FRESNO COUNTY OFFICE OF EDUCATION

FINAL
ENVIRONMENTAL ASSESSMENT NO. 2002-01
MITIGATED NEGATIVE DECLARATION

December 2, 2002

State Clearinghouse No. 2002081050

Prepared for:

SCOUT ISLAND OUTDOOR EDUCATIONAL CENTER

Development of an outdoor educational facility at the San Joaquin River
In the City and County of Fresno

Prepared by:
Blair, Church and Flynn
Consulting Engineers
2893 Larkin Avenue, Clovis CA 93612
559-291-5507
bcf@bcf-engr.com

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Preface

This document, together with the Draft Initial Study, Environmental Assessment 2002-01, and Mitigated Negative Declaration (Draft IS/MND), dated August 5, 2002, constitutes the Final Mitigated Negative Declaration (Final MND) for the Scout Island Outdoor Education Center project. The information presented in this document is in accordance with the requirements of the California Environmental Quality Act (CEQA) Guidelines and includes the following:

Chapter 1: Summary of the Draft IS/MND. This summary has been revised from the Draft IS/MND to reflect comments received on the Draft IS/MND.

Chapter 2: Contains a list of agencies and individuals who received a copy of the Draft IS/MND for review or a notice that the Draft IS/MND was available for public review.

Chapter 3: Presents the comments that were received on the Draft IS/MND and the responses to those comments by the Fresno County Office of Education.

Chapter 4: Presents the revised Table 1 from the Draft IS/MND.

Chapter 5: Presents the revised Mitigations Sections from the Draft IS/MND.

Chapter 6: Presents the revised Mitigations Table from the Draft IS/MND.

Chapter 7: Presents Revisions to the Initial Study that were made as a result of the comments that were received, included revised tables, text and exhibits. This chapter also contains exhibits that were added to the Initial Study as backup information for the responses to the written comments.

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List of Revised Tables

List of Exhibits

Note: Exhibit A, B, C, D and E are included in the Initial Study/Mitigated Negative Declaration

List of Figures

Note: Figures 1, 3, 4, 5, 6 and 7 are included in the Initial Study/Mitigated Negative Declaration

Chapter 1 – Revised Summary

Introduction

This chapter provides a summary of the SIEOC and its environmental setting in the following tables.

Project Location, Description, and Setting

The Lead Agency, location, description, and environmental setting of the project are summarized in Table 1-1, Table 1-2, Table 1-3 and Table 1-4.

Table 1-1

LEAD AGENCY CONTACT INFORMATION

Project Title	Scout Island Outdoor Education Center
State Clearing House No.	2002081050
Lead Agency	Fresno County Office of Education
Contract Person	Jamie Perry
Address	Fresno County Office of Education 1111 Van Ness Avenue Fresno, CA 93721-2000
Telephone	559-497-3721
Fax	559-265-3035
e-mail	jperry@fcoe.k12.ca.us

Table 1-2

PROJECT LOCATION

County	Fresno
Nearest Community	City of Fresno
Assessor's Parcel Numbers	500-020-08, 500-020-09 and 500-020-10
USGS Maps	Fresno North
Section, Township, & Range	S 25, T 12 South, R 19 East, Mt Diablo Base and Meridian
Street Address	7165 North Van Ness Avenue, Fresno, CA 9372
Total Site Area	82 Acres

Table 1-3 Project Description	
Overall Objective	The Scout Island Outdoor Education Center (SIOEC) site will be developed as a regional outdoor education center with programs targeted to grades K-12 students, including special education students.
Staff and visitors	Two full time staff and up to 200 visitors per day.
Site Uses	Classes in science, history, archaeology, astronomy, outdoor education, leadership training, ropes course training, tree nursery, gardening, weather studies, water quality monitoring, and other educational programs will be offered on a year-round basis. Opportunities for canoeing, swimming, and fishing will also be provided. Some overnight platform camping may be allowed.
Site Improvements	Road and trail system; installation of potable water lines, vaulted toilets, parking, fencing, a seasonal canoe dock and underground electrical facilities; maintenance of access to the San Joaquin River for swimming and water play; improvements to existing landscape irrigation facilities; landscape screening along the southern property line, outdoor education areas that will be used for instruction, wildlife observation, story-telling and dramatic presentations, the enhancement of Pirates Creek with a pond, waste-collection containers, signage, firebreaks and emergency access will also be provided.
Access	Access to the Scout Island OEC will be provided from Van Ness Avenue via the FCOE-owned and improved Boy Scout Road and an access easement on the North River's Edge Road.
Water	Provided by domestic well and potable water distribution system that is classified as a Transient Noncommunity Public Water System.
Wastewater Management	Septic systems and vault toilets.
Storm Water	Drainage swale and percolation.
Solid Waste	Staff collection from site, transfer trash to central collection bins, pick and disposal from central bins by commercial, licensed contractor.
Fire Protection	Provided by North Central Fire Protection District and Fresno Fire Department. FD approved fire suppression building sprinklers and fire hydrant system is provided.
Law Enforcement	County of Fresno Sheriffs Department and City of Fresno Police Department
Emergency Services	Fresno County contract service
Hazards	Site is situated in a designated floodway

Table 1-4 Project Environmental Setting	
Land Use	Multi-use open space/recreation
City of Fresno General Plan Designation	Multi-Use Open Space
City of Fresno Zoning	AE-5
Fresno County General Plan Designation	
Fresno County Zoning	AE-5
Topography	Flat with abrupt grade changes at defined river banks
Elevation	280 USGS Datum
Williamson Act Contracts	None
Biotic Habitats	Wetlands Non-wetland jurisdictional waters of the US Upland riparian forest Potential habitat for Sanfords Arrowhead Elderberry shrubs, which are habitat to the Valley Elderberry Longhorn Beetle, an endangered species Raptors
Geologic Setting	Site is located in the floodplain of the San Joaquin River. The site is a designated source for aggregate mining

Chapter 2 – Notification

The persons, organizations, and public agencies that were sent copies of the Draft IS/MND or were notified of the availability of the Draft IS/MND for public review are listed in this chapter. A copy of the Notice of Intent to Adopt Mitigated Negative Declaration and Notice of Governing Board Meeting is included at the end of this chapter.

FRESNO COUNTY OFFICE OF EDUCATION **DRAFT INITIAL STUDY MITIFGATED NEGATIVE DECLARATION** **MAILING LIST** (All mailings were sent US Postal Service And Federal Express) M – Notice +IS/MND N – Notice only	
LEAD AGENCY	
M	Jamie Perry, Facilities Manager Fresno County Office of Education 1111 Van Ness Fresno CA 93721-2000
FEDERAL AGENCIES	
M	Valerie Curley San Joaquin River Restoration Prg Mgr CVP/Bureau of Reclamation 1243 N St Fresno CA 93721
M	Matthew J. Hirkala, Regulatory Specialist Us Army Corps of Engineer, Sacramento District 1325 J Street Sacramento CA 95814-2922
M	Michael Hornick FEMA Region IX 1111 Broadway Ste 1200 Oakland CA 94607

M	Nancy A. Haley Chief, San Joaquin Valley Office Us Army Corps of Engineer, Sacramento District 1325 J Street Sacramento CA 95814-2922
M	Nancy Pau US Fish & Wildlife Service 2800 Cottage Way Room W-2605 Sacramento CA 95825
	STATE AGENCIES
M	Boone Lek Board of Reclamation State of California Department of Water Resources 1416 9th St Rm 1641 Sacramento CA 95814
M	Curtis Fossum, Esq State Lands Commission 100 Howe Ave Ste 100 S Sacramento CA 95825-8202
M	Donna Daniels Habitat Conservation State of California Dept of Fish & Game 1234 E Shaw Ave Fresno CA 93710
M	Dr John Parrish, SMGB Exec Officer State of California Dept Conservation Div Mines & Geol 801 K St MS24-05 Sacramento CA 95814
M	Ed Perez PE Sr District Floodplain Mgmt State of California Department of Water Resources 3374 E Shields Ave Fresno CA 93726

M	Jo Anne Kipps PE Permit Branch Chief RWQCB Central Valley Region-Fresno 3614 E Ashlan Ave Fresno CA 93726
N	John Barnett AIA Dept Gen SVCS Div State Architects 1225 R St Sacramento CA 95814
M	Leo Cosentini SWRCB Stormwater Unit 1001 I Street Sacramento CA 95814
N	Moses Stites Caltrans District 06 Planning Po Box 12616 Fresno CA 93778-2616
M	Patricia Penn State of California Dept Education Facilities 660 J St Ste 350 Sacramento CA 95814
M	Roy Manning Southern Office State of California Office of Emergency Services 2550 Mariposa Mall Rm B-181 Fresno CA 93721
M	Russell V Miller RG State of California Dept Mines & Geol 655 Hope St 7th Fl Los Angeles CA 90017
M	Sterling Sorenson, Engineering Associate State of California Board of Reclamation, DWR 1416 Ninth St Rm 1623 Sacramento CA 95814

M	State Clearing House 1400 Tenth Street Sacramento CA 95814-5502
	COUNTY AGENCIES
M	Susan Anderson, Supervisor, District 2 Fresno County Board of Supervisors 2281 Tulare St 3rd Fl Fresno CA 93721
M	Carl Carlucci PE Dept Health Services Office Drinking Water 1040 E Herndon Ave Ste 205 Fresno CA 93720
M	Carolina Jiminez-Hogg, Director Fresno Co Planning & Resource Mgmt 2220 Tulare St 6th Fl Fresno CA 93721
M	Dennis Ellis, Permit Manager Fresno Co Bldg & Safety 2220 Tulare St Rm 600 Fresno CA 93721
M	Frank Daniele PE Floodplain Administrator Fresno Co Pw Development Engrng 2220 Tulare St 6th Fl Fresno CA 93721
M	Phil Desatoff Rg Fresno Co Planning & Resource Mgmt 2220 Tulare St 6th Fl Fresno CA 93721
N	Richard Brogan, Director Fresno Co Public Works 2220 Tulare St 6th Fl Fresno CA 93721

N	Richard Pierce Fresno County Sheriff Fresno Count Sheriff's Office 2200 Fresno Street Fresno CA 93721-1753
M	Tim Casagrande, Director Fresno Co Environmental Health Svcs 1221 Fulton Mall Fresno CA 93721
M	Sheri Clark, RHS Fresno County Health Department 1221 Fulton Mall Fresno CA 93721
M	Margie McHenry, Planner Fresno County Planning And Resources Management Dept 2220 Tulare Street - 6th Floor Fresno CA 93721
M	Leonard Garoupa, Director Madera Co Planning 135 W Yosemite Ave Madera CA 93637
M	Madera County Public Wks & Floodplain Mgmt 135 W Yosemite Ave Madera CA 93637
	CITY AGENCIES
M	Brian Calhoun Council Member, District 2 Fresno City Council 2600 Fresno St Rm 2097 Fresno CA 93721
N	Bruce Rudd, Transit General Mgr Fresno Area Express 2223 G St Fresno CA 93706-1600

M	City of Fresno Floodplain Administrator Fresno City Plng & Dev Dept – Permits 2600 Fresno St Rm 3043 Fresno CA 93721-3604
N	Don Smith, Solid Waste Div Mgr City of Fresno Dept of Public Utilities 1325 E El Dorado Fresno CA 93706-2014
N	Georgeanne White, Chief of Staff City of Fresno Mayor's Office 2600 Fresno St Rm 2097 Fresno CA 93721-3600
N	Jerry Dyer, Chief of Police City of Fresno Police Department 2323 Mariposa Avenue Fresno CA 93721-2250
N	Byron Beagles, Sup Fire Prev Inspctr Fresno Fire Dept Fire Prev Bureau 450 M St Fresno CA 93721-3083
M	Joel Aranaz, Fresno Fire Marshal Fresno Fire Dept Fire Prev Bureau 450 M St Fresno CA 93721-3083
N	John Slater Grading Plan Checks City of Fresno Building & Safety 2600 Fresno St Rm 3043 Fresno CA 93721
M	James W. Owens, Interim Director City of Fresno Public Works Dept 2600 Fresno St Rm 4016 Fresno CA 93721-3615

M	Martin McIntyre, Director City of Fresno Dept of Public Utilities 2600 Fresno St Rm 3065 Fresno CA 93721-3624
N	Melvin Young Plumbing Plan Examiner City of Fresno Building & Safety 2600 Fresno St Rm 3043 Fresno CA 93721
N	Michael Slater Fresno City Attorney's Office 2600 Fresno St Rm 2031 Fresno CA 93721-3602
N	Neil Montgomery Supervs Engr Tech City of Fresno Dept Public Utilities Water Division 1910 E University Ave Fresno CA 93703-2988
M	Nick Yovino, Director City of Fresno Planning & Development 2600 Fresno St Rm 3065 Fresno CA 93721-3604
N	Ron Primavera, Director City of Fresno Parks & Recreation 2326 Fresno St Rm 101 Fresno CA 93721-1824
M	Sandra Brock City of Fresno, Planning And Development 2600 Fresno St Rm 3043 Fresno CA 93721-3604

N	Tony Sanchez City Water Well Permits Public Works Engineering Svcs 2600 Fresno St Rm 4016 Fresno CA 93721-3615
REGIONAL AGENCIES	
M	Dave Koehler, Executive Director San Joaquin River Parkway & Conservation Trust 1550 E Shaw Ave Ste 114 Fresno CA 93710
M	David Pomaville Environmental Resources Manager Fresno Metropolitan Flood Control Dist 5469 E Olive Ave Fresno CA 93727
M	Melinda Marks, Executive Director San Joaquin River Conservancy 5469 E Olive Fresno CA 93727
M	Tony Boren Council of Fresno Co Governments 2100 Tulare Ste 619 Fresno CA 93721
M	Wayne Van Ornam, Fire Marshal North Central Fire Protection Dist 15850 W Kearney Blvd Kerman CA 93630
UTILITES	
N	Mike Rose PE&E Land Rights Office 650 O St 3rd Floor Fresno CA 93760-0001

ADJACENT PROPERTY OWNERS	
N	Arnold H & Dianne B Gazarian 7655 N Van Ness Blvd Fresno CA 93711
M	Board of Directors San Joaquin Country Club 3484 W. Bluff Avenue Fresno CA 93711
N	Charles B & Elaine R Long 7685 N Ricewood Fresno CA 93711
M	David T. Knott, Vice President Fig Garden Golf Course 7700 N. Van Ness Avenue Fresno CA 93711
N	Gopal Reddy & Aruna Devi Gade 7652 N Woodson Ave Fresno CA 93711
N	James L & Marcie S Abbate 7686 N Ricewood Fresno CA 93711
N	James W & Karen S Myers 7697 N Pleasant Fresno CA 93711
M	Jon Thomason Scout Island Investors LLC 7090 N Marks Ste 102 Fresno CA 93711
N	Kalwant Singh & Jagdish Kaur Dhillon 7673 N Tahan Ave Fresno CA 93711
N	Kantam L & Sujata D Gade 7687 N Kavanagh Fresno CA 93711

N	Larry Gail Greels 7688 N Tahan Fresno CA 93711
N	Marie Because of You LLC 5425 N Sequoia Dr Fresno CA 93711
N	Marilyn Hamilton 327 Adler Ave Clovis CA 93612
N	Martin & Eileen Schwartz 2868 W Fallbrook Fresno CA 93711
N	Michael R & Terry A Tolladay 7683 N Woodson Fresno CA 93711
N	Mitchell H & Stacy A Eisner 7688 N Kavanagh Ave Fresno CA 93711
N	Patrick G & Michele Howell 7692 N Kincaid Fresno CA 93711
N	Property Owner 2967 W Brompton Ln Fresno CA 93711
N	Richard M & Nancy S Aaron 2702 W Bluff Fresno CA 93711
N	Robert C & Rosalie M McIntyre 7689 N Briarwood Fresno CA 93711
N	Stephen M & Irene S Grossman 2874 W Fallbrook Fresno CA 93711

INTERESTED PARTIES	
N	American Ambulance 911 Santa Fe Avenue Fresno CA 93721
M	Bullard Plan Advisory Committee c/o Lois Johnson Planning & Devel 2600 Fresno St Rm 3043 Fresno CA 93721-3604
M	Dave Hartesveldt Live Oak Associates 49430 Road 426 Ste C Oakhurst CA 93644
M	Mary Savala Fresno League of Women Voters 942 N Van Ness Ave Fresno CA 93728
M	Michael Paoli Michael Paoli & Associates 377 W Fallbrook Ste 205 Fresno CA 93711
M	Patrick Miller 2M Associates 1780 Sonoma Ave, Landscape Station Berkeley CA 94707
NEWSPAPERS	
N	The Business Journal P O Box 126 Fresno CA 93707

Fresno County Office of Education
Notice of Intent to Adopt Mitigated Negative Declaration and Notice of Governing Board Meeting
Scout Island Outdoor Education Center Project

Proposed Mitigated Negative Declaration: *Notice is hereby given* that the Fresno County Office of Education (FCOE) intends to adopt a Mitigated Negative Declaration for the proposed Scout Island Outdoor Education Center Project ("project"). The Proposed Mitigated Negative Declaration is based upon the determination of an Initial Study that although the project could have a significant effect on the environment, it will not in this case because of mitigation measures that have been incorporated in the project. The reasons to support this determination, including the mitigation measures incorporated in the project, are documented in the Initial Study. The Initial Study and proposed Mitigated Negative Declaration may be reviewed at the FCOE Office, 1111 Van Ness Avenue, Fresno, California 93721. Telephone 559-497-3721. Copies of the Initial Study and proposed Mitigated Negative Declaration may be requested from the FCOE office or from Blair, Church and Flynn, Consulting Engineers, 2893 Larkin Avenue, Clovis, CA 93612, Telephone 559-291-5507, attention Cordie Qualle.

Public Review Period: The public review period during which the FCOE will receive written comments on the Proposed Mitigated Negative Declaration will begin on August 09, 2002, and end on September 07, 2002. Comments should be submitted to Jamie Perry, Facilities Manager, at the FCOE Office.

Governing Board Meeting: The FCOE Governing Board will consider adopting the Mitigated Negative Declaration and approving the project at a regular Board meeting on September 19, 2002, at 1:30 P.M. (or as soon thereafter as possible). The meeting will be held in the FCOE Office, 1111 Van Ness Avenue, Third Floor, Fresno, California 93721. Telephone (559) 265-3000. The public is invited to attend and comment on the Proposed Mitigated Negative Declaration and the project.

Project Location and Description: The Scout Island Outdoor Education Center (SIOEC) project encompasses approximately 82-acres on the south bank of the San Joaquin River between the Van Ness Avenue and Marks Avenue alignments (Fresno County Assessor's Parcel Numbers 500-020-08, 09 and 10). A portion of the site is with in the City of Fresno and a portion of the site is within Fresno County, California. The site is within the east half of Section 25, Township 12 South, Range 19 East, Mount Diablo Base and Meridian, and is shown on the North Fresno, California, United States Geodetic Survey 7.5-Minute Series Quadrangle map.

The SIOEC site will be developed as a regional outdoor education center with programs targeted to grades K-12 students, including special education students. The overall intent for the SIOEC is to maintain and enhance the natural landscape and integrity of the river setting. In order to facilitate the safe and efficient use of the site, and to provide maximum accessibility for the disabled, some infrastructure improvements will need to be constructed. These improvements will include development of a road and trail system, installation of potable and non-potable water lines, installation of vault toilets, installation of drinking fountains, construction of a parking area, installation of perimeter fencing, installation of seasonal canoe docks, maintenance of access to the river for swimming and water play, installation of underground electrical facilities, installation of landscape irrigation facilities, installation of security and minimal access lighting facilities, installation of a plant and tree nursery, installation of a weather monitoring station, installation of water quality monitoring points,

improvements to existing landscape irrigation facilities and landscape screening along the southern property line. The proposed plans include outdoor education areas that will be used for instruction, wildlife observation, story-telling and dramatic presentations. A central pond may be developed as part of the enhancement of Pirates Creek, which is a non-wetland tributary water of the United States. The pond will provide the opportunity for disabled students to experience water activities in a controlled environment when appropriate. Other infrastructure, such as waste-collection containers, signage, firebreaks and emergency access will also be provided.

The landscape and riparian enhancement portion of the project will involve regarding Pirates Creek, construction of two creek crossings for access across Pirates Creek, planting native trees for shade and native riparian enhancement following the natural drainage patterns of the site, phased replacement of non-native trees with native trees, control of non-native plant species, and possible elderberry bush enhancement area.

The SIOEC staff may include one site administrator and one grounds supervisor. They will be at the site on a year-round basis. The site will have a maximum capacity of 200 for group use/student studies. Students and instructors will be transient in that they will not continuously occupy the site for more than 60 days. Most of the day use will involve students participating in field trips, workshops, or summer camp. The normal operations of the site will occur from 7:00 A.M. to 5:00 P.M., Monday through Friday, with limited overnight camping by approved and supervised groups of people or students in accordance with a previously executed use agreement.

Access to the SIOEC will be provided from Van Ness Avenue via the FCOE-owned and improved Boy Scout Road and an access easement on the North River's Edge Road.

The project proposes the removal of the non-native red gum (eucalyptus) trees. The removal of these trees will be scheduled to avoid the nesting period of typical bird species that may use these trees. The trees will be surveyed by a biologist prior to removal operations to ensure that no nesting birds are present.

The project site will remain in public ownership of the FCOE for the benefit and enjoyment of school children and the Fresno County community. It is anticipated that the site will eventually be used up to 80 percent of the time during the spring, summer, and fall months. It is likely that there will be no activity at the site several days per month, especially in the winter months.

Project construction is planned for completion in Spring, 2003. Approximately 150 calendar days will be required to complete the project.

Submitted by:
Jamie Perry
FCOE Facilities Manager

Chapter 3 – Comments Received and Responses to Comments

This chapter presents the comments received from those agencies, organizations, and persons who provided written comments on the Draft IS/MND. Written comments were received in the form of letters and e-mail sent to Jamie Perry, Assistant Facilities Director, FCOE. Copies of each commenter's letter or e-mail are presented below. Each commenter was assigned an alpha character to designate the commenter and each comment contained within the letter or e-mail was indexed by that alpha character followed by a number, i.e., A-1 for the first comment from commenter A. Table 3-1 shows the alpha character assigned to each commenter and the page numbers that contain the comment letter and the response to the comment. The indexed response to the comments with the letter or e-mail immediately follows that letter or e-mail.

Table 3-1

Responses to Draft IS/MND

Designation	Comment Letter/e-mail	Pages
A	Jan C. Knight, Chief, Endangered Species Division, US Fish and Wildlife Service, US Department of the Interior (August 26, 2002), letter to Fresno County Office of Education – Attention: Jamie Perry	3-2 through 3-4
B	Jo Anne Kipps, Senior Engineer, State of California Regional Water Quality Control Board (RWQCB) (September 9, 2002), letter to Fresno County Office of Education – Attention: Jamie Perry	3-5 through 3-6
C	W.E. Loudermilk, Regional Manager, State of California Department of Fish and Game (September 3, 2002), letter to Fresno County Office of Education – Attention: Jamie Perry	3-7 through 3-10
D	State of California Department of Transportation (Caltrans), District 06 (August 14, 2002), response to Fresno County Office of Education – Attention: Jamie Perry	3-11 through 3-12
E	Margie McHenry, Planner, Public Works and Planning Department, Environmental Analysis Unit, Fresno County (September 16, 2002), e-mail correspondence to Fresno County Office of Education – Attention: Jamie Perry	3-13 through 3-14
F	Sheri Clark, REHS, Environmental Health Specialist III, Environmental Health System, Department of Community Health, County of Fresno, (September 9, 2002) letter to Fresno County Office of Education – Attention: Jamie Perry	3-15 through 3-16
G	Nick P. Yovino, Planning and Development Director, Development Department, City of Fresno (September 11, 2002), letter to Fresno County Office of Education – Attention: Jamie Perry	3-17 through 3-29
H	Donald B. Hunsaker, Jr., Program Services Director, San Joaquin River Parkway and Conservation Trust, Inc., (September 3, 2002) letter to Fresno County Office of Education – Attention: Jamie Perry	3-30 through 3-31
I	Gary S. Henson, Battalion Chief, North Central Fire Protection District, (November 7, 2002) letter to Blair, Church and Flynn, Consulting Engineers – Attention: Cordie R. Qualle PE	3-32 through 3-33
J	Joel L. Aranaz, Fire Marshal, City of Fresno Fire Department, (November 26, 2002) letter to Fresno County Office of Education – Attention Jamie Perry	3-34

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W2605
Sacramento, California 95825

IN REPLY REFER TO:
1-1-02-TA-2957

August 26, 2002

Jamie Perry
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, California 93721-2000

Subject: Responsible Agency Review of Draft Environmental Assessment No. 2002-01, Mitigated Negative Declaration and Draft Initial Study for Scout Island Outdoor Educational Center along the San Joaquin River in Fresno County

Dear Mr. Perry:

Thank you for providing an opportunity to the U.S. Fish and Wildlife Service (Service) to review the Draft Environmental Assessment for the proposed Scout Island Outdoor Educational Center along the San Joaquin River in Fresno County. The Environmental Assessment was received in our office on August 12, 2002. The proposed project will improve existing facilities in order to establish an outdoor educational facility for use by Fresno County school children and the San Joaquin River Parkway Trust patrons and their children. Proposed improvements include development of parking areas, restroom facilities, fencing, ropes course, outdoor classroom, planting of native shade trees, noxious weed control, and stream channel enhancement. Existing roads and trails (including seven bridge crossings) will also be improved to provide better access.

Surveys of the project site conducted by Live Oak Associates found blue elderberry (*Sambucus mexicana*) on the property. The elderberry shrub is a requisite host plant of the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*, beetle), a species listed as threatened under the Endangered Species Act of 1973, as amended (Act). The beetle has been found along the San Joaquin River downstream of Millerton Lake. The project site also may provide habitat to the golden eagle (*Aquila chrysaetos*), and other raptors protected under the Migratory Bird Treaty Act. Based on the project description as described in the Environmental Assessment, the Service believes that potential effects to the beetle can be minimized, or avoided entirely. The Service is providing the following guideline to assist the planning and design of the Education Center.

(1) To assess potential effects to the elderberry, the location of all elderberry shrubs with stems one inch or greater at ground level at the project site should be mapped. **A-1**

(2) To avoid potential "take" of the valley elderberry longhorn beetle, no construction should occur within 100 feet of any elderberry shrub's dripline. With full compliance with this avoidance measure, no further consultation pursuant to the Act will be required for the proposed project. **A-2**

(3) If all elderberry shrubs with stems one (1) inch in diameter or greater cannot be avoided by 100 feet, a biologist should survey each elderberry shrub directly or indirectly affected by the proposed project as per the 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle. Further consultation pursuant to the Act would also be **A-3**

Longhorn Beetle. Further consultation pursuant to the Act would also be required if the shrubs cannot be fully avoided. If a section 404 permit is needed for the project, incidental take authorization for the beetle may be obtained through a section 7 formal consultation between the Army Corps of Engineers and the Service. A-3

(4) Dust control measures proposed by the project would minimize effects to the beetles, however, no chemicals should be applied within 100 feet of elderberry shrubs, particularly from March 15 to June 30, when adults are foraging on elderberry flowers. Similarly, herbicides to control noxious weeds should only be applied between July and February within 100 feet of the shrubs. No herbicides should be used within 20 feet of the shrubs. A-4

The Service believes that the proposed project has potential to benefit the valley elderberry longhorn beetle and other listed species in the long term. The Environmental Assessment discusses development of an elderberry enhancement area to educate the public on valley elderberry longhorn beetles. Other activities that can be incorporated into the project include planting of additional elderberry shrubs and associated vegetation, incorporating the valley elderberry longhorn beetle into classroom curriculums, and using the elderberry enhancement area as an outdoor classroom site. The Service looks forward to working with the Fresno County Office of Education in the development of a facility and program that will foster the environmental awareness of our next generation. A-5

If you have any questions regarding the contents of this letter or need further assistance, please contact Nancy Pau or Susan Jones of my staff at the address above, or at (916) 414-6630.

Sincerely,

Jan C. Knight
Chief, Endangered Species Division

cc:
California Department of Fish and Game, Fresno, CA (Attn: Donna Daniels)
Army Corps of Engineers, Sacramento, CA (Attn: Paul Maniccia)

Donna Daniels
California Department of Fish and Game
San Joaquin Valley and Southern Sierra Region
1234 East Shaw Avenue
Fresno, CA 93710

Paul Maniccia
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

California Regional Water Quality Control Board
Central Valley Region
Robert Schneider, Chair

Winston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

Fresno Branch Office
Internet Address: http://www.swrcb.ca.gov/~rwqcb5
3614 East Ashlan Avenue, Fresno, California 93726-6455
Phone (559) 445-5116 • FAX (559) 445-5910

9 September 2002

Ms. Jamie Perry
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, California 93721

MITIGATED NEGATIVE DECLARATION FOR SCOUT ISLAND OUTDOOR EDUCATION CENTER, FRESNO COUNTY

We reviewed the Fresno County Office of Education (County) *Environmental Assessment No. 2002-01 Mitigated Negative Declaration and Draft Initial Study*, dated 5 August 2002, prepared for the Scout Island Outdoor Education Center (SIOEC or project). The SIOEC will occupy an 82-acre site situation within the 100-year floodplain of the San Joaquin River accommodate up to 200 students in grades K-12. The project will utilize the site's existing buildings, one which with an existing septic tank and leachfield system, and include infrastructure improvements and wetlands modification. Infrastructure improvements include abandoning an existing well, flood-proofing two existing wells and an existing septic tank and leachfield system, and installing up to four flood-proof vault toilets for a total of five vault toilets. The project description does not indicate the amount of domestic wastewater will be discharged to the existing septic tank and leachfield system. We recommend the subsequent draft of the Mitigated Negative Declaration cover this aspect of the project in more detail. **B-1**

The Mitigated Negative Declaration's Environmental Impact Summary Checklist indicates the project has a moderate potential to pollute surface or ground water. As mitigation measures, the document indicates the water wells and wastewater disposal systems will comply with existing applicable codes and regulations, including the Regional Board's *Guidelines for Waste Disposal from Land Developments* (Guidelines). These Guidelines require, in part, that a minimum distance of five feet be maintained between the bottom of a leaching trench and anticipated highest level of ground water. The Guidelines' requirements for septic systems also apply to the vault toilets. **B-2**

Compliance with regulations and permit requirements, by themselves, are not legitimate mitigation measures. To be considered adequate, mitigation measures need to be specified, tied to a specific action plan, and measurable to allow monitoring of their implementation. When adopting a Negative Declaration containing mitigation measures, an agency should also adopt a program for reporting or monitoring the specified mitigation measures. For this project, we recommend the County consider implementing a monitoring program to confirm, at a minimum, that (1) the 5-foot minimum separation distance between the bottom of the leachfield trench and highest groundwater is maintained (in accordance with the Guidelines) and (2) the discharge from the leachfield system does not cause water quality objectives to be **B-3**

exceeded in groundwater. We offer our assistance to the County, as staff resources allow, in reviewing any proposal it may formulate to implement a groundwater monitoring program. B-3

Since the construction will disturb more than five acres, compliance with the National Pollutant Discharge Elimination System General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (Waste Discharge Requirements, Order No. 99-08-DWQ) will be required. Before construction begins, a Notice of Intent to comply with the order must be submitted to the State Water Resources Control Board and a Storm Water Pollution Prevention Plan must be prepared. If you have any questions regarding the storm water permitting process, please call Ms. Lisa Gymer at (559) 445-6046 or check the State Water Quality Control Board's website at http://www.swrcb.ca.gov for more information. B-4

Since the project will involve the discharge of dredged or fill material into navigable waters or wetlands (jurisdictional waters), a permit pursuant to Section 404 of the Clean Water Act will be needed from the US Army Corps of Engineers and the proponent will also need to obtain a Section 401 Water Quality Certification from this office. The Regional Board will review the Section 404 permit application to ensure that discharge will not violate water quality standards. If the project will result in the discharge of dredged or fill material into wetlands that are determined by the Corps to be non-jurisdictional, the proponent will not be required to obtain a Section 401 Water Quality Certification but the proponent may be required to submit a Report of Waste Discharge (RWD) if the wetlands are waters of the state. Pursuant to California Water Code, Section 13260, all persons proposing to discharge waste that may affect the quality of waters of the state must submit to the Regional Board a RWD, following which the Regional Board will either prescribe WDRs or issue a waiver. If WDRs are prescribed, they will incorporate measures to mitigate potentially significant impacts to water quality and potential public nuisances that are due to the discharge of waste. For more information regarding Section 404 permitting, contact the Sacramento District of the Corps of Engineers at (916) 557-5250 and for more information regarding RWD and state requirements contact Mr. Brian Erlandsen in our office at (559) 445-6071. B-5

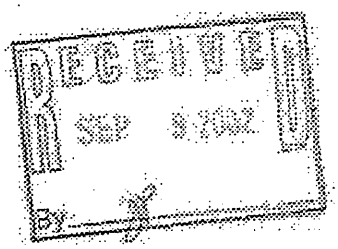
If you have any questions regarding this matter, please contact Ms. Amy Simpson at (559) 445-6187.

JO ANNE KIPPS
Senior Engineer
RCE No. 49278

Xms\Neg\Dec\Scott Island

State of California - The Resources Agency
GRAY DAVIS, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
San Joaquin Valley and Southern Sierra Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4014

September 3, 2002



Ms. Jamie Perry
Facilities Manager
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, California 93721-2000

Dear Ms. Perry:

Scout Island Outdoor Education Center (OEC) Project
Proposed Mitigation Negative Declaration
SCH # 2002081050

We have reviewed the proposed Mitigated Negative Declaration (MND) for the Project referenced above. The Project includes development of a regional outdoor education center with programs targeted to grades K-12. Infrastructure will be developed as part of the Project and the Project will also include landscaping and riparian enhancement activities. Scout Island is located on an 82-acre site on the south bank of the San Joaquin River between Van Ness Avenue and Marks Avenue alignments (Section 25, Township 12 South, Range 19 East, MDB&M). We previously commented on the early consultation request for the Project in a letter to Mr. Cordle R. Qualle, dated July 15, 2002. Though a number of mitigation measures were proposed in the MND for Project impacts to biological resources we continue to have concern regarding the Project and its potential effects on wildlife. Our additional comments follow.

Responsible Agency Authority – Stream Alteration Agreements: As mentioned in our July 15 comment letter, the Department of Fish and Game (Department) has regulatory authority with regard to activities occurring in streams and or lakes that could adversely affect any fish or wildlife resource. According to the Project description an access to the San Joaquin River and a canoe dock will be included as Project features. Additionally, Pirates Creek will be re-graded as part of the Project, a pond may be developed, and a pipeline will be constructed to connect the Creek and pond to the River. Pursuant to Fish and Game Code Sections 1600 et seq. Stream Alteration Notification is required for these activities. It is likely that the Department will need to enter into a Stream Alteration Agreement for this Project. We will need to use the environmental document prepared for the Project in order to determine conditions necessary to include in any agreement we prepare for the Project. We will also need to use the environmental document developed by the Fresno

C-1

Office of Education to prepare Responsible Agency Notices of Determination and the California Environmental Quality Act (CEQA) findings for said agreements. C-1

The MND prepared for the Project is not adequate for us to use as the environmental document to prepare a Stream Alteration Agreement or Agreements for the proposed Project. In order for the Department to proceed with authorizing work on the site, we will need to review the following information that should be included in the final MND:

1) Specific engineering plans for the improvements to Pirates Creek. The improvements must be designed and constructed so as to not cause erosion into or pollution of the San Joaquin River. Improvements must also be designed and constructed so as to not either strand aquatic species on the site, harbor non-native species, or harbor native species that could compete with anadromous fish (the Department actively supports restoration of anadromous fish in the San Joaquin River). Of particular concern to the Department is the construction of the pond. We believe that it would be difficult to construct a pond that would not potentially affect native wildlife species and we recommend against its construction. C-2

2) Specific landscape plans, approved by the Department, for the entire site including management and monitoring of plantings, type of plants, and irrigation plans. Management of the landscaping at the site should include control of the non-native invasive giant reed (*Arundo donax*) and scarlet wisteria tree (*Sesbania punicea*) as ground disturbing activities associated with stream construction and connection of the stream to the San Joaquin River could result in their spread.

Additional Concerns

Fencing: The Department has concerns regarding the impact that fencing of the site may have on wildlife that uses the San Joaquin River corridor for daily and seasonal movement. We believe that this is a potentially significant impact to wildlife under CEQA warranting additional mitigation. Mitigation options could include eliminating fencing from the site, leaving unfenced movement corridors within 200 feet of the River and along Pirates Creek, or using a wildlife friendly fencing design approved by the Department. C-3

Development of a Horse Corral and Riding Arena: We have concerns regarding the design, construction, and operation of a horse corral and riding arena on the site. Because the entire Project site is in a flood prone area, exposed soil could erode into the River or Pirates Creek and animal waste could C-4

also contaminate the River. If horses are either grazed or ridden outside of the arena then additional impacts to native habitat could occur. We recommend against inclusion of a corral and riding arena in the Project. If the Project is considered for approval with the corral and arena, we would like to review additional information regarding their design, construction, and operation including what measures the Fresno County Office of Education (FCOE) will take to mitigate their impacts. C-4

Work in the Floodway: The Scout Island Outdoor Education Center Project includes a fairly substantial amount of new construction in the floodway including outdoor classrooms, vault toilets, road, trail and parking construction, berms, camping platforms, and previously discussed features. It is generally environmentally preferable to locate projects outside of the flood prone areas rather than to try mitigate their impacts and to subject the River environment to, at minimum, incremental environmental impacts of the Project. We strongly encourage the FCOE to consider minimizing construction in the floodway to the greatest extent possible. An important component to educating students about protection of the River environment is to set a good example. C-5

If the Project is substantially modified prior to its approval, the adoption of the MND, or as a result of other permit requirements, we would like to review the Project modifications. C-6

If you have any questions regarding these comments, please contact Ms. Donna Daniels, Environmental Scientist, at the address or telephone number (extension 222) provided on this letterhead.

Yours sincerely,

W. E. Loudermilk

W. E. Loudermilk
Regional Manager

cc: See Page Four

cc: United States Fish and
Wildlife Service
2800 Cottage Way, W-2605
Sacramento, California 95825

United States Army
Corps of Engineers
Central Valley Office
1325 J Street
Sacramento, California 95814-2922

California Regional Water
Quality Control Board
Central Valley Region
3614 East Ashlan Avenue
Fresno, California 93726

Mr. Dale Mitchell
Department of Fish and Game

Ms. Gail Davis
Department of Fish and Game

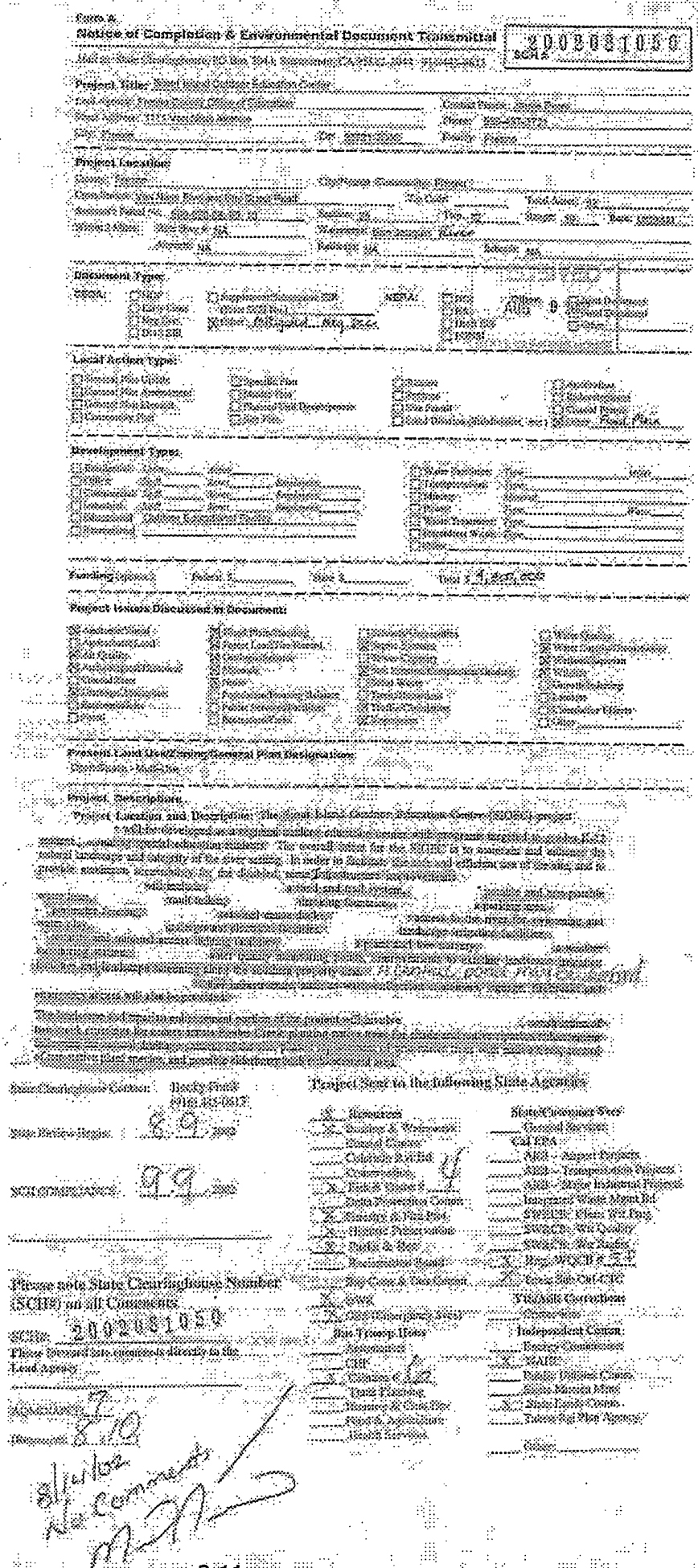
Mr. Clu Cotter
Department of Fish and Game

Mr. Craig Kindlin
Department of Fish and Game

Ms. Donna Daniels
Department of Fish and Game

Comments letter from
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DISTRICT 6

A copy of the envelope in which this comment arrived follows this comment letter.


Notice of Completion & Environmental Document Transmittal

2002081050

Project Title: Steel Island Outdoor Education Center

Project Location

Document Type:

Local Action Type:

Development Type:

Project Issues Discussed in Document:

Present Land Use/Zoning/General Plan Designation:

Project Description:

Project Location and Description: The Steel Island Outdoor Education Center (SIOEC) project

Project Sent to the following State Agencies

Please note State Clearinghouse Number (SCH#) on all Comments

SCH# 2002081050

Please forward late comments directly to the Lead Agency

8/1/02 No comments

D-1

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
DISTRICT 6
P.O. BOX 12616
FRESNO, CA 93778

Jamie Perry
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, CA 93721

93721-2800

Cordie

From: Jamie Perry [jperry@fcoe.k12.ca.us]
Sent: Tuesday, September 17, 2002 10:39 AM
To: Cordie Qualle (E-mail)
Cc: David Mowry (E-mail); Mike Flynn (E-mail); Mike Paoli (E-mail)
Subject: FW: Scout Island

-----Original Message-----

From: McHenry, Margie [mailto:MMcHenry@fresno.ca.gov]
Sent: Monday, September 16, 2002 2:10 PM
To: 'jperry@fcoe.k12.ca.us'
Cc: Frank Daniele; Frank Fowler; Stan Ediger; Dennis Ellis
Subject: Scout Island
Importance: High

Hi Jamie. Thank you again for the extension. Below are comments from the Fresno County Public Works and Planning Department:

1. The applicant shall obtain a grading permit per the County's grading ordinance (Chapter 15.28 of the County Code) prior to the start of work. A grading and drainage plan shall be submitted for review and approval. **E-1**
2. The applicant's grading operations shall meet all requirements of the County's Flood Hazard Ordinance (Chapter 15.48 of the County Code) for those areas within an area of special flood hazard. **E-2**

The following information is provided for the applicant's consideration:

1. Grading within an area of special flood hazard shall require that all fill material be compacted to a minimum of 95 percent relative compaction.
2. Non-residential structures, including existing structures proposed for substantial improvement, shall have the floor elevation a minimum of six inches above the base flood elevation, or in the alternative, be floodproofed, have structural components capable of resisting hydrostatic and hydronamic loads and effects of buoyancy, and be certified by a registered civil engineer or architect that the building meets acceptable standards of practice.
3. New structures subject to flooding shall be protected from flood damage at the time of initial construction. Such protection from damage shall be certified by a registered civil engineer, including elevation and floodproofing certifications, anchoring certifications, and wet floodproofing certifications. Certifications shall be filed with the County's building official.
4. Development shall comply with the County's provisions for flood hazard reduction, including standards for construction, for storage of materials and equipment, and for utilities.
5. Development within the flood prone or floodway areas shall require submission by a registered civil engineer of sufficient technical data to demonstrate that the proposed development will not result in any increase of base flood elevation, including increases from the additional runoff generated by the development. **E-3**
6. Any building with the finish floor proposed for construction below the base flood elevation shall require a variance issued by the floodplain administrator.
7. Provisions shall be made to maintain natural drainage throughout the development in a manner that will not significantly change the existing drainage characteristics of those parcels adjacent to the development.
8. Copies of the applicant's Stormwater Pollution Prevention Plan and Notice of Intent for NPDES permit compliance shall be submitted with the grading and drainage plan.
9. Copies of the applicant's agreements and/or permits from Department of Fish and Game, State Reclamation Board, and US Army Corps of Engineers shall be provided with the grading plan submittal.

10. Within floodway areas, if in the opinion of the floodplain administrator the land area for which development is proposed is subject to flood hazard to the extent that no reasonable amount of corrective work can eliminate or sufficiently reduce the hazard to human life or property, the grading permit shall be denied.

E-3

Please contact Frank Daniele at 262-4115 if you have any questions.

Thank you again, Jamie.

Margie McHenry
Public Works and Planning Department
Environmental Analysis Unit
PH: (559) 262-4270
FAX: (559) 262-4893
STOP #54

COUNTY OF FRESNO 1856

Human Services System
Department of Community Health
Gary M. Carozza, Director

Adult Services Department
Children & Family Services Department
Employment & Temporary Assistance Department

RECEIVED
SEP 11 2002
By

September 9, 2002

Jamie Perry, Facilities Manager
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, CA 93721

Dear Ms. Perry :

SUBJECT: Notice of Intent to Adopt Mitigated Negative Declaration - Scout Island Outdoor Education Center Project

The Fresno County Department of Community Health, Environmental Health System has reviewed the above noted document, and predominately concurs with the information contained therein. There is, however, some discussion in the document pertaining to the status of the project meeting the definition of a Public Water System (PWS) which requires clarification.

Page 23 of the document identifies potential start up and maintenance costs as a deterrent to operating while meeting the definition of a PWS. The discussion indicates utilizing bottled water at drinking fountain sites as a means to avoid PWS status. This Department permits some Transient Noncommunity PWS under a "Hand Wash Exemption" (i.e. no points of consumption, but public access points to sinks and toilets), but there is no difference in operational requirements between the two classifications. F-1

Regarding the comment in my memo to you dated June 28, 2002 indicating Technical, Managerial, and Financial Capacity was required to be met in addition to obtaining the services of a Certified Water Distribution Operator, these requirements do not apply to Transient Noncommunity PWS's. Comments were submitted when the classification of the project was unknown.

Further, emergency chlorination facilities are not required to be maintained on site. Required physical improvements include a grounded electrical outlet for a chlorination pump, a chlorine injection fitting, and a sample tap immediately downstream of the injection point. The applicant is required, however, to provide documentation of a service contract for the services of a qualified water treatment technician to install and operate the chlorinator should it become necessary. In lieu of providing emergency chlorination capability, the operator may provide a written verification that the site will be F-2

1221 Fulton Mall / P.O. Box 11867 / Fresno, California 93775 / (559) 445-3357 / FAX (559) 445-3379

closed in the event of a bacteriological contamination emergency. If further clarification is required, please contact Ed Yamamoto, Water Surveillance Program, at 445-3357.

Regarding the above ground storage tanks located on site, if they will not be removed, then prior to operation, the applicant will be required to complete and submit either a Hazardous Materials Business Plan or a Business Plan Exemption form to the Fresno County Department of Community Health, Environmental Health System. Contact the Certified Unified Program Agency at (559) 445-3271 for more information. F-3

If I can be of further assistance, please contact me at (559) 445-3357.

Sincerely,

Sheri Clark, R.E.H.S.
Environmental Health Specialist III
Environmental Health System

sc

cc: Vince Mendes, Environmental Health System (CT 43.01)
Ed Yamamoto, Environmental Health System

PCOE Scout Island Neg Decdoc

City of
FRESNO
Development Department
2600 Fresno Street • Third Floor
Fresno, California 93721-3604
(559) 498-1591 • FAX (559) 498-1012
www.ci.fresno.ca.us
Nick P. Yovino
Director

HAND DELIVERED

September 11, 2002

Jamie Perry, Facilities Manager
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, California 93721

Dear Ms. Perry:

SUBJECT: COMMENTS ON DRAFT INITIAL STUDY AND PROPOSED MITIGATED NEGATIVE DECLARATION FOR THE PROPOSED FRESNO COUNTY OFFICE OF EDUCATION (FCOE) SCOUT ISLAND OUTDOOR EDUCATIONAL CENTER (STATE CLEARINGHOUSE No. 2002081050)

We thank you for distributing copies of this draft environmental assessment (EA) document to various City departments, and for the extension of time which has allowed us to compile these departmental comments into one response letter.

PROJECT DESCRIPTION AND JURISDICTIONAL ISSUES:

We appreciate the project description clarification which verifies that the project only encompasses improvements and uses on the south side of the San Joaquin River, excluding property which FCOE purchased on the north bank of the River in Madera County.

However, the EA Initial Study Project Description now includes several project features which were never mentioned in the original project description and Request for Comment (RFC) that was routed to solicit input to the Initial Study. Features such as "landscaping berms," "platform camping area," "horse corral and riding arena," "private park area," and "Capitola kitchen," and were not previously described for the benefit of anyone reviewing and commenting on this project or its potential impacts, nor was the proposal to modify the pre-existing on-site residential/agricultural well for domestic and fire suppression water supply put forth for inter-agency review. **G-1**

Since Fresno County sent the City the building permit archival records for the ranch house and barn when Annexation No. 916 was finalized, it has been our understanding that these features were brought within the City, that the dividing line between City and County lies north of the ranch house. However, all the EA diagrams for this project are showing that the ranch house and barn (so-called "meeting building") would be located outside City boundaries. During preparation of this EA, no one consulted with us to resolve this matter, and it is unclear how the City/County boundary determination has been made. **G-2** **G-3**

A copy of our July 1, 2002 letter is enclosed, containing our response to the RFC which was circulated for this project's initial study. As noted in that letter, there are several areas of responsibility and jurisdiction that the City of Fresno has with regard to the annexed portions of this project, notwithstanding FCOE land ownership and the Resolution exempting the project from our zoning (and Conditional Use Permit) authority due to its status as a classroom facility. Even though half of the land is outside City boundaries (and several key buildings may turn out to be outside of City boundaries, contrary to our previous information from Fresno County), impacts from activities and construction on the unincorporated portions of the land may adversely affect land that is within City boundaries. G-4

ISSUES RELATING TO DEVELOPMENT IN FLOODWAYS:

Our primary concern is, and has been, that this property lies entirely within the designated 100-year floodplain and the **floodway** shown on maps produced by the Federal Emergency Management Agency (FEMA). This is of concern to us because the City of Fresno participates in the National Flood Insurance Program (NFIP) and is, therefore, obligated to enforce FEMA regulations (see copy of 44CFR60.3, enclosed) and to adopt and enforce a local floodplain protection ordinance (also enclosed; please note that it is part of our building code, not part of our zoning code). We must enforce these regulations per the most recent FEMA Flood Insurance Rate Map (FIRM), which was updated in 2001 for the upper reaches of the San Joaquin River. We have been informed by FEMA and the Department of Water Resources (DWR) that we are expected to ensure that all private and public projects conform to these regulations and floodway protections. Aside from the obvious safety and health issues involved, and the potential risks and expenses of evacuation and flood emergency responses, our City-wide flood insurance rates (for all private and public property owners who require or seek this coverage) and eligibility for federal flood disaster assistance both depend on how well we administer the flood regulations and enforce floodplain protections. Furthermore, by Governor's Executive Order, state-level agencies are also required to comply with FEMA regulations (see enclosed copy). G-5

It would have been helpful to us and to the other decision-makers who reviewed this project and EA if the portion of the most recent FEMA map covering this property--FIRM Panel No. 06019C1550F--had been included as either as separate exhibit, or as an overlay to the proposed site plan. From our evaluation of the proposed site plan and FEMA flood map, it appears that new buildings and other improvements are being proposed in the FEMA floodway (including the vault toilet building, "ropes course," and building modifications to a home and barn done without permits). G-6

We cannot concur with the EA's conclusion that the proposed project would conform to floodplain and floodway requirements simply by engaging in an engineering review and further CEQA analysis (Mitigation Measures Part 12.2/12.3, bottom of pg. 66 of the EA), and we cannot concur that the project does not have a significant potential environmental (or floodway) impact because it would cause insignificant changes or little measurable net rise in floodwaters, changes which may be dealt with by "compensatory action." G-7

FEMA regulations very clearly state that, in floodways, there is to be **no** displacement of floodwaters due to grading or improvements–in other words, no grading (including "landscaping berms") may be done, nor can any building improvement be done which would displace floodwaters in any way. Nor may improvements (such as fencing, gates, etc.) change or redirect the flow of floodwaters; nor may improvements on one property cause floodwaters to be diverted onto, or elevated for, other properties. G-8

Initial Study pg. 16 and the first mitigation measure in Part 1.3 of the Mitigation Checklist (pg. 57) talks about "berms" to be created with excavated fill. It is our understanding that FEMA regulations do not allow berms to be placed in floodways. It is also our understanding that FEMA regulations also state that no new buildings are to be placed in floodways, and no pre-existing buildings in floodways are to be "substantially improved"--this would include conversion of previously non-habitable buildings into habitable space. (The base value of the building used to test the "substantial" criterion would be its condition after the 1997 flood.) G-9

Our information from FEMA and DWR is that the *only* way around these prohibitions is to obtain a Letter of Map Amendment (LOMA) or Letter of Map Correction (LOMC) from FEMA, showing that the buildings would not, in fact, be in the floodway. A project applicant would have to apply through the local agency for a LOMA or LOMC (the City would be the appropriate local agency for all portions of the site which lie inside City boundaries–and we note that the buildings and other improvements are depicted primarily in the incorporated portion of the site). G-10

While the EA's Mitigation Measure Checklist (Part 1.2) states that a US Army Corps of Engineers HEC-RAS Water surface Profile Model was to have been prepared for this project concurrently with the draft mitigated negative declaration, no such study has been submitted to us for review as is required when determinations are to be made on improvements in the floodway and floodplain. G-11

It should also be noted that any pond proposed to be created on, or from the "Pirates Creek" channel supplied by water from the San Joaquin River (via the "intake pipeline" described on pp.13-14 of the Initial Study) should not be included in any floodwater engineering studies until FCOE has obtained a firm water right from the State Water Control Board (not the Department of Water Resources) to detain River water for beneficial use and has obtained permits from all responsible agencies for installing the intake pipeline and/or doing the grading to open the stream channel and to create any pond or other detention facility. The mitigation checklist does not include the requirement to obtain a water right, but it is an important mitigation measure that should have been included, in addition to all the permitting needed to create a pipeline intake on the San Joaquin River. G-12 G-13

Without showing evidence that a LOMA or LOMC has been issued to allow for new and substantially improved buildings and other structures in the floodway, this EA does not provide sufficient mitigation for the proposed new and remodeled structures in the San Joaquin River floodway. G-14

Further, the EA does not provide the necessary complete and detailed documentation on pre-existing structures (both small and large improvements--such as fence posts--have to be accounted for in the floodway), nor does the EA note or explain the new buildings, repairs/remodeling and building additions done on the property since the last flood in 1997. G-15

"Compensatory action" may only to be used for very minor improvements in a floodway, via a FEMA process called "simple floodway encroachments" (please see enclosed FEMA document explaining this process). This process can only be used for small-displacement structures such as a utility pole, etc. A lot of engineering analysis is required for these, and FEMA requires total offset of any displacement. G-16 (On the adjacent River's Edge project, a gate, water well casing and mailbox are requiring that portions of one or more building pads be shaved away to allow an identical volume of water to remain in floodway capacity.)

The EA does include some information on the California [State] Board of Reclamation's Designated Floodway (not to be confused with the more recently updated FEMA floodway], and this information shows that much of the property is in that Designated Floodway and is subject to the provisions of the California Code of Regulations Title 23 (administered by DWR staff on behalf of the California Board of Reclamation). FEMA regulates grading, structures, fencing and utility installations (including water intake structures) in FIRM floodways pursuant to 44CFR60.3 and derived local regulations. The California Board of Reclamation, however, goes further, with restrictions and permit requirements for agricultural plantings, landscaping plantings, and revegetation (including that done with native plants). G-17 The Board of Reclamation does not appear in Table 1 as a regulatory agency for this project; yet, almost everything proposed to be done here would require its approval. Table 1 and the Mitigation Checklist for this project needs to include any of the Board of Reclamation's requirements for performing work in the Designated Floodway. Mitigation measures should be added to reflect CCR Title 23 requirements for Designated Floodway areas, including the requirement to get encroachment permits from the Board of Reclamation for all above-ground work/construction, all in-ground/buried improvements, and all revegetation located within Designated Floodway boundaries.

We note that the City's mitigation checklist for the adjacent River's Edge Estates project (SCH 2002031100) was used as a source for most of the proposed mitigations for this project. This is in accordance with our advice that the River's Edge Estates EA and mitigation checklist be used as a starting point for FCOE project analysis and mitigation.

However, it is important to realize that the adjacent project is on land that has virtually no frontage on the main channel of the river, and is comprised of land that is only partially in the FEMA floodway and is not at all in the California [State] Designated Floodway. G-18 The River's Edge Estates mitigation measures were oriented to a project consisting of eleven widely-separated homes; its mitigation checklist was not proposed for an institutional occupancy involving sizeable numbers of children.

It appears that not all of the City's proposed mitigation measures for River's Edge Estates were included in FCOE's document. Further, it appears that some of the measures which were included have

not been appropriately adapted for this project. In addition to the aforementioned issues of FEMA and California [State] Designated Floodway encroachment, the following measures should be revisited:

- For the River's Edge Estates project, the City required that no propane tanks or other flammable material storage tanks be located anywhere in the FEMA floodway, due to the risk of their being dislodged or damaged by floating debris during a flood --leading to very dangerous situations for flood rescue workers, property owners, and downstream bridges. However, in Part 12.2/12.3 of the FCOE's proposed Mitigation Checklist (top of EA pg. 67), it is proposed that these tanks be allowed in the floodway, if elevated above Base Flood Elevations (BFE). This does not appear to be adequate protection, because debris "rafts" composed of trees, fencing, etc. often are carried above the surface level of the floodwaters themselves, and can damage any pylons or supports for elevated tanks. This FCOE mitigation measure should prohibit propane/flammable material tanks from being sited anywhere in the FEMA floodway. **G-19**

- For the River's Edge Estates project, the city required that septic tanks be distanced at least one hundred feet (100') from the northern, eastern, and southern edges of that project site in order to protect any water wells on property owned by FCOE, Fig Garden Golf Club, and the San Joaquin Country Club. In transcribing this mitigation measure verbatim into its Mitigation Checklist Part 3.4 (EA pg. 58), FCOE did not give equal protection or consideration to River's Edge Estates groundwater to the south of the FCOE property. The FCOE mitigation measure should specify that septic system components will be distanced at least 100' from eastern, western, and southern boundaries of the FCOE property. Since the northern "boundary" of the FCOE property seems to be on the San Joaquin River (not the midpoint of the River, which would be in state sovereign land), it should be determined whether 100' from that northern boundary would be the appropriate setback, or whether more distance should be required in order to protect the waters of the U.S. **G-20**

Please note that we are not coming at a late stage in planning with this floodway and floodplain information. When FCOE's business agent first came to the City building permit counter to ask for information regarding this site (before FCOE had purchased it), the draft FEMA floodplain and floodway maps were explained to him by a planner and a registered civil engineer. Subsequently, information was sent to him regarding FEMA regulations and the need to contact the State of California Board of Reclamation and Department of Water Resources regarding California [State] Designated Floodway issues. At every step in the process, we have contacted FCOE, its project engineer, and even its grading contractor. We have provided information on the requirements for grading and construction in a floodway/floodplain. If this EA is approved by the Governing Board in its present form, please be advised that the City of Fresno is still required to enforce the federal, state, and local floodway regulations. We have been formally assigned this task by FEMA and DWR with regard to federal and local floodplain protection laws and ordinances, and Board of Reclamation representatives have formally requested our assistance in administering CCR Title 23 Designated Floodway regulations. **G-21**

MINERAL RESOURCE CONSERVATION ISSUES:

The EA does note that this property is an area designated as having regionally-significant deposits of construction aggregate minerals. Pursuant to our the California Public Resources Code, Surface Mining and Reclamation Act (SMARA), and our General Plan Conservation Element mineral resource management policies, we are required to protect this land from incompatible development which would preclude future recovery (mining) of the mineral resources. The Public Resource Code does have provisions whereby regionally significant mineral resource land may be converted to a mining-incompatible use, if specific findings are made by the SMARA Lead Agency and presented to the State Mining and Geology Board (SMGB) and the public.

The EA needs to provide some proposed findings or justification for approving this project as a mining-incompatible use on recognized regionally-significant aggregate mineral resource property, explaining why this use should be instituted rather than preserving this property's potential for future mineral extraction. The FCOE property is <u>not</u> identical to the River's Edge Estates property, and it appears that not all of the same justifications which the City used to approve a mining-incompatible use on the River's Edge Estates would apply to the FCOE property.

G-22

The mitigation measure in Part 1.3 of the Checklist (EA pg. 56) needs to be modified to correctly state which agency is required to present these findings to the SMGB: the State Lands Commission has no SMARA Lead Agency responsibility for compliance with California Public Resources Code Section 2763. For portions of the project site within City boundaries, the City of Fresno is the SMARA Lead Agency; for other portions of the site, it would be the County of Fresno. The Public Resources Code does not exempt state sovereign or state-owned land from SMARA Lead Agencies' area of responsibility. Therefore, the City and the County–not State Lands Commission–are the agencies required to implement this mitigation.

Since this EA did not contain proposed findings/justifications for allowing a mining-incompatible use on the FCOE property, a subsequent consultation between the City, the County, and FCOE will be required in order to draft the letter(s) which must be sent to the State Mining and Geology Board.

For its SMARA Lead Agency work on this matter, the City will require that the noticing and public hearing provisions of PRC §2762(d) be followed (copy enclosed), because the draft Initial Study didn't contain information regarding the proposed findings/justification which the public or adjacent property owners could review to determine whether they concur with the reasons for instituting this a mining-incompatible use.

WATER SUPPLY, WATER QUALITY, AND WATER WELL ISSUES:

We noted in our July 1 letter that this property does not have sewer utility service or water service. Until the Draft EA was released we had no information on how FCOE intended to provide potable water, fire suppression water, or irrigation water for its project. This left us unable to provide useful comments in response to the Initial Study RFC.

The EA did not depict exactly where on-site waste disposal facilities would be sited, but did reference Regional Water Quality Control Board requirements for permitting and distancing those facilities from all sensitive uses (which would include any water wells on adjacent properties). The locations of septage storage tanks, septic tanks, distribution boxes, leach lines, and replacement leach field areas need to be delineated on site plans to ensure that these separations will be maintained, in order to prevent cross-contamination and to ensure that other facilities will not be inappropriately built on top of septic tanks and leach lines. G-23

Pages 10 and 11 of the Draft Initial Study state that potable water will be supplied to the entire project via improvements to the existing on-site residential/agricultural water well and installation of water lines for a "transient noncommunity [potable] water system." The Initial Study further declares that these improvements will be exempt from City and County zoning and building requirements, "pursuant to FCOE's Resolution No. 2001-32 and Government Code Section 530."

Per California Government Code Section 53094, FCOE can exempt itself from City zoning when developing classroom facilities, but as noted on page two of this letter, a school district cannot exempt itself from all regulations of the California Building Code, Uniform Plumbing Code, California Fire Code, FEMA regulations, or California Board of Reclamation regulations. G-24

Either the California Department of General Services Division of State Architects (DSA) must review plans for, and authorize, construction and improvements such as this water system; or, the appropriate local agency must do the plan check, issue permits, and inspect the work done. There should be a mitigation measure requiring that either the DSA issue a Letter approving water system improvements; or, the appropriate plumbing, electrical, and structural permits should be obtained from the City and County of Fresno as appropriate with regard to the location of improvements and the City/County boundary (these improvements would include water lines and plumbing fixtures throughout the project). The mitigation measure should also specify that the improvements will conform to FEMA floodplain/floodway rules and to State Designated Floodway regulations. G-25 G-26

While the Initial Study text speaks to the maintenance and disinfection of this system in the EA's discussion/background information section, there are no corresponding mitigation measures which FCOE's governing board is being asked to certify to provide affirmative water system operational requirements through the life of this project. Therefore, the Mitigation Checklist should include additional mitigation measures to "firm up" the items discussed in the Initial Study: G-27

- this water system shall have a licensed water treatment operator responsible for water system testing, maintenance, and disinfection; G-28

- before any further public use of this water system is allowed, the transient noncommunity public water system permit shall be obtained from California Department of Health Services/Office of Drinking Water and Environmental Regulation. [Other new public noncommunity water systems proposed in the City of Fresno for the past several years have been referred for State permitting; Fresno County Environmental Health has not offered permitting services for those.] G-29

- under the transient noncommunity public water system permit, overall occupancy of the site shall not exceed 25 persons more than 60 days per year; any higher levels of occupancy/usage/visitation shall require prior approval of a public noncommunity water system permit from the California Department of Health Services/Office of Drinking Water and Environmental Regulation. [Other new public noncommunity water systems proposed in the City of Fresno for the past several years have been referred for State permitting; Fresno County Environmental Health has not offered permitting services for those.] G-30

It is unclear whether this water well is going to be reconstructed to add a 50-foot annular seal. If the well is located within City boundaries, it will require a permit from the City Department of Public Works and the Final EA should contain information about this well and its reconstruction. This requirement is not in the City's Zoning Ordinance; it is in another portion of the Municipal Code and therefore remains applicable. If the well is located outside of City boundaries, the well reconstruction permit would have to be obtained from Fresno County Environmental Health. G-31

The EA goes on to state that this same residential/agricultural water well will be used to supply fire suppression water, but does not give any indication that the well has adequate capacity to provide fire flow. This matter will be addressed further in following paragraphs regarding fire protection measures for the project.

We have informed FCOE and its engineering consultant that, within City boundaries, a City well permit is required for any new well construction, including monitoring or "observation" wells; that would include the "groundwater observation well" installed in the bed of Pirate's Creek within City boundaries. The requirement for City well permits should be added to Table 1 and to the Checklist as a required mitigation measure. The "groundwater observation" wells were installed within the FEMA floodway, but a floodway encroachment analysis has not been done for them; this is also required. The above-ground "observation" well casings are at risk for being snapped off in the event of flooding. As a mitigation measure to safeguard against potential floodwater contamination, the "observation wells" should be removed prior to mid-December of 2002, in order to prevent waters from directly entering the water table (there are potable wells just to the south). G-32

All well(s) located within City boundaries need to be abandoned to City standards and specifications, with a City plumbing permit and City Water Division oversight. The EA discusses abandonment of G-33

another pre-existing, older agricultural well on the site (but its location is not clearly described). When wells are located within City boundaries, the appropriate mitigation measure would also be that City of Fresno well abandonment standards and procedures be followed–not "Fresno County Environmental Health Department" regulations as mentioned in the Initial Study. City water well abandonment regulations are not exempted for this project, because they are not part of the Zoning Ordinance. The City follows the provisions of DWR Bulletin 118-74, with some modifications to protect its Sole Source Aquifer. Information on well abandonment requirements for the City may be obtained from the City Water Division (Rick Childers, ph. 498-4670). G-33

FIRE PROTECTION:

For all buildings located within City boundaries, the [City of] Fresno Fire Department should be listed as the fire jurisdiction of record. The Fresno Fire Department should be added to North Central Fire Protection District in Part 11.1 of the project's Mitigation Checklist (pp. 64-65). Both fire protection agencies should be added to Table 1 of the Initial Study (pp. 28-30) as well. Part 1.3 of the Checklist should be amended to note that the [City of] Fresno Fire Department standards shall apply to all structures located in the fringe area of the City (regardless of whether it is inside, or immediately outside, of City boundaries). Even if buildings are not located within City of Fresno boundaries, North Central Fire Protection District upholds City standards on proximal fringe area development. G-34

Exhibit F, the "Fire Suppression Diagram" (or "Fire Suppression Map") does not provide hydrant or fire main locations; nor does it show vehicle ingress/egress, and turning facilities for fire equipment. This information is needed for proper evaluation of the proposed fire protection plan for the project. A specific fire safety mitigation measures should be added to the EA to provide that the City of Fresno and North Central Fire Prevention District shall both and/or jointly be provided with a detailed fire suppression plan for their review and approval before any more structures are built, modified, or put into new uses. This fire suppression plan must be fully dimensioned and shall show all existing and proposed facilities, along with means of vehicle ingress, egress, and turning; all fire protection water sources and mains; all hydrant locations and types; and showing sprinkler systems for all buildings. G-35

As noted previously in the "water issues" section of this letter, the EA needs to provide more data on fire suppression water supplies. Mitigation measures should be added regarding assurances that the fire suppression water supply shall be adequate in terms of volume and duration, and that the fire suppression water supply shall be protected from failure during emergency events. In order to meet standard fire hydrant flow requirements, a large water storage tank and/or redundant wells are typically required (we note that floodway regulations would very much complicate any effort to site a large water storage tank to serve this property). G-36

There is no water well pump test information given in the Initial Study regarding the existing residential/agricultural well, and no information about potential reduction in that well production if it is reconstructed for public potable supply purposes. This information is needed for reviewers. A mitigation measure should be added to the Checklist to specify that a "listed" UL/FM approved pump is required for the fire water supply well(s)--the existing well pump would not meet this requirement. The pump and its power supply need to be protected from flooding. G-37

There should also be a mitigation measure specifying that approved cross-contamination prevention measures will be installed (e.g., a double backcheck valve), in order to protect the potable water supply from the fire suppression water supply (since it appears that both will be derived from the same well). G-38

If it is proposed to use gas chlorine for well disinfection (required for the transient noncommunity public water system permit), a Hazardous Materials Business Plan would need to be filed with Fresno County Environmental Health and the local fire agencies. G-39

In Exhibit F of the Draft Initial Study, sprinklers are indicated only for the office (administrative) and meeting buildings. This needs to be corrected to show sprinklering of **all** buildings (using NFPA #13 design fire sprinklers). Structures must be fully sprinklered when the City of Fresno and/or the North Central Fire Protection District Fire Marshal(s) determine that sprinklering is necessary pursuant to an analysis of "running distance," response time delays, building construction, building separations, and other factors. Even if changes of occupancy and improvements are reviewed and authorized by the DSA, plans are to be supplied to the local fire departments and their fire marshal requirements are to be implemented. All habitable and non-habitable buildings are required to be fully sprinklered in fringe areas where there is excessive distance and/or response time for firefighters–such as this location. The reason for fully sprinklering all buildings here is not limited to the application of the City's Urban Growth Management running distance rule–which has a 3.0 mile distance, not 2.0 miles as was stated in the Draft EA–but the fact that getting a fire engine down to this property is excessively time-consuming due to its location down a steep, one-lane road with at least three gates to be opened. G-40

Emergency access for this site is still not completely resolved.

- All the gates installed on Boy Scout Road and on/within the FCOE property still do not have any fire/police/ambulance lockbox or equivalent, despite this need being brought to FCOE's attention a year ago. G-41

- Part 11.2 of the Mitigation Checklist needs to be augmented to specify that the all-weather, twenty-foot (20') wide access routes with appropriate turning radii, able to 80,000 pound fire apparatus, shall be provided within the FCOE property–currently, the paved roadway (Boy Scout Road) ends at the FCOE gate, and Exhibit F does not give internal access information for fire apparatus. G-42

- The EA does not verify that FCOE has acquired any easement or right to use an emergency access route through Fig Garden Golf Course. An easement was acquired by Scout Island Investors LLC for its low-density River's Edge Estates residential project, but we have not seen any documentation to show that FCOE has acquired an easement for itself or other equivalent right of access from Fig Garden Golf Course. Therefore, the mitigation measure in Part 11.2 of the Checklist (bottom of pg. 65) cannot pre-suppose that FCOE could use this emergency access route, until it is verified that FCOE has emergency access rights through that property. Also, the City has noted previously that even if FCOE were to acquire emergency access easement rights through the Fig Garden Golf Course, this would not constitute a true second point of emergency access since a street access closure at the end of North Van Ness Boulevard Extension would block access to both Boy Scout Road and the Fig Garden Golf Course driveway. While all purchasers of River's Edge Estates parcels are advised of this situation by signing a covenant, the Ea does not state what the equivalent disclosure and informed consent process would be for all potential users of the FCOE property. G-43

The Mitigation Checklist should be amended to note that while fire protection agencies review and approve emergency evacuation plans for individual buildings, it is City and County Emergency Services offices which would review the overall evacuation plan for the FCOE property. The Fresno County Office of Emergency Services is a function of Fresno County Environmental Health. The City of Fresno Emergency Preparedness Officer is in the Fresno Police Department Patrol Support Bureau. G-44

Finally, a fire protection mitigation measure should be included to require FCOE to pay its fair share of Urban Growth Management (UGM) fees for new fire stations. These fees are calculated for all development in the City of Fresno's designated Urban Growth Management area, including projects in the unincorporated area within 1/4 mile of the City boundary (per the 1991 City-County MOU). Other school districts pay their UGM fees. Since this project creates no apparent additional demands for public water or sewer service, major street improvements, or neighborhood parks, we do not propose that this project pay those types of UGM fees. However, this project clearly creates a demand for fire protection services. The UGM fees are needed to improve fire stations and purchase fire suppression equipment, ensuring that there will be adequate firefighting response as development occurs in Fresno's fringe areas. G-45

BUILDING OCCUPANCY ISSUES:

Before FCOE purchased this property, it was used as a ranch and rural residence; any group or institutional use (such as for the former Boy Scout camp) had long since expired due to lack of exercise and we have no proof in our building records that there ever was any approved "meeting building" that met codes and standards for such use. It concerns us that our records show the structure was originally constructed as a barn/agricultural building, and without any Change of Occupancy, modification permits, or Division of State Architects approval it is now characterized on pg. 10 of the EA as a G-46

"meeting building," whose "continued use" is being assumed. Without a Change of Occupancy process, there is no assurance that this building has safe and adequate egress, fire suppression, disabled access, ventilation, lighting, power supply, and so forth. The work done to convert this building into a "meeting facility" would probably constitute a "substantial improvement" of the barn. In light of this building's location in the FEMA floodway, it does not appear that it could be converted to a meeting facility (see previous section on floodway restrictions).

In converting the ranch house into an office, a Change of Occupancy must also be processed, and all structural and utility systems in the ranch house would have to be brought up to code for the new proposed nonresidential office use. By the time that all these improvements are made in the ranch house, it also may fall under the "substantial improvement" restrictions for structures within the FEMA floodway (see previous discussion). G-46

The requirement for a Change of Occupancy for all pre-existing structures being retained should be added to Table 1 of the Initial Study and to the Mitigation Checklist for this project.

ISSUES NOT COVERED IN THE EA BUT REQUIRING MITIGATION:

When grading activity or surfacing/paving is undertaken for this site, one or more grading permits will be required from the City and County of Fresno. Not only is it required that FEMA and California Board of Reclamation requirements for floodways be addressed, but ordinary site drainage needs will have to be addressed. The EA did not list Fresno Metropolitan Flood Control District (FMFCD) as an agency with authority over grading and drainage; however, they need to be added to Table 1 of the EA and mitigation measures need to be added to the Checklist for their jurisdiction. Drainage fees must be paid to FMFCD to cover FCOE's proportionate share of cost for area-wide drainage facilities. G-47

It appears that trash disposal for this facility needs to be addressed. In the absence of any City or County conditional use permit process whereby trash enclosure and trash hauling vehicle access requirements could be worked out, the Final EA needs to include information and mitigation measures which would replace, and would be equivalent to, project conditions. This location offers the complicating factor that trash enclosures would have to conform to FEMA and Board of Reclamation requirements, and trash containers would have to be anchored against buoyancy. G-48

The Initial Study did not contain any provisions for mosquito abatement. Considering that FCOE intends to construct water features and irrigated areas, and in light of the rapid spread of West Nile Virus across the country, the Final EA needs to address this matter and appropriate mosquito control mitigation measures need to be added to the Checklist. The mosquito abatement district(s) with jurisdiction over this property need to be added to Table 1. G-49

ISSUE OF USE OF THE PROPERTY FOR CHILD RECREATION/OUTDOOR EDUCATION:

In our July 1, 2002 letter, we advised that this property should not be used for recreational or educational activity groups until the mitigation and permitting issues are worked out. We continue to be concerned with issues of health, safety, and sanitation inherent in putting the property into use prematurely, before it is brought up to standards for safe building occupancy, water supply, fire protection, and so forth. We are again requesting that FCOE use this property only if is properly improved for group occupancy and educational/institutional/recreational uses with all necessary approvals from federal, state, and local agencies (including fire protection agencies).

Due to the numerous issues raised in this letter, and complex issues which we understand are being raised by other public agencies in their comments and responses to this Draft Initial Study and proposed Mitigated Negative Declaration, we would like to have the opportunity to review the compendium of comments and responses and the revised Initial Study and Mitigation Checklist at least 72 hours before the Fresno County Board of Education is scheduled to consider and approve this EA.

We still stand committed to helping FCOE comply with the complex regulations for this area, in order to assist the District in realizing the potential of this property for meeting the recreational and educational needs of our area. If you have any questions or need our assistance, please feel free to contact me at 559-621-8001 or Jerry Bishop, City Floodplain Administrator, at 559-621-8080.

Sincerely,

Nick P. Yovino
Planning & Development Director

J:\School Facils\FCOE EA Comments 02-09-11.wpd

enclosures: Copy of the City's letter responding to this EA's RFC, dated July 1, 2002.
FEMA flood regulation excerpt, 44CFR60.3
City of Fresno Flood Damage Prevention Ordinance
State of California Governor's Executive Order No. B-39-7
FEMA Requirements for Simple Floodway Encroachments
Public Resources Code Division 2, Chapter 9, Section 2762

cc: Daniel Hobbs, City Manager
Andrew T. Souza, Assistant City Manager

San Joaquin River Parkway and Conservation Trust, Inc.

September 3, 2002

Jamie Perry
Facilities Manager
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, California 93721

Dear Ms. Perry:

Re: Comments on Scout Island Mitigated Negative Declaration

The San Joaquin River Parkway and Conservation Trust has reviewed the Mitigated Negative Declaration for the Scout Island Outdoor Education Center, and we offer the following comments:

1. The planned improvements to Scout Island will greatly enhance the educational experience of children participating in summer camps and school year field trips. Scout Island represents a unique and important asset for the area's youth to learn about the San Joaquin River, and the proposed infrastructure and habitat improvements will improve the value of this asset. **H-1**

2. Page 4, Second Paragraph, 4th line from end: Sesbania punicea is misspelled. **H-2**

3. Page 20, Seventh Paragraph and paragraphs following: The discussion of the canoe launching area refers to clearing a 15 ft by 30 ft area and not conducting any type of surface treatment on this area. Depending on the slope of the land and the time of year in which clearing is done, the newly-cleared area could be a source of erosion if all of the vegetation is stripped away and the only treatment is compaction from use. The text should be revised to address the erosion potential and to identify mitigation measures (e.g., surface treatment) if warranted by the erosion potential. **H-3**

4. Page 10, Eighth Paragraph and paragraphs following and Page 11, Fourth Paragraph: The discussion of water supply should be revised to indicate expected quantities of water to be used at the site after the proposed action is implemented. These estimates should include potable as well as non-potable water. Future water use levels should be compared against current water use levels; for example, development of an irrigated meadow (page 20) and installation of an above-ground sprinkler system may increase water use over **H-4**

current levels. Potential effects on groundwater supply should be quantified. Although the text on page 39 addresses this issue in a qualitative fashion, quantification of water use is needed to support the generalization. Also, the discussion on page 10 indicates that the potable water supply will serve 25 persons for more than six months and will not serve more than 25 persons for longer than 60 days each year. These service levels are significantly less than the expected number of users at the site, which are given as up to 200 people (page 1) with an overall annual use of about 80% (page 2). Text should be added to reconcile these numbers. H-4 H-5

5. Page 38, Table 2 and associated text: Footnote "b" should refer to the federal ambient CO standard, not the "CI" standard. The term "TOS" should be spelled out in Footnote "c". The second paragraph should clarify that the emissions totals presented in the bulleted list are for the school year, whereas the numbers given in Table 2 are for the summer. It would also be helpful if the text explained the decrease in PM10 emissions to zero during the school year even though the number of operating buses increases during the school year. Also, the bulleted list should give units (tons/year?) as well as quantities. Lastly, the text on page 1 gives the vehicle trips as 60 passenger vehicles and five vans for drop off and the same for pick up. Yet the air emissions modeling described on page 38 assumes only 60 trips/day total, thereby giving the impression that the modeling is only capturing half of the vehicle trips. The text should explain this apparent discrepancy. H-6 H-7 H-8 H-9

We appreciate the opportunity to comment on this document. Please contact me at (559) 248-8480, extension 114 if you require clarification of any of the above comments.

Sincerely,

Donald B. Hunsaker, Jr.
Program Services Director

Cc: Dave Koehler

NORTH CENTRAL
FIRE

North Central Fire Protection District - 15850 West Kearney Boulevard - P.O. Box 378 - Kerman, CA 93630
(559) 275-5531 - Fax (559) 846-7114 - (559) 846-5353

November 7, 2002

Cordie R. Qualle. PE
Project Manager
Blair, Church and Flynn
Consulting Engineers

Re: Scout Island project.

Dear Mr. Qualle,

This office has reviewed the above referenced project and will require the following fire protection measures pursuant to Article 9 and 10 of the Uniform Fire Code:

1. Access road(s) constructed to not less than Fresno County and Fire Department improvement standards with adequate turn-around area for fire apparatus.
   (a.) Minimum 20-feet wide paved or stabilized access road ringing the existing buildings. The stabilized surface must be capable of supporting 80,000 pound Firefighting equipment. **The minimum inside radius of all roads must be at least 35 feet.**
   (b.) The main access route in the use area must be 20-feet wide. DG (all-weather) surfacing is acceptable. **The minimum inside radius of all roads must be at least 35 feet.**
   (c.) The secondary access road must be at least 15-feet wide with the required 35 feet inside radius.

I-1

2. Fire Lanes shall be clearly marked in red with white letters 6 inches high, **(Fire Lane)**.

3. Sprinklers to be installed in the ranch house, the meeting building and lean-to.

4. Approved fire hydrant(s) located not less than 50 feet or more than 150 feet travel distance from all exterior building points or as approved by this Department.
   (a.) One (1) standard hydrant for the existing buildings.
   (b.) Two (2) standard hydrant installed in the county area along the main access road in the main use area to be serviced from the irrigation water main.

5. Provide 1000 gpm for 2 hours at 20 psi. in the main use area and around the buildings.

6. Pumps and wells that will be used for fire suppression certified for discharge rate.

7. Provide emergency backup generator power for the fire suppression pump and well.

8. Provide a fire alarm system. An NFPA approved fire alarm for the buildings and with a method (horn or siren acceptable) to alert the main area users.

9. Installation of UL listed portable fire extinguishers with a minimum 2-A:10-B,C rating within 75 foot travel distance of all interior building points. Number and placement of extinguishers to be determined by the North Central Fire Protection District.

I-1

10. A lock Box with NCFD approved lock shall be mounted on the main building with keys to open the whole facility (See NCFPD Lock Box Standards).

11. Fire Alarm and Sprinkler plans **Shall Be** submitted to this office for plan checks.

12. For any inspection performed by the fire department, an appointment must be scheduled allowing 7 to 10 days for the process to be completed.

13. All access gates to have North Central Fire Protection District approved access system installed.

The statements listed are not to be construed as the only requirements that may be required by the North Central Fire Protection District.

Please contact the Fire Prevention Office at (559) 275-5531 ext. 110 if you have any questions.

Sincerely,

Gary S. Henson
Battalion Chief
North Central Fire Protection District

City of
FRESNO

450 M Street
Fresno, California 93706-3083
559-621-4000 FAX # 559-498-4261
www.fresno.gov

FRESNO CITY FIRE DEPARTMENT CELEBRATING 125 YEARS OF SERVICE 1877 TO 2002

Fire Department
Michael E. Smith
Fire Chief

November 26, 2002

Jamie Perry
Assistant Facilities Director
1111 Van Ness
Fresno, CA 93721

SUBJECT: SCOUT ISLAND PROJECT

The Fresno City Fire Department will require the following fire protection measures to be in place for the Scout Island Outdoor Education Center.

1. Fire sprinklers in the metal barn
2. Replace the existing AGST with double wall containment and fire rated tanks
3. The fire suppression pump need not be UL rated as long as it can produce 1000 gpm for two hours at 20 psi. The fire pump will need a back up power supply. Engine driven is allowable. **J-1**
4. The Fresno City Fire Department will not require hydrants in the main building area as long as the North Cental hydrants are no more than 150 feet travel distance from any structure in the city.

Should you have any questions, please contact me at 621-4155.

FRESNO FIRE DEPARTMENT

Joel L. Aranaz, Fire Marshal

c: Cordie R. Qualle

J:\Qualle Letter Re Scout Is

A. Responses to: Jan C. Knight, Chief, Endangered Species Division, US Fish and Wildlife Service, US Department of the Interior (August 26, 2002), letter to Fresno County Office of Education – Attention: Jamie Perry

Response A-1:

The locations of the elderberry shrubs on the site as identified by Live Oak Associates have been mapped and are shown in Figure 5 of the Initial Study.

Response A-2:

Figure 7 of the Initial Study shows that construction of roadways (and by inference, underground utility lines) will occur within 100 feet of the drip lines of the elderberries mapped on the site. Mapped elderberry shrubs will be protected as set forth in the 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle (VELB) and as set forth in the mitigation measures set forth in, "*Biological Evaluation for the Proposed Scout Island Outdoor Education Center*," Live Oak Associates, July 30, 2002, pg 34, as follows:

> 'Although the proposed project during the implementation phase will result in no impact to the VELB or its habitat, a number of avoidance measures are nonetheless recommended below to ensure that habitat loss doesn't no inadvertently occur.
>
> > Prior to project construction, that applicant should erect a construction fence at least 20 feet from the drip line of each elderberry bush to ensure that heavy equipment will not operate close enough to cause damage to the plants themselves, or their root system;
> >
> > Signs will be placed on the construction fencing protection al elderberry bushes that say: "Keep Out. This area is habitat of the valley elderberry longhorn beetle, a threatened species and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fine, and imprisonment."
> >
> > Construction work on access roads, trails, parking areas, etc., may cause dust that could drift onto elderberry bushes. Exposed earthen surfaces will be regularly sprayed with water to keep dust levels down.
>
> If FCOE anticipates a future need to periodically prune of remove elderberry bushes potentially providing habitat to the VELB, then FCOE will enter into consultation with the US Fish and Wildlife Service and, if necessary, develop a habitat conservation plan to be approved by the agency that will be the basis of an incidental take permit."

Response A-3:

A mitigation measure has been added to the project that states that a biologist will survey elderberry shrubs affected by the project that are one inch in diameter or greater for the VELB. Those shrubs are found by the biologist to be inhabited by the VELB will be protected in accordance with the Guidelines referenced in Response A-2 and further consultation will be sought with the Service to resolve any "take" issues.

Response A-4:

A mitigation measure has been added to Sections 4.1, 5.1 – Reduction of the Number of Any Unique, Rare or Endangered Species, and to the Mitigation Check List Section 4.1, 5.1 stating that chemicals to control insect pests will not be applied on the site within 100 feet of elderberry bushes during the months of March through June, inclusive, will be added.

A mitigation measure has been added to Sections 4.1, 5.1 – Reduction of the Number of Any Unique, Rare or Endangered Species, and to the Mitigation Check List Section 4.1, 5.1 stating that herbicides will not be applied on the site within 100 feet of elderberry bushes during the months of July through February, inclusive, and in no case will they be applied within 20 feet of the drip line of elderberry bushes.

Response A-5:

The comments regarding the potential to enhance the habitat of the valley elderberry longhorn beetle and increase the understanding of this insect and its habitat by visitors to the site is noted.

B. Responses to: Jo Anne Kipps, Senior Engineer, State of California Regional Water Quality Control Board (RWQCB) (September 9, 2002), letter to Fresno County Office of Education – Attention: Jamie Perry

Response B-1:

Domestic sewage that will discharged to the site's existing septic systems is estimated to be 70 to 100 gallons per day for the Ranch House and 70 gallons per day for the Meeting Building. These estimates are based upon the following information:

Ranch House: The Ranch House has a kitchen sink and a bathroom (toilet, sink and shower). The kitchen sink does not have an attached garbage disposal unit. The building will be converted to an office for the site administrator and possible assistant. There will be no commercial food preparation in the building nor any overnight use. The building will not be used as a permanent residence. The kitchen sink may be used by the site administrator and possible assistant for their own use to prepare meals. The bathroom facilities will be used by the site administrator and possible assistant as needed.

Meeting Building: The Meeting Building has a bathroom and kitchenette area within the building containing a sink and a microwave. There are two toilets located in individual privacy enclosures (permanent walls and roof) located within the lean-to area attached to the west wall of the Meeting Building. There will be no commercial food preparation in the building. The kitchen sink may be used by the maintenance staff to prepare and clean up after lunch or by people using the building to fill their self-provided cup with water to prepare hot beverages in the microwave. The bathroom and toilets are for use by the maintenance staff. The doors to the bathroom and toilet privacy enclosures are locked when not in use by the staff. Visitors to the site and who use the Meeting Building will be directed to use the vault toilet that is located near the Meeting Building.

Response B-2:

RWQCB staff engineer, Amy Simpson was provided with a copy of Comparison of Groundwater Elevations with Existing Septic System Facilities at Scout Island at a meeting held at the RWQCB offices on October 9, 2002. This table shows the results of the groundwater elevation monitoring at the site and compares these elevations with the bottom of the existing septic tanks. A copy of Comparison of Groundwater Elevations with Existing Septic System Facilities at Scout Island is included in Exhibit G. The spreadsheet shows that the difference in elevation between the groundwater at the site and the bottom of the septic tanks, which are the lowest portion of the septic system, is greater than the five feet of separation required by the *Guidelines for Waste Disposal from Land Developments* (Guidelines) for the months of June, 2002 through October, 2002.

Comparison of Groundwater Elevations with Existing Septic System Facilities at Scout Island also shows the correlation between the groundwater elevations and the water surface elevation in the San Joaquin River. Because of the interconnectivity of the river and the groundwater in this area, the water surface elevation in the river is considered to directly affect the groundwater elevations at the site (except directly adjacent to existing wells, where drawn down from the well will influence the groundwater elevation). This correlation was used to predict the water surface elevation in the river that would result in a groundwater elevation that

provided the five-foot separation between the bottom of the septic tank and the groundwater. The bottoms of the septic tanks were determined to be lower than the bottom of the leach fields by observation of the exist point of the leach lines from the tanks and known construction practices for the installation of leach lines. A HEC-RAS model of the San Joaquin River was used to calculate the discharge in the San Joaquin River that resulted in the river water surface elevation that was predicted by the correlation to maintain the five-foot separation. The calculated discharge in the San Joaquin River at that condition was between 8,000 and 10,000 cfs. These calculated discharge rates are essentially the same rates that have been suggested as necessary in the spring and fall to sustain anadromous fish in this reach of the river. The normal discharge rates in the San Joaquin River are 300 to 500 cfs due to the regulating effects of Friant Dam.

At the October 9, 2002, Ms. Simpson was also asked the RWQCB's position on flood events that cause a decrease in the required five feet of separation between ground water and the septic system. She stated that these events are rare and are not considered to be violations of the Guidelines. They are interested in the long-term separation between septic systems and ground water.

Ms. Simpson was also made aware at this meeting that the vault portion of the vault toilets is a constructed with Portland cement concrete walls and floor that are monolithically poured and are, therefore, watertight. She indicated at that meeting that the use of concrete vaults provided a sufficient barrier between the septic waste and the groundwater allowing for the separation to be reduced to less than five feet.

Response B-3:

Amy Simpson, staff engineer for the RQWCB stated at the October 9, 2002 meeting stated that the RWQCB would waive any requirement for groundwater monitoring if the Meeting Building toilets were not used by the general public. The relative minor use by staff use is considered by the RWQCB to be well within the system's capabilities. Therefore, a mitigation measure has been added to Section 3.4 – Potential Pollution of Surface and Groundwater, and to the Mitigation Check List Section 3.4, that states that the doors to the Meeting Building toilets will be locked and will only be available for use by maintenance staff. Visitors will be directed to use the vault toilet located near the Meeting Building.

Response B-4:

The Initial Study and the mitigation measures for the proposed Mitigated Negative Declaration stipulate that coverage under the State of California General Construction Permit for the discharge of storm water from construction sites will be obtained prior to any construction occurring at the site and that all of the conditions of the permit will be adhered to.

Response B-5:

The Initial Study and the mitigation measures for the proposed Mitigated Negative Declaration state that all of the wetlands on the site are considered jurisdictional by the US Army Corps of Engineers and that all of the channels (low flow channel of the San Joaquin River and Pirates Creek) are jurisdictional non-wetland waters of the United States. Therefore the Initial Study and the mitigation measures stipulate that 404 permits issued by the US Army Corps of Engineers and 401 Water Quality Certifications issued by the RWQCB will be obtained for the construction work and all of the conditions of those permits and certifications will be adhered to.

C. Responses to: W.E. Loudermilk, Regional Manager, State of California Department of Fish and Game (September 3, 2002), letter to Fresno County Office of Education – Attention: Jamie Perry

Response C-1:

The need for FCOE to enter into a 1601 Stream Bed Alternation Agreement (1601 Agreement) with the Department of Fish and Game (DFG) is noted and was stated in the Initial Study/Mitigated Negative Declaration.

Response C-2

The commenter's request for additional information, specifically engineering plans for the construction of Pirates Creek and a landscaping planting and management plan for the site, is noted. Preliminary submittals of these items have been provided to the commenter under separate cover to meet the commenter's request for additional information to complete the Mitigated Negative Declaration for DFG review of the project and use in preparing a 1601 Agreement. Exhibit H has been added. It contains a copy of the landscaping planting and management plan. The engineering plans for Pirates Creek have not been included in the interest of conserving paper, reducing the size of this document, and due to the fact that they are preliminary plans. Review and approval of the plans by DFG will result in changes that cannot be anticipated at this time.

It is the intent of FCOE to work with DFG to develop the design and landscaping of Pirates Creek in such a manner so as to not strand aquatic species or provide an environment that harbors non-native plant or animal species, especially those that might compete with future anadromous fish that may be reintroduced to the San Joaquin River. A mitigation measure has been added to *Section 5.1 – Reduction of the Numbers of any Unique, Rare or Endangered Species* and to the Mitigation Check List Section 5.1 that states that final construction plans will be designed in accordance with approved DFG measures to preclude stranding of aquatic species and to avoid harboring species that might compete with future anadromous fish and that landscaping and irrigation plans for Pirates Creek will be prepared for approval by DFG. It is also the intent of FCOE to be part of the solution to the eradication of invasive, non-native plant species along the San Joaquin River. A mitigation measure has also been added to *Section 5.1 – Reduction of the Numbers of any Unique, Rare or Endangered Species* and to the Mitigation Check List Section 5.1 to state that a vegetation management plan for the entire Scout Island site will be prepare in coordination with DFG to provide for the control of invasive, non-native plants such as Arundo donax and Sesbania punicea and the control other non-native species that already inhabit the site so that they do not become invasive to the riverine environment.

Response C-3

The comments regarding the use of fencing at the site are noted A mitigation measure has been added to *Section 5.1 – Reduction of the Numbers of any Unique, Rare or Endangered Species* and to the Mitigation Check List Section 5.1 that states that interior fencing at the site will be removed, except around the high ropes course area and that fencing will not be allowed within 200 feet of the bank of the low flow channel of the river. The exterior fencing will be designed to be wildlife friendly and will meet the approval of DFG.

Response C-4

The horse corral and riding area has been eliminated from the project.

Response C-5

The comments relative to development activity within flood prone areas and within the riverine environment are noted.

Response C-6

The commenter's request to review the project if it is substantially modified prior its approval, prior to adoption of the Mitigated Negative Declaration, or as the result of other permit requirements is noted. All reasonable attempts to comply with this request will be made by FCOE.

D. Responses to: State of California Department of Transportation (Caltrans), District 06 (August 14, 2002), response to Fresno County Office of Education – Attention: Jamie Perry

Response D-1:

Caltrans had no comments. Caltrans is thanked for their consideration of this project.

E. Responses to Margie McHenry, Planner, Public Works and Planning Department, Environmental Analysis Unit, Fresno County (September 16, 2002), e-mail correspondence to Fresno County Office of Education – Attention: Jamie Perry

Response E-1:

The Initial Study stated that all applicable local permits will be obtained. Table 1 has been revised to show that a grading permit is required for the site and the County of Fresno as a permitting agency. A mitigation measure has been added to *Section 1.2 – Adverse Change in Topography or Ground Surface Relief* and to the Mitigation Check List Section 1.2 that states that a grading permit for the site will be obtained from the County of Fresno.

Response E-2:

The Initial Study stated that all applicable local permits will be obtained and shows in Table 1 that a permit is required from the Fresno County Flood Plain Administrator for work on the site. The intent of that statement was to state that the project will adhere to the Fresno County Flood Hazard Ordinance (Fresno County Code, Chapter 15.48).

Response E-3:

The commenter is thanked for these clarifying remarks.

F. Responses to: Sheri Clark, REHS, Environmental Health Specialist III, Environmental Health System, Department of Community Health, County of Fresno, (September 9, 2002) letter to Fresno County Office of Education – Attention: Jamie Perry

Response F-1:

The commenter is thanked for clarifying the regulations pertaining to classifying and permitting Transient Noncommunity Public Water Systems (TNC-PWS).

Response F-2:

The commenter is thanked for the clarification of the regulations regarding requirements to obtain the services of a certified water operator and to provide chlorination facilities for TNC-PWSs.

Response F-3:

A mitigation measure has been added to *Section 3.4 – Potential Pollution of Surface or Ground Water* and to *Section 11.1 – Availability of Fire Protection* and to the Mitigation Check List, Sections 3.4 and 11.1, stating that:

1) The site's above ground storage tanks (AGTs) will be removed and replaced with double containment AGTs.

2) The new AGTs will be restrained in order to prevent floatation in the event of a flood event.

3) The new AGTs will be protected with bollards designed to withstand floodwater velocities and impacts from floating objects

4) A Hazardous Materials Business Plan will be prepared and submitted to the Fresno County Department of Community Health, Environmental Health System and to the Fresno Fire Department and the North Central Fire Protection District.

Table 1 has been modified to include the requirement for the preparation of the Hazardous Materials Business Plan for the site even though it is not technically a permit, to file the plan with the Fresno County Department of Community Health, Environmental Health System and with the City of Fresno Fire Department and the North Central Fire Protection Agency as the permitting agencies and to show the activity as the location and use and maintenance of two AGTs on the site.

G. Responses to Nick P. Yovino, Planning and Development Director, Development Department, City of Fresno (September 11, 2002), letter to Fresno County Office of Education – Attention: Jamie Perry

Response G-1:

The Capitol Kitchen was listed in the Request for Consultation (RFC). The platform camping area was show in Figure 2, which accompanied the RFC. The other items listed were not mentioned in the RFC, but they were included and fully described in the Initial Study/Mitigated Negative Declaration. Their omission from the RFC did not preclude the commenter or others from observing their inclusion in the project nor providing comments on them.

The horse corral and riding arena has been dropped from the project.

Response G-2:

The transfer of records regarding the Ranch House and Meeting Building do not determine the location of the City/County boundary. The transfer may only indicate the fact that the location of the City/County boundary was not clearly known by the County of Fresno staff nor the City of Fresno staff.

Response G-3:

The commenter is incorrect. City staff was consulted regarding the location of the City/County boundary. The commenter was not personally contacted, but there was no reason to believe that the commenter would be in possession of the information regarding the location of the boundary. The following steps were taken to determine the location of the City; County boundary:

> The City of Fresno Public Works Department was contacted to obtain the diagram and legal description of the boundary of the annexation that resulted in the boundary bisection the SIOEC site. Public Works Department was not able to provide the necessary information. At Public Works suggestion, LAFCO was contacted for precise boundary location information relative to the annexation. LAFCO was not able to provide this information due to a filing problem. At their direction, the Fresno County Assessor's office was contacted for documentation regarding the annexation. The Assessor's office provided the proper recording information for the annexation documents that were used to obtain copies of the documents through the customer service section of a local title company. The legal description for the annexation was then superimposed upon the a recently completed property boundary survey for the Scout Island Outdoor Education Center.

Response G-4:

It is noted that development within areas of Fresno County that are directly adjacent to the City of Fresno may have impacts on land within the City of Fresno.

Response G-5:

It is noted that the City is the Flood Plain Administrator for special flood hazard areas within the City's boundaries and that they must enforce their floodplain ordinance.

Response G-6:

It is noted that a copy of the Flood Insurance Rate Map for the project area was not included in the Initial Study/Mitigated Negative Declaration. Exhibit I has been added to the Initial Study/Mitigated Negative Declaration (IS/MND). This exhibit contains a copy of the FEMA FIRM map showing the FEMA special flood hazard area and the FEMA designated floodway and other information (44CFR Ch. 1 Section 60.3(3) and HEC-RAS calculations for the pre and post project water surface profiles).

Response G-7:

FEMA regulations (44CFR Ch. 1 Section 60.3(3)) state that development shall cause no net increase in the water surface elevation (and consequently, displacement of floodwater) in the regulatory floodway during the base flood event. We have performed a HEC-RAS analysis of the pre-project and post project water surface during the base flood event. The calculations show that the project has cause no net increase in the water surface of the regulatory floodway during the base flood event. A copy of the pre-project and post project HEC-RAS water surface profile calculations are included in Exhibit I.

Response G-8:

The commenter is referred to 44CFR Chapter 1, Section 60.3(3) for the definition of the impact that a new or substantial improvement may have on the designated floodway. Exhibit I which has been added to the Initial Study, contains a copy of this section of the Code of Federal Regulations, which, in summary state that development shall cause no net increase in the water surface elevation (and consequently, displacement of floodwater) in the regulatory floodway during the base flood event.

Response G-9:

Again the commenter is referred to 44CFR Chapter 1, Section 60.3(3) relative the allowable impact that the berms may have on the water surface elevations of the designated floodway. Exhibit I, which has been added to the Initial Study, contains a copy of this section of the Code of Federal Regulations.

The existing buildings were on the property in the condition in which they exist today when the property was purchased by FCOE. Therefore, they are, for all intents and purposes, existing buildings. They have not been substantially improved by FCOE either before or after the 1997 flooding event. During that event the floodwater was observed to be approximately two inches deep around the buildings. Only the meeting building was flooded. The repair work consisted of the air-drying of the existing carpets. The expense and effort were minimal. The ranch house was not flooded at all. The other existing buildings were not damaged even though they experienced the same shallow flooding as the meeting building.

The proposed improvements to the ranch house will not be of a type and amount to meet FEMA's definition of substantial improvement. The actual improvements that will occur to the ranch house have been refined to only include the re-carpeting of the house.

Response G-10:

Development is allowed in designated floodways by issuance of a variance when the development is shown to have no (0) net change in the water surface profile during the base flood event. Reference is made to 44CFR Chapter 1, Section 60.3(3), a copy of which is provided in Exhibit I.

Response G-11:

The results of the HEC-RAS water surface profile model were not included in the Initial Study. The calculations have been added to Exhibit I.

Response G-12:

The HEC-RAS model should reflect the project as it is proposed to be constructed. See Response G-13 regarding the acquisition of water rights to impound water within the proposed pond.

Response G-13:

Attorneys for FCOE have recently completed their analysis of whether or not water rights must be obtained for the diversion of water from the San Joaquin River into Pirates Creek. Their opinion is that it is not necessary for FCOE to obtain riparian or impoundment water rights for the water that will be diverted. A copy of this opinion is included in Exhibit J.

Table 1 has been revised to delete the requirement for water rights permit from the California Department of Water Resources.

Response G-14:

A CLOMR followed by a LOMR is not appropriate for this project. A variance issued by the flood plain administrator for the project to develop within the floodway after proving through proper modeling that the post project floodway water surface profile is not affected by the project is all that is required.

Response G-15:

The existing buildings and existing improvements were adequately shown in the topographic mapping on the diagrams provided in the Initial Study together with ancillary fencing, landscaping and other man-made improvements in the Initial Study. The Initial Study did not discuss the damages to the existing buildings that resulted from the 1997 flood event simply for the reason that there were no appreciable damages. The Initial Study has been revised to include the following information:

> According to John Solize, who works as a grounds keeper at the Scout Island site and was present before and immediately following the 1997 flood event, the only damage that occurred during the 1997 event was soaking of the carpet within the meeting building. The carpet was air dried in the building. No other work was done to any of the buildings to recover from the flooding event. Therefore, no significant improvements to the structures have occurred as a result of the 1997 flood event.

The proposed buildings were adequately described in the Initial Study to provide sufficient understanding of the location, makeup and impact to the floodway that may result from these structures.

Response G-16:

The commenter is referred to Response G-7.

Response G-17:

The commenter is thanked for the clarifying remarks relative to the jurisdictional differences between the FEMA floodway and the State of California, Department of Water Resources Board of Reclamation regulations. However, the commenter is incorrect in stating that the Board of Reclamation is missing from the permitting agencies listed in Table 1. That agency is listed therein. Herman L. Phillips, WREA Specialist, Maintenance Enforcement Unit, Department of Water Resources, Division of Flood Management, Flood Project Inspection Section made a visual inspection of the Scout Island site and reviewed the proposed project with David Mowry, PE, of the engineering firm of Blair, Church and Flynn. Mr. Phillips verbally expressed very favorable opinion regarding the project in general and the proposed improvements for the Scout Island Outdoor Education Center in particular. He opined that, from his point of view as a member of the enforcement unit, this was the type of project that should be located in this area.

A mitigation measure has been added to Section 12.0 – Hazards and to the Mitigation Check List Section 12.0 that state that required permits from the State of California, Department of Water Resources, Board of Reclamation will be obtained for the project.

Response G-18:

The commenter's statement relative to the use of the Environmental Assessment checklist is noted. The checklist has been modified as necessary to meet the requirements of this project.

Response G-19:

The Initial Study states that the feasibility of retaining the LP tanks will be evaluated and, if they cannot be retained due to excessive costs to floodproof them or the resulting floodproofing would affect the water surface profile of the floodway, they will be removed from the site and electricity would be the only source of energy for the site. However, the floodproofing of the LP tanks did not address protecting the tanks from floating debris that will occur during a flood event that is greater than the base flood event. A mitigation measure has been added to Section 12.0 – Hazards and to the Mitigation Check List Section 12.0 that states that LP tanks be certified by a registered civil engineer as to their adequacy to withstand floating debris during extreme flood events.

Response G-20:

The location and depths of the existing septic tanks and leach fields have been reviewed with Amy Simpson, staff engineer of the Regional Water Quality Control Board (Board). The Board is satisfied that the existing systems meet the requirements of their Guidelines for Waste Disposal from Land Developments and that the existing systems should pose no threat to ground water quality in the area.

Response G-21:

The assistance of the City of Fresno in pointing out the issues relative to development within a special flood hazard area and within a designated floodway has been and will continue to be appreciated.

Response G-22:

The FCOE will not request that the site be converted to a mining incompatible use as was previously stated in the Initial Study. The proposed development of the site is so minimal that the feasibility of the site for future mineral mining by some other owner will not be impacted by the project. The mitigation measure presented in Section 1.3 – Incompatible Land Use in Mineral Resource Area, has been removed and the Mitigation Check List, Section 1.3 has been revised to remove this item from the checklist.

Response G-23:

The commenter is correct that the locations of the existing septic systems were not shown in Figure 2 of the Initial Study. They have since been located and their locations have been added to Figure 2 of the Initial Study. However, the locations of the proposed vault toilets were shown Figure 7 of the Initial Study.

Response G-24:

The commenter's statements that FCOE is not exempt from the applicable building codes and federal and state regulations for development within a floodway is expressly stated in the Initial Study and the improvements of the site will properly meet the requirements of those codes and regulations.

Response G-25:

The commenter asserts City and County jurisdiction over the review and approval of the proposed water distribution system and electrical system in the absence of Department of General Services(DGS), Division of the State Architect (DSA) review and approval, but cites no Civil or Education Code granting such jurisdiction to the City or the County. Section 17280 of Article 3 of the Education Code gives the DSA through DGS the exclusive authority to supervise the design, construction, reconstruction, or alteration of any school building. Furthermore, Section 17287 exempts buildings used for outdoor science, conservation, and forestry classes from DSA oversight. The Education Code does not state any authority for the City or County to have jurisdiction over the above-referenced activities in the absence of DSA oversight. However, Govt. Code Section 53097 does require school districts to comply with City or County ordinances regulating drainage improvements and conditions, road improvements and conditions, and the review and approval of grading plans as these ordinances relate to the design and construction of on site improvements which affect drainage, road conditions, or grading. If a school district chooses not to comply with the local ordinances, the City or County is not liable for injuries or damages caused by the lack of compliance.

FCOE will submit grading plans to the City, to the Fresno Metropolitan Flood Control District, and to the County of Fresno for review and approval and the issuance of grading permits. Table 1 has been revised to show that a grading permit is required for the site and the City of Fresno, the Fresno Metropolitan Flood Control District, and the County of Fresno as permitting agencies. A mitigation measure has been added to *Section 1.2 – Adverse Change in Topography or Ground Surface Relief and to the Mitigation Check List Section 1.2* that states that a grading permit for the site will be obtained from the City and the County of Fresno.

The commenter has furnished subsequent information regarding FEMA regulation 44CFR, Chapter 1, Section 60.3(b)(1) that states that the community (local agencies that belong to the Flood Insurance program) shall require permits for all development within a Zone A flood plain.

The project will obtain permits for its development activities within the flood plain for from the local flood plain administrator in conformance with this regulation. A mitigation measure has been added to *Section 12.0 – Hazards and to the Mitigation Check List Section 12.0* that states that a grading permit for the site will be obtained from the City and the County of Fresno.

Response G-26:

A mitigation measure has been added *to Section 12.0 – Hazards and to the Mitigation Check List Section 12.0* that states that the development of the site will conform to FEMA and State Board of Reclamation regulations.

Response G-27:

A mitigation measure has been added to *Section 6.0 – Human Health and to the Mitigation Check List Section 6.0* that states that testing of the water system will be conducted as required by a permit issued by the Fresno County Department of Community Health, Environmental Health Division and if contamination of the system is detected, the water system will be shut down until proper treatment of the water is installed, operational and supervised by a licensed Certified Water Distribution Operator in conformance with the permit requirements issued by the Fresno County Health Department of Community Health, Environmental Health Division.

Response G-28:

The commenter is incorrect. A transient noncommunity public water system (TN-C PWS) does not require that the system be operated or maintained by a Certified Water Distribution Operator. Reference is made to a letter addressed to FCOE, Attention: Jamie Perry, dated September 9, 2002 from Sheri Clark, REHS, Environmental Health Specialist III, Fresno County Department of Community Health, Human Services System. This letter is included as a part of Response F to the Draft Mitigation Negative Declaration.

Response G-29:

The existing water system is not presently being used as a TN-C PWS. Prior to the system being used for such purposes, the system will be permitted by the appropriate permitting agency. There has been no indication from Fresno County Department of Community Health, Environmental Health Division that they will not choose to issue a permit for this system.

Response G-30:

The commenter is thanked for the clarification of the regulations regarding occupancy and TN-C PWSs.

Response G-31

This well is located in the City of Fresno. It presently consists of a deep water well (casing depth is 124 feet) constructed with a steel casing and no annular seal. The well was drilled in February, 1980. A copy of the well drillers report was included in Exhibit D of the Initial Study. The purpose for the reconstruction of the water well is to bring it up to the State of California Water Well Standards for use a potable water supply, including any required annular seals. Proper permits will be obtained for the work from the City. A mitigation measure has been added to *Section 3.4 – Potential Pollution of Surface or Ground Water* and to the Mitigation

Check List, Section 3.4, that states that a permit to reconstruct the well will be obtained from the City of Fresno Public Works Department. Table 1 has been amended to include the City of Fresno as a permitting agency for the reconstruction of the water well.

Response G-32:

Table 1 has been amended to include the existing observation wells and the City of Fresno as one permitting agency and the County of Fresno as the other permitting agency. In point of fact, a permit for the observation well within the County has been obtained. The permit for the observation well in the City has been applied for. Issuance of that permit is pending approval of this Environmental Assessment and Mitigated Negative Declaration.

The Initial Study has been amended to include the following information regarding the monitoring wells:

> The existing observation well casings are constructed of PVC. The above ground portion of the PVC casing is protected by a 6-inch diameter steel pipe that is anchored into the ground with a concrete footing. In addition, this steel pipe protection casing is protected by four 6-inch diameter steel pipe bollards that are anchored into the existing ground with concrete footings. The intent of the bollards is to protect the protection casing from damage caused by vehicular impact.

The protection provided by the protective casing and the bollards should be sufficient to protect the observation well casings from damage due to floating debris during a flood event. Accordingly, the observation wells will not be removed from the site until their function to provide monitoring of groundwater elevations until the one-year period has been completed.

Response G-33:

The well that is to be abandoned was shown in Figure 7 as "Abandon Well". The well is located within the County of Fresno portion of the site. Table 1 has been updated to show that a permit will be obtained from the County of Fresno for the abandonment of this well.

Response G-34:

Fresno Fire Department was omitted from the Mitigation Check List, Part 11.1. Fresno Fire Department has been added to Mitigation Check List 11.1.

North Central Fire Protection District and the Fresno Fire Department have been added to Table 1 as permitting agencies for fire suppression systems at the site.

North Central Fire Protection District and Fresno City Fire Department fire suppression requirements have been modified from those presented by the commenter. The project will comply with the requirements stated within the letters from the fire departments. A mitigation measure has been added to the project in *Section 11.1 – Availability of Fire Protection* and to the Mitigation Check List, Section 11.1, that states that the project will comply with the fire suppression requirements of the North Central Fire Protection District and the City of Fresno Fire Department as presented by those fire agencies in their letters regarding the project. See Response I-1 and Response J-1

Response G-35:

The commenter is correct, the Fire Suppression Diagram does not show all of the required fire suppression measures. The diagram in Exhibit F has been updated to show schematically the required fire suppression requirements of the North Central Fire Protection District and the City of Fresno Fire Department as presented by those fire agencies in their letters regarding the project. . A mitigation measure has been added to the project in *Section 11.1 – Availability of Fire Protection* and to the Mitigation Check List, Section 11.1, that a detailed fire suppression diagram showing the agreed upon fire suppression measures will be submitted to the North Central Fire Protection District and to the Fresno Fire Department for approval.

Response G-36:

See Response I-1 and Response J-1.

Response G-37:

See Response I-1 and J-1.

Response G-38:

A mitigation measure has been added to *Section 3.5 – Potential Pollution of Potable Water* and to the Mitigation Check List, Section 3.5, that requires the installation of appropriate backflow prevention equipment between the potable water supply system and the fire suppression system.

Response G-39:

The requirement to have and implement a Hazardous Materials Business Plan and file that plan with Fresno County Environmental Health, the Fresno Fire Department and the North Central Fire Protection District should disinfection equipment by installed and operated at the site and disinfection chemicals be stored and used at the site is noted. There will be no disinfection equipment, chemicals or chlorine gas installed at the site until if and when it is required due to a failure of the water system to meet the water quality standards set forth in the permit requirements issued by the Fresno County Health Department of Community Health, Environmental Health Division. A mitigation measure has been added to the project in *Section 11.1. – Availability of Fire Protection* and to the Mitigation Check List, Section 11.1, that states that the Hazardous Materials Business Plan that has been submitted to the Fresno County Department of Community Health, Environmental Health System and to the Fresno Fire Department and the North Central Fire Protection District will be amended to include disinfection gases and equipment should they be installed, stored, and operated at the site.

Table 1 has been modified to include the requirement to amend the Hazardous Materials Business Plan for the site to add the disinfectant equipment and chemical use at the site should such use be required, even though the plan is not technically a permit. Table 1 shows that the Fresno County Department of Community Health, Environmental Health System and with the City of Fresno Fire Department and the North Central Fire Protection Agency as the permitting agencies and to shows the activity as the location, storage and use and maintenance of disinfectant equipment and chemicals at the site, if disinfection of the domestic water system is required.

Response G-40

See Responses G-34 through G38 inclusive.

Response G-41

See Mitigation Measures contained in Section 11.2 – Emergency Vehicle Access and the Mitigation Check List, Section 11.2.

Response G-42:

See Response to G-34 and G-35.

Response G-43:

The FCOE has negotiated the grant of a right of entry/access for emergency vehicles within the same easement across the Fig Garden Golf Course that has been obtained and improved to the Fresno Fire Department Standards by the River's Edge Estates. The consummation of this agreement is waiting on the preparation a deed quit claiming a small piece of property from FCOE to the Fig Garden Golf Course owner, David Knott. A mitigation measure has been added to *Section 11.2 – Emergency Vehicle Access* and to the Mitigation Check List, Section 11.2, stating that the right of entry/access will be secured by FCOE across the Fig Garden Golf Course that is coincident with the existing secondary access for River's Edge Estates.

Response G-44:

A mitigation measure has been added to *Section 12.0 – Hazards* and to the Mitigation Check List, Section 12.0, stating that evacuation plans for the site will be reviewed and approved by the City of Fresno Office of Emergency Preparedness and by the Fresno County Office of Emergency Services.

Response G-45:

The commenter's information relative to City of Fresno UGM fees and the rationale for the payment of certain parts of these fees by FCOE is noted. FCOE is in agreement with the need to pay Fire Station UGM fees to the City of Fresno. These fees will be paid to the City upon approval of the grading plan for the site.

Response G-46:

The site was purchased by FCOE with the meeting building in its current state. The date when the building was converted to its present use is not firmly known, however, it does predate the recent inclusion of the site within the FEMA designated floodway. For the purposes of this project, this building is considered an existing structure. FCOE has discussed the requirement for DSA review and approval of the building for it's continued use as a meeting building. DSA has agreed that the building is exempt from their jurisdiction under Title 24 as it is an outdoor education facility.

FCOE has met with North Central Fire Protection District to review the occupancy status of the meeting building and the ranch house. Changes of occupancy must be processed through them for both of these buildings as they are within North Central Fire Protection District's jurisdiction. North Central will handle the processing of the changes, determine the fire and safety

requirements for the buildings resulting from the change of occupancy and those requirements will be met as part of the project. The improvements that must be made to meet the Change of Occupancy requirements as stated by North Central Fire Protection District will not result in substantial improvement to the structures as defined by FEMA regulations.

A mitigation measure has been added to *Section 6.0 – Human Health* and to the Mitigation Check List, Section 6.0 to state that a Change of Occupancy for the meeting building and the ranch house will be obtained from the North Central Fire Protection District as these buildings are within the North Central Fire District jurisdiction and all of the requirements for the Change of Occupancy will be met. Table 1 has been revised to show the North Central Fire Protection District as the permitting agency for change of occupancy for the ranch house and meeting building.

Response G-47:

A mitigation measure has been added to Section 1.2 – Adverse Change to Topography or Ground Surface Relief and to the Mitigation Check List Section 1.2 stating that a grading permit for grading of the site will be obtained from the City of Fresno, the County of Fresno and the Fresno Metropolitan Flood Control District. Table 1 has been revised to show the City of Fresno, the County of Fresno and the Fresno Metropolitan Flood Control District as permitting agencies for a site grading permit.

Response G-48:

Maintenance and disposal of trash at the site currently consists of "as needed" pick up of onsite 50 gallon capacity plastic waste containers that are located throughout the site by the maintenance staff and transfer of that waste to a main trash dumpster located at the south side of the Meeting Building, which is a screened area. Trash removal from the site is presently provided once each week under contract with BFI, a licensed private waste disposal company.

The site experiences the highest probable trash loading during the San Joaquin River and Parkway Trust and Conservancy's annual Rivercamp at Scout Island. The maintenance staff reports that the existing trash maintenance, disposal and removal regimen was adequate to manage the trash loading and maintain trash containment.

Mitigation measures have been added to Section 13.2 – Creation of Aesthetic Offensive Conditions and to the Mitigation Check List Section 13.2 stating that the site administrator will evaluate the trash management practices conducted at the site on an on-going basis and that should the presence of unmanaged trash occur, such as trash not properly contained in container due to faulty containers or over filled containers, the administrator will institute the increased pickup of trash from the site by the maintenance staff and/or removal from the site by the licensed disposal company, increase the number of on site trash containers and replace on site containers or dumpsters that are failing to properly contain trash. In the event of a flood event, the site administrator will have all of the onsite trash containers and the main trash dumpster will be removed from the site to a location above the base flood.

Response G-49:

The commenter's reminder regarding mosquito abatement at the site is appreciated. A mitigation measure has been added to *Section 6.1 – Human Health* and to the Mitigation Check List Section, 6.1, stating that any elevated mosquito activity at the site will be reported to the

Fresno Mosquito and Vector Control District for action by this agency to control the level of mosquitoes at the site. The Mosquito and Vector Control District has been added to Table 1 as an advisory agency since that District is not a permitting agency for this project.

Response G-50

The comment regarding the use of the site is noted.

Response G-51

The commenter's request for a copy of the compendium of the comments and responses will be met.

Response G-52

The comment that the City of Fresno stands committed to assist FCOE to meet the requirements of the complex regulations for this proposed project is noted.

H. Responses to: Donald B. Hunsaker, Jr., Program Services Director, San Joaquin River Parkway and Conservation Trust, Inc., (September 3, 2002) letter to Fresno County Office of Education – Attention: Jamie Perry

Response H-1:

The comment regarding the project is noted.

Response H-2:

The comment regarding the spelling of Sesbania punicea is noted.

Response H-3:

A mitigation measure has been added to *Section 1.4 – Increased Water Erosion* and to the Mitigation Check List Section, 1.4, stating that only the tops of the existing shrubs will be trimmed to allow for canoe staging at the launching point thereby retaining the root structure of the shrubs and allowing for the revegetation of the shrubs when the launch site is not in use.

Response H-4:

The expected consumptive use at the site will be approximately 49 acre-feet per year. The estimated annual consumptive use is approximately equal to an area consumption rate (based upon an 82 acre site) of 0.60 acre-feet of water per acre per year. By comparison, the typical single-family development uses approximately 2.1 acre-feet of water per acre per year, which is approximately 3 times the projected rate of the site. The site is expected to have minimal impact on the groundwater.

Water use at the site prior to ownership by FCOE is unknown. But what is known is that virtually all of the 82 acres of the site was once irrigated with sprinklers. Therefore, the use of water at the site is actually a reduction from the historical use at the site .

A copy of the calculation of the consumptive use of water at the site is included in Exhibit K.

Response H-5:

The commenter has misunderstood the Initial Study. The numerical limits listed in the Initial Study for the numbers of persons that will use the potable water system are there for the purposes of classifying the system as a Transient Noncommunity Public Water System. The numbers mean that there will not be more than 25 persons who will use the potable water system continuously, i.e., for a period that exceeds 60 days. The remaining users, the number of which could exceed 25, but is not limited to any particular number, will not use the potable water system for more than 60 consecutive days. This site will host up to 200 persons each day who will use the potable water system, but of those 200 persons, only 25 will use the potable water system for more than 60 continuous days. The remaining 175 persons will only use the system for 5 to 10 continuous days as they are not permanent staff or employees of those who use the site for long periods of time, such as the River Parkway Trust.

Response H-6:

Table 2 and footnote "b" have been corrected to refer to Federal ambient CO standard rather than the incorrectly stated CI standard. The meaning of the letters "TOS" (Threshold of Significance) has been added to footnote "c".

Response H-7:

The text within Section 2.0 – Air Quality, has been revised to clarify the estimated air pollutant emissions for Scout Island that are shown in Table 2 are for the peak summer time period while the quantities listed in the bulleted items following Table 2 are for the school year time period.

Response H-8:

The resulting annual air pollutant emissions from SIEOC shown in Table 2, Section 2.0 – Air Quality, have been revised to correct the vehicle fleet mix for the Vehicle Emissions category. The original table included buses and trucks in this category vehicle fleet mix. The revised vehicle fleet mix for that category is light automobiles, light trucks and sport/utility vehicles.

The paragraphs immediately following Table 2, on page 38 has been rewritten to explain the vehicle fleet mixes that were used to calculate the emission loadings for Table 2. Table 2 also incorrectly listed PM10 emissions as CO emissions and vise-versa. The bulleted list of emissions correctly includes light automobiles, light trucks and buses in the vehicle mix. Correcting the vehicle mix used to calculate the emissions for Table 2 and the mislabeling of the PM10 and CO emissions has corrected the apparent decrease shown in text for PM10 emissions from the summer to the school year. The units of tons/year have been added to the bulleted emissions. Table 2 has been revised to correct the use of SOX with SO_2.

Response H-9:

The text in Section 2.0 – Air Quality, has been revised to state that the vehicle trips used to calculate the air pollutant emissions for Scout Island in Table 2 were 60 roundtrip (120 total) trips.

I. Responses to: Gary S. Henson, Battalion Chief, North Central Fire Protection District, (November 7, 2002) letter to Blair, Church and Flynn, Consulting Engineers – Attention: Cordie R. Qualle PE

Response I-1:

The comments received from North Central Fire Protection District are noted and a mitigation measure has been added to Section 11.1 – Availability of Fire Protection and to the Mitigation Check List Section 11.1 that states that the requirements of this letter will be met by this project. Table 1 has been revised to show North Central Fire Protection District as a permitting agency for the fire suppression system to be installed and implemented at SIOEC.

J. Responses to: Joel Aranaz, Fire Marshal, City of Fresno Fire Department, (November 26, 2002) letter to Fresno County Office of Education– Attention: Jamie Perry

Response J-1:

The comments received from the City of Fresno Fire Department are noted and a mitigation measure has been added to Section 11.1 – Availability of Fire Protection and to the Mitigation Check List Section 11.1 that states that the requirements of this letter will be met by this project. Table 1 has been revised to show the City of Fresno Fire Department as a permitting agency for the fire suppression system to be installed and implemented at SIOEC. It is also noted that these requirements are considered to be in addition to the requirements of the North Central Fire Protection District (see Comment Letter I)

Chapter 4 – Revised Table 1 from Initial Study

This chapter contains a revised version of Table 1 from the Draft IS/MND. The revised table incorporates information received during the Draft IS/MND public review period. The table shows the required permits for this project, the permitting agency and the activity that requires the permit. The revisions are noted in the table by strikeouts and underlining.

Table 1

List of Required Permits for Improvements at SIOEC
(Revised)

Permit	Permitting Agency	Activity
General Construction Storm Drainage Discharge (NPDES) Permit for the site	State of California Water Resources Control Board	Remodeling of Ranch House Continued use of Meeting Building, Maintenance Barn and Pole Barn
Construction Activity in a Designated Floodway and Flood Plain	State of California, Department of Water Resources, Board of Reclamation	Modification of Water Wells Gravel Parking Area and Driveway Construction of Primary and Secondary Access Routes
	Fresno County Flood Plain Administrator	Enhancement of Pirates Creek Construction of Crossings of Pirates Creek
	City of Fresno Flood Plain Administrator	Construction of Landscaping Berms
Construction within lands claimed by the State of California as sovereign lands of the state (all land below the normal low water mark of the San Joaquin River) and lands claimed as held in the public trust (all lands between the normal high water mark and the normal low water mark of the San Joaquin River)	California State Lands Commission	Small Group Outdoor Teaching Areas Development of Platform Camping Area Installation of Vault Toilets Large Group Outdoor Teaching Areas Development of Irrigated Meadow Area Canoe Launch and Take-out Docks and Staging Areas Fencing for Archeological Excavation Area

Permit	Permitting Agency	Activity
		Nursery Area Shade Structures Installation of Electrical System Installation of Water Distribution System Installation of Security and Night Use Lighting Installation of GLOBE Weather Monitoring Station Installation of Water Quality Monitoring Equipment Construct Perimeter Fencing ~~Develop a Horse Corral and Riding Arena~~
Site Grading	County of Fresno City of Fresno Fresno Metropolitan Flood Control District	Grading plan for site
Hazardous Materials Business Plan	Fresno County Department of Community Health, Environmental Health System City of Fresno Fire Department North Central Fire Protection District	Installation and operation of Above Ground Storage Tanks Installation, storage and possible operation of water supply disinfectant equipment and use of disinfectant chemicals
Permit to Operate a Public Water System	Fresno County Health Department	Installation of Potable Water Distribution System Modification to Well and Pressure System
Install Groundwater Observation Wells	County of Fresno City of Fresno	Install and remove groundwater observation wells in or near Pirates Creek
Water Well Permit	Fresno County Community Health, Environmental Health System City of Fresno	Modification to Water Wells

Permit	Permitting Agency	Activity
Permit to Abandon Existing Water Well	Fresno County Community Health, Environmental Health System	Abandon existing agricultural well on the site
Federal Section 404 of the Clean Water Act Permit	US Army Corps of Engineers	Enhancement of Pirates Creek Construction of Vehicular and Pedestrian Crossings of Pirates Creek Small Group Outdoor Teaching Areas Large Group Outdoor Teaching Areas Canoe Launch and Take-out Docks and Staging Areas Installation of GLOBE Weather Monitoring Station Installation of Water Quality Monitoring Equipment
Federal Section 401 of the Clean Water Act	State of California Regional Water Quality Control Board	Enhancement of Pirates Creek Construction of Vehicular and Pedestrian Crossings of Pirates Creek Small Group Outdoor Teaching Areas Large Group Outdoor Teaching Areas Canoe Launch and Take-out Docks and Staging Areas Installation of GLOBE Weather Monitoring Station Installation of Water Quality Monitoring Equipment
Section 1601 Streambed Alternation Agreement	State of California Department of Fish and Game	Enhancement of Pirates Creek Construction of Vehicular and Pedestrian Crossings of Pirates Creek Small Group Outdoor Teaching Areas

Permit	Permitting Agency	Activity
		Large Group Outdoor Teaching Areas Canoe Launch and Take-out Docks and Staging Areas Installation of GLOBE Weather Monitoring Station Installation of Water Quality Monitoring Equipment
~~Right to Impound Water~~	~~State of California Department of Water Resources~~	~~Enhancement of Pirates Creek~~
Habitat Enhancement Plan	US Fish and Wildlife Service	Elderberry Bush Enhancement Areas
Fire Suppression System	North Central Fire Protection District Fresno Fire Department	Install a fire suppression system (fire alarms, sprinklers, water system, site access)
Change of Occupancy for Ranch House and Meeting Building	North Central Fire District	Correct record to make it consistent with the current use of the meeting building and planned use of the ranch house
Mosquito Abatement (not an actual permit, process request for services at the site)	Mosquito and Vector Control District	Notify district of need for mosquito control at site if mosquitoes become a nuisance

Chapter 5 – Mitigation Measures Incorporated in the Project

The Initial Study prepared for the project has determined that the project could have significant effects on the environment, but there will not be significant effects in this case because revisions in the project have been made by or agreed to by the FCOE that will avoid the effects or mitigate the effects to a point where clearly no significant effects would occur. These revisions are reflected in the mitigation measures listed in revised Table 5-1.

Some mitigation measures in Table 5-1 have been revised to reflect information received during the Draft IS/MND public review period. The revisions are noted in the table by strikeouts and underlining. The revised measures will avoid or reduce the significant effects to at least the same degree as, or to a greater degree than, the original measures and will create no more adverse effect of their own than would have the original measures.

Table 5-1

Environmental Impacts and Mitigation Measures

(Revised)

Impact 1.2: This project may impact local topography

Mitigation Measures:

1. Prepare US Army Corps of Engineers HEC-RAS Water Surface Profile model for the project to show that the water surface of the designated floodway for the post-project condition does not exceed the pre-project condition.

2. Obtain permits for on site grading from the City of Fresno and the County of Fresno Flood Plain Administrators.

Impact 1.3: This project will not impact the ability to mine the site for aggregate minerals should the property be sold to others who wish to mine the aggregate minerals.

Mitigation Measures:

~~1. Comply with PRC §2763 in making a finding that this proposed use is an acceptable alternative to mining the subject property for construction aggregate materials (sand and gravel), due primarily to this location's unsuitability for conducting a mining operation.~~

Impact 1.4: This project will result in graded areas that could be exposed to moving floodwater that could result in increased erosion.

Mitigation Measures:

1. Install and maintain landscaping with dense ground cover or turf on slopes. The slopes of the Pirates Creek pond and berms produced with excavated fill will also be landscaped/turfed or covered with native and non-native grass species or with local cobble riprap so as to anchor soil against erosion and/or scour.

2. Obtain coverage under the General Construction Permit of the State of California Water Quality Control Board issued through the NPDES permitting program for the discharge of storm water from a construction site and comply with all of the requirements of the permit.

3. Obtain grading permits from the flood plain administrators for the City of Fresno and County of Fresno and obtain US Army Corps of Engineers, State of California Reclamation Board, State of California Department of Fish and Game, and the State of California Regional Water Quality Control Board permits, certifications and signed agreements and comply with all of the requirements of the permits and agreements.

4. Shrubs at the canoe launching point will only be trimmed to the ground level so as to retain the root structure of the shrubs. The shrubs will be allows to revegetate the area when the area is not in use for canoe launching.

Impact 3.4: This project may impact ground water quality

Mitigation Measures:

1. For any subsequent water wells drilled on this property: utilize submersible pumps; bury all plumbing lines so flood scouring would not uncover them; and site water tanks and well pressure tanks according to measures specified in Parts 12.2/12.3 below.

2. For water system installation, comply with pertinent FEMA flood hazard area regulations as outlined in 44CFR60.3 and obtain permits for this work from the flood plain administrators for the City of Fresno and the County of Fresno.

3. ~~Existing wells will be flood-proofed and provided with annual seals in accordance with FEMA requirements and Fresno County Health Department requirements.~~ Obtain permits from the City of Fresno and the County of Fresno to reconstruct existing wells to flood-proof them and to add annual seals.

4. ~~Obtain required water well permits from Fresno County Health Department.~~ Obtain permit from Fresno County Health Department to abandon an existing well.

5. ~~This project will be required to retrofit and continue to conform to the septic feasibility study findings and findings of Fresno County EHS, FEMA regulations, the San Joaquin Basin Plan, and the Uniform Plumbing Code for existing septic systems. Specifically, all existing septic tanks will be sufficiently anchored so as to make them water-tight; and all leach lines will be installed so that they will be protected from flood scouring, per recommendations in Section 3.4 of Protecting Building Utilities from Flood Damage, a November 1999 publication of the FEMA Mitigation Directorate.~~ This project will retrofit, as required, existing septic systems to conform to the septic feasibility study findings and findings of Fresno County EHS, FEMA regulations, the San Joaquin Basin Plan, and the Uniform Plumbing Code for existing septic systems. Specifically, all existing septic tanks will be sufficiently anchored so as to restrain them from becoming buoyant and they will be made water-tight; and all leach lines will be installed so that they will be protected from flood scouring, per recommendations in Section 3.4 of Protecting Building Utilities from Flood Damage, a November 1999 publication of the FEMA Mitigation Directorate.

6. Comply with the provisions of the RWQCB San Joaquin Basin Plan provisions for on-site disposal systems, including distancing from wells, and the 10-year flood plain of the San Joaquin River.

7. Distance all septic tanks and leach lines at least one hundred feet (100') from the northern, eastern, and western boundaries of the overall project.

8. Comply with the requirements of City of Fresno and Fresno County Environmental Health for water well and with Fresno County Environmental Health for septic system installation and floodproofing.

9. Comply with the requirements of the Uniform Plumbing Code for septic tanks.

10. Comply with FEMA floodplain regulations pertaining to waste disposal systems, as set forth in 44CFR60.3.

11. Install vault toilets per recommendations in Section 3.4 of Protecting Building Utilities from Flood Damage, a November 1999 publication of the FEMA Mitigation Directorate.

12. Obtain and comply General Construction Permit issued by the WQCB for discharge of storm drainage from construction sites.

13. Comply with agrochemical use and storage regulations of the U.S. Environmental Protection Agency (EPA), U.S. Department of Agriculture (USDA), Cal-EPA, California Department of Pesticide Regulation, and the Fresno County Agricultural Commissioner.

14. The doors to the toilet enclosures for the toilet inside of the meeting building and the two (2) outside toilets attached to the meeting building will be locked when not being used by the SIEOC staff. Visitors to the site will be directed to use the vault toilet located near the meeting building.

15. The existing above ground storage tanks (ASTs) will be emptied and removed from the site and disposed of in a lawful manner. The tanks will be replaced with double wall tanks that meet or exceed UL Standard 2085 and NFPA and UFC codes. The tanks will be certified by a licensed civil engineer for proper anchoring against floatation during the base flood event.

16. A Hazardous Materials Business Plan will be filed with the Fresno County Department of Community Health, Environmental Health System to address the use and maintenance of the ASTs.

17. Add the installation and operation of disinfection equipment for the water system and the storage and use of disinfection chemicals at the site to the Hazardous Materials Business Plan should disinfection of the domestic water system be required.

18. A permit to reconstruct the existing domestic well to floodproof the well and add a 50-foot annular seal will be obtained from the City of Fresno Public Works Department.

Impact 3.5: The fire suppression water system will be connected to the domestic water system. This connection could be a source of contamination to the domestic water system.

Mitigation Measures:

1. The connection between the domestic water system and the fire suppression system will be protected by a backflow prevention device that meets regulatory requirements. The backflow prevention device will be maintained, tested and inspected as required by regulatory specifications.

Impact 4.1, 5.1: The project may impact plant and animal species of special concern.

1. Prior to construction or installation, a survey shall be completed at the location(s) of any facilities to be placed along the River for Sanford's Arrowhead, a California species of special concern which occurs in shallow waters of rivers of California's Central Valley. If populations of Sanford's Arrowhead are found in areas to be disturbed, then alternative locations for the proposed dock and swimming beach will be selected where the Sanford's Arrowhead does not occur.

2. Utilize native plants in landscaping for habitat value as well as for xeriscape (water conservation) value; consult with Depart of Public Utilities' Water Conservation Section on landscaping and irrigation plans.

3. The Valley Elderberry Longhorn Beetle (VELB), a Federally Threatened Species, resides exclusively on the elderberry bush which is found throughout Scout Island. Prior to construction, fence and flag all areas to be avoided. Maintain at least 20 feet clear from construction activity and the drip line of any elderberry bush that grows within the construction area. Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for non-compliance. Erect warning signs every 50 feet along the edge of the avoidance area per Conservation Guidelines for the Valley Elderberry Longhorn Beetle (VELB), July 1999, Fish and Wildlife Service, United States Department of the Interior, Appendix B. Comply with all other listed guidelines for the conservation of the VELB. Train inspector to recognize elderberry plants, to log all construction activity near elderberry plants and to direct contractor to keep clear of plants. Provide significant penalties in construction specifications for contractor incursion into the 20' clear area. Have biologist survey shrubs affected by the construction that are one inch in diameter or larger for the presence of the VELB, protect these shrubs in accordance with the US Fish and Wildlife Guidelines and consult with the Service regarding "take" issues for these shrubs.

4. Raptors may use the non-native red gum eucalyptus trees for nesting. Thirty days prior to construction, a qualified biologist shall survey all construction zones and their immediate vicinity for active raptor nests. Any active nests located within designated impact zones will be flagged and a no-construction buffer of not less than 200 feet will be established around the nest. Alternatively, all construction will occur outside of the nesting season (August through January).

5. The Western Pond Turtle is the only native turtle that lives in California. The habitat found at Scout Island is suitable for this California species of special concern. Maintain the present riparian habitat along the San Joaquin River to provide basking sites and sandy banks or grassy open fields for egg-laying for the Western Pond Turtle.

6. A qualified biologist shall survey the site for the presence of the Western Pond Turtle prior to any construction activity that may impact the turtle's habitat. Should the turtle be found to inhabit those areas, relocate any project construction activities or facilities away from the actively used habitat of the turtle.

7. Avoid disturbance within the drip line of any valley oak tree.

8. Chemicals to control insect pests will not be applied on the site with 100 feet of elderberry bushes during the months of March through June, inclusive.

9. Herbicides will not be applied on the site within 100 feet of elderberry bushes during the months of July through February, inclusive, and in no case will they be applied within 20 feet of the drip line of any elderberry bush.

Impact 4.1, 5.1: The project may impact sensitive wildlife habitat.

Mitigation Measures:

1. Pre-construction surveys for roosting bats will be conducted during the spring and/or summer months.

2. Prohibit pets from the site to avoid disturbance of existing species.

3. Manage the site to encourage local wildlife to continue to use the habitat at the site.

4. Work with the State Department of Fish and Game to locate, avoid, and manage sensitive habitats to enhance their beneficial use by wildlife.

5. Final construction plans will be designed in accordance with approved DFG measures to preclude stranding of aquatic species and to avoid harboring species that might compete with future anadromous fish.

6. Landscaping and irrigation plans for Pirates Creek will be prepared for approval by DFG.

7. A vegetation management plan for the entire Scout Island site will be prepare in coordination with DFG to provide for the control of invasive, non-native plants such as Arundo donax and Sesbania punicea and the control other non-native species that already inhabit the site so that they do not become invasive to the riverine environment.

8. Remove interior fencing at the site, except around the high ropes course area.

9. Construct no fencing within 200 feet of the bank of the river

10. Design and construct exterior fencing to be wildlife friendly and meet the approval of DFG.

Impact 4.1, 5.1: The project impacts jurisdictional wetlands.

Mitigation Measures:

1. Obtain Section 404, U.S. Army Corps of Engineers Clean Water Act permits for all activities or construction work that occurs within jurisdictional wetlands.

2. Obtain Section 401, Regional Water Quality Control Board Clean Water Act clearance for all activities or construction work that occurs within jurisdictional wetlands.

Impact 4.1, 5.1: The project will impact non-wetland jurisdictional tributary waters of the US – Pirates Creek.

Mitigation Measures:

1. Obtain Section 404, U.S. Army Corps of Engineers Clean Water Act permits for all activities or construction work that occurs within Pirates Creek.

2. Obtain Section 401, Regional Water Quality Control Board Clean Water Act clearance for all activities or construction work that occurs within Pirates Creek.

3. Obtain 1601, State of California Department of Fish and Game Stream Bed Alteration agreement for work within Pirates Creek.

4. Provide State of California Department of Fish and Game approved fish screens on the intake and outfall structures for the Pirates Creek inlet and outlet pipes.

5. Provide annual biological survey of Pirates Creek to determine the presence of non-native plant species, fish, and animals and direct the removal of such species should they be found.

Impact 4.1, 5.1: The project will impact non-wetland jurisdictional tributary waters of the US – San Joaquin River.

Mitigation Measures:

1. Obtain Section 404, U.S. Army Corps of Engineers Clean Water Act permits for all activities or construction work that occurs within San Joaquin River.

2. Obtain Section 401, Regional Water Quality Control Board Clean Water Act clearance for all activities or construction work that occurs within San Joaquin River.

3. Obtain 1601, State of California Department of Fish and Game Stream Bed Alteration agreement for work within San Joaquin River.

Impact 6.1: This project may impact human health through the delivery of contaminated drinking water.

Mitigation Measures:

1. The domestic water system will be tested for quality as required by the Transient Noncommunity Public Water System permit that will be obtained from Fresno County Department of Community Health, Environmental Health System. The domestic water system will be shut down if contamination is detected by the testing. In that event, proper disinfection equipment will be installed at the site prior to reuse of the system. The equipment will be operated and maintained by a Certified Water Distribution Operation

2. The Hazardous Materials Business Plan (HMBP) will be updated to include the storage and handling of disinfectant chemicals and gases at the site. The HMBP will address the handling of these materials in the occurrence of a flood event.

Impact 6.1: This project will change the use of the existing ranch house from a residence to the on site administrator's office. In addition, the existing meeting building occupancy has changed prior to the acquisition of the site by FCOE and the occupancy of that building has never been updated. These changes in occupancy may impact human health through the change of use of these buildings.

Mitigation Measures:

1. Obtain Change of Occupancy of the existing ranch house and meeting building from the North Central Fire Protection District and meet the requirements imposed by the Change of Occupancy.

Impact 6.1: This project may impact human health through increased mosquito activity at the site resulting from the enhancement of Pirates Creek as another source for mosquito breeding.

Mitigation Measures:

1. The site administrator will conduct periodic checks with site visitors regarding mosquito activity at the site as well as personal investigations. Should these investigations reveal an elevated or nuisance level of mosquito activity, the site administrator will notify the Mosquito and Vector Control District and request their services to control and abate the nuisance.

Impact 8.1: The project would create light and glare from automobile and bus headlights and from interior and exterior lighting.

Mitigation Measures:

1. All parking lot lighting shall have cut-off fixtures. A full cut-off type fixture is a luminary or light fixture that, by design of the housing, does not allow any dispersion or direct glare to shine above a 90-degree horizontal plane from the base of the fixture. Full cut-off fixtures must be installed in a horizontal position as designed.

2. All external signs and lighting shall be lit from the top and shine downward except where uplighting is required for safety or security purposes. The lighting shall be shielded to prevent direct glare and/or light trespass. The lighting shall also be, as much as physically possible, contained to the target area.

3. Exterior building lighting for security or aesthetics shall be full cut-off or a shielded type designed to minimize any upward distribution of light.

4. Non-essential lighting shall be turned off by 10:00 p.m., leaving only necessary lighting for site security.

Impact 10.3: Boy Scout Road is the only improved access to the SIOEC site. This access is a private road that is not maintained by the City of Fresno or the County of Fresno. It is a one-lane road that must provide two-way traffic to those using the site and the property owners of River's Edge Estates. Lack of maintenance of the roadway or the traffic control devices could result in traffic hazards.

Mitigation Measures:

1. Fresno County Office of Education, together with property owners at River's Edge Estates, shall contribute, as needed, to the ongoing maintenance of Boy Scout Road and the emergency alternate access route through Fig Garden Golf Club.

2. Maintain existing drop arm gates and warning lights to control traffic flow in and out of Boy Scout Road.

Impact 11.1: This project will require fire protection from the North Central Fire Protection District and the City of Fresno Fire Department.

Mitigation Measures:

1. Submit fire suppression plan to the North Central Fire Protection District (NCFPD) and to the Fresno Fire Department for evaluation, obtain all permits required to install/equip the system as approved by NCFPD and the Fresno Fire Department, and make the improvements as outlined in the approved fire suppression plan.

2. If the fire suppression water supply is to be obtained from on-site water well(s), they must utilize (or be retrofitted with) backup generation and both the well control boxes and the generators shall be built with flood hazard protection measures as specified in Part 12.2/12.3 below

3. Comply with SJVUAPCD Rule 4701 by obtaining SJVUAPCD permit for any backup generator having 50hp or greater.

4. Comply with NCFPD and City of Fresno Fire Department requirements for fire protection ~~applicable to residences over 2 miles from the nearest fire station (install fire sprinkler systems in occupied buildings).~~ as stated in these fire agencies' letters regarding the project including certification that the well that will provide water for fire suppression will meet the fire flow requirements of the fire agencies.

5. Maintain functional bypass (emergency response agency access) locks on all access route gates, per requirements of Part 11.2 below.

6. Add the installation and operation of disinfection equipment for the water system and the storage and use of disinfection chemicals at the site to the Hazardous Materials Business Plan should disinfection of the domestic water system be required.

Impact 11.2: This project will need to provide access to the site by emergency vehicle access.

Mitigation Measures:

1. All gates in this project will have standard locks/lockboxes ("bypass locks") to allow fire, police, and ambulance access.

Impact 11.2: This project will need to provide a secondary access route to the site for use by emergency vehicles.

Mitigation Measures:

1. Fresno County Office of Education (FCOE) will complete the acquisition of the right of entry from the Fig Garden Golf Course to use the existing emergency access easement across Fig Garden Golf Club that has been acquired by River's Edge Estates. FCOE will contribute, as needed, to the retention and maintenance of the road to keep the road structurally sound for all weather travel, marked as required by the Fresno Fire Department and North Central Fire District, and equipped with fire/police/emergency vehicle bypass locks at gates on the River's Edge Estates property and on property of the Fig Garden Golf Club.

Impact 12.0: This project is within the floodplain and designated floodway (FEMA and State of California, Board of Reclamation) of the San Joaquin River.

Mitigation Measures:

1. Maintain access routes and gates for the project in accordance with mitigation measures given above in Part 11.2 above, to facilitate emergency evacuation and rescue worker access.

2. Install on-site domestic wastewater disposal systems and water supply system(s) in accordance with the specifications and mitigations set forth above in Part 3.4.

3. All fences, walls, gates, electrical transformer pads, and structures of any size proposed for construction on the FEMA floodway will be certified by a licensed civil engineer as causing no obstruction or diversion of floodwaters and no net rise in area floodwaters. This certification is subject to review and approval by the County and City of Fresno Floodplain Administrators.

4. Obtain grading permit(s) from the City of Fresno and/or the Fresno County floodplain administrator(s) for any subsequent grading at the site ~~Any proposed grading in the FEMA floodway~~ which would create new building pads larger than electrical transformer pads ~~requires an engineering review for further CEQA analysis~~.

5. All LP tanks and other gas or liquid fuel tanks must be located (or relocated) above BFE levels, and also must be certified by a licensed civil engineer as being sufficiently anchored to resist flotation in the event of immersion by severe flooding (inundation levels higher than those of a 100-year event) and that they will withstand the impact of floating debris during this extreme event. This certification is subject to review and approval by the City of Fresno or County of Fresno Floodplain Administrator.

6. Other types of tanks shall be installed per the specific requirements in Part 3.4 above (pertaining to septic tanks and vault toilets).

7. Electrical transformers, control panels/boxes, motors, and generators shall be elevated above BFE on pedestals or poles, or placed in certified water-tight vaults or boxes as verified by grading plan evaluation and/or electrical and structural permits. If physical elevation above BFE is the method chosen, the installation must be certified by a licensed civil engineer as not causing any obstruction or diversion of floodwaters, as being sufficiently protected from floodwaters and flood borne debris, and as not causing an unacceptable net rise in floodwaters; this certification is subject to review and approval by the City of Fresno and/or County of Fresno Floodplain Administrator ~~and Fresno County FPA~~.

8. All owners and occupants of this project are required to provide direct contact telephone numbers (and gate access codes as may be required) to the Fresno County Office of Emergency Services, the City of Fresno Emergency Preparedness Office, Fresno Fire Department, Fresno Metropolitan Flood Control District, the State Office of Emergency Services, and the U.S. Bureau of Reclamation Central Valley Project Friant Unit. This information ~~needs to~~ will be updated with the above agencies as soon and as often as it changes.

9. Recreational vehicles parked or stored at the subject property may not be inhabited or used for temporary sleeping quarters.

10. All motor vehicles, recreational vehicles, tractors, and construction equipment shall be removed from the floodway and floodplain during any flood evacuation, time permitting.

11. A permit for development within the State of California, Department of Water Resources, Board of Reclamation's designate floodway will be obtained for the project and all work will be performed in conformance with Board of Reclamation regulations.

12. Permits for development within a FEMA designated floodway will be obtained from the flood plain administrators for the City and County of Fresno and all work will be performed in accordance with FEMA regulations.

13. Evacuation plans for the project will be prepared and submitted to the City of Fresno Office of Emergency Services and the Fresno County Office of Emergency Services for approval.

Impact 12: Fire is a hazard at the site during summer months due to dry conditions at the site.

Mitigation Measures:

1. Maintain access routes and gates for the project in accordance with mitigation measures given in Part 11.2 above, to facilitate emergency evacuation and rescue worker access.

2. Install and maintain an on-site fire suppression system with a sprinkler component which would remain functional to protect dwellings during a 100-year flood, as set forth in Part 11.1 above.

Impact 13.2: This project may create aesthetically offensive conditions at the site and at the adjacent river areas if trash is not contained and disposed of properly.

Mitigation Measures:

1. The site administrator will evaluate the trash management practices conducted at the site on an on-going basis. Should the presence of unmanaged trash occur, such as trash not properly contained in on site containers due to faulty containers or over filled containers, the administrator will instruct the maintenance staff to pick up unmanaged trash and institute increased pickup of trash from the site by the maintenance staff and/or removal from the site by the licensed disposal company. The site administrator will also increase the number of on site trash containers as needed and replace on site containers or dumpsters that are failing to properly contain trash. In the event of a flood event, the site administrator will direct the maintenance staff to remove from the site all of the onsite trash containers to a location above the flood elevation. The site administrator will also instruct the licensed trash contactor to remove the main trash bin from the site to a location above the flood elevation. The trash bin and onsite containers will not be returned to the site until the threat of flooding has passed.

Impact 14.1: Construction activities at the site may expose or find artifacts or remains of archeological, paleontological, or legal significance.

Mitigation Measures:

1. If material that may be human remains, animal fossils, or archaeological material is encountered during project grading or construction, all work will be immediately stopped.

2. If the material includes suspected human remains, the Fresno County Coroner will immediately be contacted for his/her determination as to whether the material is contemporary or prehistoric in nature. If the remains are not related to a crime scene, but are possibly Native American in origin, the Native American Heritage Commission will be contacted for its instructions. The California Archaeological Inventory/Southern San Joaquin Valley Information Center will also be contacted to obtain a referral list of recognized archaeologists to conduct an archaeological assessment with recordation of findings and to formulate recommendation as to further site investigation and/or preservation. The City of Fresno will request concurrence of the State Historic Preservation Office (SHPO) on these findings and recommendations.

3. If the material is human-related, but does not include human remains; and if the archaeological material is possibly Native American in origin, Native American Heritage Commission will be contacted for its instructions. The California Archaeological Inventory/Southern San Joaquin Valley Information Center will also be contacted to obtain a referral list of recognized archaeologists to conduct an assessment with recordation of findings and to formulate a recommendation as to any further site investigation and/or preservation. The City of Fresno will request SHPO concurrence on these findings and recommendations.

4. If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley will be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist and, if the paleontologist determines the material to be significant, it shall be conserved as warranted and feasible.

Chapter 6 – Mitigation Monitoring Program

This Mitigation Monitoring Program ("Program") has been prepared in accordance with State CEQA Guidelines Section 15091(d) and Sections 15097(a) and (d). The purpose for the Mitigation Monitoring Program is to ensure that the mitigation measures and project revisions identified for the Scout Island Outdoor Education Center are implemented.

The FCOE Superintendent or his designee shall act as the Project Mitigation Monitoring Coordinator ("Coordinator"). The Coordinator shall be responsible for administering the Program, which shall be conducted as described in the following parts.

MITIGATION MONITORING PROGRAM ~~CHECKLIST~~ FOR FCOE SCOUT ISLAND OUTDOOR EDUCATION CENTER - ENVIRONMENTAL ASSESSMENT NO. 2002-01

~~This monitoring checklist is prepared in accordance with the California Environmental Quality Act (CEQA), as required under Assembly bill 3180. It is intended to establish a reporting/monitoring program for the Scout Island Outdoor Education Center as described in the preceding Initial Study. Verification of implementation of these mitigation measures will be required with submittal of construction plans and request for permits to construct the improvements described in EA No. 2002-01.~~

Part 1.2 – This project may impact local topography.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
Prepare US Army Corps of Engineers HEC-RAS Water Surface Profile model for the project to show that the water surface of the designated floodway for the post-project condition does not exceed the pre-project condition.	FCOE, successor(s) in interest, etc.*	~~When the proposed~~ With the mitigated negative declaration ~~and draft initial study are routed for comment~~	Federal Emergency Management Agency (FEMA), City and County of Fresno flood plain administrators
Obtain permits for on site grading from the City of Fresno and the County of Fresno Flood Plain Administrators.	FCOE, successor(s) in interest, etc.*	When grading plans are approved	City of Fresno and County of Fresno Flood Plain Administrators

Part 1.3 – This project will not impact the ability to mine the site for aggregate minerals should the property be sold to others who wish to mine the aggregate minerals.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
~~Comply with PRC §2763 in making a finding that this proposed use is an acceptable alternative to mining the subject property for construction aggregate materials (sand and gravel), due primarily to this location's unsuitability for conducting a mining operation.~~	FCOE; California State Lands Commission (CSLC)	When the proposed mitigated negative declaration and draft initial study are routed for comment	California Sate Mining & Geology Board

* includes FCOE and successor(s) in interest's contractors/subcontractors, agents, and employees; entities/persons assigned and delegated authority by the FCOE/successor(s) in interest to take actions with regard to the subject property; and other entities/persons performing work or non-work actions on the property with the knowledge of the FCOE/successor(s) in interest.

Part 1.4 – This project will result in graded areas that could be exposed to moving flood water that could result in increased erosion.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
Install and maintain landscaping with dense ground cover or turf on slopes. The slopes of the Pirates Creek pond and berms produced with excavated fill will also be landscaped/turfed or covered with native and non-native grass species or with local cobble riprap so as to anchor soil against erosion and/or scour.	FCOE, successor(s) in interest, etc.*	Throughout the life of the project.	Fresno County Office of Education
Obtain coverage under the General Construction Permit of the State of California Water Quality Control Board issued through the NPDES permitting program for the discharge of storm water from a construction site and comply with all of the requirements of the permit.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	FCOE
Obtain grading permits from the flood plain administrators for the City of Fresno and County of Fresno and obtain US Army Corps of Engineers, State of California Reclamation Board, State of California Department of Fish and Game, and the State of California Regional Water Quality Control Board permits, certifications and signed agreements and comply with all of the requirements of the permits and agreements.	FCOE, successor(s) in interest, etc.*	Prior to construction	City of Fresno and County of Fresno Flood Plain Administrators

Part 3.4 – This project may impact ground water quality.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
For any subsequent water wells drilled on this property: utilize submersible pumps; bury all plumbing lines so flood scouring would not uncover them; and site water tanks and well pressure tanks according to measures specified in Parts 12.2/12.3 below.	FCOE, successor(s) in interest, etc.*	During construction, plan check for any plumbing permit/plan check for related installations	City of Fresno Planning & Development Dept.
For water system installation, comply with pertinent FEMA flood hazard area regulations as outlined in 44CFR60.3 and obtain permits for this work from the flood plain administrators for the City of Fresno and the County of Fresno.	FCOE, successor(s) in interest, etc.*	During construction plan check for any plumbing permit/plan check for related installations	City of Fresno Planning & Development Dept.; County of Fresno Building and Safety Dept.

(Part 3.4 is continued on next page)

~~Existing wells will be flood-proofed and provided with annual seals in accordance with FEMA requirements and Fresno County Health Department requirements.~~ Obtain permits from the City of Fresno and the County of Fresno to reconstruct existing wells to flood-proof them and to add annual seals.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	City of Fresno and County of Fresno Flood Plain Administrators
~~Obtain required water well permits from Fresno County Health Department.~~ Obtain permit from Fresno County Health Department to abandon an existing well.	FCOE, successor(s) in interest, etc.*	Prior to abandonment of well	County of Fresno Community Health Department
~~This project will be required to retrofit and continue to conform to the septic feasibility study findings and findings of Fresno County EHS, FEMA regulations, the San Joaquin Basin Plan, and the Uniform Plumbing Code for existing septic systems. Specifically, all existing septic tanks will be sufficiently anchored so as to make them water-tight; and all leach lines will be installed so that they will be protected from flood scouring, per recommendations in Section 3.4 of Protecting Building Utilities from Flood Damage, a November 1999 publication of the FEMA Mitigation Directorate.~~ This project will retrofit, as required, existing septic systems to conform to the septic feasibility study findings and findings of Fresno County EHS, FEMA regulations, the San Joaquin Basin Plan, and the Uniform Plumbing Code for existing septic systems. Specifically, all existing septic tanks will be sufficiently anchored so as to restrain them from becoming buoyant and they will be made water-tight; and all leach lines will be installed so that they will be protected from flood scouring, per recommendations in Section 3.4 of Protecting Building Utilities from Flood Damage, a November 1999 publication of the FEMA Mitigation Directorate.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	County of Fresno Flood Plain Administrator
Comply with the provisions of the RWQCB San Joaquin Basin Plan provisions for on-site disposal systems, including distancing from wells, and the 10-year flood plain of the San Joaquin River.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	FCOE
Distance all septic tanks and leach lines at least one hundred feet (100') from the northern, eastern, and western boundaries of the overall project.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	FCOE

(Part 3.4 is continued on next page)

Comply with the requirements of City of Fresno and Fresno County Environmental Health for water well and with Fresno County Environmental Health for septic system installation and floodproofing.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	County of Fresno Environmental Health and City of Fresno
Comply with the requirements of the Uniform Plumbing Code for septic tanks.	FCOE, successor(s) in interest, etc.*	Preparation of construction plans	City of Fresno and County of Fresno Flood Plain Administrators
Comply with FEMA floodplain regulations pertaining to waste disposal systems, as set forth in 44CFR60.3.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	City of Fresno and County of Fresno Flood Plain Administrators
Install vault toilets per recommendations in Section 3.4 of Protecting Building Utilities from Flood Damage, a November 1999 publication of the FEMA Mitigation Directorate.	FCOE, successor(s) in interest, etc.*	At time of installation of vault toilets	City of Fresno and County of Fresno Flood Plain Administrators
Obtain and comply General Construction Permit issued by the RWQCB for discharge of storm drainage from construction sites.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	FCOE
Comply with agrochemical use and storage regulations of the U.S. Environmental Protection Agency (EPA), U.S. Department of Agriculture (USDA), Cal-EPA, California Department of Pesticide Regulation, and the Fresno County Agricultural Commissioner.	FCOE, successor(s) in interest, etc.*	Now	FCOE
The doors to the toilet enclosures for the toilet inside of the meeting building and the two (2) outside toilets attached to the meeting building will be locked when not being used by the SIEOC staff. Visitors to the site will be directed to use the vault toilet located near the meeting building.	FCOE, successor(s) in interest, etc.*	Now	FCOE
The existing above ground storage tanks (ASTs) will be emptied and removed from the site and disposed of in a lawful manner. The tanks will be replaced with double wall tanks that meet or exceed UL Standard 2085 and NFPA and UFC codes. The tanks will be certified by a licensed civil engineer for proper anchoring against floatation during the base flood event.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	FCOE
A Hazardous Materials Business Plan will be filed with the Fresno County Department of Community Health, Environmental Health System to address the use and maintenance of the ASTs.	FCOE, successor(s) in interest, etc.*	At time of installation of ASTs	Fresno County Community Health Department

(Part 3.4 is continued on next page)

Add the installation and operation of disinfection equipment for the water system and the storage and use of disinfection chemicals at the site to the Hazardous Materials Business Plan should disinfection of the domestic water system be required.	FCOE, successor(s) in interest, etc.*	When domestic water quality testing indicates need for disinfection	Fresno County Community Health Department
A permit to reconstruct the existing domestic well to floodproof the well and add a 50-foot annular seal will be obtained from the City of Fresno Public Works Department.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	City of Fresno Public Works Department

Part 3.5 – The fire suppression water system will be connected to the domestic water system. This connection could be a source of contamination to the domestic water system.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
The connection between the domestic water system and the fire suppression system will be protected by a backflow prevention device that meets regulatory requirements. The backflow prevention device will be maintained, tested and inspected as required by regulatory specifications.	FCOE, successor(s) in interest, etc.*	At time of construction	FCOE

Part 4.1 – The project may impact plant and animal species of special concern.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
Prior to construction or installation, a survey shall be completed at the location(s) of any facilities to be placed along the River for Sanford's Arrowhead, a California species of special concern which occurs in shallow waters of rivers of California's Central Valley. If populations of Sanford's Arrowhead are found in areas to be disturbed, then alternative locations for the proposed dock and swimming beach will be selected where the Sanford's Arrowhead does not occur.	FCOE, successor(s) in interest, etc.*	During pre-construction	FCOE
Utilize native plants in landscaping for habitat value as well as for xeriscape (water conservation) value; consult with Depart of Public Utilities' Water Conservation Section on landscaping and irrigation plans.	FCOE, successor(s) in interest, etc.* City of Fresno Water Division/Water Conservation Section	During initial landscaping and ongoing throughout the life of the project	FCOE

(Part 4.1 is continued on next page)

Obtain Section 404, U.S. Army Corps of Engineers Clean Water Act permits for all activities or construction work that occurs with jurisdictional wetlands.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, US Army Corps of Engineers
Obtain Section 401, Regional Water Quality Control Board Clean Water Act clearance for all activities or construction work that occurs with jurisdictional wetlands.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, Regional Water Quality Control Board
Obtain Section 404, U.S. Army Corps of Engineers Clean Water Act permits for all activities or construction work that occurs within Pirates Creek.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, US Army Corps of Engineers
Obtain Section 401, Regional Water Quality Control Board Clean Water Act clearance for all activities or construction work that occurs within Pirates Creek.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, Regional Water Quality Control Board
Obtain 1601, State of California Department of Fish and Game Stream Bed Alteration agreement for work within Pirates Creek.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, State Department of Fish and Game
Provide annual biological survey of Pirates Creek to determine the presence of non-native plant species, fish, and animals and direct the removal of such species should they be found.	FCOE, successor(s) in interest, etc.*	Each year	FCOE
Obtain Section 404, U.S. Army Corps of Engineers Clean Water Act permits for all activities or construction work that occurs within San Joaquin River.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, US Army Corps of Engineers
Obtain Section 401, Regional Water Quality Control Board Clean Water Act clearance for all activities or construction work that occurs within San Joaquin River.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, Regional Water Quality Control Board
Obtain 1601, State of California Department of Fish and Game Stream Bed Alteration agreement for work within San Joaquin River.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, State Department of Fish and Game

Part 5.1 – The project may impact plant and animal species of special concern.

The project may impact sensitive wildlife habitat.

The project impact jurisdictional wetlands.

The project will impact non-wetland jurisdictional tributary waters of the US – Pirates Creek.

The project will impact non-wetland jurisdictional tributary waters of the US – San Joaquin River.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
The Valley Elderberry Longhorn Beetle (VELB), a Federally Threatened Species, resides exclusively on the elderberry bush which is found throughout Scout Island. Prior to construction, fence and flag all areas to be avoided. Maintain at least 20 feet clear from construction activity and the drip line of any elderberry bush that grows within the construction area. Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for non-compliance. Erect warning signs every 50 feet along the edge of the avoidance area per Conservation Guidelines for the Valley Elderberry Longhorn Beetle, July 1999, Fish and Wildlife Service, United States Department of the Interior, Appendix B. Comply with all other listed guidelines for the conservation of the VELB. Train inspector to recognize elderberry plants, to log all construction activity near elderberry plants and to direct contractor to keep clear of plants. Provide significant penalties in construction specifications for contractor incursion into the 20' clear area.	FCOE, successor(s) in interest, etc.*	During pre-construction	FCOE, U.S. Fish & Wildlife Service (USFWS)
Raptors may use the non-native red gum eucalyptus trees for nesting. Thirty days prior to construction, a qualified biologist shall survey all construction zones and their immediate vicinity for active raptor nests. Any active nests located within designated impact zones will be flagged and a no-construction buffer of not less than 200 feet will be established around the nest. Alternatively, all construction will occur outside of the nesting season (August through January).	FCOE, successor(s) in interest, etc.*	At least 30 days prior to construction	FCOE, California Department of Fish & Game (DFG)

(Part 5.1 is continued on next page)

The Western Pond Turtle is the only native turtle that lives in California. The habitat found at Scout Island is suitable for this California species of special concern. Maintain the present riparian habitat along the San Joaquin River to provide basking sites and sandy banks or grassy open fields for egg-laying for the Western Pond Turtle.	FCOE, successor(s) in interest, etc.*	During construction and throughout the life of the project	FCOE
A qualified biologist shall survey the site for the presence of the Western Pond Turtle prior to any construction activity that may impact the turtle's habitat. Should the turtle be found to inhabit those areas, relocate any project construction activities or facilities away from the actively used habitat of the turtle.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	FCOE
Avoid disturbance within the drip line of any valley oak tree.	FCOE, successor(s) in interest, etc.*	During construction	FCOE
Chemicals to control insect pests will not be applied on the site with 100 feet of elderberry bushes during the months of March through June, inclusive.	FCOE, successor(s) in interest, etc.*	On going	FCOE
Herbicides will not be applied on the site within 100 feet of elderberry bushes during the months of July through February, inclusive, and in no case will they be applied within 20 feet of the drip line of any elderberry bush.	FCOE, successor(s) in interest, etc.*	On going	FCOE
Pre-construction surveys for roosting bats will be conducted during the spring and/or summer months.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	FCOE
Prohibit pets from the site to avoid disturbance of existing species.	FCOE, successor(s) in interest, etc.*	On going	FCOE
Manage the site to encourage local wildlife to continue to use the habitat at the site.	FCOE, successor(s) in interest, etc.*	On going	FCOE and State Department of Fish and Game
Work with the State Department of Fish and Game to locate, avoid, and manage sensitive habitats to enhance their beneficial use by wildlife.	FCOE, successor(s) in interest, etc.*	On going	FCOE and State Department of Fish and Game
Obtain Section 404, U.S. Army Corps of Engineers Clean Water Act permits for all activities or construction work that occurs within jurisdictional wetlands.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE; US Army Corps of Engineers (USACE)
Final construction plans will be designed in accordance with approved DFG measures to preclude stranding of aquatic species and to avoid harboring species that might compete with future anadromous fish.	FCOE, successor(s) in interest, etc.*	Prior to start of construction, during construction, and throughout the life of the project	FCOE and State Department of Fish and Game

(Part 5.1 is continued on next page)

Landscaping and irrigation plans for Pirates Creek will be prepared for approval by DFG.	FCOE, successor(s) in interest, etc.*	Prior to start of construction, during construction, and throughout the life of the project	FCOE and State Department of Fish and Game
A vegetation management plan for the entire Scout Island site will be prepare in coordination with DFG to provide for the control of invasive, non-native plants such as Arundo donax and Sesbania punicea and the control other non-native species that already inhabit the site so that they do not become invasive to the riverine environment.	FCOE, successor(s) in interest, etc.*	Prior to start of construction, during construction, and throughout the life of the project	FCOE and State Department of Fish and Game
Remove interior fencing at the site, except around the high ropes course area, construct no fencing within 200 feet of the low flow channel bank of the river and design and construct exterior fencing to be wildlife friendly and meet the approval of DFG.	FCOE, successor(s) in interest, etc.*	Prior to start of construction, during construction, and throughout the life of the project	FCOE and State Department of Fish and Game
Obtain Section 401, Regional Water Quality Control Board Clean Water Act clearance for all activities or construction work that occurs within jurisdictional wetlands.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE; Regional Water Quality Control Board (RWCB)
Obtain Section 404, U.S. Army Corps of Engineers Clean Water Act permits for all activities or construction work that occurs within Pirates Creek.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE; USACE
Obtain Section 401, Regional Water Quality Control Board Clean Water Act clearance for all activities or construction work that occurs within Pirates Creek.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE; RWQCB
Obtain 1601, State of California Department of Fish and Game Stream Bed Alteration agreement for work within Pirates Creek.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, State Department of Fish and Game
Provide State of California Department of Fish and Game approved fish screens on the intake and outfall structures for the Pirates Creek inlet and outlet pipes.	FCOE, successor(s) in interest, etc.*	During construction	FCOE, State Department of Fish and Game
Provide annual biological survey of Pirates Creek to determine the presence of non-native plant species, fish, and animals and direct the removal of such species should they be found.	FCOE, successor(s) in interest, etc.*	Each year	FCOE
Obtain Section 404, U.S. Army Corps of Engineers Clean Water Act permits for all activities or construction work that occurs within San Joaquin River.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, US Army Corps of Engineers

(Part 5.1 is continued on next page)

Obtain Section 401, Regional Water Quality Control Board Clean Water Act clearance for all activities or construction work that occurs within San Joaquin River.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, Regional Water Quality Control Board
Obtain 1601, State of California Department of Fish and Game Stream Bed Alteration agreement for work within San Joaquin River.	FCOE, successor(s) in interest, etc.*	Prior to start of construction and throughout the life of the project	FCOE, State Department of Fish and Game

6.1 - This project may impact human health through the delivery of contaminated drinking water.

This project will change the use of the existing ranch house from a residence to the on site administrator's office. In addition, the existing meeting building occupancy has changed prior to the acquisition of the site by FCOE and the occupancy of that building has never been updated. These changes in occupancy may impact human health through the change of use of these buildings.

This project may impact human health through increased mosquito activity at the site resulting from the enhancement of Pirates Creek as another source for mosquito breeding.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
The domestic water system will be tested for quality as required by the Transient Noncommunity Public Water System permit that will be obtained from Fresno County Department of Community Health, Environmental Health System. The domestic water system will be shut down if contamination is detected by the testing. In that event, proper disinfection equipment will be installed at the site prior to reuse of the system. The equipment will be operated and maintained by a Certified Water Distribution Operation.	FCOE, successor(s) in interest, etc.*	As required by the water regulations	FCOE and Fresno County Environmental Health Department
The Hazardous Materials Business Plan (HMBP) will be updated to include the storage and handling of disinfectant chemicals and gases at the site. The HMBP will address the handling of these materials in the occurrence of a flood event.	FCOE, successor(s) in interest, etc.*	If and when disinfecting system is installed	FCOE and Fresno County Environmental Health Department
Obtain Change of Occupancy of the existing ranch house and meeting building from the North Central Fire Protection District and meet the requirements imposed by the Change of Occupancy.	FCOE, successor(s) in interest, etc.*	Now	North Central Fire Protection District
The site administrator will conduct periodic checks with site visitors regarding mosquito activity at the site as well as personal investigations. Should these investigations reveal an elevated or nuisance level of mosquito activity, the site administrator will notify the Mosquito and Vector Control District and request their services to control and abate the nuisance.	FCOE, successor(s) in interest, etc.*	On going during summer months	FCOE

Part 8.1 – The project would create light and glare from automobile and bus headlights and from interior and exterior lighting.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
All parking lot lighting shall have cut-off fixtures. A full cut-off type fixture is a luminary or light fixture that, by design of the housing, does not allow any dispersion or direct glare to shine above a 90-degree horizontal plane from the base of the fixture. Full cut-off fixtures must be installed in a horizontal position as designed.	FCOE, successor(s) in interest, etc.*	During construction plan check for parking and yard and later electrical plan/permit checks for any additional lighting	FCOE
All external signs and lighting shall be lit from the top and shine downward except where uplighting is required for safety or security purposes. The lighting shall be shielded to prevent direct glare and/or light trespass. The lighting shall also be, as much as physically possible, contained to the target area.	FCOE, successor(s) in interest, etc.*	During construction plan check for parking and yard and later electrical plan/permit checks for any additional lighting	FCOE
Exterior building lighting for security or aesthetics shall be full cut-off or a shielded type designed to minimize any upward distribution of light.	FCOE, successor(s) in interest, etc.*	During construction plan check for parking and yard and later electrical plan/permit checks for any additional lighting	FCOE
Non-essential lighting shall be turned off by 10:00 p.m., leaving only necessary lighting for site security.	FCOE, successor(s) in interest, etc.*	During construction plan check for parking and yard and later electrical plan/permit checks for any additional lighting	FCOE

Part 10.3 – Boy Scout Road is the only improved access to the SIOEC site. This access is a private road that is not maintained by the City of Fresno or the County of Fresno. It is a one-lane road that must provide two-way traffic to those using the site and the property owners of River's Edge Estates. Lack of maintenance of the roadway or the traffic control devices could result in traffic hazards.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
Fresno County Office of Education, together with property owners at River's Edge Estates, shall contribute, as needed, to the ongoing maintenance of Boy Scout Road and the emergency alternate access route through Fig Garden Golf Club.	FCOE, successor(s) in interest, etc.*	During construction and for the life of the project	FCOE
Maintain existing drop arm gates and warning lights to control traffic flow in and out of Boy Scout Road.	FCOE*	During construction and for the life of the project	Fresno County Building and Safety

Part 11.1 – This project will require fire protection from the North Central Fire Protection District and the City of Fresno Fire Department.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
Submit fire suppression plan to the North Central Fire Protection District (NCFPD) and to the Fresno Fire Department for evaluation, obtain all permits required to install/equip the system as approved by NCFPD and the Fresno Fire Department, and make the improvements as outlined in the approved fire suppression plan.	FCOE*	Before further building permits are issued by the Planning & Development Department	FCOE; North Central Fire District
If the fire suppression water supply is to be obtained from on-site water well(s), they must utilize (or be retrofitted with) backup generation and both the well control boxes and the generators shall be built with flood hazard protection measures as specified in Part 12.2/12.3 below	See Part 12.2/12.3 below	Within 90 days of the filing of the Notice of Determination for this EA	See Part 12.2/12.3 below
Comply with SJVUAPCD Rule 4701 by obtaining SJVUAPCD permit for any backup generator having 50hp or greater.	FCOE, successor(s) in interest, etc.*	During electrical permit application/plan check for generator installation and ongoing throughout the life of electrical generator(s)	City of Fresno Planning & Development Dept.; SJVUAPCD
Comply with NCFPD and City of Fresno Fire Department requirements for fire protection ~~applicable to residences over 2 miles from the nearest fire station (install fire sprinkler systems in occupied buildings)~~ as stated in these fire agencies' letters regarding the project including certification that the well that will provide water for fire suppression will meet the fire flow requirements of the fire agencies.	FCOE, successor(s) in interest, etc.*	During construction plan check	FCOE; North Central Fire District
Maintain functional bypass (emergency response agency access) locks on all access route gates, per requirements of Part 11.2 below.	See Part 11.2 below	See Part 11.2 below	See Part 11.2 below
Add the installation and operation of disinfection equipment for the water system and the storage and use of disinfection chemicals at the site to the Hazardous Materials Business Plan should disinfection of the domestic water system be required.	FCOE, successor(s) in interest, etc.*		

Part 11.2 – This project will need to provide access to the site by emergency vehicle access.

This project will need to provide a secondary access route to the site for use by emergency vehicles.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
All gates in this project are required to have standard locks/lockboxes ("bypass locks") to allow fire, police, and ambulance access.	FCOE, successor(s) in interest, etc.*	Ongoing throughout the life of the project	FCOE
Fresno County Office of Education (FCOE) will complete the acquisition of the right of entry from the Fig Garden Golf Course to use the existing emergency access easement across Fig Garden Golf Club that has been acquired by River's Edge Estates. FCOE will contribute, as needed, to the retention and maintenance of the road to keep the road structurally sound for all weather travel, marked as required by the Fresno Fire Department and North Central Fire District, and equipped with fire/police/emergency vehicle bypass locks at gates on the River's Edge Estates property and on property of the Fig Garden Golf Club.	FCOE, successor(s) in interest, etc.*	Now	FCOE, North Central Fire Protection District, City of Fresno Fire Department

Part 12.0 – This project is within the flood plain and designated floodway (FEMA and State of California, Board of Reclamation) of the San Joaquin River.

Fire is a hazard at the site during summer months due to dry conditions at the site.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
Maintain access routes and gates for the project in accordance with mitigation measures given above in Part 11.2 above, to facilitate emergency evacuation and rescue worker access.	See Part 11.2 above	See Part 11.2 above	See Part 11.2 above
Install on-site domestic wastewater disposal systems and water supply system(s) in accordance with the specifications and mitigations set forth above in Part 3.4.	See Part 3.4 above	See Part 3.4 above	See Part 3.4 above

(Part 12.0 is continued on next page)

All fences, walls, gates, electrical transformer pads, and structures of any size proposed for construction on the FEMA floodway will be certified by a licensed civil engineer as causing no obstruction or diversion of floodwaters and no net rise in area floodwaters. This certification is subject to review and approval by the County and City of Fresno Floodplain Administrators.	FCOE, successor(s) in interest, etc.*	Whenever such structures are proposed to be installed or constructed	City of Fresno Planning & Development Dept.; Fresno County Building & Safety
Obtain grading permit(s) from the City of Fresno and/or the Fresno County floodplain administrator(s) for any subsequent grading at the site ~~Any proposed grading in the FEMA floodway~~ which would create new building pads larger than electrical transformer pads ~~requires an engineering review for further CEQA analysis~~.	FCOE, successor(s) in interest, etc.*	Prior to start of any subsequent grading work at the site, if any occurs	City of Fresno and County of Fresno Flood Plain Administrators
All LP tanks and other gas or liquid fuel tanks must be located (or relocated) above BFE levels, and also must be certified by a licensed civil engineer as being sufficiently anchored to resist flotation in the event of immersion by severe flooding (inundation levels higher than those of a 100-year event) and that they will withstand the impact of floating debris during this extreme event. This certification is subject to review and approval by the City of Fresno or County of Fresno Floodplain Administrator.	FCOE, successor(s) in interest, etc.*	Whenever fuel tanks are proposed to be installed	City of Fresno Planning & Development Dept.; Fresno County Building & Safety
Other types of tanks shall be installed per the specific requirements in Part 3.4 above (pertaining to septic tanks and vault toilets).	See Part 3.4 above	See Part 3.4 above	See Part 3.4 above
Electrical transformers, control panels/boxes, motors, and generators shall be elevated above BFE on pedestals or poles, or placed in certified water-tight vaults or boxes as verified by grading plan evaluation and/or electrical and structural permits. If physical elevation above BFE is the method chosen, the installation must be certified by a licensed civil engineer as not causing any obstruction or diversion of floodwaters, as being sufficiently protected from floodwaters and flood borne debris, and as not causing an unacceptable net rise in floodwaters; this certification is subject to review and approval by the City of Fresno and/or County of Fresno Floodplain Administrator ~~and Fresno County FPA~~.	FCOE, successor(s) in interest, etc.*	Whenever such structures/items are proposed to be installed or constructed	City of Fresno Planning & Development Dept. .; Fresno County Building & Safety

(Part 12.0 is continued on next page)

All owners and occupants of this project are required to provide direct contact telephone numbers (and gate access codes as may be required) to the Fresno County Office of Emergency Services, the City of Fresno Emergency Preparedness Office, Fresno Fire Department, Fresno Metropolitan Flood Control District, the State Office of Emergency Services, and the U.S. Bureau of Reclamation Central Valley Project Friant Unit. This information needs to be updated with the above agencies as soon and as often as it changes.	FCOE, successor(s) in interest, etc.*	Ongoing throughout the life of the project	City of Fresno Planning & Development Dept.; City of Fresno Police Department / Patrol Support Division / [City of Fresno] Office of Emergency Services; Fresno County Building & Safety
Recreational vehicles parked or stored at the subject property may not be inhabited or used for temporary sleeping quarters.	FCOE, successor(s) in interest, etc.*	Ongoing throughout the life of the project	City of Fresno Housing.; Community, and Economic Development Dept., Code Enforcement Division
All motor vehicles, recreational vehicles, tractors, and construction equipment shall be removed from the floodway and floodplain during any flood evacuation, time permitting.	FCOE, successor(s) in interest, etc.*	As necessary during a severe flood event	City of Fresno Police Department / Patrol Support Division / [City of Fresno] Office of Emergency Services; Fresno County Building & Safety
A permit for development within the State of California, Department of Water Resources, Board of Reclamation's designate floodway will be obtained for the project and all work will be performed in conformance with Board of Reclamation regulations.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	State of California Board of Reclamation
Permits for development within a FEMA designated floodway will be obtained from the flood plain administrators for the City and County of Fresno and all work will be performed in accordance with FEMA regulations.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	City of Fresno and County of Fresno Flood Plain Administrators
Evacuation plans for the project will be prepared and submitted to the City of Fresno Office of Emergency Services and the Fresno County Office of Emergency Services for approval.	FCOE, successor(s) in interest, etc.*	Now	City of Fresno Office of Emergency Services and the County of Fresno Office of Emergency Services
			(Part 12.0 is continued on next page)

Maintain access routes and gates for the project in accordance with mitigation measures given in Part 11.2 above, to facilitate emergency evacuation and rescue worker access.	FCOE, successor(s) in interest, etc.*	Now	FCOE, North Central Fire Protection District and the Fresno Fire Department
Install and maintain an on-site fire suppression system with a sprinkler component which would remain functional to protect dwellings during a 100-year flood, as set forth in Part 11.1 above.	FCOE, successor(s) in interest, etc.*	Prior to start of construction	North Central Fire Protection District and the Fresno Fire Department

Part 13.2 - This project may create aesthetically offensive conditions at the site and at the adjacent river areas if trash is not contained and disposed of properly.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
The site administrator will evaluate the trash management practices conducted at the site on an on-going basis. Should the presence of unmanaged trash occur, such as trash not properly contained in on site containers due to faulty containers or over filled containers, the administrator will instruct the maintenance staff to pick up unmanaged trash and institute increased pickup of trash from the site by the maintenance staff and/or removal from the site by the licensed disposal company. The site administrator will also increase the number of on site trash containers as needed and replace on site containers or dumpsters that are failing to properly contain trash.	FCOE, successor(s) in interest, etc.*	On going	FCOE

Part 14.0 – Construction activities at the site may expose or find artifacts or remains of archeological, paleontological, or legal significance.

MITIGATION MEASURE	IMPLEMENTED BY	WHEN IMPLEMENTED	VERIFIED BY
If material that may be human remains, animal fossils, or archaeological material is encountered during project grading or construction, all work will be immediately stopped.	FCOE, successor(s) in interest, etc.*	During project surveying, grading, or construction; and ongoing throughout use of the property	City of Fresno Planning & Development Dept.; Fresno County Coroner and other law enforcement agencies

(Part 14.0 is continued on next page)

If the material includes suspected human remains, the Fresno County Coroner will immediately be contacted for his/her determination as to whether the material is contemporary or prehistoric in nature. If the remains are not related to a crime scene, but are possibly Native American in origin, the Native American Heritage Commission will be contacted for its instructions. The California Archaeological Inventory/Southern San Joaquin Valley Information Center will also be contacted to obtain a referral list of recognized archaeologists to conduct an archaeological assessment with recordation of findings and to formulate recommendation as to further site investigation and/or preservation. The City of Fresno will request concurrence of the State Historic Preservation Office (SHPO) on these findings and recommendations.	FCOE, successor(s) in interest, etc.*		City of Fresno Planning & Development Dept.; Fresno County Coroner and other law enforcement agencies; Native American Heritage Commission (affiliated with the California Department of Justice); California Archaeological Inventory / Southern San Joaquin Valley Information Center; SHPO
If the material is human-related, but does not include human remains; and if the archaeological material is possibly Native American in origin, Native American Heritage Commission will be contacted for its instructions. The California Archaeological Inventory/Southern San Joaquin Valley Information Center will also be contacted to obtain a referral list of recognized archaeologists to conduct an assessment with recordation of findings and to formulate a recommendation as to any further site investigation and/or preservation. The City of Fresno will request SHPO concurrence on these findings and recommendations.	FCOE, successor(s) in interest, etc.*	Ongoing throughout the life of the project	City of Fresno Planning & Development Dept.; Native American Heritage Commission; California Archaeological Inventory / Southern San Joaquin Valley Information Center; SHPO
If animal fossils are uncovered, the Museum of Paleontology, U.C. Berkeley will be contacted to obtain a referral list of recognized paleontologists. An assessment shall be conducted by a paleontologist and, if the paleontologist determines the material to be significant, it shall be conserved as warranted and feasible.	FCOE, successor(s) in interest, etc.*	As necessary during a severe flood event	City of Fresno Planning & Development Dept.; Museum of Paleontology at U.C. Berkeley

Chapter 7 - Revisions To The Initial Study/Mitigated Negative Declaration (Revised Tables, Text, and Exhibits)

This section contains revisions to the tables, text, and exhibits included in the Initial Study/Mitigated Negative Declaration. It also contains new exhibits that have been added as backup material to the responses to the comments received on the Initial Study/Mitigated Negative Declaration.

Exhibit F contains the revised Fire Suppression Diagram. Exhibits G, H, I and J are new exhibits. The contents of these exhibits are:

Exhibit G:	Groundwater Monitoring Elevation and Bottom Elevation of Septic Tanks Information
Exhibit H:	Proposed Landscaping Planting and Maintenance Plan for Scout Island Outdoor Education Center
Exhibit I:	FEMA Flood Insurance Rate Map, CFR44 Chapter 1, Section 60.3, and HEC-RAS Water Surface Profile Calculations
Exhibit J:	Water Rights Opinion From FCOE Attorney
Exhibit K:	Consumptive Water Use Calculations for Scout Island Outdoor Education Center

The section that follows the exhibits contains revised material that is either added to or corrections of the material that was presented in the Initial Study/Mitigated Negative Declaration. New material is noted by underlining. Deleted material is noted by strikethrough. The tables are not underlined to provide better readability of the tables. They are intended to completely replace the tables presented in the Initial Study/Mitigated Negative.

Exhibit F

FIRE SUPPRESSION DIAGRAM (REVISED)

FIRE SUPPRESSION MAP

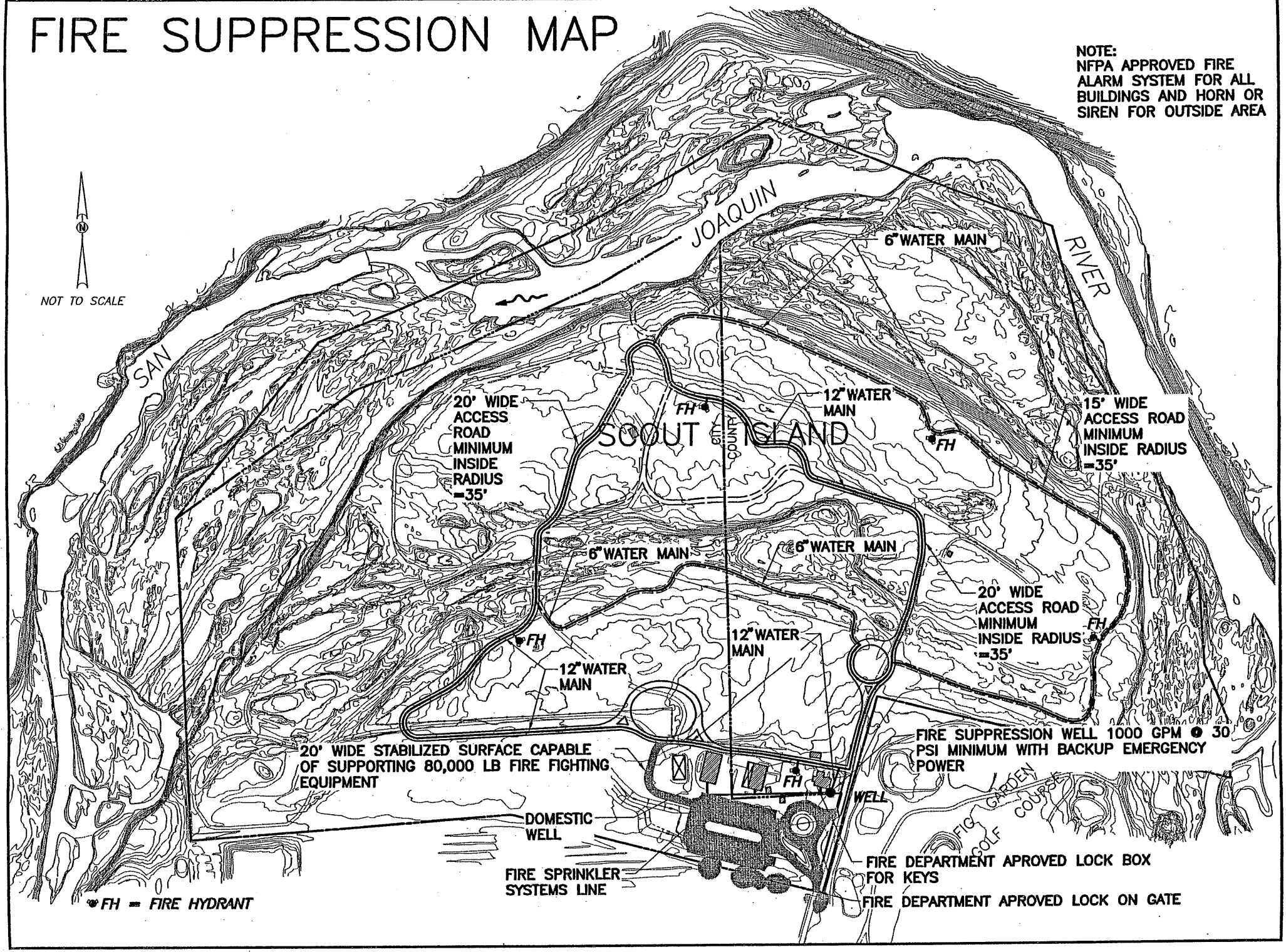


Exhibit G

GROUNDWATER MONITORING ELEVATION AND BOTTOM ELEVATION OF SEPTIC TANKS INFORMATION

Date	US Gage Reading	DS Gage Reading	240.00 US Water Surface	231.00 DS Water Surface	2700 Gradient		Gage Well No. 1	228.60 WS Well No. 1	1030 Calculated WS Well No. 1	Gage Well No. 4	232.80 WS Well No. 4	1880 Calculated WS Well No. 4
4/16/02			241.44	236.59	0.00180							
6/25/02	1.65	5.60	241.65	236.60	0.00187							
7/10/02	1.65	5.60	241.65	236.60	0.00187							
8/2/02	1.65	5.65	241.65	236.65	0.00185							
8/8/02	1.65	5.64	241.65	236.64	0.00186		9.23	237.83	238.55	5.55	238.35	240.13
8/16/02	1.58	6.67	241.58	237.67	0.00145		9.20	237.80	239.16	6.40	239.20	240.39
8/26/02	1.66	5.66	241.66	236.66	0.00185		9.00	237.60	238.57	6.40	239.20	240.14
9/5/02	1.60	5.66	241.60	236.66	0.00183		9.00	237.60	238.54	6.30	239.10	240.10
9/13/02	1.66	5.69	241.66	236.69	0.00184		9.00	237.60	238.59	6.30	239.10	240.15
9/20/02	1.70	5.70	241.70	236.70	0.00185		9.20	237.80	238.61	6.50	239.30	240.18
9/27/02	1.66	5.68	241.66	236.68	0.00184		5.68	234.28	238.58	6.40	239.20	240.15
10/3/02	1.57	5.70	241.57	236.70	0.00180		9.20	237.80	238.56	6.50	239.30	240.09

gradient		0.001068	0.0029268
Bottom of Septic Tanks	251.40		
Maximum GW elevation with 5' separation	246.40		
Projected WS in River from GW		243.92	248.80

Exhibit H

PROPOSED LANDSCAPING PLANTING
AND
MAINTENANCE PLAN
FOR
SCOUT ISLAND OUTDOOR EDUCATION CENTER

Summary
Scout Island
Vegetation Management Plan

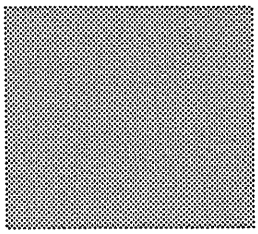
Prepared for:

Fresno County
Office of Education

Prepared by:

2M Associates

November 4, 2002



GOALS

Scout Island is an 84.6 acre site to be used as a regional outdoor education facility with programs targeted for K-12, including special education students. Leadership training for students, teachers, and administrators will also be available at the site. Scout Island will provide year-round science, history, astronomy, outdoor education, leadership training and other educational programs of the County Office of Education, school districts throughout the region, and other public and private partners involved with outdoor education.

General Ecological Goal

Scout Island should be developed and managed in a way that enhances water quality, plant and animal habitat conditions, and open space and natural resource values while promoting water and energy conservation and minimizing environmental impacts.

Vegetation Management Goals

Site-specific goals for managing and enhancing the vegetation of Scout Island include;

- Implementing a long-term program of noxious weed control to reduce competition with native species
- Using plants native to the San Joaquin River environs within the area between Friant Dam and the Mendota Pool
- Maintaining a tree canopy and shade to all educational use areas, the ranch house complex, and the parking area
- Providing visual buffer screening along the southern and eastern property lines
- Phasing replacement of non-native trees with native trees
- Retaining native trees
- Where possible, allowing for natural processes to establish and maintain desired vegetation
- Providing visual screening for adjacent land uses (residential and golf courses)

VEGETATION PROGRAM

GENERAL

Coordination and Implementation

The vegetation management program for Scout Island will be refined and administered in consultation with the California Department of Fish and Game. Where specific permits are required, such as for the riparian enhancement of Pirates Creek, detailed planting and irrigation plans will be developed for agency review.

Most of the planting and vegetation management on the site will be implemented by students and teachers through the various educational programs of the County Office of Education..

Non-native Trees

A large proportion of the trees at Scout Island are not indigenous to the San Joaquin River. A long-term program will be implemented to remove the majority of exotic tree species on the property and replace them with native riparian plants. The priority will be first placed on removal of eucalyptus (Eucalyptussp.) within the immediate area of the San Joaquin River and along the enhanced portions of Pirates Creek. Additional tree replacement will be implemented as funding and labor are available.

Noxious Weed Control

There exist a number of invasive exotic plants on the property. Noxious weeds will be removed and controlled through non-chemical methods including: mowing, selected controlled burns, and flash grazing with sheep or goats. Of particular importance is the management of scarlet wisteria tree (Sesbania panicea), giant reed (Arundo donax) and yellow-star thistle (Centaurea solstitialis).

Grain Crops

Selected meadow between the Ranch residence and Pirates Creek will be evaluated for annual plantings of grain crops for forage by migratory waterfowl.

VEGETATION MANAGEMENT ZONES

Figure 1, Vegetation Management, delineates a generalized mosaic to be used for managing and enhancing vegetation at Scout Island. The zones illustrated are general and will be subject to modification as site-specific actions are implemented. These zones are described below.

Natural Succession (NS)

Native plants will be allowed to develop through natural succession within areas immediately along the San Joaquin River that are subject to frequent inundation. Vegetation management activities within this zone will be limited to phased removal of eucalyptus trees and annual noxious weed control (see above).

Wetland/Riparian (W/R)

Wetland and riparian species will be planted or allowed to volunteer along the immediate edges of the enhanced Pirates Creek where water will be present.

Cottonwood and Mixed Riparian Forest (C/MR)

Forest areas, now principally composed of eucalyptus, will be converted into a Cottonwood / Mixed Riparian Forest association. Initial activities will be associated with the enhancement of Pirates Creek (C/MR-1).

Valley Oak/Sycamore Savanna

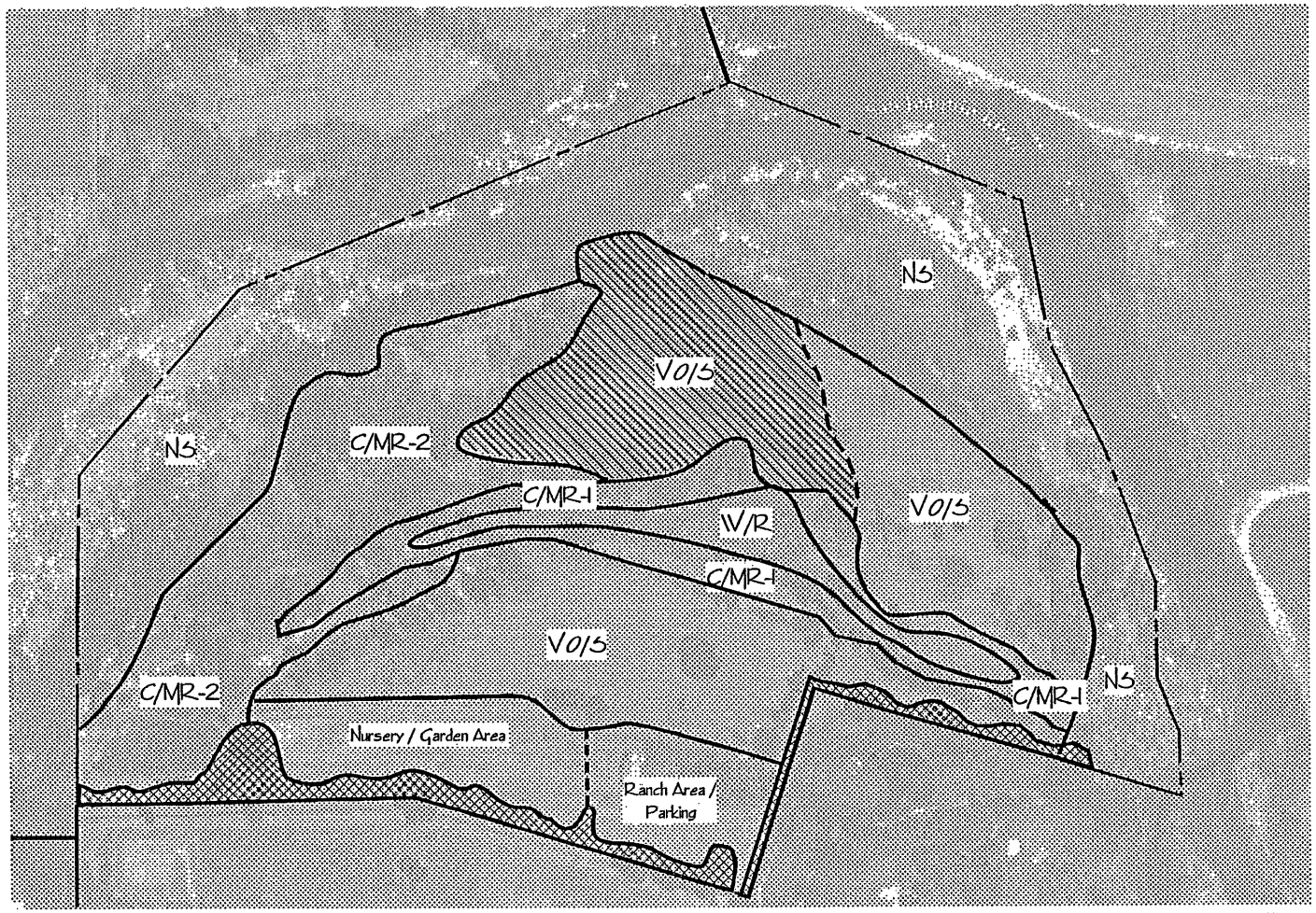
The majority of Scout Island that will be used for program activities will be retained in a savanna appearance. The majority of the area will be reclaimed as a Valley Oak / Sycamore Savanna association with either native grasses or grain forage for migratory waterfowl encouraged as the understory cover. The traditional turf area used for group program activities will be retained.

Visual Buffer

A buffer area along the south and east property line will be planted with screening vegetation composed entirely of native plants.

PLANTS BY ASSOCIATION

Table 1 is keyed to Figure 1 and lists recommended plant species to be used in revegetation activities.



Scout Island

Fresno County Office of Education

Figure 1

Vegetation Management

Legend (see text for explanation)

- Property Boundary
- NS — Natural Succession *
- C/MR — Cottonwood / Mixed Riparian Forest
  1: Initial: Pirates Creek Enhancement
  2: Later Phasing
- W/R — Wetland / Riparian (Pirates Creek Enhancement)
- V0/S — Valley Oak / Sycamore Savanna
- V0/S — Valley Oak / Sycamore Savanna - Programmed Use Area
- Visual Buffer

* Management of noxious weeds and invasive exotics will occur in all areas of the property including areas labeled as Natural Succession. See text for methods to be used.

Acres

4

1

1/4

Discussion Draft:
11/04/02

North

Scale
0 200' 400' 600'

This drawing is conceptual and for planning purposes only. Program information, scale, location of use areas and other information shown are subject to field evaluation and modification based on pending property line, topographic, and biological surveys, as well as other information.

Aerial photo provided by California Land Commission: File No. Wer745; Drawing No. W23745.DWG (EB).

TABLE 1: Scout Island Vegetation Management

Scientific Name	Common Name	Valley Oak / Sycamore Savannah (VO/S)	Cottonwood / Mixed Riparian (C/MR)	Wetland / Riparian (W/R)	Visual Buffer	Ranch Area / Parking
TREES						
Acer negundo ssp. californicum	box elder		X			X
Alnus rhombifolia	white alder		X		X	X
Fraxinus dipetala	California ash		X			
Fraxinus latifolia	Oregon ash		X		X	
Juglans californica var. hindsii	black walnut	X	X			
Platanus racemosa	western sycamore	X	X			X
Populus fremontii ssp. fremontii	Fremont cottonwood	X	X	X		
Quercus lobata	valley oak	X	X		X	X
SHRUBS						
Artemisia douglasiana	mugwort			X		
Calycanthus occidentalis	western spicebush		X		X	
Cephalanthus occidentalis var. californicus	California button willow		X	X	X	
Cercis occidentalis	western redbud		X		X	
Rhamnus californica	coffeeberry				X	
Rosa californica	California rose		X	X		
Rosa gymnocarpa	wood rose		X			
Salix gooddingii	Goodding's black willow		X	X	X	
Salix hindsiana	sandbar willow		X	X	X	
Salix lasiolepis	arroyo willow		X	X	X	

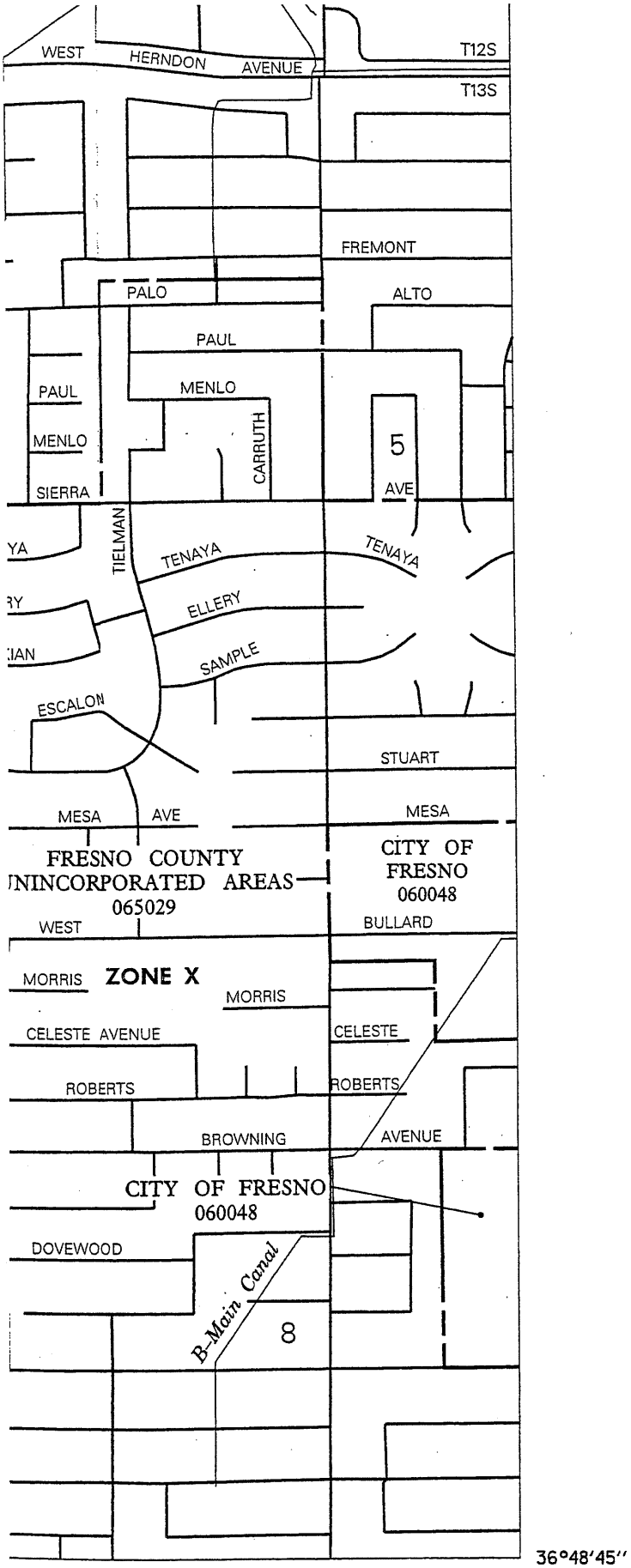
TABLE 1: Scout Island Vegetation Management (continued)

Scientific Name	Common Name	Valley Oak / Sycamore Savannah (VO/S)	Cottonwood / Mixed Riparian (C/MR)	Wetland / Riparian (W/R)	Visual Buffer	Ranch Area / Parking
VINES						
Rubus ursinus	California backberry		X		X	
Vitis californica	California wild grape		X	X	X	
GRASSES / FORBS						
Bromus carinatus	Califronia brome	X				
Elymus multisetus	big squirreltail	X				
Eschscholzia californica	Califronia poppy	X				
Festuca californica	Califronia fescue	X				
Leymus triticoides	creeping wild rye	X				
Lupinus albifrons	lupine	X				
Lupinus microcarpus	chick lupine	X				
Melica californica	Califronia melic	X				
Melica imperfecta	ncn	X				
Muhlenbergia rigens	deergrass	X				
Nassella pulchra	purple needlegrass	X				
WETLAND						
Carex barbarae	sedge			X		
Juncus spp.	rush			X		
Scirpus californicus	tule			X		
Scirpus pungens	common threesquare			X		
Typha spp.	cattail			X		

7-13

Exhibit I

FEMA FLOOD INSURANCE RATE MAP, CFR44 CHAPTER 1, SECTION 60.3, AND HEC-RAS WATER SURFACE PROFILE CALCULATIONS



Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE DATE shown on this map to determine when actuarial rates apply to structures in zones where elevations or depths have been established.

To determine if flood insurance is available, contact an insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET

1000 0 1000

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

FRESNO COUNTY, CALIFORNIA AND INCORPORATED AREAS

PANEL 1555 OF 3550

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

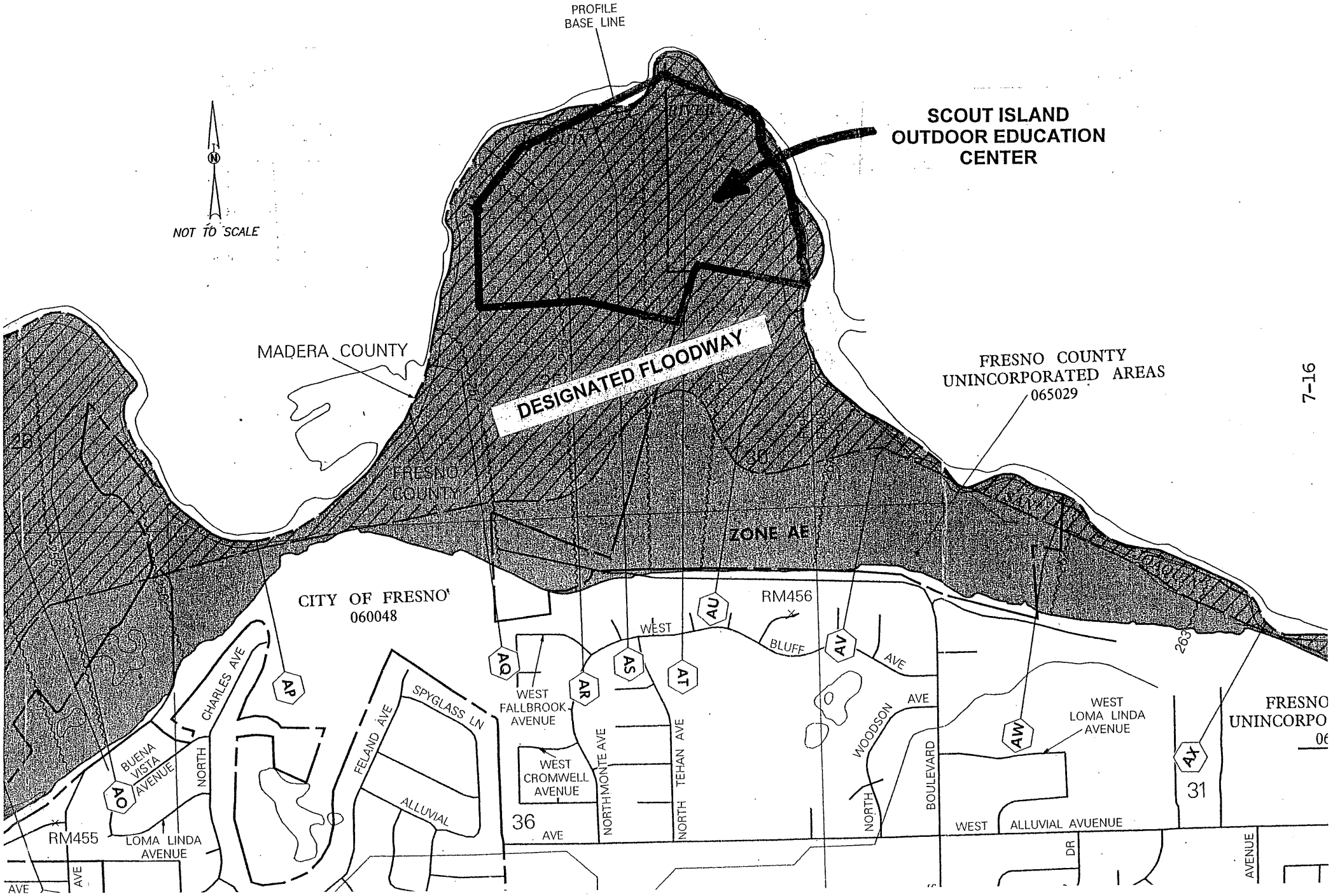
COMMUNITY	NUMBER	PANEL	SUFFIX
FRESNO, CITY OF	060048	1555	F
FRESNO COUNTY, UNINCORPORATED AREAS	065029	1555	F

MAP NUMBER
06019C1555 F

EFFECTIVE DATE:
JULY 19, 2001

Federal Emergency Management Agency

PORTION OF FEMA FLOOD INSURANCE MAP
PANEL 06019C1555 F, JULY 19, 2001



regulations utilizing the standards such as contained in subpart C of this part. In some instances, community officials may have access to information or knowledge of conditions that require, particularly for human safety, higher standards than the minimum criteria set forth in subpart A of this part. Therefore, any flood plain management regulations adopted by a State or a community which are more restrictive than the criteria set forth in this part are encouraged and shall take precedence.

[41 FR 46975, Oct. 26, 1976. Redesignated at 44 FR 31177, May 31, 1979, as amended at 48 FR 44552, Sept. 29, 1983; 49 FR 4751, Feb. 8, 1984]

§ 60.2 Minimum compliance with flood plain management criteria.

(a) A flood-prone community applying for flood insurance eligibility shall meet the standards of §60.3(a) in order to become eligible if a FHBM has not been issued for the community at the time of application. Thereafter, the community will be given a period of six months from the date the Administrator provides the data set forth in §60.3(b), (c), (d), (e) or (f), in which to meet the requirements of the applicable paragraph. If a community has received a FHBM, but has not yet applied for Program eligibility, the community shall apply for eligibility directly under the standards set forth in §60.3(b). Thereafter, the community will be given a period of six months from the date the Administrator provides the data set forth in §60.3(c), (d), (e) or (f) in which to meet the requirements of the applicable paragraph.

(b) A mudslide (i.e., mudflow)-prone community applying for flood insurance eligibility shall meet the standards of §60.4(a) to become eligible. Thereafter, the community will be given a period of six months from the date the mudslide (i.e., mudflow) areas having special mudslide hazards are delineated in which to meet the requirements of §60.4(b).

(c) A flood-related erosion-prone community applying for flood insurance eligibility shall meet the standards of §60.5(a) to become eligible. Thereafter, the community will be given a period of six months from the date the flood-related erosion areas having special erosion hazards are delineated in which to meet the requirements of §60.5(b).

(d) Communities identified in part 65 of this subchapter as containing more than one type of hazard (e.g., any combination of special flood, mudslide (i.e., mudflow), and flood-related erosion hazard areas) shall adopt flood plain management regulations for each type of hazard consistent with the requirements of §§ 60.3, 60.4 and 60.5.

(e) Local flood plain management regulations may be submitted to the State Coordinating Agency designated pursuant to §60.25 for its advice and concurrence. The submission to the State shall clearly describe proposed enforcement procedures.

(f) The community official responsible for submitting annual or biennial reports to the Administrator pursuant to §59.22(b)(2) of this subchapter shall also submit copies of each annual or biennial report to any State Coordinating Agency.

(g) A community shall assure that its comprehensive plan is consistent with the flood plain management objectives of this part.

(h) The community shall adopt and enforce flood plain management regulations based on data provided by the Administrator. Without prior approval of the Administrator, the community shall not adopt and enforce flood plain management regulations based upon modified data reflecting natural or man-made physical changes.

[41 FR 46975, Oct. 26, 1976. Redesignated at 44 FR 31177, May 31, 1979, as amended at 48 FR 29318, June 24, 1983; 48 FR 44552, Sept. 29, 1983; 49 FR 4751, Feb. 8, 1984; 50 FR 36024, Sept. 4, 1985; 59 FR 53598, Oct. 25, 1994; 62 FR 55716, Oct. 27, 1997]

§ 60.3 Flood plain management criteria for flood-prone areas.

The Administrator will provide the data upon which flood plain management regulations shall be based. If the Administrator has not provided sufficient data to furnish a basis for these regulations in a particular community, the community shall obtain, review and reasonably utilize data available from other Federal, State or other sources pending receipt of data from

the Administrator. However, when special flood hazard area designations and water surface elevations have been furnished by the Administrator, they shall apply. The symbols defining such special flood hazard designations are set forth in §64.3 of this subchapter. In all cases the minimum requirements governing the adequacy of the flood plain management regulations for flood-prone areas adopted by a particular community depend on the amount of technical data formally provided to the community by the Administrator. Minimum standards for communities are as follows:

(a) When the Administrator has not defined the special flood hazard areas within a community, has not provided water surface elevation data, and has not provided sufficient data to identify the floodway or coastal high hazard area, but the community has indicated the presence of such hazards by submitting an application to participate in the Program, the community shall:

(1) Require permits for all proposed construction or other development in the community, including the placement of manufactured homes, so that it may determine whether such construction or other development is proposed within flood-prone areas;

(2) Review proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334;

(3) Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall (i) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, (ii) be constructed with materials resistant to flood damage, (iii) be constructed by methods and practices that minimize flood damages, and (iv) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(4) Review subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, to determine whether such proposals will be reasonably safe from flooding. If a subdivision proposal or other proposed new development is in a flood-prone area, any such proposals shall be reviewed to assure that (i) all such proposals are consistent with the need to minimize flood damage within the flood-prone area, (ii) all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage, and (iii) adequate drainage is provided to reduce exposure to flood hazards;

(5) Require within flood-prone areas new and replacement water supply systems to be designed to minimize or eliminate infiltration of flood waters into the systems; and

(6) Require within flood-prone areas (i) new and replacement sanitary sewage systems to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters and (ii) onsite waste disposal systems to be located to avoid impairment to them or contamination from them during flooding.

(b) When the Administrator has designated areas of special flood hazards (A zones) by the publication of a community's FHBM or FIRM, but has neither produced water surface elevation data nor identified a floodway or coastal high hazard area, the community shall:

(1) Require permits for all proposed construction and other developments including the placement of manufactured homes, within Zone A on the community's FHBM or FIRM;

(2) Require the application of the standards in paragraphs (a) (2), (3), (4), (5) and (6) of this section to development within Zone A on the community's FHBM or FIRM;

(3) Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals base flood elevation data;

(4) Obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source, including data developed pursuant to paragraph (b)(3) of this section, as criteria for requiring that new construction, substantial improvements, or other development in Zone A on the community's FHBM or FIRM meet the standards in paragraphs (c)(2), (c)(3), (c)(5), (c)(6), (c)(12), (c)(14), (d)(2) and (d)(3) of this section;

(5) Where base flood elevation data are utilized, within Zone A on the community's FHBM or FIRM:

(i) Obtain the elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures, and

(ii) Obtain, if the structure has been floodproofed in accordance with paragraph (c)(3)(ii) of this section, the elevation (in relation to mean sea level) to which the structure was floodproofed, and

(iii) Maintain a record of all such information with the official designated by the community under §59.22 (a)(9)(iii);

(6) Notify, in riverine situations, adjacent communities and the State Coordinating Office prior to any alteration or relocation of a watercourse, and submit copies of such notifications to the Administrator;

(7) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained;

(8) Require that all manufactured homes to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.

(c) When the Administrator has provided a notice of final flood elevations for one or more special flood hazard areas on the community's FIRM and, if appropriate, has designated other special flood hazard areas without base flood elevations on the community's FIRM, but has not identified a regulatory floodway or coastal high hazard area, the community shall:

(1) Require the standards of paragraph (b) of this section within all A1–30 zones, AE zones, A zones, AH zones, and AO zones, on the community's FIRM;

(2) Require that all new construction and substantial improvements of residential structures within Zones A1–30, AE and AH zones on the community's FIRM have the lowest floor (including basement) elevated to or above the base flood level, unless the community is granted an exception by the Administrator for the allowance of basements in accordance with §60.6 (b) or (c);

(3) Require that all new construction and substantial improvements of non-residential structures within Zones A1–30, AE and AH zones on the community's firm (i) have the lowest floor (including basement) elevated to or above the base flood level or, (ii) together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

(4) Provide that where a non-residential structure is intended to be made watertight below the base flood level, (i) a registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of paragraph (c)(3)(ii) or (c)(8)(ii) of this section, and (ii) a record of such certificates which includes the specific elevation (in relation to mean sea level)

to which such structures are floodproofed shall be maintained with the official designated by the community under §59.22(a)(9)(iii);

(5) Require, for all new construction and substantial improvements, that fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria: A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(6) Require that manufactured homes that are placed or substantially improved within Zones A1–30, AH, and AE on the community's FIRM on sites

(i) Outside of a manufactured home park or subdivision,

(ii) In a new manufactured home park or subdivision,

(iii) In an expansion to an existing manufactured home park or subdivision, or

(iv) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist floatation collapse and lateral movement.

(7) Require within any AO zone on the community's FIRM that all new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified);

(8) Require within any AO zone on the community's FIRM that all new construction and substantial improvements of nonresidential structures (i) have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified), or (ii) together with attendant utility and sanitary facilities be completely floodproofed to that level to meet the floodproofing standard specified in §60.3(c)(3)(ii);

(9) Require within any A99 zones on a community's FIRM the standards of paragraphs (a)(1) through (a)(4)(i) and (b)(5) through (b)(9) of this section;

(10) Require until a regulatory floodway is designated, that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1–30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

(11) Require within Zones AH and AO, adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

(12) Require that manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A–1–30, AH, and AE on the community's FIRM that are not subject to the provisions of paragraph (c)(6) of this section be elevated so that either

(i) The lowest floor of the manufactured home is at or above the base flood elevation, or

(ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to

resist floatation, collapse, and lateral movement.

(13) Notwithstanding any other provisions of §60.3, a community may approve certain development in Zones A1–30, AE, and AH, on the community's FIRM which increase the water surface elevation of the base flood by more than one foot, provided that the community first applies for a conditional FIRM revision, fulfills the requirements for such a revision as established under the provisions of §65.12, and receives the approval of the Administrator.

(14) Require that recreational vehicles placed on sites within Zones A1–30, AH, and AE on the community's FIRM either

(i) Be on the site for fewer than 180 consecutive days,

(ii) Be fully licensed and ready for highway use, or

(iii) Meet the permit requirements of paragraph (b)(1) of this section and the elevation and anchoring requirements for "manufactured homes" in paragraph (c)(6) of this section.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

(d) When the Administrator has provided a notice of final base flood elevations within Zones A1–30 and/or AE on the community's FIRM and, if appropriate, has designated AO zones, AH zones, A99 zones, and A zones on the community's FIRM, and has provided data from which the community shall designate its regulatory floodway, the community shall:

(1) Meet the requirements of paragraphs (c) (1) through (14) of this section;

(2) Select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood, without increasing the water surface elevation of that flood more than one foot at any point;

(3) Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge;

(4) Notwithstanding any other provisions of §60.3, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community first applies for a conditional FIRM and floodway revision, fulfills the requirements for such revisions as established under the provisions of §65.12, and receives the approval of the Administrator.

(e) When the Administrator has provided a notice of final base flood elevations within Zones A1–30 and/or AE on the community's FIRM and, if appropriate, has designated AH zones, AO zones, A99 zones, and A zones on the community's FIRM, and has identified on the community's FIRM coastal high hazard areas by designating Zones V1–30, VE, and/or V, the community shall:

(1) Meet the requirements of paragraphs (c)(1) through (14) of this section;

(2) Within Zones V1–30, VE, and V on a community's FIRM, (i) obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures, and whether or not such structures contain a basement, and (ii) maintain a record of all such information with the official designated by the community under §59.22(a)(9)(iii);

(3) Provide that all new construction within Zones V1–30, VE, and V on the community's FIRM is located landward of the reach of mean high tide;

(4) Provide that all new construction and substantial improvements in Zones V1–30 and VE, and also Zone V if base flood elevation data is available, on the community's FIRM, are elevated on pilings and columns so that (i) the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to

or above the base flood level; and (ii) the pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of paragraphs (e)(4) (i) and (ii) of this section.

(5) Provide that all new construction and substantial improvements within Zones V1–30, VE, and V on the community's FIRM have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood latticework, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purposes of this section, a breakway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

(i) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and,

(ii) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards.

Such enclosed space shall be useable solely for parking of vehicles, building access, or storage.

(6) Prohibit the use of fill for structural support of buildings within Zones V1–30, VE, and V on the community's FIRM;

(7) Prohibit man-made alteration of sand dunes and mangrove stands within Zones V1–30, VE, and V on the community's FIRM which would increase potential flood damage.

(8) Require that manufactured homes placed or substantially improved within Zones V1–30, V, and VE on the community's FIRM on sites

(i) Outside of a manufactured home park or subdivision,

(ii) In a new manufactured home park or subdivision,

(iii) In an expansion to an existing manufactured home park or subdivision, or

(iv) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, meet the standards of paragraphs (e)(2) through (7) of this section and that manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision within Zones V1–30, V, and VE on the community's FIRM meet the requirements of paragraph (c)(12) of this section.

(9) Require that recreational vehicles placed on sites within Zones V1–30, V, and VE on the community's FIRM either

(i) Be on the site for fewer than 180 consecutive days,

(ii) Be fully licensed and ready for highway use, or

(iii) Meet the requirements in paragraphs (b)(1) and (e)(2) through (7) of this section.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

(f) When the Administrator has provided a notice of final base flood elevations within Zones A1–30 or AE on

the community's FIRM, and, if appropriate, has designated AH zones, AO zones, A99 zones, and A zones on the community's FIRM, and has identified flood protection restoration areas by designating Zones AR, AR/A1–30, AR/AE, AR/AH, AR/AO, or AR/A, the community shall:

(1) Meet the requirements of paragraphs (c)(1) through (14) and (d)(1) through (4) of this section.

(2) Adopt the official map or legal description of those areas within Zones AR, AR/A1–30, AR/AE, AR/AH, AR/A, or AR/AO that are designated developed areas as defined in §59.1 in accordance with the eligibility procedures under §65.14.

(3) For all new construction of structures in areas within Zone AR that are designated as developed areas and in other areas within Zone AR where the AR flood depth is 5 feet or less:

(i) Determine the lower of either the AR base flood elevation or the elevation that is 3 feet above highest adjacent grade; and

(ii) Using this elevation, require the standards of paragraphs (c)(1) through (14) of this section.

(4) For all new construction of structures in those areas within Zone AR that are not designated as developed areas where the AR flood depth is greater than 5 feet:

(i) Determine the AR base flood elevation; and

(ii) Using that elevation require the standards of paragraphs (c)(1) through (14) of this section.

(5) For all new construction of structures in areas within Zone AR/A1–30, AR/AE, AR/AH, AR/AO, and AR/A:

(i) Determine the applicable elevation for Zone AR from paragraphs (a)(3) and (4) of this section;

(ii) Determine the base flood elevation or flood depth for the underlying A1–30, AE, AH, AO and A Zone; and

(iii) Using the higher elevation from paragraphs (a)(5)(i) and (ii) of this section require the standards of paragraphs (c)(1) through (14) of this section.

(6) For all substantial improvements to existing construction within Zones AR/A1–30, AR/AE, AR/AH, AR/AO, and AR/A:

(i) Determine the A1–30 or AE, AH, AO, or A Zone base flood elevation; and

(ii) Using this elevation apply the requirements of paragraphs (c)(1) through (14) of this section.

(7) Notify the permit applicant that the area has been designated as an AR, AR/A1–30, AR/AE, AR/AH, AR/AO, or AR/A Zone and whether the structure will be elevated or protected to or above the AR base flood elevation.

[41 FR 46975, Oct. 26, 1976]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §60.3, see the List of Sections Affected in the Finding Aids section of this volume.

§60.4 Flood plain management criteria for mudslide (i.e., mudflow)-prone areas.

The Administrator will provide the data upon which flood plain management regulations shall be based. If the Administrator has not provided sufficient data to furnish a basis for these regulations in a particular community, the community shall obtain, review, and reasonably utilize data available from other Federal, State or other sources pending receipt of data from the Administrator. However, when special mudslide (i.e., mudflow) hazard area designations have been furnished by the Administrator, they shall apply. The symbols defining such special mudslide (i.e., mudflow) hazard designations are set forth in §64.3 of this subchapter. In all cases, the minimum requirements for mudslide (i.e., mudflow)-prone areas adopted by a particular community depend on the amount of technical data provided to the community by the Administrator. Minimum standards for communities are as follows:

(a) When the Administrator has not yet identified any area within the community as an area having special mudslide (i.e., mudflow) hazards, but the community has indicated the presence of such hazards by submitting an application to participate in the Program, the community shall

(1) Require permits for all proposed construction or other development in the community so that it may determine whether development is proposed within mudslide (i.e., mudflow)-prone areas;

LIVE OAK ASSOCIATES, INC.

an Ecological Consulting Firm

BIOLOGICAL ASSESSMENT FOR INCLUSION IN A SECTION 7 CONSULTATION SCOUT ISLAND EDUCATIONAL FACILITY PROJECT FRESNO COUNTY OFFICE OF EDUCATION FRESNO COUNTY, CALIFORNIA

Prepared by

Live Oak Associates, Inc.

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March 11, 2003 File Number 359-04

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EXECUTIVE SUMMARY

Live Oak Associates, Inc. completed a biotic assessment in support of a Section 7 Consultation for a 84.6-acre property known as Scout Island located in the San Joaquin River bottom in the extreme northerly sector of the City of Fresno in August of 2001. More specifically, the 84.6-acre property is located north of the intersection of Herndon Avenue and Van Ness Boulevard between the San Joaquin Country Club and the Fig Garden Golf Course. The Sierra foothills are located approximately 10 miles to the northeast. Five biotic habitats were identified on the study area including mixed riparian woodland, aquatic habitats of the low flow channel of the San Joaquin River, non-native grassland (partly disced), red-gum woodland, and park-like ornamental landscaping within the flood plain to the south.

The study area provides habitat for the federally threatened Valley Elderberry Longhorn Beetle (VELB). The proposed project will avoid impacts to mature elderberry shrubs that provide habitat for the Valley Elderberry Longhorn Beetle. However, approximately 22,000 square feet (0.51 acre) of jurisdictional waters in the form of the tributary waters associated with Pirates Creek will be affected by the project. Jurisdictional waters occur within 50 feet of at least 21 clumps of elderberry shrubs. The number of elderberry shrubs in these 21 clumps that have mature stems (>1 inch in diameter) is unknown, since a complete inventory of these elderberries was considered impractical. However, LOA biologists estimate the number of mature stems in these clumps to be greater than 100. Although not all of the elderberry plants on-site were surveyed for the VELB, several were observed having potential larval exit holes characteristic of the VELB. LOA has proposed a number of avoidance measures that will reduce potentially adverse project impacts to the VELB. Avoidance measures will include the following:

- Fencing;
- Signage;
- Briefing contractors prior to construction;
- Monitor on site when construction will occur within 100 feet of shrubs;
- Oil-based materials and heavy machinery will not be used within 50 feet of the shrubs to keep down dust. Watering will also minimize dust levels;
- Minimization of Soil Compaction around Root Ball;
- Hand removal of pavement within 50 feet of shrubs to reduce dust, where appropriate;
- Construction will preferably occur outside of flight season.

1.0 INTRODUCTION

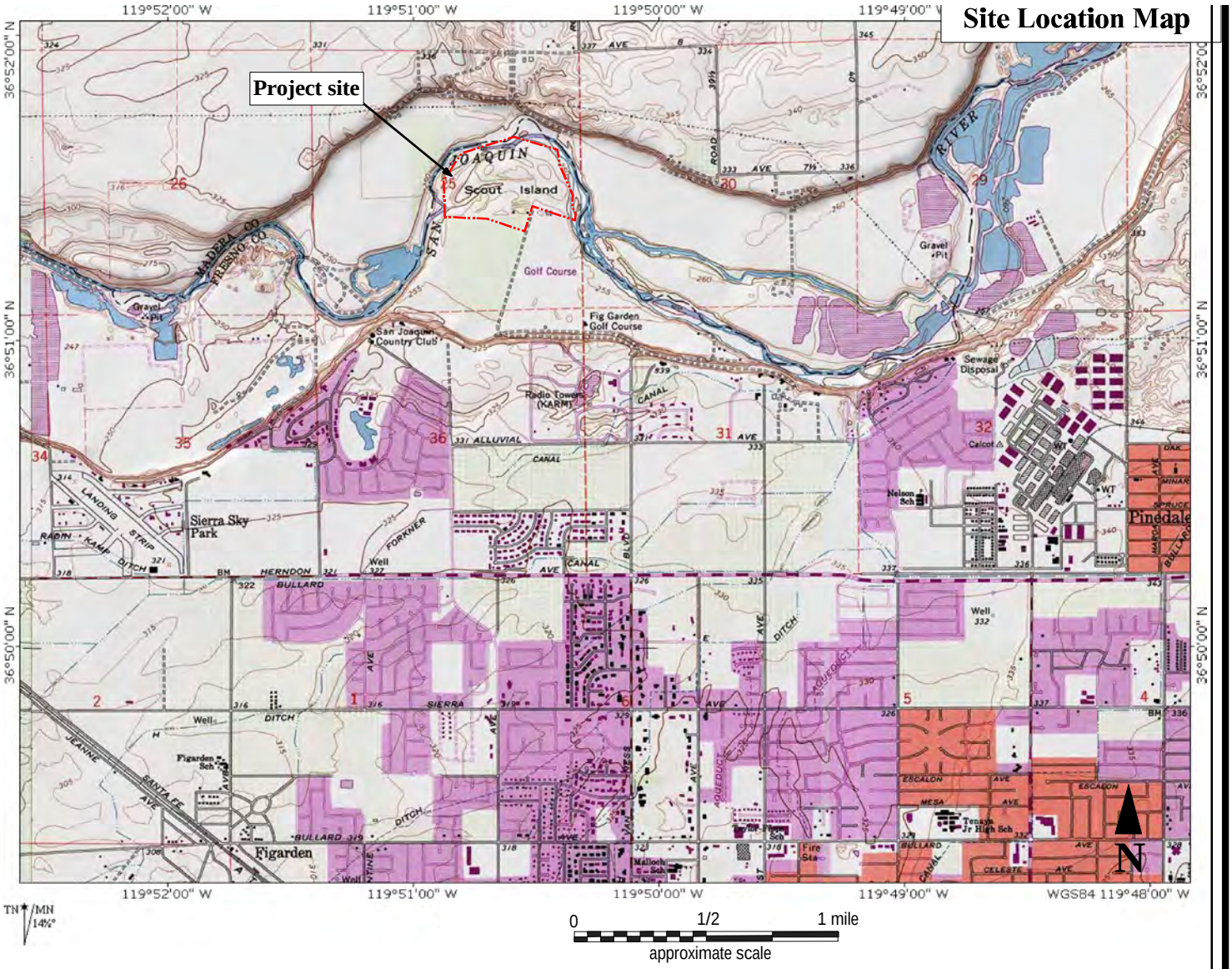
Live Oak Associates, Inc. (LOA) completed this biotic assessment in support of a Section 7 Consultation for the Scout Island project in the City of Fresno, Fresno County during the spring of 2002. Although project plans do not warrant the removal of any elderberry bushes, tributary waters associated with the bed and bank of Pirates Creek are within 50 feet of greater than 21 clumps of elderberry bushes. Mature stems of elderberry bushes are the host plant for the federally threatened valley elderberry longhorn beetle (VELB).

The applicant plans to improve some on-site facilities for educational purposes of the riverine environment with the intent of maintaining the natural landscape and the integrity of the river setting. Some of the improvements will include the installation of entrance gates, parking areas, fencing, ropes course, outdoor classrooms, water quality monitoring points, a weather station, the planting of native shade trees, removal of non-native tress and shrubs, noxious weed control, and stream channel enhancement. In addition, there will improvements to a hierarchical system of roads and trails that will provide access to the more remote portions of Scout Island for educational purposes. Seventeen small group outdoor classroom areas will be constructed and culverts will be installed or improved upon. This biological assessment was conducted to guide the planning of construction of on site facilities, to provide CEQA documentation, and to provide a biological resource for the program.

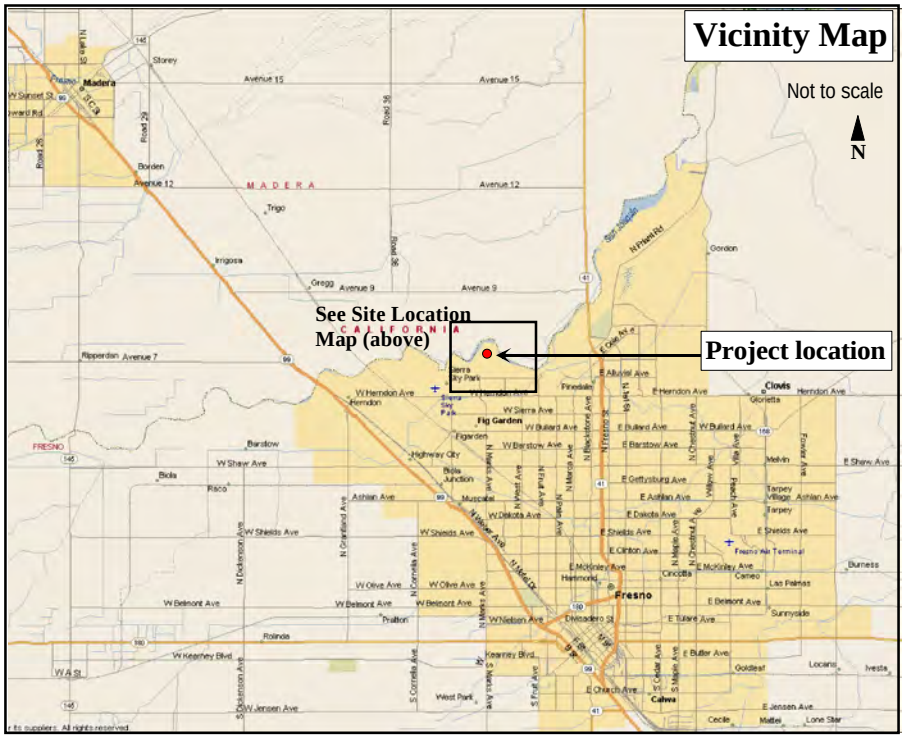
Impacts to the San Joaquin River and other tributary waters are subject to Section 404 requirements of the U.S. Army Corps of Engineers (USACE). Therefore, the USACE has agreed to initiate consultations with the U.S. Fish and Wildlife Service (USFWS) via this biotic assessment per the provisions of Section 7 of the federal Endangered Species Act.

The study area is located in the San Joaquin River bottom between the San Joaquin Country Club and the Fig Garden Golf Course Scout Island in the natural setting of the southern shore of the San Joaquin River. The San Joaquin River borders the study area to the west, east, and north. It can be found on the Fresno North 7.5' U.S.G.S. quadrangle at Township 12 South, Range 19 East, Section 25 (Figure 1). The 84.6-acre property is located at approximately 250-255 feet NGVD with gently sloping terrain. Biotic habitats identified on the study area include mixed riparian woodland, aquatic habitats of the low flow channel of the San Joaquin River, non-native grassland (partly disced), red-gum woodland, and park-like ornamental landscaping within the flood plain to the south.

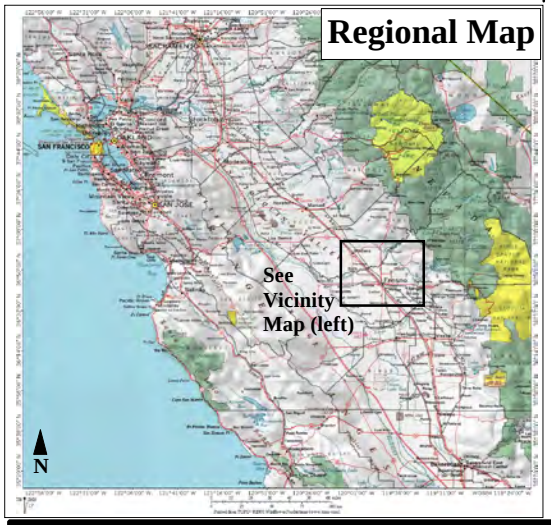
Site Location Map



Vicinity Map



Regional Map



Live Oak Associates, Inc.

Scout Island Biotic Assessment
Site/Vicinity Map

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1.1 PROJECT

1.1.1 Scout Island Program

The Scout Island Outdoor Educational Center (SIOEC) site will be developed as a regional outdoor education center with programs targeted to grades K-12 students, including special education students. Classes in science, history, archaeology, astronomy, outdoor education, leadership training, ropes course training, gardening, and other educational programs will be offered on a year-round basis. Opportunities for canoeing, swimming, and fishing will also be provided. Some overnight platform camping may be allowed.

The overall intent for the SIOEC is to maintain and enhance the natural landscape and integrity of the river setting. In order to facilitate the safe and efficient use of the site, and to provide maximum accessibility for the disabled, some infrastructure improvements will need to be constructed. These improvements will include development of a road and trail system, installation of potable and non-potable water lines, installation of vault toilets, installation of drinking fountains, construction of a parking area, installation of perimeter fencing, installation of seasonal canoe docks, maintenance of access to the river for swimming and water play, installation of underground electrical facilities, installation of landscape irrigation facilities, installation of security and minimal access lighting facilities, installation of a plant and tree nursery, improvements to existing landscape irrigation facilities and landscape screening along the southern property line. The proposed plans include outdoor education areas that will be used for instruction, wildlife observation, story-telling and dramatic presentations. A central pond will be developed as part of the restoration of Pirates Creek, which is a non-wetland tributary water of the United States. The pond will provide the opportunity for disabled students to experience water activities in a controlled environment when appropriate. Other infrastructure, such as waste-collection containers, signage, firebreaks and emergency access will also be provided.

The SIOEC is located on land leased by the FCOE from the State of California State Lands Commission under a 49-year lease agreement. All of the described improvements and uses will have to be permitted by the State Lands Commission and the existing lease amended to include those improvements and uses. The site is also located within the designated floodway and flood plain of the San Joaquin River. All of the described improvements will have to be permitted by the State of California Reclamation Board, by the Fresno County and City of Fresno floodplain administrators, and will to adhere to Federal Emergency Management Agency (FEMA) regulations.

Pirates Creek has been classified by Live Oak Associates as non-wetland tributary water to waters of the United States. The riparian enhancement of Pirates Creek will consist of the re-grading and shaping of approximately 1800 feet of channel and the construction of 1200 feet of pipeline. The pond water feature will be incorporated into the creek channel. Approximately 470 feet of the pipeline will connect Pirates Creek to the San Joaquin River to provide water to the creek. The remaining 730 feet of pipeline will return water from the creek back to the San Joaquin River. The creek enhancement will be subject to California State Department of Fish and Game 1601 Streambed Alteration agreement, Nation Wide Permit 27 issued by the US Army Corps of Engineers under Section 404 of the Clean Water Act and will require a State of California Regional Water Quality Control Board clean water clearance issued under Section 401 of the Clean Water Act.

The existing facilities at the SIOEC site will be used as follows: the ranch house will be used for administrative offices; the meeting building will be used as a museum/teaching center; the shop building will be used for maintenance services and storage, the pole barn will continue to house farming equipment and above ground fuel tanks with containment vessels. The "Capitola Kitchen," will be used as a staging area for catered events and distribution of lunches prepared off of the site. The only improvements to the existing buildings that will occur as a part of the project will be cosmetic (carpet, paint) and as may be required for health, safety reasons, and flood proofing (electrical upgrades, sprinklers for fire suppression, etc.).

Sewage management at the site will be provided by an existing septic system and by the addition of vault toilets. The septic system will be flood proofed as required by FEMA regulations. The vault toilets will be installed in accordance with FEMA regulations and managed by scheduled removal of waste by a licensed operator.

Two of the existing wells will be flood-proofed in accordance with FEMA regulations. The third well is not in use and will be abandoned in accordance with Fresno County Health Department Standards as part of the project. One of the remaining wells will be used to provide potable water to the site. It will be equipped with a back-up water treatment system that meets Fresno County Health Department standards. The other well will be used for non-potable water uses such as landscape irrigation, wash down water, and dust control. Water fountains, connected to the potable water system, will be provided as a part of the project. Operation, maintenance and testing of the potable water system will be conducted as required by Fresno County Health Standards.

The SIOEC staff may include one site administrator and one grounds supervisor. They will be at the site on a year-round basis. The site will have a maximum capacity of 200 for group use/student studies. Students and instructors will be transient in that they will not continuously occupy the site for more than 60 days. Most of the day use will involve students participating in field trips, workshops, or summer camp. The normal operations of the site will occur from 7:00 A.M. to 5:00 P.M., Monday through Friday, with limited overnight camping by approved and supervised groups of people or students in accordance with a previously executed use agreement.

The site is within the flood plain and floodway of the San Joaquin River. However, the proposed project features will create no adverse displacement of surface water flows. Upstream, downstream, and adjoining properties will not be at an increased risk of flooding relative to adopted FEMA Floodway and Flood Insurance Rate Maps federal flood plain management standards. Grading for site work will result in no net displacement of floodwaters. Fill will not be deposited within the bed or banks of the low flow channel of the San Joaquin River.

Drainage from the site will be handled in conformance with Best Management Practices as required by the State of California General Construction permit for during and post construction activities.

Jurisdictional wetlands have been identified on the site. The wetland areas are located adjacent to the low flow channel of the San Joaquin River along the entire length of the channel within the site boundaries. They vary in width from approximately 100 feet wide to 250 feet wide. The project proposes to construct seasonal access routes and footpaths, a small group outdoor education/interpretation area, and a seasonal canoe launching area.

Live Oak Associates have identified Sanford's arrowhead, a freshwater marsh plant of the Central Valley, as the only plant species of special concern that may be located on the site, although none of this particular species were found. Measures to protect this plant species, should it be found on the site, will be identified and implemented. In accordance with the request of the State of California Department of Fish and Game, disturbance of ground within the drip line of valley oak trees will be avoided.

There are plant species located on the site, which provide habitat for special animal species. These plants include the elderberry which is home to the Valley Elderberry Longhorn Beatle, a federally threatened species, and the red gum, a non-native eucalyptus tree, which provides nesting to raptors,

which are resident to the area. There are some non-resident raptors that are listed as California species of concern that may use these trees for nesting. However, none of these raptors were observed at the site. The locations of the elderberry plants have been mapped and the project features will be located so as to maintain a buffer between those features and any existing bushes that meet U.S. Fish and Wildlife requirements.

The project proposes the removal of the non-native red gum (eucalyptus) trees. The removal of these trees will be scheduled to avoid the nesting period of typical bird species that may use these trees. The trees will be surveyed by a biologist prior to removal operations to ensure that no nesting birds are present.

The project site will remain in public ownership of the FCOE for the benefit and enjoyment of school children and the Fresno County community. It is anticipated that the site will eventually be used up to 80 percent of the time during the spring, summer, and fall months. It is likely that there will be no activity at the site several days per month, especially in the winter months.

1.2 ENVIRONMENTAL SETTING

The study area is located immediately to the south and north of the San Joaquin River where it forms the boundary between Fresno and Madera Counties. At the location of the study area, the San Joaquin River has cut a substantial swath through the surrounding alluvium, creating both a river bottom and the precipitous bluffs on either side. At the location of the study area the river bottom includes the low flow channel of the San Joaquin River at elevations of about 250 feet NGVD (National Geodetic Vertical Datum) at its downstream reach to a high of 255 feet NGVD at its upstream reach. The river bottom also includes an adjacent flood plain approximately 10 feet higher in elevation than the low flow channel. The low flow channel is subject to inundation during the winter and spring, depending on the intensity of winter storm events and releases from Friant Dam during the spring snowmelt. A small secondary channel of the San Joaquin River, sometimes referred to as Pirate's Creek, bisects the adjacent flood plain on the south side of the river. This channel was dammed at its upstream end a number of years ago, and no longer carries flows except during the most extreme flood events. The bluffs enclosing the river bottom rise to elevations 50 to 60 feet above the low flow channel. The study area itself is not contiguous with the bluffs to the north or south.

The site is located on alluvium deposited over time by the San Joaquin River. This alluvium has been transported from the Sierra Nevada Range located to the east of the site, and consists of sands and

gravels derived from granite and some older metamorphic rock. This alluvium has accumulated on site since the time of the Pleistocene from overbank flooding of the San Joaquin River. The soil types of the study that have developed in this alluvium have been identified as Grangeville sandy loam (0-2% slopes), Grangeville fine sandy loam (0-2% slopes), Hanford fine sandy loam (0-2% slopes), Tujunga loamy sand (0-3% slopes), and Tujunga loamy sand, gravelly substratum (0-3% slopes) (NRCS 1971). The Natural Resources Conservation Service considers the two Grangeville soils to be hydric, meaning that their development occurred under the influence of soil saturation or periodic inundation. Hanford fine sandy loam and Tujunga loamy sand are known to have hydric inclusions that are typically found in drainages or low areas of the flood plain. The only non-hydric soil is Tujunga loamy sand, gravelly substratum. The Grangeville soils are typically poorly drained. Hanford fine sandy loam is generally well drained, and the two Tujunga soils are excessively drained. A cemented hardpan, which is common to San Joaquin soils above the bluff, does not occur in this alluvium. Therefore, the site would not have historically been the location of vernal pool habitats that are common to the north of the river along Highway 41.

Overbank flooding that historically was responsible for depositing the alluvium on which the site is now situated now rarely occurs due to the construction and operation of Friant Dam approximately 10 miles up the river. Therefore, alluvium is no longer accreting at the location of the study area as it once did prior to the construction of Friant Dam.

Annual precipitation within the study area is about 12 to 13 inches, most of which falls between the months of October and March. All precipitation falls in the form of rain. Rainfall typically infiltrates into the sandy soils. During particularly intense storm events, soils of the site may reach field capacity, at which time remnant channels of the site could fill with surface runoff that eventually flows into the San Joaquin River.

A long history of use has resulted in considerable modification of the natural habitats of the site. Certainly, the construction of Friant Dam had the most significant effect on habitats of the site by controlling spring flood flows in the San Joaquin River. It is important to note that the well-developed riparian corridor of some Central Valley streams may not have been present along the San Joaquin River prior to the construction of Friant Dam. Spring floods resulting from the melting of the Sierra snow pack often sent the river over its bank. Rooted vegetation had difficulty becoming established in flood zones, because the main channel shifted from year to year, as did gravel and sand bars. Since the construction

of Friant Dam, flood flows have largely been controlled, and dense riparian vegetation has become established in many locations of the river.

Higher portions of the flood plain were probably once open oak woodland interspersed with ox-bow wetlands and secondary channels of the San Joaquin River. These historic habitats have been modified in a number of ways. On Scout Island, the historic channel of Pirates Creek was dammed approximately 15-20 years ago, an action that has significantly altered the flow of water through the natural flood plain of the site. Farming and/or the planting of non-native trees have further modified these areas. Valley oak woodlands have also been affected by water diversions from the main channel of the San Joaquin River via the Friant-Kern Canal, as well as ground water pumping on adjacent lands, activities that have substantially lowered the water table. Both the lowering of the water table and the near elimination of spring floods have, almost certainly, adversely affected valley oaks that may have once been more common in the river bottom. Mature oaks along Central Valley streams have been known to die when the water table has dropped precipitously. Furthermore, the recruitment and survivorship of new valley oak trees is often associated with spring flooding.

In summary, the Scout Island study area has been substantially modified from it historic condition by human activities. The biotic habitats of the site all retain elements of native habitats that once existed. However, alterations to the hydrology of the site (from actions occurring both on and off site) have substantially affected the habitats of the low-flow channel along the San Joaquin River, as well as the upper flood plain.

1.2.1 Biotic Habitats

Five biotic habitats have been identified on Scout Island (LOA 2001). These include mixed riparian woodland and aquatic habitats of the low flow channel of the San Joaquin River, red gum woodland, non-native grassland (partly disced), and park-like ornamental landscaping within the flood plain to the south (Table 1 and Figure 2). These biotic habitats are described in detail below and have been mapped (Figure 2). The acreages and boundaries of these habitats are based on observations made during the reconnaissance level survey on August 29 and September 21, 2001. A list of vascular plants observed on the site during the field survey has been provided in Appendix A. A list of terrestrial vertebrates using, or potentially using, the site has been provided in Appendix B. Conservation Guidelines for the Valley Elderberry Longhorn Beetle can be found in Appendix C. Selected photographs of biotic habitats of the study area can be found in Appendix D.

TABLE 1. APPROXIMATE AREA OF BIOTIC HABITATS (IN ACRES) OF THE 84.6-ACRE SCOUT ISLAND SITE.

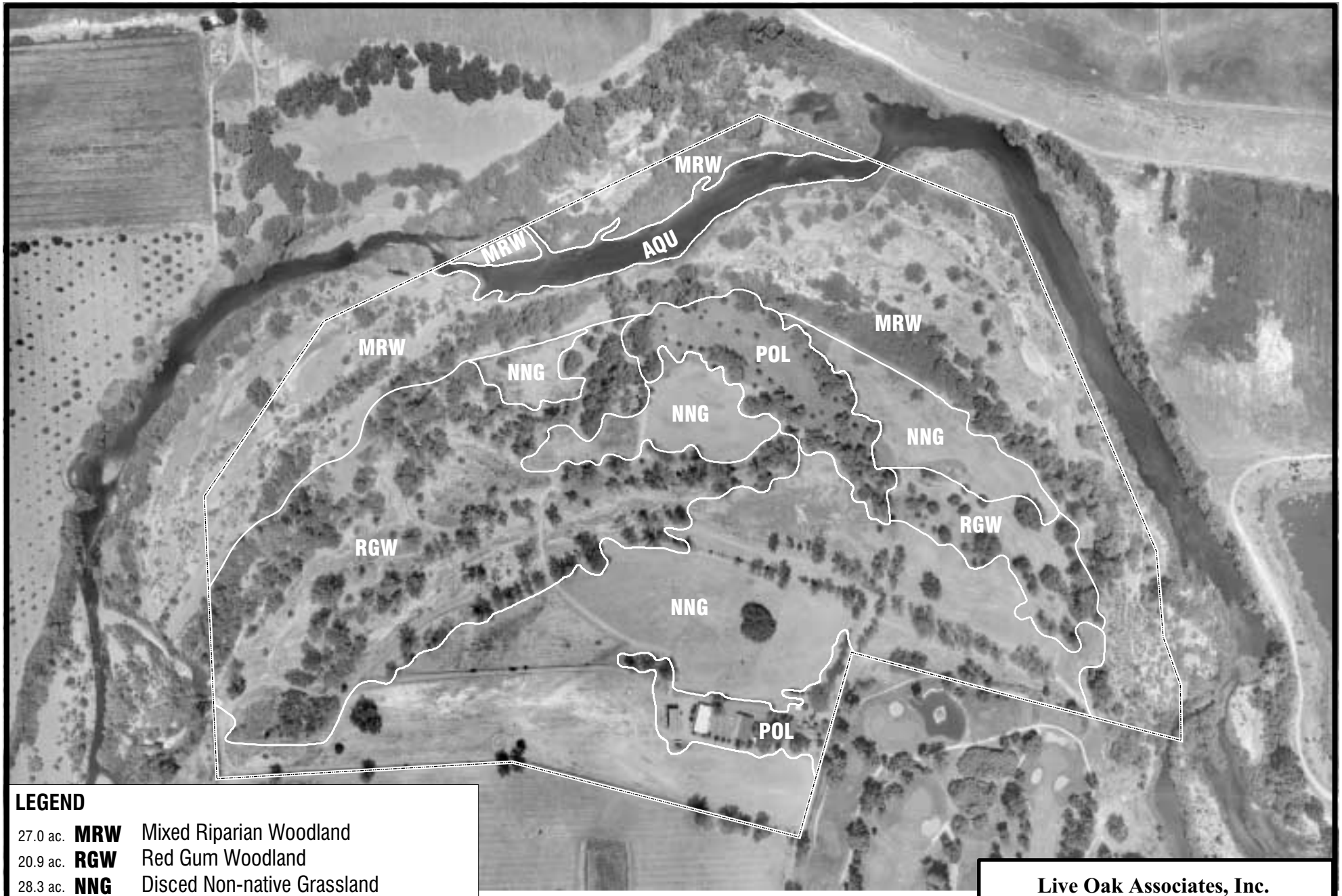
Habitat Type	Area (in acres)	Percent of Total
Low Flow Channel		
Mixed Riparian Woodland	27.0	31.9
Aquatic	2.5	3.0
Floodplain		
Non-native Grassland	28.3	33.5
Red Gum Woodland	20.9	24.7
Park-like Ornamental Landscaping	5.9	7.0
Total	84.6	100.0

1.2.1.1 Non-native Grassland

Scattered areas throughout the site contained vegetation typical of non-native grasslands of the San Joaquin valley. Most of the non-native grasslands of the study area have been routinely disced by Scout Island groundskeepers. At the time of the field surveys this habitat was crisscrossed by dirt roads and fences. Upland vegetation associated with grasslands included, but was not limited to, ripgut (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), wild oats (*Avena fatua*), Spanish clover (*Lotus purshianus*), smooth cat's ear (*Hypochaeris glabra*), prickly lettuce (*Lactuca serriola*), black mustard (*Brassica nigra*) and Canada horseweed (*Conyza canadensis*). Non-native grassland typically supports numerous spring-flowering forbs including red-maids (*Calindrinia ciliata*), rusty popcorn flower (*Plagiobothrys nothofulvus*) and Eastwood's fiddleneck (*Amsinckia eastwoodiae*).

Non-native grassland offers cover and foraging habitat for numerous terrestrial vertebrates. This grassland had areas of debris from downed fence lines, which provided cover for a few Western fence lizards (*Sceloporus occidentalis*). Other reptiles, which would be expected to occur in non-native grasslands of the study area are gopher snake (*Pituophis melanoleucus*), Western whiptail (*Cnemidophorus tigis*), ringneck snake (*Diadophis punctatus*) and Western rattle snake (*Crotalus atrox*).

A varied of birds may also use this non-native grassland. Mourning doves (*Zenaida macroura*), American crows (*Corvus brachyrhynchos*) and Brewer's blackbirds (*Euphagus cyanocephalus)* were observed in this habitat. Horned larks (*Eremophila alpestris*), Western meadowlarks (*Sturnella*



LEGEND

27.0 ac.	**MRW**	Mixed Riparian Woodland
20.9 ac.	**RGW**	Red Gum Woodland
28.3 ac.	**NNG**	Disced Non-native Grassland
5.9 ac.	**POL**	Park-like Ornamental Landscaping
2.5 ac.	**AQU**	Aquatic (San Joaquin River & Tributary)

Approximate Project Boundary

N

250' 0 250 feet

approximate scale

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Scout Island Biotic Assessment
Biotic Habitats

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neglecta), and savannah sparrows (*Passerculus sandwichensis*) also frequent these habitats. Small birds, rodents and reptiles are prey for raptors such as red-tailed hawks (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo lineatus*), which were observed on the site. Other raptors, which may forage on grassland habitats of the site, include merlins (*Falco columbarius*), Northern harriers (*Circus cyaneus*), golden eagles (*Aquila chrysaetos*) and ferruginous hawks (*Buteo regalis*).

Common rodents that are likely to be present include deer mice (*Permomyscus maniculatus*) and California voles (*Microtus californicus*). Evidence of Botta's pocket gophers (*Thomomys bottae*) was indicated by the presence of their characteristic holes and mounds. Several California ground squirrel burrows (*Spermophilus beecheyi*) were also observed. Tracks of desert cottontail *(Sylvilagus audubonii)* were seen throughout the disced fields. These small mammals may attract predators such as coyotes (*Canis latrans*) and feral cats (*Felis cattus*). The tracks and scat of which were observed on-site. Other predators that may use this habitat include bobcats (*Lynx rufus*) and long-tailed weasels (*Mustela frenata*).

1.2.1.2 Mixed Riparian Woodland

Mixed riparian woodland occurs in and immediately adjacent to the low flow channel. This woodland is rather sparse on gravelly bars, and consists of scattered stands of riparian trees interspersed among native and non-native shrubs. In the study area, the woodland is considerably denser along the upper bank of the low flow channel just downstream of the landscaped park. Common riparian trees observed included arroyo willow (*Salix laseolepis*), Goodding's black willow (*Salix gooddingii*), red willow (*Salix laevigata*), white alder (*Alnus rhombifolia*), and Fremont's cottonwood (*Populus fremontii*). Scattered red gums (*Eucalyptus rostrata*), a non-native species, were also observed growing among native riparian species within the low flow channel. A very large non-native cork oak (*Quercus suber*) is growing on the steep embankment leading from the low flow channel to the higher floodplain. Typical scrub/shrub species present in the study area included mule fat (*Baccharis salicifolia*), button willow and the occasional blue elderberry (*Sambucus mexicana*). The non-native sesbania has become well established throughout this habitat as well. Scattered patches of Himalayan blackberry (*Rubus discolor*) were also observed mixed in with dense stands of willows and cottonwoods. A mix of both upland and wetland understory grasses and forbs were identified during the site survey. Some of the species observed included barnyard barely (*Hordeum murinum* ssp. *leporinum*), poison hemlock (*Conium maculatum*), mugwort (*Artemesia douglasiana*), Bermuda grass (*Cynodon dactylon*), rough cocklebur (*Xanthium*

strumarium), and curly dock (*Rumex crispus*). Wetter areas of the mixed riparian woodland supported Pacific and Mexican rush.

The diversity of terrestrial vertebrates using this habitat study is enhanced by patchy stands of dense mixed riparian woodland adjacent to the aquatic/emergent marsh of the San Joaquin River. The structural diversity of this habitat (i.e. the many canopy layers), the presence of open water, and the large populations of invertebrates found in aquatic habitat ensure that cover and food are available on this site for a variety of species that would not be present on other sites lacking riparian habitat.

All of the amphibian and reptile species occurring in the river itself would also occur in the adjacent riparian woodlands. The deep leaf litter also provides habitat for Gilbert's skinks (*Eumeces gilberti*) and southern alligator lizards (*Gerrhonotus multicarinatus*). Gopher snakes (*Pituophis melanoleucus*), common kingsnakes (*Lampropeltis getulus*) and racers (*Coluber constrictor*) may all forage in the riparian woodlands, as well as other wooded habitats of the site.

Riparian woodlands also attract a large number of avian species that seek cover, forage and nest in the various canopy layers. Resident species observed in this habitat during the two field surveys include Western scrub jays (*Aphelocoma californica*), California towhees (*Pipilo crissalis*), Brewer's blackbirds (*Euphagus cyanocephalus*), Anna's hummingbirds (*Calypte anna*), and European starlings (*Sturnus vulgaris*). Resident raptors include red-tailed hawks (*Buteo jamaicensis*) and red-shouldered hawks (*Buteo lineatus*), both of which were observed during late summer field surveys of 2001. Cooper's hawks (*Accipiter cooperi*) have also been observed along the river and would be likely to occur within the study area. Riparian woodlands are of particular importance to various migrant birds. Some, like the white-crowned Sparrow (*Zonotrichia leucophrys*), golden-crown sparrow (*Zonotrichia atricapilla*) and dark-eyed Junco (*Junco hyemalis*) arrive on site in late September or early October and remain until April, at which time they return to their breeding habitats upslope in the Sierra or in various locations of the northern United States. Summer migrants expected to breed in riparian habitats of the study area could include Bullock's orioles (*Icterus bullocki*), ash-throated flycatchers (*Myiarchus cinerascens*), and black-headed grosbeaks (*Pheucticus melanocephalus*). Other species tend to use riparian habitats of the San Joaquin River for cover and foraging during migration, but do not linger there. Riparian corridors such as found along the San Joaquin River facilitate the movements of many species during migration and dispersal.

Various mammals occur in riparian habitats of the site. Small mammals would include ornate shrews, deer mice (*Peromyscus maniculatus*), Audubon's cottontails (*Sylvilagus audubonii*), and Virginia opossums (*Didelphis virginiana*). A number of non-native fox squirrels (*Sciurus nigra*) were observed in this and other wooded habitats of the site. Raccoons (*Procyon lotor*), striped skunks (*Mephitus mephitus*), long-tailed weasels (*Mustrela frenata*), gray foxes (*Urocyon cinereoargentus*), and coyotes (*Canis latrans*) are predators common to this habitat. Mule deer (*Odocoileus hemionus*) were observed in this and adjoining woodland habitats as well.

1.2.1.3 Red Gum Woodland

Red-gum eucalyptus (*Eucalyptus rostrata*) woodland has become established on the flood plain above the low flow channel. Historically, this portion of the floodplain was probably a valley oak (*Quercus lobata*) woodland. Several large valley oaks are still present within this habitat. Evidence of natural recruitment of valley oaks was not observed during the field surveys. Eucalyptus trees of various species often prevent other plant species from becoming established in their understory, by releasing allelopathic chemicals in the decaying leaf litter. Even weedy annuals of Mediterranean origin were somewhat sparse in the densest eucalyptus groves. A number of other non-native species were present in this woodland as well, including several Coulter pines (*Pinus coulteri*), Arizona cypress (*Cupressus arizonica*), deodar cedar (*Cedrus deodora*), English walnut (*Juglans regia*) and an unidentified species of elm (*Ulmus sp.*). Herbaceous vegetation observed in this habitat included ripgut (*Bromus diandrus*), rattail fescue (*Vulpia myuros*), wild oats (*Avena barbata*), and a native grass, creeping wildrye (*Leymus triticoides*).

The sparse understory of this habitat, by providing little cover or food, limits wildlife diversity; however, a small amount of cover is provided by red-gum eucalyptus leaves, exfoliated bark, and the remains of fallen trees. Most of the same amphibian and reptile species that can be found in other adjacent habitats may occur here as well, although in smaller numbers. The greatest value of this habitat is to nesting bird species. Since red-gum eucalyptus trees often obtain great heights and have complex crown structures, they provide excellent bird nesting habitat. Dark-eyed juncos (*Junco hyemalis*), American robins, European starlings, American crows, and common ravens are a few bird species that commonly nest in the canopies of red-gum eucalyptus trees. Raptors, including red-tailed hawks, red-shouldered hawks, and white-tailed kites are often observed nesting in these trees as well.

Also due to the lack of an understory and palatable forbs and grasses in this habitat, terrestrial mammals would for the most part be limited to those that are passing through during home-range movements or

migration. Introduced fox squirrels have been observed in the study area and are known to nest in red-gum eucalyptus. Gray squirrels may also nest in these trees.

1.2.1.4 Park-like Ornamental Landscaping

This habitat consists of a lawn with interspersed ornamental trees and shrubs. A few structures that will be used as educational facilities are located within the area identified as park-like ornamental landscaping. Mowed fescue lawn dominates the understory, and large trees have been maintained in the overstory. Stands of red gum (*Eucalyptus rostrata*) are the dominant tree species; individuals have invaded portions of the mixed riparian woodland. Other ornamental species observed during the site survey included, but were not limited to, Atlas cedar (*Cedrus atlantica*), Bradford pear (*Pyrus calcame*), coast redwood (*Sequoia sempervirens*), Japanese black pine (*Pinus thunbergi*), Canary Island pine (*Pinus canariensis*), Arizona cypress (*Cupressus glabra*), Italian cypress (*Cupressus sempervirens*), and tree-of-heaven (*Ailanthus altissima*). The only native tree species that were observed within this habitat were some large remnant Western sycamores (*Platanus racemosa*), Fremont Cottonwoods (*Populus fremontii*) and a small number of valley oaks.

Landscaped habitats generally support a low diversity of wildlife. Species found in these habitats are usually common species that are well adapted to the presence of humans and their environments. Green lawns and ornamental landscaping often provide forage for several species that is scarce in the dry summer months. Amphibians and reptiles would be rare in this habitat, with the possible exception of tree frogs (*Hyla regilla*) and Western fence lizards. Racers and gopher snakes may forage here infrequently as well.

Birds that would be expected to use this habitat include Northern mockingbirds (*Mimus polyglottos*), American robin (*Turdus migratorius*), Brewer's blackbirds, and scrub jays (*Aphelocoma californica*). Mammals that would frequent this habitat include Western gray squirrels (*Sciurus griseus*), striped skunks (*Memphitis memphitis*), raccoons (*Procyon lotor*), Virginia possums (*Delphis virginiana*), red fox (*Vulpes vulpes*), coyotes, and mule deer.

1.2.1.5 Aquatic

This habitat consists of the portion of the San Joaquin River that flows through the study area. In addition, a small pond next to the river and a slough that diverts water from the river to a pond near the

southwestern boundary of the study area are also considered aquatic. The entire area identified as aquatic habitat on the biotic habitat map (Figure 2) was inundated during the site survey in late August of 2001. Aquatic plants observed along the direct margins of the river during the site survey included water smartweed (*Polygonum* sp.), duckweed (*Lemna* sp.) and mosquito fern (*Azolla filiculoides*).

The highest diversity of amphibians would occur near or in this aquatic habitat. Numerous bullfrogs *(Rana catesbeiana)* tadpoles were observed in aquatic habitat of Scout Island. More densely vegetated portions of the aquatic habitat provide breeding habitat for Western toads (*Bufo boreas*) and Pacific treefrogs. The abundance of non-native bullfrogs, however, could limit or exclude populations of native amphibians, including the Western pond turtle. Another reptile that would occur in this habitat in higher populations than surrounding habitat would be the common garter snake.

Black-crowned night herons (*Nycticorax nycticorax*) and great blue herons (*Ardea heodias*) and various other waterfowl were observed in this habitat. Waterfowl that typically frequent perennially inundated aquatic habitats include ring-necked ducks (*Aythya collaris*), cinnamon teals (*Anas cyanoptera*), mallards *(Anas platyhynchos*), and American widgeons (*Anas americana*). Aquatic habitat is also suitable for many species of bat, because it provides foraging over the surface of the water. Raccoon tracks were observed near the river. Raccoons are often observed in aquatic habitats feeding on a variety of wildlife species including amphibians, fish, and birds. Aquatic habitats also provide a permanent source of drinking water for many vertebrate species that occur in surrounding habitats.

Various native and planted fish species live in the San Joaquin River. Hardhead (*Mylopharadon conocephalus*), a native fish, have been found here and may still be present. Other native fish may include Western sucker (*Catostomus* spp.), Sacramento squawfish (*Ptychocheilus grandis*), and California roach (*Herperoleucus symmetricus*). Planted species of fish may include Largemouth black bass (*Micropterus salmoides*), mosquitofish (*Gambusia affinis*), European brown trout (*Salmo trutta*), and white catfish (*Ictalurus catus*) (Storer, 1963).

1.2.2 Special Status Plants and Animals

Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2 state and federal laws have provided the California

Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by the CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened or endangered (CNPS 2001). Collectively, these plants and animals are referred to as "special status species".

A number of special status plants and animals occur in the vicinity of the study area. Special status plant and animal species known to occur within 5 miles of the study area are shown in Figure 3. These species, and their potential to occur in the study area, are listed in Table 2 on the following pages. Sources of information for this table included *California's Wildlife, Volumes I, II, and III (Zeiner et. al 1988), California Natural Diversity Data Base (CDFG 2001), Endangered and Threatened Wildlife and Plants (USFWS 2001), Annual Report on the Status of California State Listed Threatened and Endangered Animals and Plants (CDFG 2001), The Jepson Manual: Higher Plants of California (Hickman ed., 1993), and The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001).*

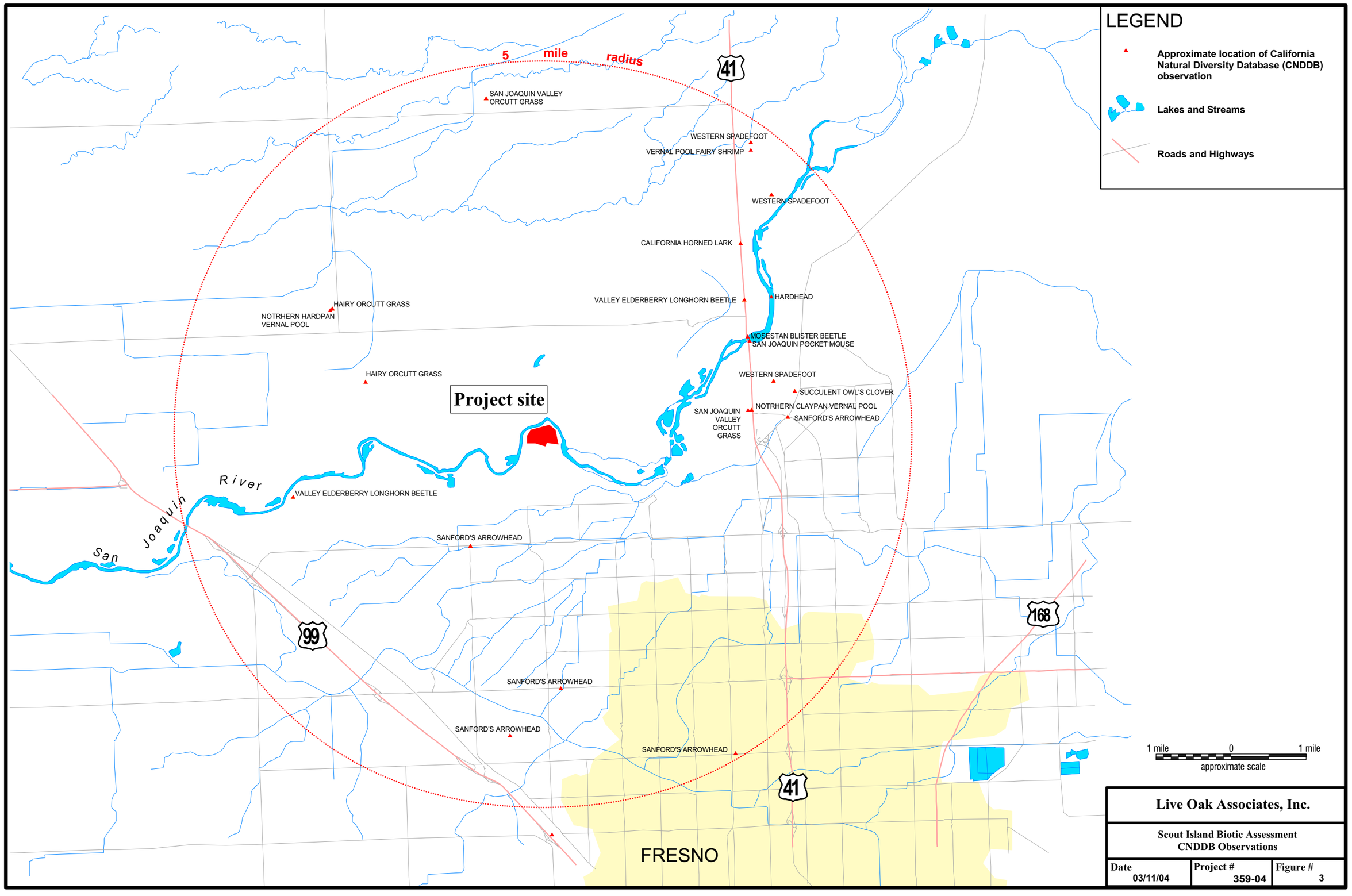

LEGEND
Approximate location of California Natural Diversity Database (CNDDB) observation
Lakes and Streams
Roads and Highways
5 mile radius
41
SAN JOAQUIN VALLEY ORCUTT GRASS
WESTERN SPADEFOOT
VERNAL POOL FAIRY SHRIMP
WESTERN SPADEFOOT
CALIFORNIA HORNED LARK
VALLEY ELDERBERRY LONGHORN BEETLE
HARDHEAD
HAIRY ORCUTT GRASS
NOTRHERN HARDPAN VERNAL POOL
MOSESTAN BLISTER BEETLE
SAN JOAQUIN POCKET MOUSE
HAIRY ORCUTT GRASS
WESTERN SPADEFOOT
SUCCULENT OWL'S CLOVER
Project site
SAN JOAQUIN VALLEY ORCUTT GRASS
NOTRHERN CLAYPAN VERNAL POOL
SANFORD'S ARROWHEAD
San Joaquin River
VALLEY ELDERBERRY LONGHORN BEETLE
SANFORD'S ARROWHEAD
99
168
SANFORD'S ARROWHEAD
SANFORD'S ARROWHEAD
SANFORD'S ARROWHEAD
41
FRESNO
1 mile 0 1 mile
approximate scale
Live Oak Associates, Inc.
Scout Island Biotic Assessment
CNDDB Observations
Date 03/11/04
Project # 359-04
Figure # 3

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

PLANTS (adapted from CNDDB 2001)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Hartweg's Golden Sunburst (*Pseudobahia bahiifolia*)	CE CNPS 1B	Grasslands and open woodlands with clay soils. Generally on north slopes.	**Absent**. No clay soils occur on the study area.
Succulent Owl's Clover (*Castelleja campestris succulenta*)	CE CNPS 1B	Vernal pools and moist places at the base of the Sierra.	**Absent**. No vernal pools occur on the site.
Greene's Tuctoria (*Tuctoria greenei*)	FT, CR CNPS 1B	Vernal pools California's Central Valley. Requires deep pools with prolonged periods of inundation.	**Absent**. No vernal pools occur on the site.
Hairy Orcutt Grass (*Orcuttia pilosa*)	FE, CE CNPS 1B	Vernal pools California's Central Valley. Requires deep pools with prolonged periods of inundation.	**Absent**. No vernal pools occur on the site.
San Joaquin Orcutt Grass (*Orcuttia inaequalis*)	FE, CE CNPS 1B	Vernal pools California's Central Valley. Requires deep pools with prolonged periods of inundation.	**Absent**. No vernal pools occur on the site.
Bogg's Lake Hedge-Hyssop (*Gratiola heterosepala*)	CE CNPS 1B	Shallow water and margins of vernal pools.	**Absent**. No vernal pools occur on the site.

State and Federal Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Madera Linanthus (*Linanthus serrulatus*)	CNPS 1B	Open areas of woodlands and chaparral in the foothills.	**Unlikely**. Suitable habitat is not present.
Spiny-sepaled Button Celery (*Eryngium spinosepalum*)	CNPS 1B	Vernal pools California's Central Valley.	**Absent**. No vernal pools occur on the site.
Sanford's Arrowhead (*Sagittaria sanfordii*)	CNPS 1B	Freshwater emergent marshes of the Central Valley.	**Possible**. Suitable habitat occurs on the study area.

ANIMALS (adapted from CNDDB 2001)

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act

Species	Status	Habitat	*Occurrence in the Study Area
Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)	FT	Primarily found in vernal pools, may use other seasonal wetlands.	**Absent**. No vernal pools occur on the site.
Vernal Pool Tadpole Shrimp (*Lepidurus packardi*)	FE	Found in vernal pools of California.	**Absent**. No vernal pools occur on the site.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act (cont.).

Species	Status	Habitat	*Occurrence in the Study Area
Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*)	FT	Lives in mature elderberry shrubs of California's Central Valley and Sierra Foothills.	**Possible**. Mature elderberry shrubs occur on the site.
Steelhead (*Oncorhynchus Mykiss*)	FT	Needs cool, clear, oxygenated streams and gravel beds for spawning. Found in deep pools, under bubble curtains, and underwater ledges.	**Absent.** Since the diversion of river water by dams river flows have been too low to support upstream spawning.
Chinook Salmon (*Oncorhynchus tshawytscha*)	FE, CE	Requires gravel beds for spawning. Can be found under bubble curtains, underwater rocky ledges, in shady areas and in large pools.	**Unlikely.** Since the diversion of river water by dams, river flows have been too low to support most upstream spawning. Low amounts of salmon may spawn during flood years.
Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)	CE	Requires large gallery riparian forests for breeding and foraging.	**Absent.** Although the riparian habitats of the study area are of excellent quality for the San Joaquin River, this species requires riparian habitats that are much more extensive, up to a mile in width. These types of riparian forests are no longer present along the San Joaquin River or its tributaries and probably never occurred in the quality of representative habitats such as the riparian gallery forests of the Sacramento River, where the species is extant. The Western yellow-billed cuckoo has not been observed in the vicinity of the study area since 1910 and is considered regionally extirpated.
Bald Eagle (*Haliaeetus leucocephalus*)	FT, CE	Winters along the Central Valley. Mostly feeds on fish in large bodies of water or rivers.	**Possible**. A large population winters at nearby Millerton Lake. Although this species has not been reported as occurring on-site, suitable roosting and foraging habitat re present that could allow the species to use the site in the future.
American Peregrine Falcon (*Falco peregrinus anatum*)	FE, CE	Individuals breed on cliffs in the Sierra or in coastal habitats; occurs in many habitats of the state during migration and winter.	**Possible**. The site provides potential foraging habitat for transients and migrating birds. This site is not within suitable breeding range.
Swainson's Hawk *(Buteo swainsoni*)	CT	Uncommon resident and migrant in the Central Valley. Forages in grasslands and fields close to riparian areas.	**Unlikely**. This species is seldom observed in the project vicinity.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act (cont.).

Species	Status	Habitat	*Occurrence in the Study Area
Fresno Kangaroo Rat (*Dipodomys nitratoides exilis*)	FE, CE	Bare alkaline clay rich soils subject to seasonal inundation, with more friable soil mounds around shrubs and grasses.	**Absent.** Suitable habitat for this species is not present. This species has not been located since a single male was captured at the Alkali Sink Ecological Reserve, west of Fresno in 1992 and may be extirpated in the wild.
San Joaquin Kit Fox (*Vulpes macrotis mutica*)	FE, CT	Desert alkali scrub, annual grasslands; may forage in adjacent agricultural habitats.	**Unlikely**. This species has not been seen in this part of Fresno County. The habitat on the site was much too disturbed for this species.

State Species of Special Concern

Species	Status	Habitat	*Occurrence in the Study Area
Hardhead (*Mylopharadon conocephalus*)	CSC	Prefers well-oxygenated streams and surface waters of reservoirs. Found in clear pools with sand –gravel – boulder substrates and slow river velocities.	**Possible.** Suitable habitat is present, but this species may be in low numbers due to the presence of non-native fish.
Sacramento Splittail (*Pogonichthys macrolepidotus*)	CSC	This species occurs primarily in freshwater, but can tolerate moderate salinity. Found in slow moving, shallow sections of rivers and sloughs.	**Possible.** This species spawns and is most often found in flood plains and sloughs, but may be found in upstream in rivers like the San Joaquin.
Brook Lamprey (*Lampetra hubbsi*)	CSC	Found in silty backwaters of rivers in foothill regions.	**Possible.** Suitable habitat is present along the San Joaquin River.
Western Pond Turtle (*Clemmys marmorata*)	CSC	Prefers ponds, marshes, rivers, streams and irrigation ditches Requires basking sites and sandy banks or grassy open fields for egg laying.	**Likely**. Suitable habitat along the San Joaquin River is present.
California Tiger Salamander (*Ambystoma californiense*)	CSC	Found primarily in annual grasslands; requires vernal pools for breeding and rodent burrows for refuge.	**Unlikely**. Breeding and aestivation habitats are marginal to poor.
Western Spadefoot (*Scaphoipus hammondii*)	CSC	Primarily occurs in grasslands, but also occurs in valley and foothill hardwood woodlands. Requires vernal pools or other temporary wetlands for breeding.	**Absent**. Breeding and aestivation habitats are marginal to poor.
California Horned Lizard (*Phrynosoma coronatum*)	CSC	Grasslands, scrublands, oak woodlands, etc. of central California. Common in sandy washes with scattered shrubs.	**Possible**. Although not documented from this site, this species could be found in the grasslands and dry washes of the study area.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

State Species of Special Concern (cont.).

Species	Status	Habitat	*Occurrence in the Study Area
Osprey (*Pandion haliaetus*)	CSC	Nests in tall snags along the margins of large rivers and lakes. Forages for fish and eels.	**Possible.** Suitable breeding and foraging habitat occur along the san Joaquin River.
Golden Eagle (*Aquila chrysaetos*)	CSC	Typically frequents rolling foothills, mountain areas, sage-juniper flats and desert.	**Likely**. Marginally suitable foraging habitat exists on the site for this species, which has reportedly been sighted by Scout Island employees (John Soliz, pers. commun).
Burrowing Owl (*Athene cunicularia*)	CSC	Found in open, dry grasslands, deserts and ruderal areas. Requires suitable burrows.	**Unlikely**. Habitat for this species is marginal at best.
White-tailed Kite (*Elanus caeruleus*)	CSC	Open grasslands and agricultural areas throughout central California.	**Possible**. There is suitable breeding and foraging habitat on the site.
Northern Harrier (*Circus cyaneus*)	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	**Possible**. The site provides foraging and breeding habitat for this species.
Ferruginous Hawk (*Buteo regalis*)	FSC, CSC	Breeds in the Pacific Northwest and Canada, but winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	**Likely**. The site provides foraging habitat, but this species would not breed here.
Sharp-shinned Hawk (*Accipiter striatus*)	CSC	Breeds in the mixed conifer forests of the northern Sierra Nevada. This species winters in a variety of habitats of the state.	**Possible**. This species may winter on the site, but this species would not breed here.
Cooper's Hawk (*Accipiter cooperii*)	CSC	Breeds in oak woodlands, riparian forests and mixed conifer forest of the Sierra Nevada, but winters in a variety of lowland habitats.	**Likely**. Suitable breeding and foraging habitat occur in the riparian habitats and red gum eucalyptus stands.
Merlin (*Falco columbarius*)	CSC	This falcon, which breeds in Canada, winters in a variety of California habitats, including grasslands, savannahs, wetlands, etc.	**Possible**. Winter migrants may occasionally forage on the site.
Prairie Falcon (*Falco mexicanus*)	CSC	Distributed from annual grasslands to alpine meadows; requires cliffs or rock outcroppings for nesting.	**Possible**. This site provides possible foraging habitat. However, breeding habitat is absent.
Short-eared Owl (*Asio flammeus*)	CSC	Transient or occasional breeder in grasslands, marshes, and in some agricultural lands of the San Joaquin Valley.	**Possible**. Suitable winter foraging habitat occurs on the site. However, breeding habitat is absent.

TABLE 2. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY

State Species of Special Concern (cont.).

Species	Status	Habitat	*Occurrence in the Study Area
California Horned Lark (*Eremophila alpestris actia*)	CSC	Found in a variety of open habitats where trees and shrubs are absent; breeds in grasslands and fallow fields.	**Unlikely.** Non-native grasslands on site are marginally or poorly suited foraging and nesting habitats due to their relatively small size.
Yellow Warbler (*Dendroica petechia brewster*)	CSC	This species breeds in riparian thickets of alder, willow and cottonwoods. Migrants move through many habitats of the state.	**Possible.** This species could forage and breed in the riparian habitats of the study area.
Tricolored Blackbird (*Agelaius tricolor*)	CSC	Occurs near fresh water with dense cattails, or thickets of willows or shrubs.	**Possible**. Suitable foraging habitat occurs in the grassland habitats. Suitable breeding habitat is present in the mixed riparian and aquatic habitats of the study area.
Double-crested Cormorant (*Phlacrocorax auritus*)	CSC	Fairly common to lacustrine and riverine habitats of the Central Valley and coastal slope lowlands.	**Possible.** This species may forage on the site during the winter. Suitable breeding habitat is absent.
Yuma Myotis (*Myotis yumanensis*)	FSC, CSC	Ranges throughout the state, but especially common in wooded canyon bottoms.	**Possible**. Suitable night and day roosting habitats are present in tree cavities and exfoliating bark. Suitable foraging habitat is present in all habitats of the study area.
Pacific Western Big-eared Bat (*Plecotus townsendii townsendii*)	CSC	Primarily a cave-dwelling bat, may also roost in buildings. Occurs in a variety of habitats.	**Possible**. Suitable night and day roosting habitats are present in tree cavities and exfoliating bark. Suitable foraging habitat is present in all habitats of the study area.
Pallid Bat (*Antrozous pallidus*)	CSC	Grasslands, chaparral, woodlands, and forests of California; most common in dry rocky open areas providing roosting opportunities.	**Possible**. Suitable night and day roosting habitats are present in tree cavities and exfoliating bark. Suitable foraging habitat is present in all habitats of the study area.
California Mastiff Bat (*Eumops perotis*)	CSC	Occurs in a variety of habitats from woodlands to grasslands along central and southern coast and the central valley.	**Possible**. Suitable night and day roosting habitats are present in tree cavities and exfoliating bark. Suitable foraging habitat is present in all habitats of the study area.

*Present: Species observed on the site at time of field surveys or during recent past.
Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.
Possible: Species not observed on the site, but it could occur there from time to time.
Unlikely: Species not observed on the site, and would not be expected to occur there except, perhaps, as a transient
Absent: Species not observed on the site, and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE	Federally Endangered	CE	California Endangered
FT	Federally Threatened	CT	California Threatened
FPE	Federally Endangered (Proposed)	CR	California Rare
FC	Federal Candidate	CSC	California Species of Special Concern
FSC	Federal Species of Concern	CNPS	California Native Plant Society Listing
FSS	U.S. Forest Service Sensitive Species		

2.0 METHODS

The environmental setting and results section of this report have been based on a review of the literature and reconnaissance level field surveys.

Sources of information used in the preparation of this analysis included: (1) the *California Natural Diversity Data Base* (CDFG 2001); (2) the *Inventory of Rare and Endangered Vascular Plants of California* (Skinner et. al 1994); (3) manuals and references related to the plants and animals of California's Central Valley, (4) the *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS 1999); (5) *Elderberry Inventory Report for Scout Island Project Fresno County, CA* (Live Oak Associates 2001); and (6) *Waters of the United States, Scout Island, Fresno County, CA* (LOA 2001).

Wendy Hooper and Richard Rivas of Live Oak Associates, Inc. surveyed the study area on August 29, 2001. The entire study area was surveyed in order to categorize the biotic habitats, inventory the biotic resources on site, and evaluate the site's potential to support special status plant and animal species likely to occur in the area. The likely associations of reptiles, amphibians, birds and mammals occurring in the study area were inferred from information gathered during the field survey and a review of relevant background material by Live Oak Associates, Inc. The suitability of the site to support the San Joaquin kit fox was evaluated as well. Additional research to complete the evaluation for kit fox was performed by wildlife ecologist Joe Thompson who also visited the site on February 5, 2002. Research materials included the Recovery Plan for Upland Species of the San Joaquin Valley (USFWS 1998), maps of the study area and surrounding lands, and consultation from personnel at Endangered Species Recovery Program (ESRP) and the USFWS. A wetland delineation of the study area was also completed at a later date.

A letter from USFWS Endangered Species Division Chief Jan Knight addressed the issue of the VELB for the project (File Number 1-1-02-TA-2957, August 26, 2002, (Appendix E)). The Service proposed avoidance of elderberry shrubs as the preferred method for preserving the habitat of the VELB.

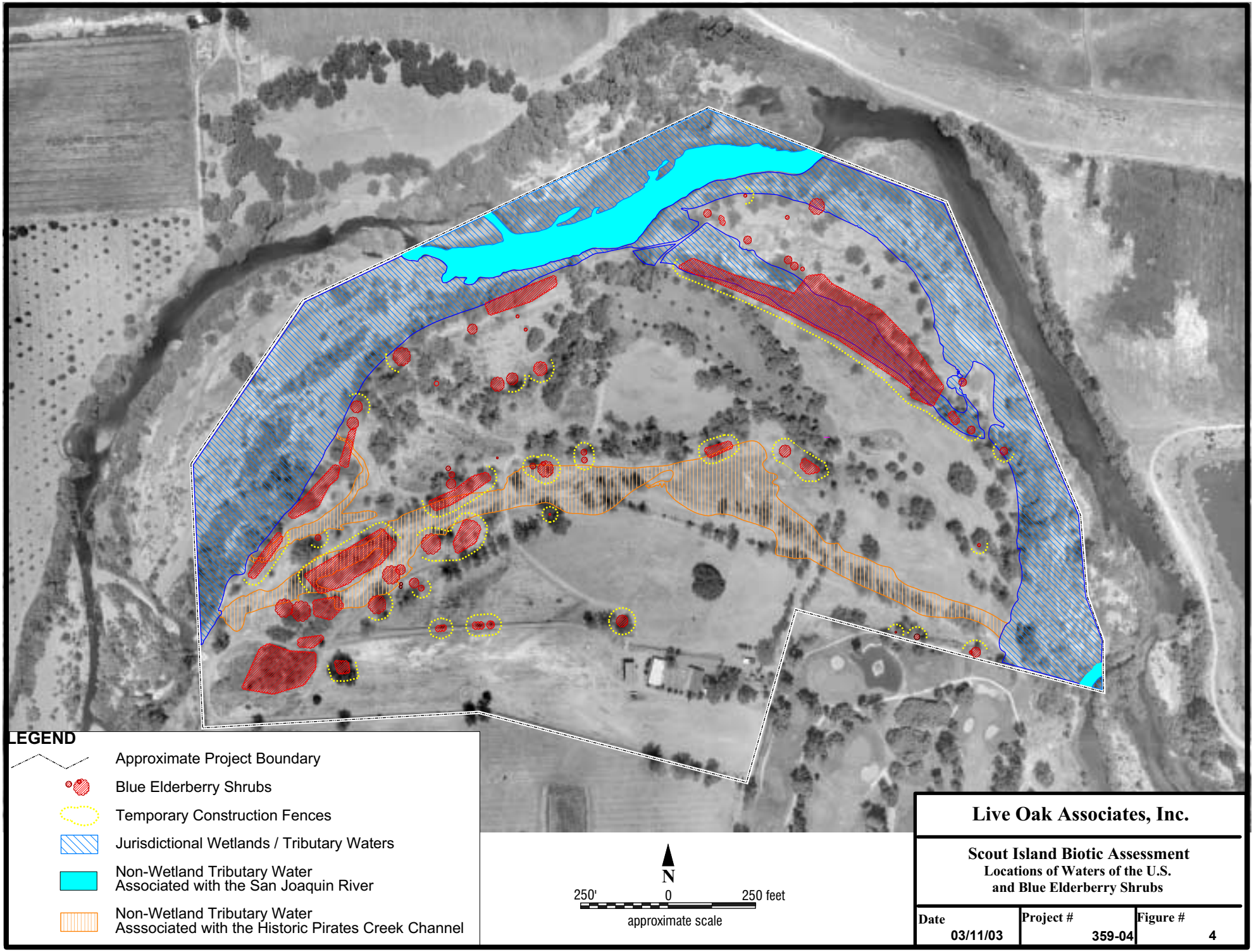
3.0 RESULTS

3.1 WATERS OF THE UNITED STATES

Natural drainage channels and wetlands are considered "Waters of the United States" (hereafter referred to as "jurisdictional waters"). The filling or grading of such waters is regulated by the U.S. Army Corps of Engineers (USACE) by authority of Section 404 of the Clean Water Act (Wetland Training Institute, Inc. 1991). The extent of jurisdiction within drainage channels is defined by "ordinary high water marks" on opposing channel banks. Wetlands are habitats with soils which are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes, which show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water) and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

All activities, which involve the discharge of fill into jurisdictional waters, are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). Such permits are typically issued on the condition that the applicant agrees to provide mitigation, which results in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The RWCQB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. The California Department of Fish and Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code (California Department of Fish and Game 1995). Activities, which would disturb these drainages, are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protects the habitat values of the drainage in question.

Jurisdictional waters were delineated on the site by Live Oak Associates (2002). The delineation was verified by the USACE on April 18, 2002. Jurisdictional waters totaled approximately 26.98 acres, of which 18.33 acres met the three technical criteria of jurisdictional wetlands (Figure 4). The remaining 8.65 acres would be considered non-wetland tributary waters located within the bed and bank of the San Joaquin River (aquatic habitat) and within the bed and bank of Pirate's Creek.



Live Oak Associates, Inc.

Scout Island Biotic Assessment
Locations of Waters of the U.S. and Blue Elderberry Shrubs

Date	Project #	Figure #
03/11/03	359-04	4

3.2 VALLEY ELDERBERRY LONGHORN BEETLE

Throughout much of its range, particularly in the San Joaquin Valley, the blue elderberry naturally occurs at low population densities in riparian habitat (Arnold 1995). Favored locations include low flow channels, upper channel banks and floodplains. It particularly favors well-watered spots where it can grow rapidly (up to 6 feet in a single year) into small trees. Not uncommonly, it can be found growing in granite outcrops of the foothills, sometimes occupying a crack in otherwise solid rock.

The valley elderberry longhorn beetle (VELB) inhabits elderberries of various sized, ages, and growth forms. Young shrubs are seldom infested with VELB. The, VELB typically prefers large, mature plants of good health (USFWS 1991). Adult beetles lay their eggs in the bark of large stems (i.e. greater than 1 inch in diameter). The larvae that emerge from these eggs then bore through the bark into the pith of the stem where they feed and mature. Mature beetles eat an exit hole in the stem somewhat smaller than the diameter of a pencil. The adults feed on the flowers and leaves of elderberry bushes prior to laying their eggs and beginning the cycle over again.

Elderberry shrubs were common within habitats of the study area (Figure 4). At the time of the survey these shrubs exhibited a range of health and vigor from young green shoots to older shrubs that were in a state of decay. Some of the elderberries resembled small trees, reaching 15-20 feet in height. At least 21 of the site's elderberry clusters are within 50 feet of jurisdictional wetlands. Due to the density and volume of the elderberry bushes on-site, it was not considered practical to count all of the mature elderberry stems (diameter >1 inch). However, a representative sample of the population determined the number of mature stems within 50 feet of jurisdictional waters to be greater than 100. Although not all of the shrubs were inspected for the presence of the VELB, several were observe as having potential exit holes similar to those made by the federally threatened beetle.

3.3 SAN JOAQUIN KIT FOX

The kit fox (*Vulpes macrotis mutica*) is one of nine species in the genus Vulpes in the family Canidae in the order Carnivora. The San Joaquin kit fox is one of seven subspecies of kit fox and is considered the most genetically distinct (Mercure et al. 1993).

Historically, the San Joaquin kit fox occurred extensively throughout California's Central Valley and parts of the Salinas and Santa Clara valleys. Kit fox currently inhabit some areas of suitable habitat on

the San Joaquin Valley floor and in the surrounding foothills of the coastal ranges, Sierra Nevada, and Tehachapi Mountains, from southern Kern County north to Contra Costa, Alameda, and San Joaquin Counties on the west, and near La Grange, Stanislaus County on the east side of the Valley and some of the larger scattered islands of natural land on the Valley floor in Kern, Tulare, Kings, Fresno, Madera, and Merced Counties (taken from the *Recovery Plan for Upland Species of the San Joaquin Valley, California*, USFWS 1998).

Kit foxes prefer habitats of open or low vegetation with loose soils. In the northern portion of their range, they occupy grazed grasslands and to a lesser extent valley oak woodlands. In the southern and central portion of the Central Valley, kit foxes are found in Valley Sink Scrub, Valley Saltbrush Scrub, Upper Sonoran Subshrub Scrub and Annual Grassland (USFWS 1998). Kit foxes are also found in grazed grasslands, urban settings and in areas adjacent to tilled or fallow fields (see USFWS 1998).

The kit fox requires underground dens to raise pups, to avoid predators (Golightly and Ohmart 1984), and to regulate temperature and avoid other adverse environmental conditions. Burrowing mammals, in some cases ground squirrels (*Spermophilus beecheyi*), usually provide these holes. Dens are usually located on loose-textured soils on slopes less than 40 degrees (O'Farrell 1980). Natal pupping dens are generally found on slopes of less than 6 degrees (O'Farrell and McCue 1981). Dens have been recorded at the elevation of 363 meters (1,200 feet) (Grinnell et. al. 1937, USFWS 1983, USFWS 1998).

The San Joaquin kit fox is the smallest North American canid (member of the dog family, Canidae). Adult males weigh approximately 2.3 kilograms (approximately 5 lbs.) and adult females weigh 2.1 kilograms (about 4.6 lbs.), on average (Morrell 1972).

The home range size of kit foxes in the southern portion of their range is about 2.6-9 square kilometers (km^2) and individual home ranges overlap extensively (Morrell 1972, Ralls et al. 1990, Spiegel and Bradbury 1992). Pairs may share home ranges all year but may use different dens (USFWS 1998). Kit foxes are solitary from mid-summer through late fall and occur in family groups from late fall through early summer. Kit foxes breed from late December to March (Egoscue 1956, Morrell 1972, Zoellick et al. 1987). One litter of two to six pups is born sometime between February and late March (Egoscue 1962, Morrell 1972, McGrew 1979, Zoellick et al. 1987). Males provision the females and pups for some period after birth. The pups remain with the parents until June or July at which time the juveniles usually disperse distances of one to seven km. Dispersal distances vary considerably. Some individuals disperse distances of more than 20 km from the natal den (Morrell 1972, Orloff et al. 1986). A six-year study at

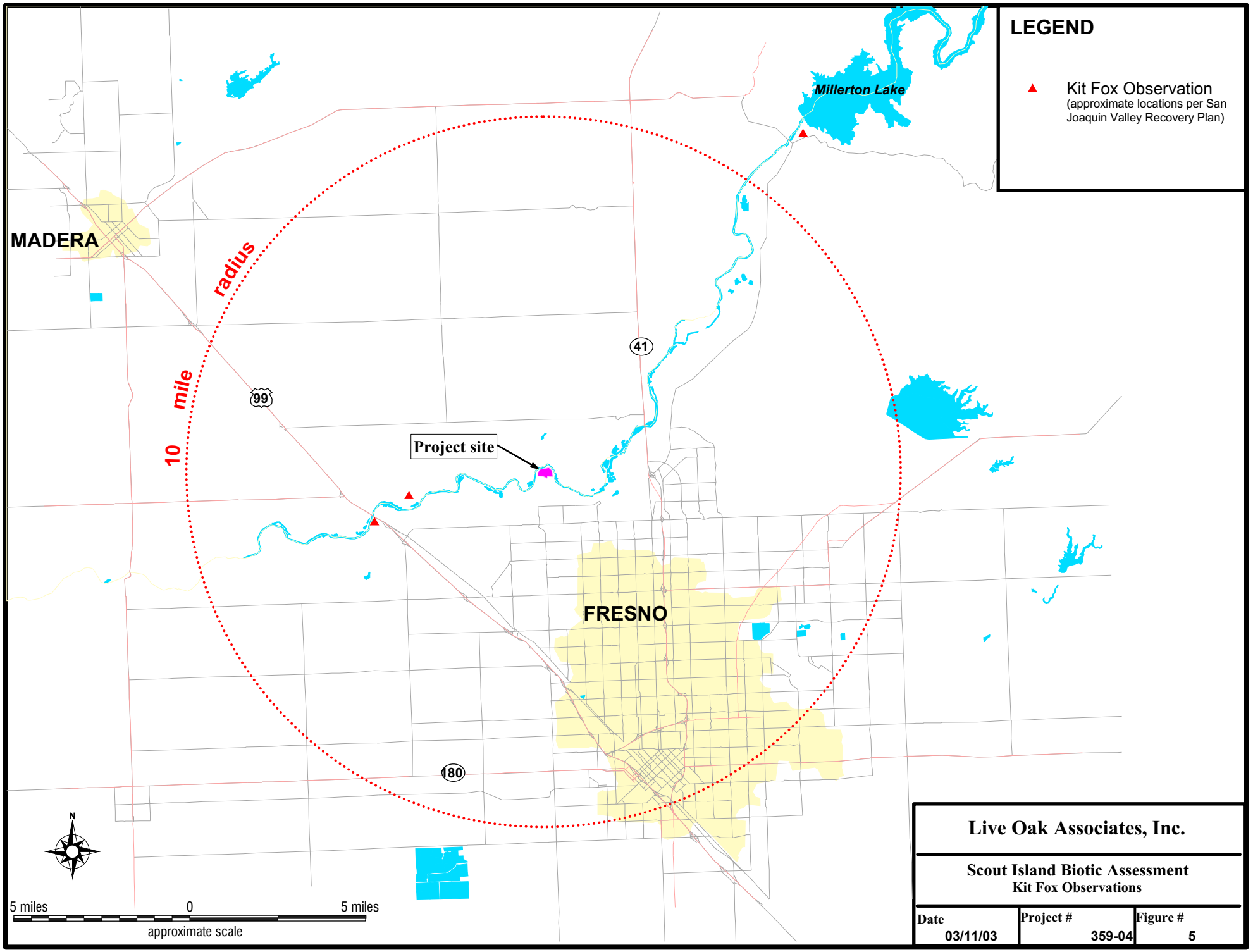
Elk Hills Petroleum Preserves in California showed that pups dispersed an average distance of 5.0 miles (Scrivner 1987, USFWS 1998).

Age range of kit fox varies from 2 years (Egoscue 1975) to over 10 years in captivity (McGrew 1979). Kit foxes in the wild have been known to live to 7 (Egoscue 1962) and even 8 years (Berry et al. 1987). However, kit foxes have high mortality rates as adults (0.50) and as juveniles (0.70) (Morrell 1972, Egoscue 1975, Ralls and White 1995).

According to the U.S. Fish and Wildlife Service (USFWS) Recovery Plan for Upland Species of the San Joaquin Valley, California 1998, two sightings of San Joaquin kit fox have been reported within 10 miles of the study area (Figure 5). These two sightings are not reported in the CNDDB. However, the San Joaquin Valley Endangered Species Recovery Program One sighting was reported 11.5 miles northeast of the study area on the south side of the San Joaquin River below Millerton Dam. This sighting was reported in 1990. However, details associated with this reported occurrence, including the name of the person who made the observation, their level of certainty, and their qualifications for identifying small canids is unknown. Several explanations may account for the lack of reputable sightings of kit fox in the study area and region as a whole.

1) Suitable habitat is largely absent from the study area. Approximately 79 percent of the 86.4-acre study area is composed of mixed riparian woodland, aquatic, red gum woodland, and park-like ornamental landscaping. Kit foxes do not commonly occur in any of these habitats. In fact, kit foxes are known to avoid riparian and aquatic habitats. The remaining 21 percent of the study area (approximately 34 acres) is composed of non-native grassland, which as a habitat type is generally suited for kit fox. However, this parcel is small, isolated from other grassland habitats, and lacks resources that are necessary to support kit foxes. Small mammals, considered to be the chief prey items for the species, appear to be low in abundance, as are ground squirrel burrows that could be used of denning purposes. Furthermore, even if the non-native grassland habitats of the study area supported abundant prey and suitable denning habitat, the small size and fragmented nature of the habitats would make the study area undesirable as kit fox habitat.

2) Grassland habitats of the study area are surrounded by habitats that are unfavorable to kit fox. Roads, highways, urban areas and agricultural lands, separate the study area from known populations of kit fox in the Central Valley. The nearest large population of kit fox is in the Ciervo Panoche Natural Area, approximately 70 miles from the study area. Kit foxes dispersing from these populations to the study area would need to traverse numerous obstacles including


LEGEND
Kit Fox Observation
(approximate locations per San Joaquin Valley Recovery Plan)
Millerton Lake
MADERA
10 mile radius
99
41
Project site
FRESNO
180
N
5 miles
0
5 miles
approximate scale
Live Oak Associates, Inc.
Scout Island Biotic Assessment
Kit Fox Observations
Date
03/11/03
Project #
359-04
Figure #
5

Interstate 5, Highways 180 and 99, numerous agricultural lands, and the City of Fresno. These features represent considerable barriers to kit fox movement since they may cause mortality to kit foxes by bringing them into contact with automobiles, dogs, and humans. Several sightings of kit fox have been reported for the region separating these known populations from the study area. However, these sightings cannot be verified and are of such low occurrence as to be statistical outliers when considered in the broader context of the known statewide distribution of the species. Riparian habitats, dense woodlands, and aquatic habitats, which surround the immediate vicinity of the study area are generally avoided by kit foxes. These closed habitats are generally frequented by predators to kit foxes such as bobcats and red foxes.

This argument is supported by recent survey efforts in the region. A recent local survey in habitats more suitable for the kit fox failed to detect any evidence of kit fox presence or activity. LOA biologists Dr. sue Townsend and Joe Thompson performed early evaluations for kit fox at the 900-acre River Ranch, in Friant, approximately 6 miles northeast of the study area during the spring of 2002. The results of this survey were negative for kit fox or their sign, event though the River Ranch study area consisted of more suitable habitat than those present at Scout Island. Den surveys for the kit fox were also conducted by LOA in the Millerton-New Town area during the spring of 2002, which also failed to detect evidence of kit fox. These habitats were also evaluated by Curt Uptain of the Endangered Species Recovery Program (ESRP). Mr. Uptain stated that although the study area contained suitable habitat in the form of available prey and potential denning areas, the site is probably inaccessible due to a lack of connectivity to known kit fox populations caused by obstructions to their movement.

2) <u>Inadequate number of focused surveys for the species.</u> The possibility exists that the species does occur within the region of the study area and an inadequate number of surveys have been performed to determine it's regional occurrences. This is an unlikely scenario given the number of people living in the area that would probably report kit foxes or animal species that could be mistaken for a kit fox such as gray foxes, red foxes, coyotes, or even small domestic dogs. It is more likely that the species is either extremely rare or absent from the region.

4.0 IMPACTS

4.1 WATERS OF THE UNITED STATES

The project will result in the placement of a small amount of fill in various areas meeting the definition of jurisdictional waters to facilitate road and trail construction. Approximately 22,000 square feet of jurisdictional waters will be impacted from the proposed project (Figure 6). These Waters consist of the bed and bank of Pirates Creek where bridge footings will be placed in the channel, and where trenching will occur during pipeline construction.

4.2 VALLEY ELDERBERRY LONGHORN BEETLE

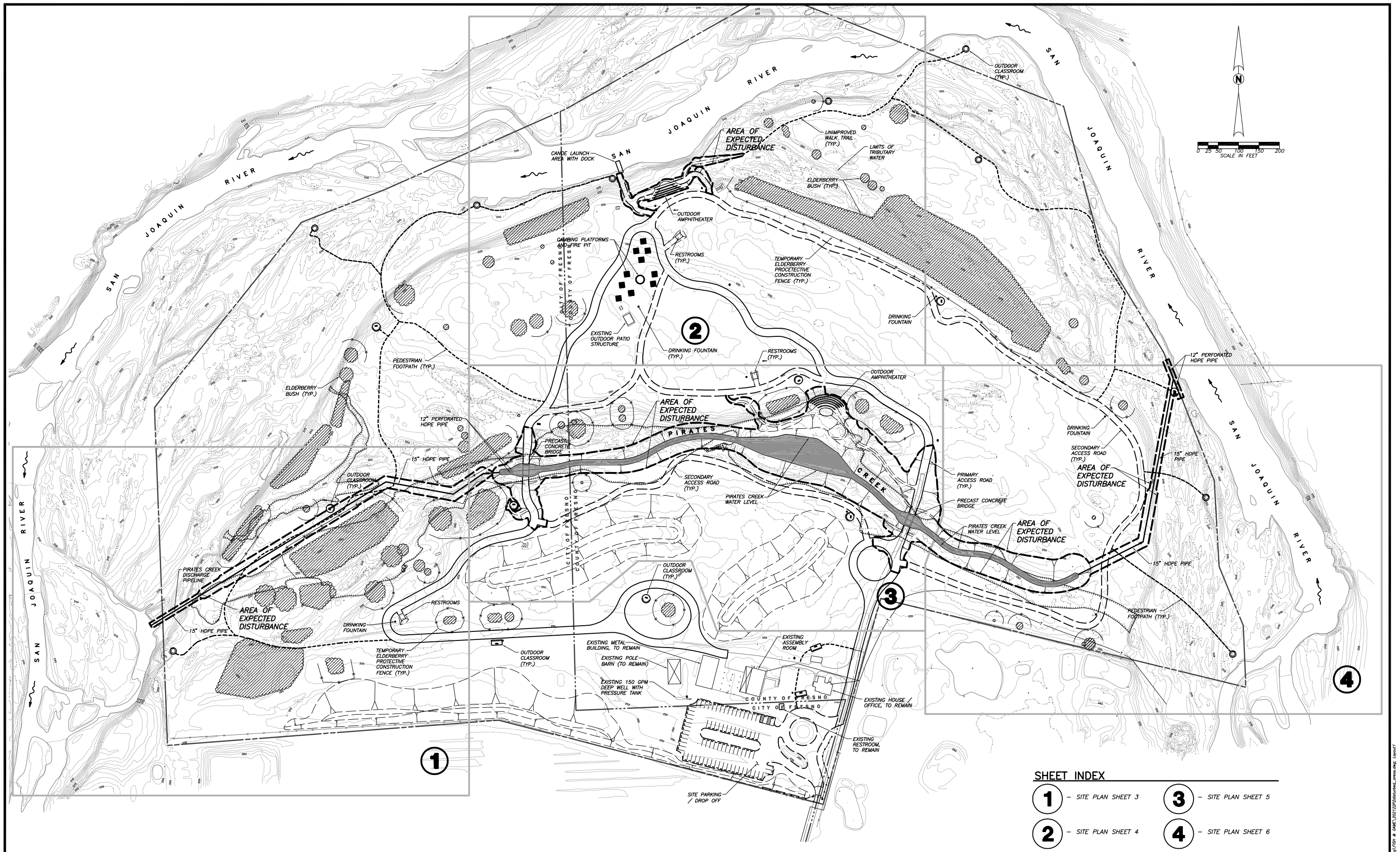
Due to avoidance and minimization measures devised in consultation between the USFWS and the USACE, the proposed project is not expected to result in the removal of any elderberry shrubs from the study area. These avoidance measures will minimize the likelihood that any shrubs will be directly impacted from the project. However, indirect adverse impacts to the VELB and its host plant, the blue elderberry, could occur from implementation of the project itself.

4.3 SAN JOAQUIN KIT FOX

The San Joaquin kit fox is unlikely to occur within the study area due to a lack of suitable habitats both within the study area and in surrounding habitats that the species would be expected to cross in order to enter the study area. Only two sightings of the kit fox have ever been reported within a radius of 10 miles of the study area; one for 1990 and the other in 1993. These occurrences may indicate that the species occurs in very low numbers within the vicinity of the study area, where habitats are suitable. However, significant barriers to the movements of kit fox in the immediate vicinity of the study area as well as a lack of suitable kit fox habitats within the study area greatly diminish the likelihood that the species is present.

Furthermore, the project proposed by the applicant, an outdoor educational facility is not expected to alter the study area as a whole in such a way that kit fox movement through the area would be prohibited. Parking lots and trails that will be constructed, although they reduce kit fox foraging and denning opportunities (which are considered unlikely) would still allow kit foxes to pass through.

In summary, it is considered unlikely that kit fox use the study area. However, such a possibility cannot entirely be ruled out. The type of project that is planned for the site would not impede the movement of kit fox through the area if one happened to wander onto the study area.



INDEX SHEET

SCALE: 1"=100'

SHEET INDEX

REGISTERED PROFESSIONAL ENGINEER — DAVID A. MOWRY — No. 54,414 Exp. 12/31/03 — CIVIL — STATE OF CALIFORNIA

BLAIR, CHURCH & FLYNN
CONSULTING ENGINEERS
FRESNO – CLOVIS , CALIFORNIA
MICHAEL E. FLYNN R.C.E. 23,828

REGISTERED PROFESSIONAL ENGINEER — MICHAEL E. FLYNN — EXP. 12/31/05 — No. 23,828 — CIVIL — STATE OF CALIFORNIA

REF. & REV.

FRESNO COUNTY OFFICE OF EDUCATION

SCOUT ISLAND IMPROVEMENTS–PHASE 2

INDEX SHEET

DR. BY: RF
CH. BY: DAM
DATE: 2-28-03
SCALE AS NOTED

SHEET NO. 2 OF 7 SHEETS

5.0 MITIGATION

5.1 WATERS OF THE UNITED STATES

Compliance with state and federal regulations pertaining to jurisdictional waters could require a number of standard mitigation measures, the implementation of which would mitigate impacts to a less than significant level. The applicant will comply with provisions of Section 401 and 404 of the Clean Water Act and with Section 1601 of the California Fish and Game Code.

5.2 VALLEY ELDERBERRY LONGHORN BEETLE

Since the applicant has designed the project to avoid the removal of any elderberry shrubs, mitigation measure will not require monetary compensation and shall consist entirely of avoidance measures. These measures were determined using the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (USFWS 1999) (Appendix C).

"Complete" avoidance is assumed when a 100 ft. wide buffer is established around each elderberry shrub with one inch or greater diameter (USFWS 1999). Complete avoidance of a sensitive resource (i.e. wetlands or endangered species habitat) is usually considered the preferred approach for any project. Complete avoidance of all elderberry masses is not feasible, since many occur within 20 feet of proposed construction. However, avoidance measures will be implemented that help to ensure that these shrubs are preserved during and after construction.

Activities related to construction (such as vibration, dust, run-off from paving, or physical abuse) could result in "take" according to the USFWS standards. Therefore, protective measures to reduce the likelihood that elderberry masses are damaged during construction will include:

- Temporary or permanent fencing will be placed around all elderberries within the 100-foot buffer zone prior to construction. Fencing will be placed as far away (20 feet is preferred) from the drip line of each shrub as possible.

- All elderberries within the 100-foot buffer zone will be surrounded by orange construction fencing and signed. Legible signs should be erected on the fencing of each shrub with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines and imprisonment."

- During construction, a qualified biologist will visit the site periodically (once a week or so) when construction is occurring within 100 feet of the shrubs to make sure that no shrubs have been impacted from project construction. Contractors working on the project will be briefed as to the significance and possible penalties for not complying with the requirements of the Service. If there are any impacts that occur during construction or unauthorized takes of the beetle or its' habitat, a monitor working with the general contractor will be responsible for contacting CDFG and the USFWS immediately in the event that an elderberry shrub is injured.

- All elderberry masses will be free of exposure to dust and contaminants associated with construction. This will be accomplished by watering areas adjacent to the shrubs several times a day when construction is occurring within 100 feet of any elderberry shrub. No oil-based (petroleum) palliatives will be used. In addition, vegetation or fencing that will be removed within a 20-foot area surrounding each shrub will be done so by hand, or by other methods approved by engineer that will not impact the elderberry shrubs. This would not include the use of heavy equipment.

- Extreme care will be taken when working in close proximity of each shrub to be sure that physical injury to roots does not occur. Use of heavy equipment within 50 foot of each shrub will be extremely limited to that which is absolutely necessary to complete the work. Compaction of the soil around roots will be minimized to the greatest extent possible.

- Construction will preferably be planned between the months of July and October when the VELB is not within its flight season, which occurs between February through June. From a construction standpoint, it may not be possible to complete construction during the times of year that the shrubs are dormant, which is between November through February. During the months of November through February, weather conditions also restrict construction activities.

Implementation of the avoidance measures outlined above would provide protection to VELB habitat associated with the proposed project. Avoidance mechanisms recommended in this letter are consistent with those for in *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (USFWS 1999) (see Appendix C).

5.3 SAN JOAQUIN KIT FOX

The results of the survey indicate that the project is unlikely to result in "take" of the San Joaquin kit fox. However, the incidental occurrence of the species occurring on the study area cannot be entirely ruled out. Therefore, it would be prudent for the applicant to conduct pre-construction surveys for the kit fox. These pre-construction surveys should be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to any construction-related activities. The primary objective is to identify kit fox habitat features (potential dens and refugia) on the project site and evaluate them sufficiently to ascertain if they are being used by a kit fox. If an active kit fox den is detected within (or immediately adjacent to) the area of work, the USFWS will be contacted immediately to determine the best course of action. If no

kit fox activity is detected, the work shall continue as planned and a written report will be submitted to the Corps and Service within five days after completion of the surveys.

While kit foxes are not expected to access the site during development, the applicant should as a matter of caution, follow the *Standardized Kit Fox Construction Practices* developed by the Service (1997). These are summarized below.

- All construction-related activities should be preceded by a tail-gate session, the primary purpose of which will be to describe to construction workers the importance of implementing construction related activities that will minimize potential construction related impacts to kit foxes.
- Project-related vehicles should observe a 20-mph speed limit in all project areas, except on city or county roads; this is particularly important at night when kit foxes are most active. To the extent possible, nighttime construction and traffic should be avoided. Off-road traffic outside of designated project areas should be prohibited.
- To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. In addition, these structures should be thoroughly inspected by properly trained construction personnel each morning for kit fox or other species. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected by properly trained construction personnel for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in anyway. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved once to remove it from the path of construction activity.
- All food related trash items such as wrappers, cans, bottles, food scraps should be disposed of in a closed container and removed at least once a week from a construction or project site and signs will be placed at the construction site that prohibit feeding wildlife.
- No firearms shall be allowed on the project site.

- To prevent harassment, mortality of kit foxes or destruction of dens by dogs or cats, no pets should be permitted on project sites.
- Use of rodenticides and herbicides in project areas should be restricted.
- A representative shall be appointed by the project proponent who will be the contact person for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped individual (the representative's name and address shall be provided to the USFWS).
- Upon completion of the project, all areas subject to temporary ground disturbance, including storage and staging areas, temporary roads, pipeline corridors, etc. should be re-contoured if necessary, and revegetated to promote restoration of the area to pre-project conditions.
- In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the USFWS should be contacted for advice.
- Any contractor, employee(s), or military or agency personnel who inadvertently kills or injures a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFG immediately in the case of a dead, injured or entrapped kit fox. The CDFG contact for immediate assistance is State Dispatch at (916) 445-0045.

The Sacramento Field Office of the USFWS and the Fresno Field Office of CDFG will be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities. Notification must include the date, time, location of the incident or of the finding of a dead or injured animal and any other pertinent information.

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John Soliz, Groundskeeper at Scout Island

Rob Tipstra, Biologist, California Department of Fish and Game

APPENDIX A: VASCULAR PLANTS OF THE STUDY AREA

The plant species listed below have been observed on the study area during surveys conducted by Live Oak Associates, Inc. on August 8, 2001. The U.S. Fish and Wildlife Service wetland indicator status of each plant has been shown following its common name.

OBL - Obligate
FACW - Facultative Wetland
FAC - Facultative
FACU - Facultative Upland
UPL - Upland
+/- - Higher/lower end of category
NR - No review
NA - No agreement
NI - No investigation

APIACEAE – Carrot Family		
Conium maculatum	Poison Hemlock	FACW
ASTERACEAE - Sunflower Family		
Artemesia douglasiana	Mugwort	FACW
Baccharis salicifolia	Mule Fat	FACW
Centaurea solstitialis	Yellow star-thistle	UPL
Conyza canadensis	Canada Horseweed	FAC
Gnaphalium stramineum	Cotton-batting Cudweed	FAC-
Helianthus annuus	Common Sunflower	FAC
Hemizonia fitchii	Fitch's Tarweed	UPL
Heterotheca grandiflora	Telegraph Weed	UPL
Holocarpha heermannii	Heerman's Tarweed	UPL
Hypochaeris glabra	Smooth Cat's-ear	UPL
Lactuca serriola	Prickly Lettuce	FAC-
Senecio vulgaris	Common Groundsel	NI*
Silybum marinum	Milk Thistle	UPL
Sonchus oleraceus	Sow Thistle	NI
Taraxacum officinale	Common Dandelion	FACU
Xanthium strumarium	Cocklebur	FAC+
AZOLLACEAE – Mosquito Fern Family		
Azolla filiculoides	Mosquito Fern	OBL
BETULACEAE – Birch Family		
Alnus rhombifolia	White Alder	FACW
BORAGINACEAE – Borage Family		
Amsinckia eastwoodeae	Eastwood's Fiddleneck	UPL
Amsinckia menziesii ssp. *intermedia*	Common Fiddleneck	UPL
BRASSICACEAE - Mustard Family		
Brassica nigra	Black Mustard	UPL
Raphanus sativus	Radish	UPL
Sisymbrium altissimum	Tall Tumble Mustard	FACU
Stellaria media	Common Chickweed	NI
CAPRIFOLIACEAE – Honeysuckle Family		
Sambucus mexicanus	Blue Elderberry	FAC
CHENOPODIACEAE – Goosefoot Family		
Chenopodium album	Pigweed	FAC

CUCURBITACEAE – Cucumber Family		
Cucurbita foeditissima	Calabazilla	UPL
CUPRESSACEAE – Cypress Family		
Cedrus atlantica	Atlas Cedar	UPL
Cedrus deodara	Deodar Cedar	UPL
Cupressus sp.	Cypress	UPL
Juniperus horizontalis	Creeping Juniper	UPL
CYPERACEAE – Sedge Family		
Cyperis eragrostis	Tall Flatsedge	FACW
Eleocharis macrostachya	Creeping Spikerush	OBL
EQUISETACEAE – Horsetail Family		
Equisetum hyemale	Common Horsetail	OBL
EUPHORBIACEAE – Spurge Family		
Eremocarpus setigerus	Turkey Mullein	UPL
FABACEAE - Legume Family		
Sesbania panicea	Scarlet Wisteria	-
Lotus purshianus	Spanish Clover	UPL
Lupinus sp.	Lupine	UPL
Medicago polymorpha	Bur Clover	UPL
Robinia hispida	Rose Locust	UPL
Trifolium repens	White Clover	FACU*
Vicia sativa	Common Vetch	FACU
FAGACEAE –Oak Family		
Quercus rubra	Red Oak	UPL
Quercus suber	Cork Oak	UPL
GERANIACEAE - Geranium Family		
Erodium botrys	Red-stemmed Filaree	UPL
Erodium cicutarium	Storksbill	UPL
Erodium moschatum	Broad-leaved Filaree	UPL
Geranium molle	Cranesbill	UPL
JUGLANDACEAE – Walnut Family		
Carya pecan	Pecan	UPL
Juglans nigra	Black Walnut	UPL
JUNCACEAE – Rush Family		
Juncus balticus	Baltic Rush	OBL
Juncus effusus ssp. *pacificus*	Pacific Rush	OBL
Juncus xiphioides	Iris-leaved Rush	OBL
LAMIACEAE – Mint Family		
Marrubium vulgare	Horehound	FAC
Mentha pelugium	Pennyroyal	OBL
Trichostema lanceolatum	Vinegar Weed	UPL
LEMNACEAE – Duckweed Family		
Lemna sp.	Duckweed	OBL
LYTHRACEAE – Loosestrife Family		
Lagerstroemia indica	Common Crapemyrtle	UPL
MALVACEAE – Mallow Family		
Malva nicaeensis	Bull Mallow	UPL
MORACEAE – Mulberry Family		
Morus alba	White Mulberry	NI
MYRTACEAE – Bottlebrush Family		
Eucalyptus rostrata	Red Gum	UPL

OLEACEAE – Olive Family		
Fraxinus latifolia	Oregon Ash	FACW
Syringa japonica	Common Lilac	UPL
ONAGRACEAE – Evening Primrose Family		
Epilobium brachycarpum	Panicled Willow-herb	UPL
Epilobium latifolium	Willow-herb	FACW
PAPAVERACEAE – Poppy Family		
Escholschzia californica	California Poppy	UPL
PINACEAE –Pine Family		
Pinus canariensis	Canary Island Pine	UPL
Pinus sabiniana	Gray Pine	UPL
Pinus thumbergi	Japanese Black Pine	UPL
PITTOSPORACEAE – Pittosporum Family		
Pittosporum tobira	Japanese Pittosporum	UPL
POACEAE - Grass Family		
Arundo donax	Giant Reed	FACW
Avena fatua	Wild Oat	UPL
Bromus diandrus	Ripgut	UPL
Bromus hordeaceus	Soft Chess	FACU
Crypsis schoenoides	Swamp Timothy	OBL
Cynodon dactylon	Bermuda Grass	FAC
Echinochloa crus-galli	Barnyard Grass	FACW
Festuca sp.	Lawn Grass	UPL
Hordeum murinum ssp. *leporinum*	Barnyard Barley	FACU
Phalaris arundinacea	Reed Canary Grass	OBL
Poa annua	Annual Bluegrass	FACW-
Polypogon monspeliensis	Rabbit's Foot Grass	FACW+
Sorghum halepense	Johnson Grass	FACU
Vulpia myuros	Rattail Fescue	FACU
POLYGONACEAE - Buckwheat Family		
Polygonum arenastrum	Prostrate Smartweed	FAC
Rumex crispus	Curly Dock	FACW-
PUNICACEAE- Pomegranite Family		
Punica sp.	Pomegranite	UPL
ROSACEAE – Rose Family		
Prunus sp.	Peach	UPL
Pyracantha sp.	Firethorn	UPL
Pyrus calcame	Bradford Pear	-
Rosa californica	California Rose	FAC*
Rosa eriantha	Sweet Briar	UPL
Rosa sp.	Cultivated Rose	UPL
Rubus discolor	Himalayan Blackberry	FACW*
Rubus ursinus	California Blackberry	FACW*
RUBIACEAE – Madder Family		
Cephalanthus occidentalis	Button Willow	FACW
Galium aparine	Catchweed Bedstraw	FACU
RUTACEAE – Citrus Family		
Citrus sp.	Citrus	UPL
SALICACEAE – Willow Family		
Populus fremontii	Fremont's Cottonwood	FACW
Salix exigua	Sandbar Willow	OBL

Salix gooddinggii	Gooddings's Black Willows	OBL
Salix lasiolepis	Arroyo Willow	FACW
SCROPHULARIACEAE – Figwort Family		
Verbascum thapsus	Woolly Mullein	UPL
SIMAROUBACEAE - Tree of Heaven Family		
Ailanthus altissima	Tree-of-Heaven	FACU
SOLANACEAE - Nightshade Family		
Datura wrightii	Jimson Weed	UPL
Nicotiana glauca	Tree Tobacco	FAC
Solanum sp.	Nightshade	-
TAXODIACEAE – Redwood Family		
Sequoia sempervirens	Coast Redwood	UPL
URTICACEAE – Nettle Family		
Urtica dioica	Stinging Nettle	FACW

APPENDIX B: TERRESTRIAL VERTEBRATE SPECIES WHICH POTENTIALLY OCCUR ON THE STUDY AREA

The species listed below are those which may reasonably be expected to use the habitats of the study area. The list was not intended to include birds which are vagrants or occasional transients. Its purpose was rather to include those species that may be expected to routinely and predictably use the planning area during some or all of the year. Those species observed on the site have been marked with an asterix.

CLASS: AMPHIBIA
ORDER: SALIENTIA (Frogs and Toads)
FAMILY: BUFONIDAE
Western Toad (*Bufo boreas*)
FAMILY: HYLIDAE (Treefrogs and Relatives)
Pacific Treefrog (*Hyla regilla*)
FAMILY: RANIDAE (True Frogs)
*Bullfrog (Rana catesbeiana)

CLASS: REPTILIA
ORDER:TESTUDINES (Turtles)
FAMILY: EMYDIDAE (Pond and Marsh Turtles)
Western Pond Turtle (Clemmys marmorata)
ORDER: SQUAMATA (Lizards and Snakes)
SUBORDER: SAURIA (Lizards)
FAMILY: IGUANIDAE (Iguanids)
*Western Fence Lizard (*Sceloporus occidentalis*)
FAMILY: SCINCIDAE (Skinks)
Gilbert Skink (*Eumeces gilberti*)
FAMILY: TEIIDAE (Whiptails and Relatives)
Western Whiptail (Cnemidophorus tigris)
FAMILY: ANGUIDAE (Alligator Lizards and Relatives)
Southern Alligator Lizard (*Gerrhonotus multicarinatus*)
SUBORDER: SERPENTES (Snakes)
FAMILY: COLUBRIDAE (Colubrids)
Ringneck Snake (*Diadophis punctatus*)
Racer (*Coluber constrictor*)
Gopher Snake (*Pituophis melanoleucus*)
Common Kingsnake (*Lampropeltis getulus*)
Common Garter Snake (*Thamnophis sirtalis*)
Sharp-tailed Snake (*Contia tenuis*)
Coachwhip (*Masticophis flagellum*)
California Whipsnake (*Masticophis lateralis*)
Glossy Snake (*Arizone elegans*)
FAMILY: VIPERIDAE (Vipers)
Western Rattlesnake (*Crotalus atrox*)

CLASS: AVES
ORDER: PODICIPEDIFORMES (Grebes)
FAMILY: PODICIPEDIDAE (Grebes)
Pied-billed Grebe (*Podilymbus podiceps*)
Eared Grebe (*Podiceps nigricollis*)
Western Grebe (*Aechmophorus occidentalis*)
Clark's Grebe (*Aechmophorus clarkii*)
ORDER: PELECANIFORMES (Tropicbirds, Pelicans, and Relatives)
FAMILY: PELECANIDAE (Pelicans)
American White Pelican (*Pelecanus erythrorhynchos*)
FAMILY: PHALACROCORACIDAE (Cormorants)
Double-crested Cormorant (*Phlacrocorax auritus*)
ORDER: CICONIIFORMES (Herons, Storks, Ibises, and relatives)

FAMILY: ARDEIDAE (Herons and Bitterns)
American Bittern (*Botaurus lentiginosus*)
*Great Blue Heron (*Ardea herodias*)
Great Egret (*Ardea albus*)
Snowy Egret (*Egretta thula*)
Cattle Egret (*Bubulcus ibis*)
Green-backed Heron (*Butorides striatus*)
*Black-crowned Night-heron (*Nycticorax nycticorax*)
ORDER: ANSERIFORMES (Screamers, Ducks and Relatives)
FAMILY: ANATIDAE (Swans, Geese, and Ducks)
*Canada Goose (*Branta canadensis*)
Wood Duck (*Aix sponsa*)
Green-winged Teal (*Anas crecca*)
Mallard (*Anas platyrhynchos*)
Northern Pintail (*Anas acuta*)
Blue-winged Teal (*Anas discors*)
Cinnamon Teal (*Anas cyanoptera*)
Northern Shoveler (*Anas clypeata*)
Gadwall (*Anas strepera*)
Eurasian Wigeon (*Anas penelope*)
American Wigeon (*Anas americana*)
Canvasback (*Aythya valisineria*)
Redhead (*Aythya americana*)
Ring-necked Duck (*Aythya collaris*)
Lesser Scaup (*Aythya affinis*)
Common Goldeneye (*Bucephala clangula*)
Bufflehead (*Bucephala albeola*)
Common Merganser (*Mergus merganser*)

Ruddy Duck (*Oxyura jamaicensis*)

ORDER: FALCONIFORMES (Vultures, Hawks, and Falcons)

FAMILY: CATHARTIDAE (American Vultures)

Turkey Vulture (*Cathartes aura*)

FAMILY: ACCIPITRIDAE (Hawks, Old World Vultures, and Harriers)

Osprey (*Pandion haliaetus*)
Black-shouldered Kite (Elanus caeruleus)
Bald Eagle (*Haliaeetus leucocephalus*)
Northern Harrier (*Circus cyaneus*)
Sharp-shinned Hawk (*Accipiter striatus*)
Cooper's Hawk (*Accipiter cooperi*)
*Red-shouldered Hawk (*Buteo lineats*)
* Red-tail Hawk (*Buteo jamaicensis*)
Ferruginous Hawk (*Buteo regalis*)

FAMILY: ACCIPITRIDAE (Hawks, Old World Vultures, and Harriers)

Rough-legged Hawk (*Buteo lagopus*)
Golden Eagle (*Aquila chrysaetos*)

FAMILY: FALCONIDAE (Caracaras and Falcons)

American Kestrel (*Falco sparverius*)
Merlin (*Falco columbarius*)
Praire Falcon (*Falco mexicanus*)
Peregrine Falcon (*Falco peregrinus*)

ORDER: GALLIFORMES (Megapodes, Currassows, Pheasants and relatives)

FAMILY: PHASIANIDAE (Quails, Pheasants, and relatives)

Ring-necked Pheasant (Phasianus colchicus)
*California Quail (*Callipepla californica*)

ORDER: GRUIFORMES (Cranes, Rails, and relatives)

FAMILY: RALLIDAE (Rails, Gallinules, and Coots)

Virginia Rail (*Rallus limicola*)
Sora (*Porzana carolina*)
Common Moorhen (*Gallinula chloropus*)
American Coot (*Fulica americana*)

ORDER: CHARADRIIFORMES (Shorebirds, Gulls, and relatives)

FAMILY: CHARADRIIDAE (Plovers and relatives)

Black-bellied Plover (*Pluvialis squatorola*)
Lesser Golden Plover (*Pluvialis dominica*)
Semipalmated Plover (*Charadrius semipalmatus*)
*Killdeer (*Charadrius vociferus*)

FAMILY: RECURVIROSTRIDAE (Avocets and Stilts)

Black-necked Stilt (*Himantopus mexicanus*)
American Avocet (*Recurvirostra americana*)

FAMILY: SCOLOPACIDAE (Sandpipers and relatives)

Greater Yellowlegs (*Tringa melanoleuca*)
Solitary Sandpiper (*Tringa solitaria*)
Willet (*Catoptrophorus semipalmatus*)
Spotted Sandpiper (*Actitis macularia*)
Long-billed Curlew (*Numenius americanus*)
Least Sandpiper (*Calidris minutilla*)
Long-billed Dowitcher (*Limnodromus scolopaceus*)
Common Snipe (*Gallinago gallinago*)
Herring Gull (*Larus argentatus*)

ORDER: COLUMBIFORMES (Pigeons and Doves)

FAMILY: COLUMBIDAE (Pigeons and Doves)

*Mourning Dove (*Zenaida macroura*)
Rock Dove (*Columba livia*)

ORDER: STRIGIFORMES (Owls)

FAMILY: TYTONIDAE (Barn Owls)

Common Barn Owl (*Tyto alba*)

FAMILY: STRIGIDAE (Typical Owls)

Great Horned Owl (*Bubo virginianus*)
Burrowing Owl (*Speyotyto cunicularia*)
Long-eared Owl (*Asio otus*)
Short-eared Owl (*Asio flammeus*)

ORDER: CAPRIMULGIFORMES (Goatsuckers and relatives)

FAMILY: CAPRIMULGIDAE (Goatsuckers)

Lesser Nighthawk (*Chordeiles acutipennis*)

ORDER: APODIFORMES (Swifts and Hummingbirds)

FAMILY: TROCHILIDAE (Hummingbirds)

Black-chinned Hummingbird (*Archilochus alexandri*)
*Anna's Hummingbird (*Calypte anna*)

ORDER: PICIFORMES (Woodpeckers and Relatives)

FAMILY: PICIDAE (Woodpeckers and Wrynecks)

Lewis' Woodpecker (*Melanerpes lewis*)
Acorn Woodpecker (*Melanerpes formicivorous*)
*Nuttall's Woodpecker (*Picoides nuttallii*)
Downy Woodpecker (*Picoides pubescens*)
*Northern Flicker (*Colaptes auratus*)

ORDER: PASSERIFORMES (Perching Birds)

FAMILY: TYRANNIDAE (Tyrant Flycatchers)

Dusky Flycatcher (*Empidonax oberholseri*)
Pacific Slope Flycatcher (*Empidonax difficilis*)
*Black Phoebe (*Sayornis nigricans*)
Say's Phoebe (*Sayornis saya*)
*Ash-throated Flycatcher (*Myiarchus cinerascens*)
Western Kingbird (*Tyrannus verticalis*)

FAMILY: ALAUDIDAE (Larks)

Horned Lark (*Eremophila alpestris*)

FAMILY: HIRUNDINIDAE (Swallows)
Tree Swallow (*Tachycineta bicolor*)
Violet-green Swallow (*Tachycineta thalassina*)
Cliff Swallow (*Hirundo pyrrhonota*)
Barn Swallow (*Hirundo rustica*)
FAMILY: CORVIDAE (Jays, Magpies, and Crows)
Yellow-billed Magpie (*Pica nuttallii*)
*American Crow (*Corvus brachyrhynchos*)
Common Raven (*Corvus corax*)
*Scrub Jay (*Aphelocoma coerulescens*)
FAMILY: PARIDAE (Titmice)
Oak Titmouse (*Parus inornatus*)
FAMILY: AEGITHALIDAE (Bushtit)
Bushtit (*Psaltriparus minimus*)
FAMILY: CERTHIIDAE (Creepers)
Brown Creeper (*Certhia americana*)
FAMILY: TROGLODYTIDAE (Wrens)
Bewick's Wren (*Thryomanes bewickii*)
House Wren (*Troglodytes aedon*)
Marsh Wren (*Cistothorus palustris*)
FAMILY: MUSCICAPIDAE (Old World Warblers, Gnatcatchers, Kinglets, Thrushes, Bluebirds, and Wrentit)
Golden-crowned Kinglet (*Regulus satrapa*)
Ruby-crowned Kinglet (*Regulus calendula*)
Blue-gray Gnatcatcher (*Polioptila caerulea*)
Western Bluebird (*Sialia mexicana*)
Mountain Bluebird (*Sialia currucoides*)
Hermit Thrush (*Catharus guttatus*)
*American Robin (*Turdus migratorius*)
Varied Thrush (*Ixoreus naevius*)

FAMILY: MIMIDAE (Mockingbirds and Thrashers)
*Northern Mockingbird (*Mimus polyglottos*)
Sage Thrasher (*Oreoscoptes montanus*)
California Thrasher (*Toxostoma redivivum*
FAMILY: MOTACILLIDAE (Wagtails and Pipits)
American Pipit (*Anthus rubescens*)
FAMILY: BOMBYCILLIDAE (Waxwings)
Cedar Waxwing (*Bombycilla cedrorum*)
FAMILY: LANIIDAE (Shrikes)
Loggerhead Shrike (*Lanius ludovicianus*)
FAMILY: STURNIDAE (Starlings)
European Starling (*Sturnus vulgaris*)
FAMILY: EMBERIZIDAE (Wood Warblers, Sparrows, Blackbirds and relatives)

Orange-crowned Warbler (*Vermivora celata*)
Common Yellowthroat (*Geothlypis trichas*)
*Black-headed Grosbeak (*Pheucticus melanocephalus*)
Blue Grosbeak (*Guiraca caerulea*)
Lazuli Bunting (*Passerina amoena*)
Rufous-sided Towhee (*Pipilo erythrophthalmus*)
California Towhee (*Pipilo crissalis*)
Chipping Sparrow (*Spizella passerina*)
Fox Sparrow (*Passerella iliaca*)
Song Sparrow (*Melospiza melodia*)
Lincoln's Sparrow (*Melospiza lincolnii*)
Golden-crowned Sparrow (*Zonotrichia atricapilla*)
White-crowned Sparrow (*Zonotrichia leucophrys*)
Dark-eyed Junco (*Junco hyemalis*)
*Red-winged Blackbird (*Agelaius phoeniceus*)
Tri-colored Blackbird (*Agelaius tricolor*)
Western Meadowlark (*Sturnella neglecta*)
Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)
*Brewer's Blackbird (*Euphagus cyanocephalus*)
Brown-headed Cowbird (*Molothrus ater*)
Hooded Oriole (*Icterus cucullatus*)
Northern Oriole (*Icterus galbula*)

FAMILY: FRINGILLIDAE (Finches)
House Finch (*Carpodacus mexicanus*)
Lesser Goldfinch (*Carduelis psaltria*)
American Goldfinch (*Carduelis tristis*)

FAMILY: PASSERIDAE (Old World Sparrows)
House Sparrow (*Passer domesticus*)

CLASS: MAMMALIA

ORDER: MARSUPIALIA (Opossums, Kangaroos, and Relatives)

FAMILY: DIDELPHIDAE (Opossums)
Virginia Opossum (*Didelphis virginiana*)

ORDER: INSECTIVORA (Shrews and Moles)

FAMILY: SORICIDAE (Shrews)
Ornate Shrew (*Sorex ornatus*)

FAMILY: TALPIDAE (Moles)
Broad-footed Mole (*Scapanus latimanus*)

ORDER: CHIROPTERA (Bats)

FAMILY: VESPERTILIONIDAE (Vespertilionid Bats)
Yuma Myotis (*Myotis yumanensis*)
Long-eared Myotis (*Myotis evotis*)
Fringed Myotis (*Myotis thysanodes*)
California Myotis (*Myotis californicus*)
Small-footed Myotis (*Myotis leibii*)
Silver-haired Bat (*Lasionycteris noctivagansi*)

Western Pipistrelle *(Pipistrellus herperus*)
Big Brown Bat (*Eptesicus fuscus*)
Hoary Bat (*Lasiurus cinereus*)
Spotted Bat (*Euderma maculatum*)
Pacific Big-eared Bat (*Plecotus toensedii*)
Pallid Bat (*Antrozous pallidus*)
Red Bat (*Lasiurus borealis*)

FAMILY: MOLOSSIDAE (Free-tailed Bat)

Brazilian Free-tailed Bat (*Tadarida brasiliensis*)
Western Mastiff Bat (*Eumops perotis*)

ORDER: LAGOMORPHA (Rabbits, Hares, and Pikas)

FAMILY: LEPORIDAE (Rabbits and Hares)

*Desert Cottontail (*Sylvilagus audubonii*)
Black-tailed Hare (*Lepus californicus*)

ORDER: RODENTIA (Squirrels, Rats, Mice, and Relatives)

FAMILY: SCIURIDAE (Squirrels, Chipmunks, and Marmots)

*California Ground Squirrel (*Spermophilus beecheyi*)

FAMILY: GEOMYIDAE (Pocket Gophers)

*Botta's Pocket Gopher (*Thomomys bottae*)

FAMILY: HETEROMYIDAE (Pocket Mice and Kangaroo Rats)

San Joaquin Pocket Mouse (*Perognathus inornatus*)
Heerman's Kangaroo Rat (*Dipodomys nitratoides*)

FAMILY: CRICETIDAE (Deer Mice, Voles, and Relatives)

Western Harvest Mouse (*Reithrodontomys megalotis*)
Deer Mouse (*Peromyscus maniculatus*)
California Vole (*Microtus californicus*)
Dusky-Footed Woodrat (*Neotoma fuscipes*)
Muskrat (*Ondatra zibethicus*)

FAMILY: MURIDAE (Old World Rats and Mice)

Black Rat (*Rattus rattus*)
House Mouse (*Mus musculus*)

ORDER: CARNIVORA (Carnivores)

FAMILY: CANIDAE (Foxes, Wolves, and Relatives)

*****Coyote (*Canis latrans*)
Grey fox (*Urocyon cinereoargentus*)
*Domestic Dog ()

FAMILY: PROCYONIDAE (Raccoons and Relatives)

*Raccoon (*Procyon lotor*)

FAMILY: MUSTELIDAE (Weasels, Badgers, and Relatives)

Striped Skunk (*Mephitis mephitis*)
Long-tailed Weasel (*Mustela frenata*)
Badger (*Taxidea taxus*)

FAMILY: FELIDAE (Cats)

Mountain Lion (*Felis concolor*)
Bobcat (*Lynx rufus*)
*Feral Cat (*Felis cattus*)

ORDER: ARTIODACTYLA (Even-toed Ungulates)
FAMILY: CERVIDAE (Deer, Elk, and Relatives)
*****Mule Deer (*Odocoileus hemionus*)

APPENDIX C: CONSERVATION GUIDELINES FOR THE VALLEY ELDERBERRY LONGHORN BEETLE (USFWS 1999)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
3310 El Camino Avenue, Suite 130
Sacramento, California 95821-6340

Conservation Guidelines for the Valley Elderberry Longhorn Beetle

9 July 1999

The following guidelines have been issued by the U.S. Fish and Wildlife Service (Service) to assist Federal agencies and non-federal project applicants needing incidental take authorization through a section 7 consultation or a section 10(a)(1)(B) permit in developing measures to avoid and minimize adverse effects on the valley elderberry longhorn beetle. The Service will revise these guidelines as needed in the future. The most recently issued version of these guidelines should be used in developing all projects and habitat restoration plans. The survey and monitoring procedures described below are designed to avoid any adverse effects to the valley elderberry longhorn beetle. Thus a recovery permit is not needed to survey for the beetle or its habitat or to monitor conservation areas. If you are interested in a recovery permit for research purposes please call the Service's Regional Office at (503) 231-2063.

BACKGROUND INFORMATION

The valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), was listed as a threatened species on August 8, 1980 (*Federal Register* 45: 52803-52807). This animal is fully protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). The valley elderberry longhorn beetle (beetle) is completely dependent on its host plant, elderberry (*Sambucus* species), which is a common component of the remaining riparian forests and adjacent upland habitats of California's Central Valley. Use of the elderberry by the beetle, a wood borer, is rarely apparent. Frequently, the only exterior evidence of the elderberry's use by the beetle is an exit hole created by the larva just prior to the pupal stage. The life cycle takes one or two years to complete. The animal spends most of its life in the larval stage, living within the stems of an elderberry plant. Adult emergence is from late March through June, about the same time the elderberry produces flowers. The adult stage is short-lived. Further information on the life history, ecology, behavior, and distribution of the beetle can be found in a report by Barr (1991) and the recovery plan for the beetle (USFWS 1984).

SURVEYS

Proposed project sites within the range of the valley elderberry longhorn beetle should be surveyed for the presence of the beetle and its elderberry host plant by a qualified biologist. The beetle's range extends throughout California's Central Valley and associated foothills from about the 3,000-foot elevation contour on the east and the watershed of the Central Valley on the west (Figure 1). All or portions of 31 counties are included: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Madera, Mariposa, Merced, Napa, Nevada, Placer, Sacramento, San Benito, San Joaquin, San Luis Obispo, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba.

If elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level occur on or adjacent to the proposed project site, or are otherwise located where they may be directly or indirectly affected by the proposed action, minimization measures which include planting replacement habitat (conservation planting) are required (Table 1).

All elderberry shrubs with one or more stems measuring 1.0 inch or greater in diameter at ground level that occur on or adjacent to a proposed project site must be thoroughly searched for beetle exit holes (external evidence of beetle presence). In addition, all elderberry stems one inch or greater in diameter at ground level must be tallied by diameter size class (Table 1). As outlined in Table 1, the numbers of elderberry seedlings/cuttings and associated riparian native trees/shrubs to be planted as replacement habitat are determined by stem size class of affected elderberry shrubs, presence or absence of exit holes, and whether a proposed project lies in a riparian or non-riparian area.

Elderberry plants with no stems measuring 1.0 inch or greater in diameter at ground level are unlikely to be habitat for the beetle because of their small size and/or immaturity. Therefore, no minimization measures are required for removal of elderberry plants with no stems measuring 1.0 inch or greater in diameter at ground level with no exit holes. Surveys are valid for a period of two years.

AVOID AND PROTECT HABITAT WHENEVER POSSIBLE

Project sites that do not contain beetle habitat are preferred. If suitable habitat for the beetle occurs on the project site, or within close proximity where beetles will be affected by the project, these areas must be designated as avoidance areas and must be protected from disturbance during the construction and operation of the project. When possible, projects should be designed such that avoidance areas are connected with adjacent habitat to prevent fragmentation and isolation of beetle populations. Any beetle habitat that cannot be avoided as described below should be considered impacted and appropriate minimization measures should be proposed as described below.

Avoidance: Establishment and Maintenance of a Buffer Zone

Complete avoidance (i.e., no adverse effects) may be assumed when a 100-foot (or wider) buffer is established and maintained around elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level. Firebreaks may not be included in the buffer zone. In buffer areas construction-related disturbance should be minimized, and any damaged area should be promptly restored following construction. The Service must be consulted before any disturbances within the buffer area are considered. In addition, the Service must be provided with a map identifying the avoidance area and written details describing avoidance measures.

Protective Measures

1. Fence and flag all areas to be avoided during construction activities. In areas where encroachment on the 100-foot buffer has been approved by the Service, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant.

2. Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.

3. Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must

not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.

4. Instruct work crews about the status of the beetle and the need to protect its elderberry host plant.

Restoration and Maintenance

1. Restore any damage done to the buffer area (area within 100 feet of elderberry plants) during construction. Provide erosion control and re-vegetate with appropriate native plants.

2. Buffer areas must continue to be protected after construction from adverse effects of the project. Measures such as fencing, signs, weeding, and trash removal are usually appropriate.

3. No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant should be used in the buffer areas, or within 100 feet of any elderberry plant with one or more stems measuring 1.0 inch or greater in diameter at ground level.

4. The applicant must provide a written description of how the buffer areas are to be restored, protected, and maintained after construction is completed.

5. Mowing of grasses/ground cover may occur from July through April to reduce fire hazard. No mowing should occur within five (5) feet of elderberry plant stems. Mowing must be done in a manner that avoids damaging plants (e.g., stripping away bark through careless use of mowing/trimming equipment).

TRANSPLANT ELDERBERRY PLANTS THAT CANNOT BE AVOIDED

Elderberry plants must be transplanted if they can not be avoided by the proposed project. All elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level must be transplanted to a conservation area (see below). At the Service's discretion, a plant that is unlikely to survive transplantation because of poor condition or location, or a plant that would be extremely difficult to move because of access problems, may be exempted from transplantation. In cases where transplantation is not possible the minimization ratios in Table 1 may be increased to offset the additional habitat loss.

Trimming of elderberry plants (e.g., pruning along roadways, bike paths, or trails) with one or more stems 1.0 inch or greater in diameter at ground level, may result in take of beetles. Therefore, trimming is subject to appropriate minimization measures as outlined in Table 1.

1. Monitor. A qualified biologist (monitor) must be on-site for the duration of the transplanting of the elderberry plants to insure that no unauthorized take of the valley elderberry longhorn beetle occurs. If unauthorized take occurs, the monitor must have the authority to stop work until corrective measures have been completed. The monitor must immediately report any unauthorized take of the beetle or its habitat to the Service and to the California Department of Fish and Game.

2. Timing. Transplant elderberry plants when the plants are dormant, approximately November through the first two weeks in February, after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the plant and increase transplantation success.

3. Transplanting Procedure.

   a. Cut the plant back 3 to 6 feet from the ground or to 50 percent of its height (whichever is taller) by removing branches and stems above this height. The trunk and all stems measuring 1.0 inch or greater in diameter at ground level should be replanted. Any leaves remaining on the plant should be removed.

   b. Excavate a hole of adequate size to receive the transplant.

   c. Excavate the plant using a Vemeer spade, backhoe, front end loader, or other suitable equipment, taking as much of the root ball as possible, and replant immediately at the conservation area. Move the plant only by the root ball. If the plant is to be moved and transplanted off site, secure the root ball with wire and wrap it with burlap. Dampen the burlap with water, as necessary, to keep the root ball wet. Do not let the roots dry out. Care should be taken to ensure that the soil is not dislodged from around the roots of the transplant. If the site receiving the transplant does not have adequate soil moisture, pre-wet the soil a day or two before transplantation.

   d. The planting area must be at least 1,800 square feet for each elderberry transplant. The root ball should be planted so that its top is level with the existing ground. Compact the soil sufficiently so that settlement does not occur. As many as five (5) additional elderberry plantings (cuttings or seedlings) and up to five (5) associated native species plantings (see below) may also be planted within the 1,800 square foot area with the transplant. The transplant and each new planting should have its own watering basin measuring at least three (3) feet in diameter. Watering basins should have a continuous berm measuring approximately eight (8) inches wide at the base and six (6) inches high.

   e. Saturate the soil with water. Do not use fertilizers or other supplements or paint the tips of stems with pruning substances, as the effects of these compounds on the beetle are unknown.

   f. Monitor to ascertain if additional watering is necessary. If the soil is sandy and well-drained, plants may need to be watered weekly or twice monthly. If the soil is clayey and poorly-drained, it may not be necessary to water after the initial saturation. However, most transplants require watering through the first summer. A drip watering system and timer is ideal. However, in situations where this is not possible, a water truck or other apparatus may be used.

PLANT ADDITIONAL SEEDLINGS OR CUTTINGS

Each elderberry stem measuring 1.0 inch or greater in diameter at ground level that is adversely affected (i.e., transplanted or destroyed) must be replaced, in the conservation area, with elderberry seedlings or cuttings at a ratio ranging from 1:1 to 8:1 (new plantings to affected stems). Minimization

ratios are listed and explained in Table 1. Stock of either seedlings or cuttings should be obtained from local sources. Cuttings may be obtained from the plants to be transplanted if the project site is in the vicinity of the conservation area. If the Service determines that the elderberry plants on the proposed project site are unsuitable candidates for transplanting, the Service may allow the applicant to plant seedlings or cuttings at higher than the stated ratios in Table 1 for each elderberry plant that cannot be transplanted.

PLANT ASSOCIATED NATIVE SPECIES

Studies have found that the beetle is more abundant in dense native plant communities with a mature overstory and a mixed understory. Therefore, a mix of native plants associated with the elderberry plants at the project site or similar sites will be planted at ratios ranging from 1:1 to 2:1 [native tree/plant species to each elderberry seedling or cutting (see Table 1)]. These native plantings must be monitored with the same survival criteria used for the elderberry seedlings (see below). Stock of saplings, cuttings, and seedlings should be obtained from local sources. If the parent stock is obtained from a distance greater than one mile from the conservation area, approval by the Service of the native plant donor sites must be obtained prior to initiation of the revegetation work. Planting or seeding the conservation area with native herbaceous species is encouraged. Establishing native grasses and forbs may discourage unwanted non-native species from becoming established or persisting at the conservation area. Only stock from local sources should be used.

Examples

Example 1

The project will adversely affect beetle habitat on a vacant lot on the land side of a river levee. This levee now separates beetle habitat on the vacant lot from extant Great Valley Mixed Riparian Forest (Holland 1986) adjacent to the river. However, it is clear that the beetle habitat located on the vacant lot was part of a more extensive mixed riparian forest ecosystem extending farther from the river's edge prior to agricultural development and levee construction. Therefore, the beetle habitat on site is considered riparian. A total of two elderberry plants with at least one stem measuring 1.0 inch or greater in diameter at ground level will be affected by the proposed action. The two plants have a total of 15 stems measuring over 1.0 inch. No exit holes were found on either plant. Ten of the stems are between 1.0 and 3.0 inches in diameter and five of the stems are greater than 5.0 inches in diameter. The conservation area is suited for riparian forest habitat. Associated natives adjacent to the conservation area are box elder (*Acer negundo californica*), walnut (*Juglans californica* var. *hindsii*), sycamore (*Platanus racemosa*), cottonwood (*Populus fremontii*), willow (*Salix gooddingii* and *S. laevigata*), white alder (*Alnus rhombifolia*), ash (*Fraxinus latifolia*), button willow (*Cephalanthus occidentalis*), and wild grape (*Vitis californica*).

Minimization (based on ratios in Table 1):

- Transplant the two elderberry plants that will be affected to the conservation area.
- Plant 40 elderberry rooted cuttings (10 affected stems compensated at 2:1 ratio and 5 affected stems compensated at 4:1 ratio, cuttings planted:stems affected)
- Plant 40 associated native species (ratio of associated natives to elderberry plantings is 1:1 in areas with no exit holes):
  5 saplings each of box elder, sycamore, and cottonwood

5 willow seedlings
5 white alder seedlings
5 saplings each of walnut and ash
3 California button willow
2 wild grape vines
Total: 40 associated native species

• Total area required is a minimum of 1,800 sq. ft. for one to five elderberry seedlings and up to 5 associated natives. Since, a total of 80 plants must be planted (40 elderberries and 40 associated natives), a total of 0.33 acre (14,400 square feet) will be required for conservation plantings. The conservation area will be seeded and planted with native grasses and forbs, and closely monitored and maintained throughout the monitoring period.

Example 2
The project will adversely affect beetle habitat in Blue Oak Woodland (Holland 1986). One elderberry plant with at least one stem measuring 1.0 inch or greater in diameter at ground level will be affected by the proposed action. The plant has a total of 10 stems measuring over 1.0 inch. Exit holes were found on the plant. Five of the stems are between 1.0 and 3.0 inches in diameter and five of the stems are between 3.0 and 5.0 inches in diameter. The conservation area is suited for elderberry savanna (non-riparian habitat). Associated natives adjacent to the conservation area are willow (*Salix* species), blue oak (*Quercus douglasii*), interior live oak (*Q. wislizenii*), sycamore, poison oak (*Toxicodendron diversilobum*), and wild grape.

Minimization (based on ratios in Table 1):

• Transplant the one elderberry plant that will be affected to the conservation area.

• Plant 30 elderberry seedlings (5 affected stems compensated at 2:1 ratio and 5 affected stems compensated at 4:1 ratio, cuttings planted:stems affected)

• Plant 60 associated native species (ratio of associated natives to elderberry plantings is 2:1 in areas with exit holes):
20 saplings of blue oak, 20 saplings of sycamore, and 20 saplings of willow, and seed and plant with a mixture of native grasses and forbs

• Total area required is a minimum of 1,800 sq. ft. for one to five elderberry seedlings and up to 5 associated natives. Since, a total of 90 plants must be planted (30 elderberries and 60 associated natives), a total of 0.37 acre (16,200 square feet) will be required for conservation plantings. The conservation area will be seeded and planted with native grasses and forbs, and closely monitored and maintained throughout the monitoring period.

CONSERVATION AREA—PROVIDE HABITAT FOR THE BEETLE IN PERPETUITY

The conservation area is distinct from the avoidance area (though the two may adjoin), and serves to receive and protect the transplanted elderberry plants and the elderberry and other native plantings. The Service may accept proposals for off-site conservation areas where appropriate.

1. Size. The conservation area must provide at least 1,800 square feet for each transplanted elderberry plant. As many as 10 conservation plantings (i.e., elderberry cuttings or seedlings and/or associated native plants) may be planted within the 1800 square foot area with each transplanted elderberry. An additional 1,800 square feet shall be provided for every additional 10 conservation plants. Each planting should have its own watering basin measuring approximately three feet in diameter. Watering basins should be constructed with a continuous berm measuring approximately eight inches wide at the base and six inches high.

   The planting density specified above is primarily for riparian forest habitats or other habitats with naturally dense cover. If the conservation area is an open habitat (i.e., elderberry savanna, oak woodland) more area may be needed for the required plantings. Contact the Service for assistance if the above planting recommendations are not appropriate for the proposed conservation area.

   No area to be maintained as a firebreak may be counted as conservation area. Like the avoidance area, the conservation area should connect with adjacent habitat wherever possible, to prevent isolation of beetle populations.

   Depending on adjacent land use, a buffer area may also be needed between the conservation area and the adjacent lands. For example, herbicides and pesticides are often used on orchards or vineyards. These chemicals may drift or runoff onto the conservation area if an adequate buffer area is not provided.

2. Long-Term Protection. The conservation area must be protected in perpetuity as habitat for the valley elderberry longhorn beetle. A conservation easement or deed restrictions to protect the conservation area must be arranged. Conservation areas may be transferred to a resource agency or appropriate private organization for long-term management. The Service must be provided with a map and written details identifying the conservation area; and the applicant must receive approval from the Service that the conservation area is acceptable prior to initiating the conservation program. A true, recorded copy of the deed transfer, conservation easement, or deed restrictions protecting the conservation area in perpetuity must be provided to the Service before project implementation.

   Adequate funds must be provided to ensure that the conservation area is managed in perpetuity. The applicant must dedicate an endowment fund for this purpose, and designate the party or entity that will be responsible for long-term management of the conservation area. The Service must be provided with written documentation that funding and management of the conservation area (items 3-8 above) will be provided in perpetuity.

3. Weed Control. Weeds and other plants that are not native to the conservation area must be removed at least once a year, or at the discretion of the Service and the California Department of Fish and Game. Mechanical means should be used; herbicides are prohibited unless approved by the Service.

4. Pesticide and Toxicant Control. Measures must be taken to insure that no pesticides, herbicides, fertilizers, or other chemical agents enter the conservation area. No spraying of these agents must be done within one 100 feet of the area, or if they have the potential to drift, flow, or be washed into the area in the opinion of biologists or law enforcement personnel from the Service or the California Department of Fish and Game.

5. Litter Control. No dumping of trash or other material may occur within the conservation area. Any trash or other foreign material found deposited within the conservation area must be removed within 10 working days of discovery.

6. Fencing. Permanent fencing must be placed completely around the conservation area to prevent unauthorized entry by off-road vehicles, equestrians, and other parties that might damage or destroy the habitat of the beetle, unless approved by the Service. The applicant must receive written approval from the Service that the fencing is acceptable prior to initiation of the conservation program. The fence must be maintained in perpetuity, and must be repaired/replaced within 10 working days if it is found to be damaged. Some conservation areas may be made available to the public for appropriate recreational and educational opportunities with written approval from the Service. In these cases appropriate fencing and signs informing the public of the beetle's threatened status and its natural history and ecology should be used and maintained in perpetuity.

7. Signs. A minimum of two prominent signs must be placed and maintained in perpetuity at the conservation area, unless otherwise approved by the Service. The signs should note that the site is habitat of the federally threatened valley elderberry longhorn beetle and, if appropriate, include information on the beetle's natural history and ecology. The signs must be approved by the Service. The signs must be repaired or replaced within 10 working days if they are found to be damaged or destroyed.

MONITORING

The population of valley elderberry longhorn beetles, the general condition of the conservation area, and the condition of the elderberry and associated native plantings in the conservation area must be monitored over a period of either ten (10) consecutive years or for seven (7) years over a 15-year period. The applicant may elect either 10 years of monitoring, with surveys and reports every year; or 15 years of monitoring, with surveys and reports on years 1, 2, 3, 5, 7, 10, and 15. The conservation plan provided by the applicant must state which monitoring schedule will be followed. No change in monitoring schedule will be accepted after the project is initiated. If conservation planting is done in stages (i.e., not all planting is implemented in the same time period), each stage of conservation planting will have a different start date for the required monitoring time.

Surveys. In any survey year, a minimum of two site visits between February 14 and June 30 of each year must be made by a qualified biologist. Surveys must include:

1. A population census of the adult beetles, including the number of beetles observed, their condition, behavior, and their precise locations. Visual counts must be used; mark-recapture or other methods involving handling or harassment must not be used.

2. A census of beetle exit holes in elderberry stems, noting their precise locations and estimated ages.

3. An evaluation of the elderberry plants and associated native plants on the site, and on the conservation area, if disjunct, including the number of plants, their size and condition.

4. An evaluation of the adequacy of the fencing, signs, and weed control efforts in the avoidance and conservation areas.

5. A general assessment of the habitat, including any real or potential threats to the beetle and its host plants, such as erosion, fire, excessive grazing, off-road vehicle use, vandalism, excessive weed growth, etc.

The materials and methods to be used in the monitoring studies must be reviewed and approved by the Service. All appropriate Federal permits must be obtained prior to initiating the field studies.

Reports. A written report, presenting and analyzing the data from the project monitoring, must be prepared by a qualified biologist in each of the years in which a monitoring survey is required. Copies of the report must be submitted by December 31 of the same year to the Service (Chief of Endangered Species, Sacramento Fish and Wildlife Office), and the Department of Fish and Game (Supervisor, Environmental Services, Department of Fish and Game, 1416 Ninth Street, Sacramento, California 95814; and Staff Zoologist, California Natural Diversity Data Base, Department of Fish and Game, 1220 S Street, Sacramento, California 95814). The report must explicitly address the status and progress of the transplanted and planted elderberry and associated native plants and trees, as well as any failings of the conservation plan and the steps taken to correct them. Any observations of beetles or fresh exit holes must be noted. Copies of original field notes, raw data, and photographs of the conservation area must be included with the report. A vicinity map of the site and maps showing where the individual adult beetles and exit holes were observed must be included. For the elderberry and associated native plants, the survival rate, condition, and size of the plants must be analyzed. Real and likely future threats must be addressed along with suggested remedies and preventative measures (e.g. limiting public access, more frequent removal of invasive non-native vegetation, etc.).

A copy of each monitoring report, along with the original field notes, photographs, correspondence, and all other pertinent material, should be deposited at the California Academy of Sciences (Librarian, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118) by December 31 of the year that monitoring is done and the report is prepared. The Service's Sacramento Fish and Wildlife Office should be provided with a copy of the receipt from the Academy library acknowledging receipt of the material, or the library catalog number assigned to it.

Access. Biologists and law enforcement personnel from the California Department of Fish and Game and the Service must be given complete access to the project site to monitor transplanting activities. Personnel from both these agencies must be given complete access to the project and the conservation area to monitor the beetle and its habitat in perpetuity.

SUCCESS CRITERIA

A minimum survival rate of at least 60 percent of the elderberry plants and 60 percent of the associated native plants must be maintained throughout the monitoring period. Within one year of discovery that survival has dropped below 60 percent, the applicant must replace failed plantings to bring survival above this level. The Service will make any determination as to the applicant's replacement responsibilities arising from circumstances beyond its control, such as plants damaged or killed as a result of severe flooding or vandalism.

SERVICE CONTACT

These guidelines were prepared by the Endangered Species Division of the Service's Sacramento Fish and Wildlife Office. If you have questions regarding these guidelines or to request a copy of the most recent guidelines, telephone (916) 414-6600 **after August 5, 1999**, or write to:

U.S. Fish and Wildlife Service
Ecological Services
2800 Cottage Way, W-2605
Sacramento, CA 95825

LITERATURE CITED

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USFWS. 1984. Recovery plan for the valley elderberry longhorn beetle. U.S. Fish and Wildlife Service, Endangered Species Program; Portland, Oregon.

Figure 1: Range of the Valley Elderberry Longhorn Beetle

Table 1: Minimization ratios based on location (riparian vs. non-riparian), stem diameter of affected elderberry plants at ground level, and presence or absence of exit holes.

Location	Stems (maximum diameter at ground level)	Exit Holes Y/N (quantify)	Elderberry Seedling Ratio[1]	Associated Native Plant Ratio[2]
non-riparian	stems ≥ 1" & ≤ 3"	No:	1:1	1:1
		Yes:	2:1	2:1
non-riparian	stems > 3" & < 5"	No:	2:1	1:1
		Yes:	4:1	2:1
non-riparian	stems ≥ 5"	No:	3:1	1:1
		Yes:	6:1	2:1
riparian	stems ≥ 1" & ≤ 3"	No:	2:1	1:1
		Yes:	4:1	2:1
riparian	stems > 3" & < 5"	No:	3:1	1:1
		Yes:	6:1	2:1
riparian	stems ≥ 5"	No:	4:1	1:1
		Yes:	8:1	2:1

[1] Ratios in the *Elderberry Seedling Ratio* column correspond to the number of cuttings or seedlings to be planted per elderberry stem (one inch or greater in diameter at ground level) affected by a project.

[2] Ratios in the *Associated Native Plant Ratio* column correspond to the number of associated native species to be planted per elderberry (seedling or cutting) planted.

APPENDIX D: SELECTED PHOTOGRAPHS OF THE STUDY AREA

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

APPENDIX E: COMMENT LETTER, USFWS FILE # 1-1-02-TA-2957
RESPONSIBLE AGENCY REVIEW OF DRAFT ENVIRONMENTAL ASSESSMENT,
SCOUT ISLAND EDUCATIONAL FACILITY

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W2605
Sacramento, California 95825

IN REPLY REFER TO:
1-1-02-TA-2957

August 26, 2002

Jamie Perry
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, California 93721-2000

Subject: Responsible Agency Review of Draft Environmental Assessment No. 2002-01, Mitigated Negative Declaration and Draft Initial Study for Scout Island Outdoor Educational Center along the San Joaquin River in Fresno County

Dear Mr. Perry:

Thank you for providing an opportunity to the U.S. Fish and Wildlife Service (Service) to review the Draft Environmental Assessment for the proposed Scout Island Outdoor Educational Center along the San Joaquin River in Fresno County. The Environmental Assessment was received in our office on August 12, 2002. The proposed project will improve existing facilities in order to establish an outdoor educational facility for use by Fresno County school children and the San Joaquin River Parkway Trust patrons and their children. Proposed improvements include development of parking areas, restroom facilities, fencing, ropes course, outdoor classroom, planting of native shade trees, noxious weed control, and stream channel enhancement. Existing roads and trails (including seven bridge crossings) will also be improved to provide better access.

Surveys of the project site conducted by Live Oak Associates found blue elderberry (*Sambucus mexicana*) on the property. The elderberry shrub is a requisite host plant of the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*, beetle), a species listed as threatened under the Endangered Species Act of 1973, as amended (Act). The beetle has been found along the San Joaquin River downstream of Millerton Lake. The project site also may provide habitat to the golden eagle (*Aquila chrysaetos*), and other raptors protected under the Migratory Bird Treaty Act. Based on the project description as described in the Environmental Assessment, the Service believes that potential effects to the beetle can be minimized, or avoided entirely. The Service is providing the following guideline to assist the planning and design of the Education Center.

(1) To assess potential effects to the elderberry, the location of all elderberry shrubs with stems one inch or greater at ground level at the project site should be mapped.

(2) To avoid potential "take" of the valley elderberry longhorn beetle, no construction should occur within **100** feet of any elderberry shrub's dripline. With full compliance with this avoidance measure, no further consultation pursuant to the Act will be required for the proposed project.

(3) If all elderberry shrubs with stems one (1) inch in diameter or greater cannot be avoided by 100 feet, a biologist should survey each elderberry shrub directly or indirectly affected by the proposed project as per the 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle. Further consultation pursuant to the Act would also be

Longhorn Beetle. Further consultation pursuant to the Act would also be required if the shrubs cannot be fully avoided. If a section 404 permit is needed for the project, incidental take authorization for the beetle may be obtained through a section 7 formal consultation between the Army Corps of Engineers and the Service.

(4) Dust control measures proposed by the project would minimize effects to the beetles, however, no chemicals should be applied within 100 feet of elderberry shrubs, particularly from March 15 to June 30, when adults are foraging on elderberry flowers. Similarly, herbicides to control noxious weeds should only be applied between July and February within 100 feet of the shrubs. No herbicides should be used within 20 feet of the shrubs.

The Service believes that the proposed project has potential to benefit the valley elderberry longhorn beetle and other listed species in the long term. The Environmental Assessment discusses development of an elderberry enhancement area to educate the public on valley elderberry longhorn beetles. Other activities that can be incorporated into the project include planting of additional elderberry shrubs and associated vegetation, incorporating the valley elderberry longhorn beetle into classroom curriculums, and using the elderberry enhancement area as an outdoor classroom site. The Service looks forward to working with the Fresno County Office of Education in the development of a facility and program that will foster the environmental awareness of our next generation.

If you have any questions regarding the contents of this letter or need further assistance, please contact Nancy Pau or Susan Jones of my staff at the address above, or at (916) 414-6630.

Sincerely,

Jan C. Knight
Chief, Endangered Species Division

cc:
California Department of Fish and Game, Fresno, CA (Attn: Donna Daniels)
Army Corps of Engineers, Sacramento, CA (Attn: Paul Maniccia)

Donna Daniels
California Department of Fish and Game
San Joaquin Valley and Southern Sierra Region
1234 East Shaw Avenue
Fresno, CA 93710

Paul Maniccia
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

SIERRA VALLEY CULTURAL PLANNING

A CULTURAL RESOURCES SURVEY FOR THE PROPOSED 80-ACRE SCOUT ISLAND OUTDOOR EDUCATION SITE, CITY OF FRESNO, CALIFORNIA

Prepared by:

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Submitted to:

Jamie D. Perry, Facilities Manager
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, CA 93721-2000
(559) 497-3721

9 September 2001

Topographic Quadrangle: Fresno North, Calif., 7.5' (1965);
Area: 80 acres (32.4 ha)

(Keywords: *Fresno County, Township 12S, Range 19E, Scout Island, San Joaquin River, Fresno Beach, Fresno Traction Company, Wishon Avenue Line, River View Park)*

MANAGEMENT SUMMARY

On August 27, 2001, an archaeological survey was performed of approximately 80 acres (32.4 ha) (Project Study Area), located in the San Joaquin Riverbottom in the extreme northerly sector of the City of Fresno, Fresno County, California. The Fresno County Office of Education (FCOE) plans to develop the parcel as an outdoor educational facility. The Project Study Area extends south from the San Joaquin River and is bounded on the remaining sides by the San Joaquin Country Club and the Fig Garden Golf Course (Township 12S, Range 19E, Section 25, MDB&M; see Figure 1). The archaeological survey was performed at the request of Ms. Jamie D. Perry, Facilities Manager for the FCOE. The FCOE will use the results of this study in an environmental review of the proposed outdoor education facility. Identification of historic properties is required pursuant to guidelines set forth in the California Environmental Quality Act.

No cultural resources were identified as a result of surface inspection of the Project Study Area; thus, it is unlikely that the proposed Project will have an effect on important archaeological or other cultural resources. No further archaeological investigation is therefore recommended.

Site development plans call for landscape/resource enhancement. Many native species found in riparian contexts are of importance to Native American peoples in the production of basketry and other cultural items. It is recommended that revegetation of the Outdoor Education Facility be done in consultation with representatives from Table Mountain Rancheria.

In the unlikely event that buried archaeological deposits are encountered during Project-related activities, work in the immediate vicinity of the discovery should cease until the finds have been evaluated by a qualified archaeologist. Should human remains be encountered within the Project area, the County Coroner should be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission should be contacted as well.

1.0 INTRODUCTION

This report presents the findings of an archaeological survey of a approximately 80.0-acre (32.4 ha) parcel (Project Study Area) located in the San Joaquin Riverbottom in the extreme northerly sector of the City of Fresno, Fresno, County, California. The Fresno County Office of Education (FCOE) plans to develop the parcel as an outdoor educational facility. The Project Study Area extends south from the San Joaquin River and is bounded on the remaining sides by the San Joaquin Country Club and the Fig Garden Gold Course (Township 12S, Range 19E, Section 25, MDB&M; see Figure 1). The archaeological survey was performed at the request of Ms. Jamie D. Perry, Facilities Manager for the FCOE. The FCOE will use the results of this study in an environmental review of the proposed outdoor education facility. Identification of historic properties is required pursuant to guidelines set forth in the California Environmental Quality Act. No previous cultural resources have been recorded within or in the immediate vicinity of the Project Study Area, nor have any previous cultural resources studies been conducted within the study sites. One archaeological site and one ethnographic village have been documented within one mile of the Project Study Area.

The author conducted an archaeological survey of the Project Study Area on August 27, 2001. No cultural resources were identified as a result of surface inspection of the Project Study Area.

A brief description of the natural and cultural setting of the Project Study Area follows this introduction. Survey methods and findings are presented in the subsequent section.

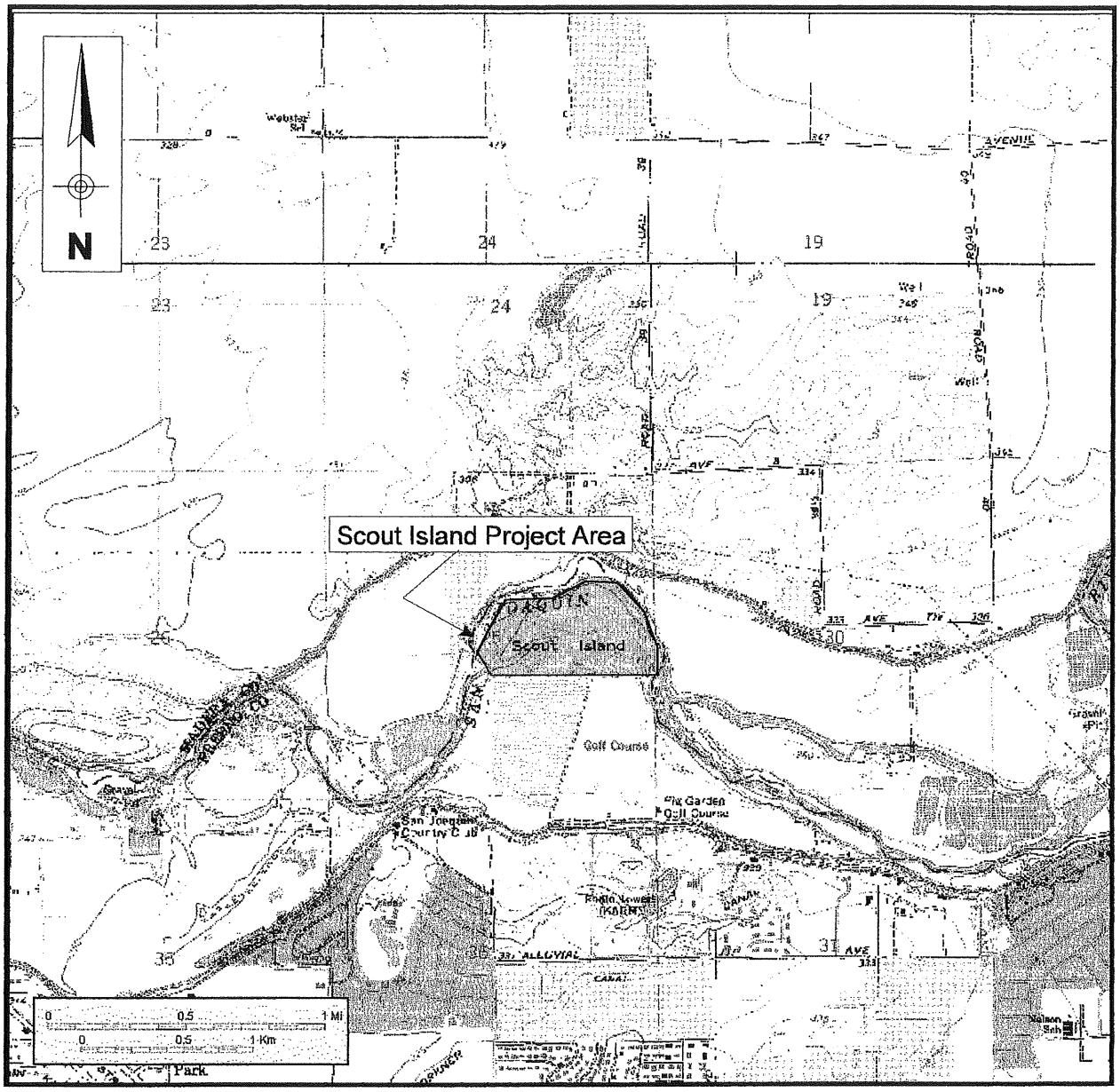

Figure 1. Location of Project Study Area, T12S / R19 E, Section 25, Fresno, North, Calif., 7.5' USGS topographic quadrangle (1965).

2.0 SETTING

Extensive ground disturbance has occurred throughout most of the area due to road construction, irrigation, recreation activities, and agricultural improvements. A portion of the property has been improved with a farmstead consisting of a barn/storage building, single family residence, a storage barn, and a pole barn. The barn/storage building is a converted carriage house which was remodeled into an office with an attached shop and canopy. The single-family residence was constructed in the 1920s. It originally consisted of a single bedroom, living area, and kitchen. It has since been extensively modified to include two bedrooms, a kitchen area, a living room, a den, and a single bathroom. A metal carport is attached to the residence structure. Other miscellaneous improvements include driveways and parking area, landscaping. There are several concrete slab areas located on the property which are the remnants of former improvements. The property has most recently been used as a camp by the Boy Scouts. A single road (Boy Scout Road) provides access to the property from Van Ness Avenue extension.

2.1 Natural Environment

The Project Study Area is located in the northerly sector of the City of Fresno adjacent to the San Joaquin River, at an elevation of community of Friant, approximately 1 mi southwest of the Friant Dam in eastern/central Fresno County, at an average elevation of 255 ft (78 m) above sea level. Topography ranges from level to gently rolling. Native vegetation most likely consisted of climax stands of perennial bunchgrasses, such as purple needlegrass, and scattered oaks, with mixed riparian habitat along the San Joaquin River to the north, and annual species on drier alluvial terraces above the floodplain. Present vegetation in the Project Study Area is dominated by non-native grasses and forbes including Spanish clover (*Lotus purshianus*), turkey mullein (*Eremocarpus serigerus*), prickly lettuce (*Lactuca serriola*), ripgut (*Bromus diandrus*), and wild oat (*Avena fatua*); wild tobacco also grows within the area. Overstory species include native oaks and sycamores as well as non-native redgum eucalyptus trees and other exotic ornamental species. Soils within the study area grade between sandy loams and loamy sand.

Prior to EuroAmerican exploration and settlement in the region, the central San Joaquin Valley was an extensive grassland covered with spring-flowering herbs. Stands of trees -- sycamore, cottonwoods, and willows -- lined the stream and river courses with groves of valley oaks in well-watered localities with rich soil. Rivers yielded fish, mussels, and pond turtles; migratory waterfowl nested in the dense tules along the river sloughs downstream. Tule elk, sometimes referred to by early Spanish explorers as wild horses, found ample forage. Smaller mammals and birds, including jackrabbits, ground squirrels, and quail were abundant. Native Americans occupants of the region describe abundant sedge beds, along with rich areas of deer grass, plants that figure prominently in the construction of Native American basketry items.

2.2 Ethnographic Summary

Prior to EuroAmerican settlement, most of the San Joaquin Valley and the bordering foothills of the Sierra Nevada and Diablo Range were inhabited by speakers of Yokutsan languages. The bulk of the Valley Yokuts people lived on the eastern side of the San Joaquin River. The Project Study Area falls within *Pitkachi* Yokuts territory. The *Pitkachi,* a northern valley Yokuts tribelet, occupied the southern side of the San Joaquin River extending up and down river from the town

of Herndon. The *Hoyima (Hojumne)* occupied the north side of the San Joaquin. The *Wakichi* were present upstream on the San Joaquin at the town of Friant. The*Pitkachi* village of *Kohuou* was located in the vicinity of the town of Herndon (Kroeber 1925). The *Hojumne* village of *Attabau*, located in Madera County north of the San Joaquin River is situated within one mile of the Project Study Area (Latta 1977).

Numerous accounts of Valley Yokuts lifeways offer details of pre-European land use in the San Joaquin Valley. The reader is referred to Gayton (1948), Kroeber (1925), Latta (1977), and Wallace (1978) for additional information on pre-contact Yokuts subsistence and culture.

2.3 Historic Period Summary

The San Joaquin River area was visited in the early 1800s by Spanish expeditions exploring the interior in search of potential mission sites. The Pico (1926) and Rodriguez (1828) expeditions may have passed through Pitkachi territory. In 1832-33 Colonel Jose J. Warner, a member of the Ewing-Young trapping expedition, passed through the San Joaquin Valley, crossing the San Joaquin River near the Project area. Warner described Native villages densely packed along the San Joaquin, from the foothills down into the slough area. The next year he revisited the area following a devastating malaria epidemic. Whereas the previous year the region had been densely occupied by Native peoples, during this trip not more than five Indians were observed between the head of the Sacramento Valley and the Kings River (Pillipes 1993:94).

EuroAmerican settlement of the region began in 1851 with the establishment of Fort Miller on the San Joaquin River. Hostilities between Native inhabitants and American settlers initially prevented widespread settlement of the region; however, by 1860 such threats had been reduced and settlers began taking up large tracts in the region.

The settlement of the City of Fresno in the 1870s concentrated population several miles south of the San Joaquin River, but the arrival of electric power and the street railway system brought Fresnans north in 1914 when the Fresno Traction Company extended the Wishon Avenue line to the San Joaquin River to a newly constructed recreation park called River View Park, commonly referred to as Fresno Beach. The cost of a round-trip ticket from downtown Fresno to Fresno Beach was 50 cents. The one-way distance was 11.18 miles (Temple 1986:251-252). In 1914 a merry-go-round was moved to the Fresno Beach area and a dance hall was constructed among other buildings. Scattered concrete foundation remains of some of these structures are present within the Project Area. Recent flooding, however, has altered the river course and former beach area. The arrival of the family automobile spelled the end of the line for River View Park and Fresno Beach. People were now free to travel to more distant locales and the San Joaquin River park lost its appeal. Streetcar service was discontinued in 1930. The property was later purchased by William Whitehurst (father of former Fresno mayor Dan Whitehurst), and has been used in the recent past as a camp area for the Boy Scouts of America (from thus the name, Scout Island).

2.4 Record Search Results

Prior to field inspection, a record search was conducted with the Southern San Joaquin Valley Information Center of the California Historical Resources Information System to identify areas previously surveyed and identify known cultural resources present within or in close proximity to the project area (Attachment 1). According to the Information Center records, therre have been no previous cultural resource studies conducted within the Project area. There have been four

surveys conducted within a one-mi radius of the Project area (California State University, Fresno, n.d.; Lopez 1979; Sheets 1973; Starkweather 1974). While there are no recorded archaeological sites within the project area, one archaeological, CA-FRE-775, site has been identified within a mile of the project area (see Attachment 1). One ethnographic village site has been identified within a one-mi radius of the Project area (the *Hojumne* village of *Attabau*; Latta 1977:161).

There are no resources within or immediately adjacent to the Project area that are listed on the National Register of Historic Places, California Points of Historical Interest, California State Historic Landmarks, nor the California Inventory of Historic Resources.

3.0 METHODS AND FINDINGS

On August 27, 2001, the author conducted an archaeological survey of the Project Study Area. Surface visibility was partially limited due to riparian vegetation and landscaping within portions of the study area, although the majority of surface was open and easily inspected for evidence of archaeological deposits and other cultural resources. No archaeological deposits or isolated finds of were identified during the archaeological survey. No plant resources of potential value for Native Americans such as sedge or deer grass, which are of importance in the traditional methods of basketry construction, were observed in the surveyed area. Although structures of historic age are present within the Project Study Area, they have been greatly modified and lack integrity of architectural style and are thus ineligible for listing on the California State Register of Historic Places.

Based on the lack of surface evidence of cultural resources within the Project area, it is unlikely that development of the proposed FCOE outdoor education facility will have an effect on important archaeological or other cultural resources. Therefore, no further cultural resource investigation is recommended at this time.

Site development plans call for landscape/resource enhancement. Many native species found in riparian contexts are of importance to Native American peoples in the production of basketry and other cultural items. It is recommended that revegetation of the Outdoor Education Facility be done in consultation with representatives from Table Mountain Rancheria. Native American plant use can be incorporated into educational studies and provide a rich resource of information concerning human adaptive responses to and manipulation of the environment.

In the unlikely event that unanticipated buried archaeological deposits are encountered during Project-related activities, work in the immediate vicinity of the discovery should cease until the finds can be evaluated by a qualified archaeologist. Should human remains be encountered within the Project area, the County Coroner should be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission should be contacted as well.

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1977 *Handbook of Yokuts Indians.* Bear State Books, Santa Cruz, CA.

Lopez, Conrad
1979 Archaeological Reconnaissance for the Fresno Metropolitan Flood Control District. Laboratory of Anthropology, CSU Fresno, Fresno, CA. File No. FR-533.

Phillips, G. H.
1993 *Indians and Intruders in Central California, 1769-1849.* University of Oklahoma Press, Norman.

Sheets, Payson
1973 The Archaeological Survey of Tract 2444. Laboratory of Anthropology, CSU Fresno, Fresno, CA. File No. FR-702.

Starkweather, Jeri A.
1974 An Archaeological Survey of the O'Neill Property of Bullard Lands Irrigated Subdivision No. 8, Tract No. 2577. Laboratory of Anthropology, CSU Fresno, Fresno, CA. File No. FR-707.

Temple, Bobbye Sisk (editor)
1986 Fresno County in the 20th Century, From 1900 to the 1980s. Panorama West Books, Fresno, CA.

Wallace, William J.
1978 Northern Valley Yokuts. In Handbook of North American Indians, vol. 8, *California*, edited by R. F. Heizer, pp. 462-470. Smithsonian Institution, Washington, D.C.

Attachment 1:

Cultural Resources Records Search,
Southern San Joaquin Valley Information Center
of the California Historical Resources
Information System (RS# 01-386)

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

FRESNO
KERN
KINGS
MADERA
TULARE

Southern San Joaquin Valley Information Center
California State University, Bakersfield
9001 Stockdale Highway
Bakersfield, California 93311-1099
661/664-2289 FAX 661/664-2415
E-mail: sbaldwin@csubak.edu

TO: C. Kristina Roper (RS# 01-386)
Sierra Valley Cultural Planning
42181 Mynatt Drive
Three Rivers, CA 93271

DATE: August 29, 2001

PRIORITY

RE: Office of Education Scout Island Project

County: Fresno

Map(s): Fresno North 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The Southern San Joaquin Valley Information Center is under contract to the State Office of Historic Preservation and is responsible for the local management of the California Historical Resources Inventories. The following are the results of a search of the cultural resources site files at the IC. These files include known and recorded archaeological and historic sites, inventory and excavation reports filed with this office, and properties listed on the National Register of Historic Places, the California Historical Landmarks, The California Inventory of Historic Resources, and The California Points of Historical Interest.

PRIOR CULTURAL RESOURCE INVENTORIES WITHIN THE PROJECT CORRIDOR

According to the information in our files, there have been no previous cultural resource studies conducted within the project area. There have been four surveys conducted within a one-radius, FR-87, 533, 702 & 707, Surveys are plotted on the enclosed map and report title pages are provided.

PRIORITY

PRIORITY

(RS# 01-386)

KNOWN CULTURAL RESOURCES WITHIN THE PROJECT CORRIDOR

There are no recorded cultural resources within the project study area, and it is not known if resources exist there. There is one recorded archaeological site, (P-10-000775), and one identified village site, (the Hojumne Village of Attabau, Latta, 1977:161) within a one-mile radius. See the enclosed map for resource locations. A copy of the site record for P-10-000775 is enclosed.

There are no cultural resources within the project area that are listed in the National Register of Historic Places, California Inventory of Historic Places, California Points of Historic Interest, or the California State Historic Landmarks.

COMMENTS

If you need any additional information for this project, please don't hesitate to contact me at (661) 664-2289.

By: Adele Baldwin

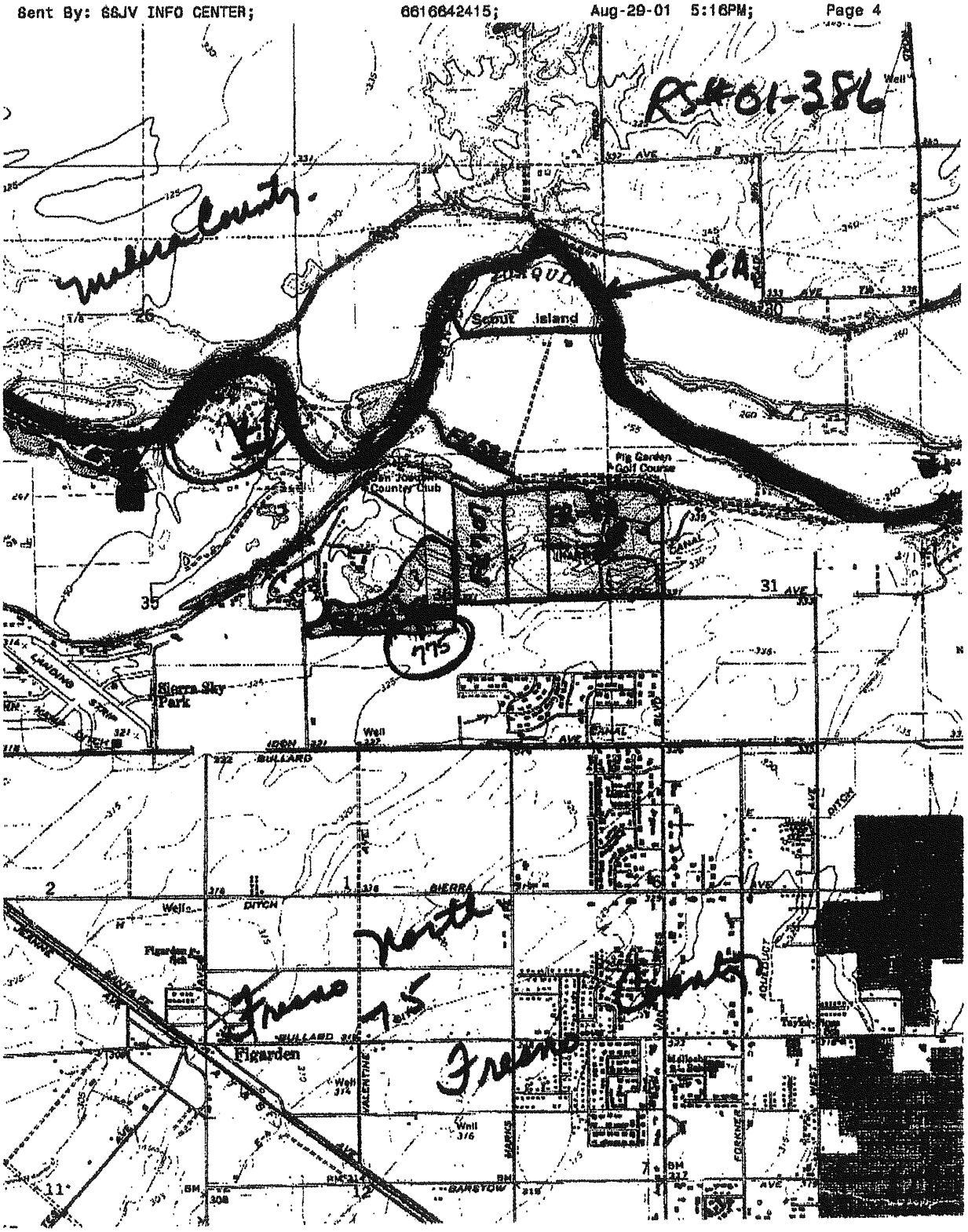
Adele Baldwin
Assistant Coordinator

Date: August 29, 2001

PRIORITY

Fee: $180.00/hr. *(Priority Service)*

Invoice # A1526


RSH 01-386
Scout Island
Pig Garden Golf Course
Sierra Sky Park
Figarden
BULLARD
BARSTOW
SIERRA
775

1141295

California State University, Fresno
Laboratory of Archaeology

ARCHAEOLOGICAL RESOURCE ASSESSMENT
Site Records Search and Literature Review

FR-00087

1. Project Name Alluvial-Van Ness No. 4A District Reorganization

2. Location: T. 12S, R. 19E, S. 36, NE 1/4 of 1/4
12S 20E 31 W ½ NW
U.S.G.S. Quad(s) ~~Hamilton Quad 1965~~ Fresno North County Fresno

3. Agency/Company Wilson Construction Co.

Address 225 W. Shaw / Fresno, CA

4. Natural Environment: X valley floor, X riverine, ___foothills, ___mountains
___other:

5. Historical modifications: X agriculture, X grazing, X urban, ___unknown
___other:

6. Ethnographic groups:
The south side of the San Joaquin River was occupied by the Pitkachi Yokuts. Two villages (Gewachiu and Kohuou) are historically recorded in the area (Latta 1949: 4; Kroeber 1970: 484).

7. Previous archaeological investigations:
1. Archaeological survey of the O'Neill property of the Bullard Lands Irrigated Subdivision No. 8, Tract No. 2577 (Starkweather 1974).

2. Archaeological survey of tentative Tract 2444 (Sheets 1973).

8. Prehistoric complexes:
Prehistoric inhabitants of this area were probably proto-Yokuts (Moratto 1972).

9. Recorded sites in project area:
none

CALIFORNIA STATE UNIVERSITY • FRESNO
LABORATORY OF ARCHAEOLOGY/CULTURAL RESOURCE FACILITY
FRESNO, CALIFORNIA 93740 (209) 487-2018

Mr. Cecil Leonardo
Fresno Metro Flood Control District
Suite 600 Rowell Building
Fresno, CA 93721

11 September 1979

RE: Archaeological Reconnaissance for the Fresno Metropolitan Flood Control District

Enclosed is the report on our archaeological reconnaissance of the subject parcel.

As described in the report,

__No__ archaeological sites or cultural resources were discovered.

Their scientific or historical significance is

_____minimal _____moderate _____high.

Our recommendations are:

_____further evaluation of the site(s) by a professional archaeologist.

_____preservation of the site(s) by the following protective measures:

_____site marking and avoidance

_____site fencing and avoidance

_____placement of the site(s) in open-space easement(s)

_____other:

__X__ no further actions necessary

_____other:

Let us know if you need additional information.

Sincerely,

DUDLEY M. VARNER, PH.D.
DIRECTOR

By Conrad C. López by RC
Staff Archaeologist
Conrad C. Lopez

FR 00533

AN ARCHAEOLOGICAL SURVEY OF THE O'NEILL PROPERTY OF BULLARD LANDS IRRIGATED SUBDIVISION NO. 8, TRACT NO. 2577

by

Jeri A. Starkweather

June 1974

Supervised by:

Payson D. Sheets
District 06 Archaeologist
Department of Anthropology
California State University, Fresno
Fresno, California 93740

FR 00707

THE ARCHAEOLOGICAL SURVEY OF TRACT 2444

26 May 1973

PAYSON D. SHEETS
ASSISTANT PROFESSOR AND DISTRICT 6 ARCHAEOLOGIST
DEPARTMENT OF ANTHROPOLOGY
CALIFORNIA STATE UNIVERSITY, FRESNO

FR 00702

incomplete information

ARCHAEOLOGICAL SITE SURVEY RECORD
LABORATORY OF ARCHAEOLOGY - DEPARTMENT OF ANTHROPOLOGY
CALIFORNIA STATE UNIVERSITY, FRESNO

P-10-000775

1. Site CA-FRE-775	2. Map FRESNO NORTH 7.5' USGS Herndon 15' 1965 (379)
3. County Fresno	4. Township 12S, Range 19E, Section 36, SE 1/4 of NW 1/4
5. UTM Grid 11/245850/4081250	
6. Location, Topography Site is located on high terrace ½ mile south of San Joaquin Country Club on the San Joaquin River. Site lies appx. 350m West of NE bend on Alluvial Road.	
7. Contour Elevation 330'	8. Other site designations Temp. # FSC-249
9. Owner Paul E. Myers	10. Address 1300 W. Shaw, Suite E, Fresno
11. Present tenant same	
12. Description of site Small habitation site destroyed by plowing and a dirt road which runs through the area, midden, flakes, and shell beads	
13. Area Diam. of midden soil: 6m	14. Depth unknown
15. Vegetation, Fauna, Ecological Zone Lower Sonoran: grasses, rodents, rabbits	
16. Nearest water small arroyo	17. Surrounding Soil unknown
18. Site Soil midden	
19. Previous excavation none known	
20. Cultivation-logging plowed	
21. Construction (buildings, roads, etc.) small dirt road cuts site in half	
22. Erosion unknown	23. Possibility of destruction site already disturbed
24. Features (burials, house pits, etc.) midden	
25. Artifacts shell beads (amount not recorded), flakes	
26. Remarks, drainage San Joaquin	
27. Published references none known	
28. Sketch map attached	29. Photos none
30. Recorded by P.D. Sheets	31. Date 5/26/73
45. Continuation Sheet Yes [ ] No [x]	

PDS 2/74

FILED

JAN 17 2003

FRESNO COUNTY CLERK

By _____ DEPUTY

CEQA Appendix D: Notice of Determination

Notice of Determination 3200310000013 *Appendix D*

To: ___ Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

X County Clerk
County of Fresno

From: (Public Agency) Fresno County Office of Education
1111 Van Ness Avenue
Fresno, CA 93721 (Address)

Subject:
Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Scout Island Outdoor Education Center
Project Title

2002031050 | Jamie Perry | (559) 497-3721
State Clearinghouse Number (If submitted to Clearinghouse) | Lead Agency Contact Person | Area Code/Telephone/Extension

APN 507-020-18, 507-020-04, 507-020-10; 7695 N. Van Ness Avenue, Fresno, CA 93711, Fresno County
Project Location (Include County)

Project Description:
Development of a regional outdoor education center on an 82-acre site along the south bank of the San Joaquin River in the City of Fresno and Fresno County.

This is to advise that the Fresno County Office of Education has approved the above described project on
☐ Lead Agency ☐ Responsible Agency

January 16, 2003 and has made the following determinations regarding the above described project:
(Date)

1. The project [will (will not)] have a significant effect on the environment.
2. [ ] An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   [X] A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [were (were not)] made a condition of the approval of the project.
4. A statement of Overriding Considerations [was (was not)] adopted for this project.
5. Findings [were (were not)] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval is available to the General Public at:
Fresno County Office of Education, 1111 Van Ness Avenue, Fresno, CA 93721-2000

[signature] January 17, 2003 Deputy Superintendent, Business
Signature (Public Agency) Date Title

Date received for filing at OPR:

Revised October 1998

FILED

JAN 17 2003

FRESNO COUNTY CLERK

By _____ DEPUTY

CALIFORNIA DEPARTMENT OF FISH AND GAME
CERTIFICATE OF FEE EXEMPTION

De Minimis Impact Finding

E200310000023

To: Fresno County Clerk
2221 Kern St
Fresno, CA 93721

From: Fresno County Office of Education
1111 Van Ness Avenue
Fresno, CA 93721

Project Title: Scout Island Outdoor Education Center

Name and Address of Project Proponent: Fresno County Office of Education (see address above)

Project Location and Description: The Project encompasses approximately 82-acres on the south bank of the San Joaquin River between the Van Ness Avenue and Marks Avenue alignments (Fresno County Assessor's Parcel Numbers 500-020-08, 09 and 10). A portion of the site is within the City of Fresno and a portion is within Fresno County, California. The site is within the east half of Section 25, Township 12 South, Range 19 East, Mount Diablo Base and Meridian, and is shown on the North Fresno, California, United States Geodetic Survey 7.5-Minute Series Quadrangle map.

The Project site will be developed as a regional outdoor education center with programs targeted to grades K-12 students, including special education students. The overall intent for the Project is to maintain and enhance the natural landscape and integrity of the river setting. In order to facilitate the safe and efficient use of the site, and to provide maximum accessibility for the disabled, some infrastructure improvements will need to be constructed. These improvements will include development of a road and trail system, installation of potable and non-potable water lines, installation of vault toilets, installation of drinking fountains, construction of a parking area, installation of perimeter fencing, installation of a seasonal canoe dock, maintenance of access to the river for swimming and water play, installation of underground electrical facilities, installation of landscape irrigation facilities, installation of security and minimal access lighting facilities, installation of a plant and tree nursery, installation of a weather monitoring station, installation of water quality monitoring points, improvements to existing landscape irrigation facilities and landscape screening along the southern property line. The proposed plans include outdoor education areas that will be used for instruction, wildlife observation, story-telling and dramatic presentations. A central pond may be developed as part of the enhancement of Pirates Creek, which is a non-wetland tributary water of the United States. The pond will provide the opportunity for disabled students to experience water activities in a controlled environment when appropriate. Other infrastructure, such as waste-collection containers, signage, firebreaks and emergency access will also be provided.

The landscape and riparian enhancement portion of the Project will involve reopening Pirates Creek, construction of two creek crossings for access across Pirates Creek, planting native trees for shade and native riparian enhancement following the natural drainage patterns of the site, phased replacement of non-native trees with native trees, control of non-native plant species, and possible elderberry bush enhancement area.

The Project site will remain in public ownership of the FCOE for the benefit and enjoyment of school children and the Fresno County community. It is anticipated that the site will eventually be used up to 80 percent of the time during the spring, summer, and fall months. It is likely that there will be no activity at the site several days per month, especially in the winter months.

Project construction is planned for completion in spring, 2003. Approximately 150 calendar days will be required to complete the Project.

Finding of Exemption: An Initial Study has been conducted by the Fresno County Office of Education, which has evaluated the potential for the Project to cause any adverse effect, either individually or cumulatively, on wildlife resources. For this purpose, wildlife is defined as "all wild animals, birds, plants, fish, amphibians, and related ecological communities, including the habitat upon which the wildlife depends for its continued viability." (Section 711.1 of the Fish and Game Code)

Based upon the Initial Study and the Mitigated Negative Declaration, FCOE hereby declares that when considering the record as a whole, there is no evidence before FCOE that the proposed Project will have potential adverse effects on wildlife resources or the habitat upon which the wildlife depends. Accordingly, FCOE has determined that, due to mitigation measures incorporated into the Project, development of the Project will have a de minimis impact on biological resources.

Certification: I hereby certify that the Fresno County Office of Education, as lead agency, has made the above findings of fact and, that based upon the environmental review process and hearing record, the proposed project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.4 of the Fish and Game Code.

Signature: _____ Date: 1/17/03

Fresno County
Office of Education

Dr. Peter G. Mehas
Superintendent

RESOLUTION #2003-02

BEFORE THE FRESNO COUNTY BOARD OF EDUCATION

ADOPTION OF MITIGATED NEGATIVE DECLARATION AND APPROVAL OF SCOUT ISLAND OUTDOOR EDUCATION CENTER PROJECT

WHEREAS, the Fresno County Office of Education ("FCOE") is proposing to undertake the Scout Island Outdoor Education Center Project ("Project"); and

WHEREAS, the Project involves developing a regional outdoor education center on an 82-acre site along the south bank of the San Joaquin River in the City of Fresno and Fresno County, California; and

WHEREAS, the FCOE has prepared an Initial Study and Proposed Mitigated Negative Declaration for the Project in compliance with the California Environmental Quality Act ("CEQA") and the State CEQA Guidelines; and

WHEREAS, notice that the FCOE proposed to adopt a Mitigated Negative Declaration for the Project was provided to the public within a reasonable period of time prior to the date on which the Mitigated Negative Declaration was scheduled for adoption; and

WHEREAS, the Initial Study identified potentially significant effects which the Project could have but the FCOE agreed to mitigation measures which will avoid the effects or mitigate the effects to a point where no significant impacts will occur; and

WHEREAS, all comments received from the public in response to the proposed Mitigated Negative Declaration have been submitted to the Board of Education for review, together with responses to those comments; and

WHEREAS, there is no substantial evidence before the Board of Education that the Project may have a significant effect on the environment; and

WHEREAS, the FCOE has prepared a Mitigation Reporting Program for the Project.

NOW, THEREFORE, BE IT RESOLVED:

Section 1. The Board of Education hereby finds that the Initial Study and Mitigated Negative Declaration reflect the independent judgment of the Board as Lead Agency for the Project.

Section 2. The Board of Education hereby finds that the Initial Study and Mitigated Negative Declaration have been completed in compliance with CEQA; and that the Board of Education has

independently reviewed and considered the Initial Study and Proposed Mitigated Negative Declaration, together with all comments received during the public review process, prior to adopting the Mitigated Negative Declaration and approving the Project.

Section 3. The Board of Education, on the basis of the Initial Study and the comments received, hereby finds there is no substantial evidence the Project may have a significant effect on the environment.

Section 4. The Board of Education hereby finds that the Project would have only a de minimis effect on fish and wildlife.

Section 5. The Board of Education hereby confirms that the mitigation measures listed in the Mitigated Negative Declaration have been incorporated into the Project, adopts the Mitigation Monitoring Program described in the project CEQA Documents, and adopts a Mitigated Negative Declaration for the Project.

Section 6. The Board of Education hereby approves the Project.

Section 7. The Board of Education hereby authorizes the Superintendent or his designee to file a Notice of Determination for the Project.

Section 8. The Office of the Superintendent, Fresno County Office of Education, 1111 Van Ness Avenue, Fresno, California 93721, is hereby designed as the custodian of the public record with respect to the Project.

Section 9. The Resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the Board of Education of FCOE this 16th day of January 2003, by the following vote, to wit:

AYES: 5

NOES: 0

ABSENT: 0

Barbara Thomas

BARBARA THOMAS, PRESIDENT

PETER G. MEHAS, Fresno County Superintendent of School and Ex-Officio Secretary