STORRER
ENVIRONMENTAL
SERVICES

2565 Puesta Del Sol Road #3
Santa Barbara, CA 93105
(805) 682-2065
Fax (805) 569-9394

Theresa Lubin
County of Ventura
Parks Department
L#1030
800 So. Victoria Avenue
Ventura, CA 93009

November 3, 1999

Re: Site Assessment for Presence of California Red-legged Frog (*Rana aurora draytonii*) – Proposed Flood Damage Restoration and Protection Project at Foster Park, Ventura County, California

Dear Ms. Lubin:

This correspondence is an assessment of habitat suitability for California red-legged frog (CRLF) in relation to the County of Ventura's proposed bank stabilization project at Foster Park. The purpose of the Site Assessment is to provide the U.S. Fish and Wildlife Service (USFWS) with information pertinent to their environmental review of the project.

Project Description

The proposed project entails structural stabilization and restoration along two segments of the Ventura River's east bank, both adjoining Foster Park (Figure 2). One segment (field designation Segment 1) is just upstream from the Casitas Vista Bridge and is approximately 935 feet long. The other (field designation Segment 2) is further upstream and is approximately 435 feet in length.

Method

The investigative procedure followed USFWS protocol described in their "Guidance on Site Assessment and Field Surveys for California Red-legged Frogs" (USFWS 1997). The Site Assessment consists of three basic elements:

1. The USFWS must be contacted to determine if the project site is within the range of the CRLF.

2. A background review must be conducted to ascertain known localities for the CRLF within five miles of the project site. This review must include a search of the California Department of Fish & Game's Natural Diversity Database (CNDDB), in addition to contacts with resource professionals, agency representatives, museums, and universities.

3. An assessment of habitat suitability within one mile of the project site must be completed. The assessment must include a field reconnaissance, mapping, and photo-documentation, as required by the USFWS guidelines.

Results

The Ventura Field Office of the USFWS was contacted on October 18, 1999. Biologist Rick Farris indicated that the project was within the range of the CRLF and that the USFWS was requesting a Site Assessment, on that basis.

A background review was then conducted. The California Natural Diversity Data Base (CNDDB) was consulted regarding possible known localities for CRLF (CNDDB 1999). No such occurrences were reported for the Ventura 7.5' Quadrangle.

Dr. Lawrence Hunt, a herpetologist with substantial familiarity with the project vicinity was consulted (Hunt, 1999 personal communication). Dr. Hunt related four records for CRLF from the project area (i.e. within five miles), including one historic record for the immediate project vicinity. These records are cited in Hunt et. al (1992) and are presented in Table 1. The two recorded localities for CRLF closest to the project site are plotted as precisely as possible, given the data available (Figure 2).

Table 1: Records for California Red-legged Frog (*Rana aurora draytonii*) Within Five Miles of Foster Park

Location	Date	Source
Ventura River at Coyote Creek in Foster Park	"1940's"	M. Jennings in Hunt et. al, 1992
Ventura River at main stem, 6.4 miles northeast of Ventura	"1940's"	M. Jennings in Hunt et. al, 1992
San Antonio Creek, 4.0 miles downstream from Ojai	"1940's"	M. Jennings in Hunt et. al, 1992
San Antonio Creek	"1970's"	Sight records (Hunt, personal communication, 1999)

A field reconnaissance was conducted on October 26, 1999 between 0820 and 1045 by John Storrer of Storrer Environmental Services. Ms. Theresa Lubin of the Ventura County Park Department provided an overview of the project. Both segments proposed for stabilization were walked from within the riverbed and along the top of bank. Ten-power binoculars were used to scan the vegetation and surface water adjacent to the project sites. A more general assessment of potential habitat upstream, downstream, and west of the project sites was also made. The general reconnaissance included the riverbed upstream and downstream from Segment 2, for a distance of approximately 100 yards in both directions. The riverbed west of the project site was examined for a distance of 5-600 feet.

At the project location, the Ventura River is a broad floodplain, supporting various types of riparian vegetation. At the time of the field reconnaissance, streamflow conditions were at or near a seasonal low. Much of the riverbed was dry. Surface water was confined to narrow, discontinuous channels or braids. There were also pools or back-eddies that had formed in shallow depressions within the riverbed.

Segment 1 lies just upstream from Casitas Vista Bridge (Photo 1). There was no surface flow in this vicinity. Early succession stage vegetation of shrubby aspect was present along the toe of the east bank. The dominant plants included arroyo willow (*Salix lasiolepis*) and mule fat (*Baccharis salicifolia*), in addition to non-native species such as tree tobacco (*Nicotiana glauca*) and giant reed (*Arundo donax*).

Segment 2 was relatively more complex and better developed in terms of its hydrology and vegetation (Photos 2 & 3). A large, shallow backwater pool had formed against the east bank. The pool was approximately 50 feet in width and 100 yards in length, with a maximum depth of 18-24 inches. There were large Western sycamores (*Platanus racemosa*) at intervals along the top of the bank and one tree that had grown horizontally across the streambed at the north end of the area proposed for stabilization. There were also stands of cattail (*Typha* sp.) along the toe of the bank and on the margin of the pool. Arroyo willows and giant reed also grew along the toe of the east bank. The backwater was sustained by a narrow, 25-foot wide active stream channel that lies approximately 30 yards to the west (Photo 4). The channel was lined with willows and cattail.

As previously noted, the purpose of the survey was to make a general assessment of habitat suitability. Neither adult or juvenile (larval) CRLF were observed during the field reconnaissance. A noteworthy observation was that of an adult Southwestern pond turtle (*Clemmys marmorata pallida*) in the active channel, approximately 500 feet west of the project site (Figure 2).

Discussion

Habitat value for CRLF along Segment 1 is extremely poor in its present condition. The lack of surface water and paucity of vegetative cover offer marginal refuge.

The backwater pool and associated vegetation along Segment 2 afford suitable habitat for CRLF. Undercut portions of the river bank, tree roots, and patches of emergent vegetation create ideal conditions for this species. The pool appears to be sustained by a continuous infusion of freshwater and (most likely) shallow groundwater table.

Other portions of the riverbed examined on a more cursory basis, range from poor to good in terms of habitat suitability and quality. The shallow channels and associated vegetation are sufficient to support CRLF, at least on a season basis. Larger pools offer better prospects for long-term occupancy.

Historic changes in river hydrology and vegetative character have undoubtedly reduced overall habitat value for CRLF. Groundwater extraction and surface water diversion may have profound effects on aquatic habitats. The introduction of exotic plant species is generally regarded as detrimental. The presence of bullfrogs (*Rana catesbiana*) within the Ventura River system is a significant impediment to the persistence or re-establishment of CRLF, particularly within the main stem of the river (Hunt, 1999 personal communication). These factors may, in part, explain the apparent lack of records for CRLF in the project area within the last 20 to 30 years.

Conclusion

There are four records for CRLF within five miles of the proposed project site, including one from the project vicinity (Table 1, Figure 2). The records are dated (i.e. 1940's and 1970's), however they do confirm the historic occurrence of CRLF within the Ventura River system. Habitat value within the main stem of the Ventura River is highly variable. Several factors have contributed to an overall decline in habitat suitability for CRLF within the last century. Habitat quality within and adjacent to proposed Segment 1 is very poor. Vegetative character and hydrology within and adjacent to Segment 2 impart suitable conditions for CRLF.

References

California Natural Diversity Data Base. The Resources Agency, Department of Fish and Game. Search date October 21, 1999. Information dated August 17, 1999.

Hunt, L., P. Lehman, and M. Capelli. 1992. Vertebrate Resources at Emma Woods State Beach and the Ventura River Estuary, Ventura County, California: Inventory and Management. Prepared for the City of San Buenaventura, California Coastal Conservancy, and California Department of Parks and Recreation. 108 pp.

Hunt, L. Herpetologist/Consultant, Goleta, California. Telephone conversation with J. Storrer on October 21, 1999.

Farris, R. USFWS Biologist, Ventura Field Office. Telephone conversation with J. Storrer on October 18, 1999.

U.S. Fish and Wildlife Service. 1997. Guidance on Site Assessment and Field Surveys for California Red-legged Frogs. February 18, 1999.

Please call me if you have any questions concerning the content of this report.

Sincerely,

John Storrer
Biological Consultant

attachments: Figure 1: Project Site and Vicinity
Figure 2: Historic Occurrences of California CRLF Relative to Project Location
representative photographs of the project site

Figure 1: Project Site and Vicinity

[Map Provided by County of Ventura – General Services Agency]

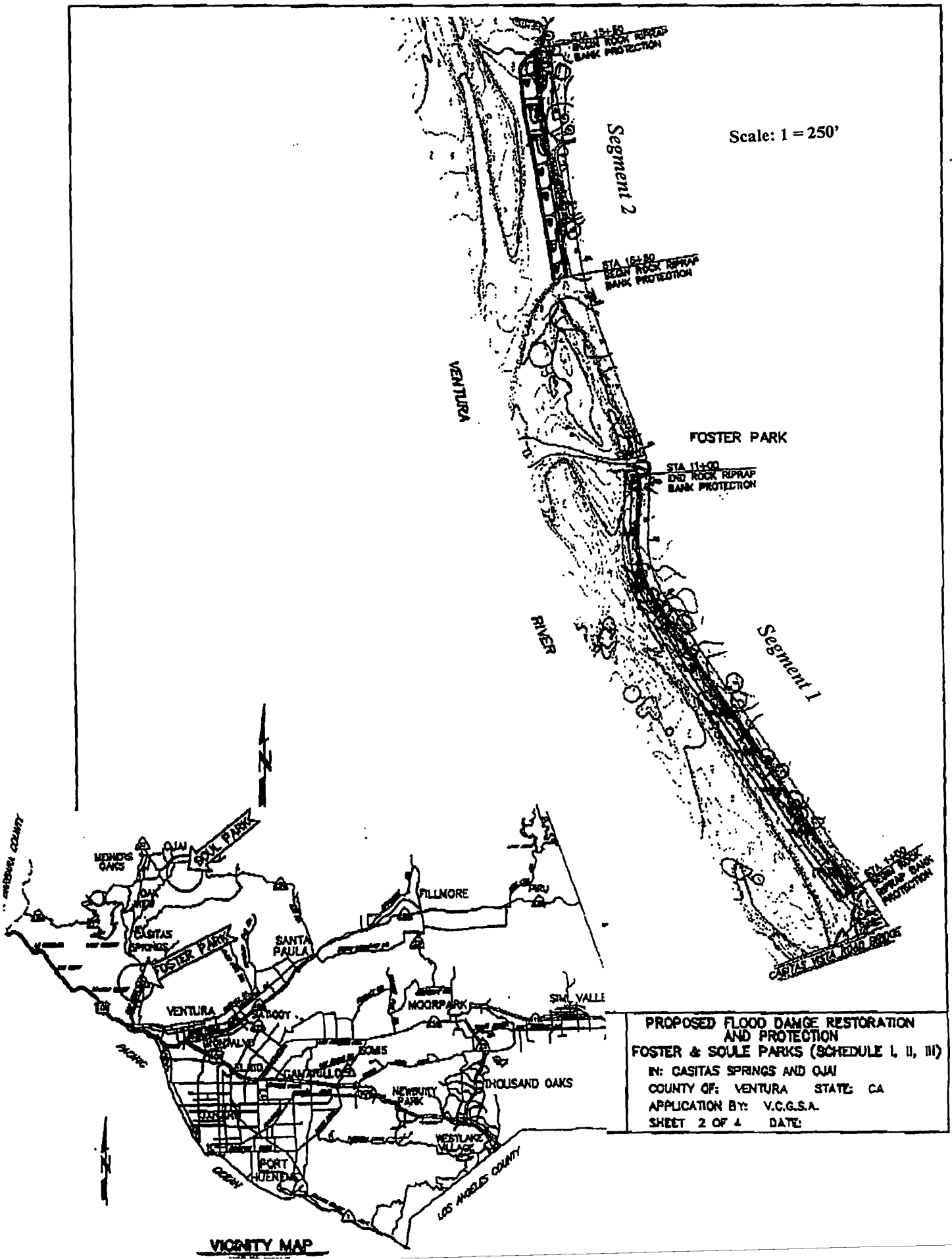

Figure 2: Historic Occurrences of California Red-legged Frog Relative to Project Location