc:
Subject: RE: Ventura River Restoration Priorities - URGENT!

Hi Kindra, I think you all did a great job with this big effort. I would say that mentioning the importance of cooperative landowners and the aquisition of lands along the Ventura River and San Antonio Creek should be a high priority goal. Almost all of your important goals will be negated unless you have a cooperative landowner and even better a landowner with professional resource management experience. From past experience, we have seen that trying to get a project done with a resistant landowner can lead to significant time delays and higher costs. Working with the Land Conservancy and other natural resource focused landowners will help us to reach these goals.

Jim Engel Executive Director Ojai Valley Land Conservancy

Comments for Ventura River Conservation Plans or Priorities

by David Pritchett (09 March 2003), based on meeting by Entrix with stakeholders, held on 20 Feb. 2003

As discussed, the intent is to indicate what should be done with minimal regard to whether anyone has the will to do it, considered a separate issue.

Relative priorities noted as high, moderate, or low.

Land Preservation may be the highest priority, as they are not making any more; but specific restoration and fish passage actions need to advance as well...

- < riparian woodland parcel currently for sale at confluence of San Antonio Ck. (high)
- < old PetroChem facility site and adjacent parcels filled in the river channel (low)
- < Zellarbach (old property owner name) at lower river right above Main Street (mod)
- < Ventura River RV Park and Resort (buy out and remove all this fill in the channel and estuary) (high)
- < various riparian parcels along San Antonio Creek, such as Rancho Arnaz floodplain site (mod)
- < programmatic approach to pick up parcels as they become available as easements or title (hi)
- < encourage and support Ojai Valley Land Conservancy as a land owner and manager (hi)

Water Quantity

- \$ entire Ojai Valley needs a modern, comprehensive groundwater and surface water management to optimize opportunities for people and river fish (mod)
- \$ live within means of water supply (mod)
- \$ demand-side water supply management; lots more opportunity for conservation by all consumers (hi)

Water Quality

- implement BMPs for horse paddocks and other livestock along San Antonio Creek (low)
- \Box assess existing sanitary sewer system for leaks (low)

Outreach & Planning

- # signage on river functions and presence of steelhead (mod)
- # enforce the copious existing laws, plenty enacted already (high)
- # establish and fund a watershed council of stakeholders as forum for planning and coordination; find out what and when such an effort to be done by County (high)

Steelhead Habitat Restoration

- < *HIGHEST PRIORITY*: convert Robles Diversion Dam to alternative subsurface water diversion per method constructed for Elwah River in Washington (allows fully inimpeded fish passage AND sediment flow) (high)
- < remove Matilija Dam per plan underway (mod)
- < remove road xing blockage at Wheeler Springs campground (lo)
- < watershed-wide arundo management if not eradication (mod)