TERR 6 VALLEY ELDERBERRY LONGHORN BEETLE

1.0 EXECUTIVE SUMMARY

Valley elderberry longhorn beetle (VELB) (*Desmocerus californicus dimorphus*) habitat mapping and U.S. Fish and Wildlife Service (USFWS) protocol-level surveys were completed near Project facilities and recreation features by reviewing existing information, conducting agency consultation, and completing surveys during the spring and summer of 2004 at facilities not surveyed in 2002 or 2003.

VELB habitat surveys were conducted in conjunction with special-status plant surveys and incorporated into a GIS database.

There were six elderberry shrubs identified at the Project facilities not previously surveyed. No shrubs had signs of VELB exit holes.

2.0 STUDY OBJECTIVES

• Determine the location of VELB habitat (i.e., elderberry shrubs below 3,000 feet) at Project facilities not surveyed in 2002 or 2003.

3.0 STUDY IMPLEMENTATION

3.1 STUDY ELEMENTS COMPLETED

- Completed surveys for VELB habitat at Project facilities and recreation features in the study area not surveyed in 2002 or 2003, in conjunction with special-status plant surveys.
- Conducted protocol-level surveys in accordance with USFWS *Conservation Guidelines for Valley Elderberry Longhorn Beetle* (USFWS 1999) for all elderberry shrubs identified in the study area.

3.2 OUTSTANDING STUDY ELEMENTS

• There are no outstanding study elements.

4.0 STUDY METHODOLOGY

4.1 **REVIEW OF EXISTING INFORMATION**

Existing documentation on VELB in the study area was compiled, reviewed, and analyzed. This included a review of: (1) CDFG's *Natural Diversity Database* (CNDDB) (CDFG 2004); (2) USDA-FS's *Threatened, Endangered, and Forest Service Sensitive Species Database for the Terrestrial Species of the Sierra National Forest* (USDA-FS 2004); (3) USFWS *Conservation Guidelines for Valley Elderberry Longhorn Beetle* (USFWS 1999); and other relevant documents included in the 2002 TERR 6, Valley Elderberry Longhorn Beetle, Technical Study Report (TSR) (SCE 2003).

4.2 VELB HABITAT MAPPING

During the spring and summer of 2004, surveys for elderberry shrubs located below 3,000 feet in elevation were conducted at Project facilities and recreation features in the study area. The following is a list of locations surveyed in 2004:

- Stevenson 12 kV Project Power Line
- Rock Trap Flushing Channel, Mammoth Pool Powerhouse
- Mammoth Pool Powerhouse Tunnel Muck Site
- Manifold 2.4kV Project Power Line
- Adit 1, Tunnel 8
- Angler Access Stairway at Mammoth Powerhouse
- Parking Area near Mammoth Powerhouse Gate
- Access Road from 8S03 to Mammoth Pool Penstock

Surveys were conducted in conjunction with the lower elevation special-status plant surveys on April 19-21 and July 6-7, 2004. Refer to the 2002 TERR 6, Valley Elderberry Longhorn Beetle TSR (SCE 2003) for detailed methodology.

4.3 USFWS PROTOCOL LEVEL SURVEYS

A protocol-level survey was conducted in accordance with the USFWS *Conservation Guidelines for Valley Elderberry Longhorn Beetle* (USFWS 1999) because it was determined that elderberry shrubs could potentially be affected, in the future, by Project operations or maintenance activities. Surveys were completed on April 19-21 and July 6-7, 2004. Refer to the 2002 TERR 6, Valley Elderberry Longhorn Beetle TSR (SCE 2003) for detailed methodology.

5.0 STUDY RESULTS AND ANALYSIS

5.1 REVIEW OF EXISTING INFORMATION

There is the potential for VELB to occur in the Project area in elderberry shrubs below 3,000 feet in elevation. The life history, habitat requirements, and known occurrences in the Project vicinity of VELB are described in the 2002 TERR 6, Valley Elderberry Longhorn Beetle TSR (SCE 2003).

5.2 VELB HABITAT MAPPING

Field surveys were conducted in the spring and summer of 2004 in conjunction with the special-status plant surveys. Refer to the 2002 TERR 3, Special-status Plant Populations TSR (SCE 2003) for survey methodology. There were six elderberry shrubs detected in the 2004 study area. Five shrubs were identified along the Manifold 2.4kV Project Power Line and one shrub was identified adjacent to the Mammoth Pool Powerhouse Tunnel Muck Site (Figures TERR 6-1a and TERR 6-1b, and Appendix A). No beetle exit holes were observed on any of the shrubs.

5.3 USFWS PROTOCOL-LEVEL SURVEYS

There were six elderberry shrubs detected during the VELB habitat mapping surveys in 2004. Stem counts were completed on each and the diameter size classes were determined (Appendix A). There were 47 stems that were greater than or equal to 1 inch and less than or equal to 3 inches in diameter (≥ 1 and ≤ 3), none of which had evidence of beetle exit holes. There were 38 stems greater than 3 and less than 5 inches in diameter (≥ 3 and <5), none of which had evidence of beetle exit holes. A total of 12 stems greater than or equal to 5 inches (≥ 5) in diameter were associated with these shrubs, none of which had evidence of beetle exit holes.

6.0 LITERATURE CITED

- California Department of Fish and Game (CDFG). 2004. Rarefind 2, California Natural Diversity Database. Electronic database. Sacramento, California.
- Southern California Edison. 2003. 2002 Technical Study Report Package for the Big Creek Hydroelectric System Alternative Licensing Process prepared by Southern California Edison. October 10, 2003.
- U.S Department of Agriculture, Forest Service (USDA-FS). 2004. Threatened, Endangered, and Forest Service Sensitive Species Database for the Terrestrial Species of the Sierra National Forest. Electronic database.
- U.S. Fish and Wildlife Service (USFWS). 1999. Conservation Guidelines for Valley Elderberry Longhorn Beetle, Sacramento.

FIGURES

Placeholder for Figures

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APPENDIX A

Results of 2004 VELB Habitat Mapping and Protocol-Level Surveys

	Diameter						
	≥1" and ≤ 3" >3" and <5		' ≥5"				
Site #	Total Stem Count	Total Stem Count	Total Stem Count	Location	GPS Coordinates		Exit Holes Present
1	6	8	1	Mammoth Pool PH Tunnel Muck Site	37 13 23.5 N	119 20 29.1 W	No signs of exit holes
2	10	12	2	Manifold 2.4kV Power Distribution Line (Project Power Lines Less Than 33kV)	37 08 44.3 N	119 23 21.9 W	No signs of exit holes
3	7	6	4	Manifold 2.4kV Power Distribution Line (Project Power Lines Less Than 33kV)	37 08 44.7 N	119 23 21.9 W	No signs of exit holes
4	6	2	3	Manifold 2.4kV Power Distribution Line (Project Power Lines Less Than 33kV)	37 08 44.7 N	119 23 21.9 W	No signs of exit holes
5	15	9	2	Manifold 2.4kV Power Distribution Line (Project Power Lines Less Than 33kV)	37 08 46.5 N	119 23 24.3 W	No signs of exit holes
6	3	1	0	Manifold 2.4kV Power Distribution Line (Project Power Lines Less Than 33kV)	37 08 .645 N	119 23 .313 W	No signs of exit holes
Total	47	38	12				

Appendix A. Results of VELB Habitat Mapping and Protocol-Level Surveys.