
TABLE OF CONTENTS

TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
I. INTRODUCTION	I-1
A. Purpose of the Biological Assessment.....	I-1
B. Species Covered in this Document.....	I-2
C. Description of Proposed Projects.....	I-3
D. Summary of Conclusions.....	I-4
E. Responsible Parties.....	I-6
II. PROJECT HISTORY	II-1
III. HISTORY OF CONSULTATION.....	III-1
IV. DESCRIPTION OF THE PROPOSED ACTION.....	IV-1
A. UC Long Range Development Plan	IV-1
B. Infrastructure Project.....	IV-5
V. OTHER INTERRELATED AND INTERDEPENDENT PROJECTS	V-1
A. University Community Plan (UCP)	V-1
B. Off-Site Infrastructure Outside Campus and University Community Boundaries	V-7
VI. ACTION AREA	VI-1
VII. BIOLOGICAL SETTING	VII-1
A. Regional Setting	VII-1
B. Habitat for Federally-Listed and Proposed Species Within the Study Area.....	VII-2
VIII. SPECIES ACCOUNTS AND STATUS OF THE SPECIES IN THE ACTION AREA	VIII-1
A. Survey Methodology	VIII-1
B. Species Accounts/Status	VIII-9

<u>Chapter</u>	<u>Page</u>
----------------	-------------

IX. EFFECTS OF THE PROPOSED PROJECTS..... IX-1
 A. General Habitat Impacts IX-1
 B. Species-Specific Impacts..... IX-24
 C. Impacts of Interrelated and Interdependent Actions..... IX-55
 D. Effects of Proposed Projects on Vernal Pool Critical Habitat IX-63

X. CUMULATIVE EFFECTS X-1

XI. OTHER PROPOSED PROJECTS AFFECTING
 FEDERALLY-LISTED SPECIES XI-1

XII. CONCLUSION AND DETERMINATIONS XII-1
 A. Succulent owl’s clover XII-1
 B. Colusa grass XII-3
 C. San Joaquin Valley Orcutt grass XII-4
 D. Vernal Pool crustaceans..... XII-5
 E. Bald eagle XII-8
 F. Mountain plover XII-9
 G. San Joaquin kit fox XII-10

XIII. LITERATURE CITED XIII-1

XIV. FIGURES

Appendices

- A. Resource Mitigation Plan
- B. Habitat Mitigation Plan Infrastructure Project
- C. Species Evaluated
- D. Analyses for Species Not Federally-Listed
- E. Letters from the Service

LIST OF FIGURES

Figure

1. Regional Location
2. Campus Location
3. Infrastructure Project
4. LRDP Land Use Diagram
5. UCP Sub-Areas Diagram
6. Off-Site Utility Connections
7. Action Area
8. Survey Areas
9. Aerial Photograph of Action Area
10. Vegetation of the LRDP Survey Area
11. UC Merced Campus Vegetation LRDP Survey Area
12. Vegetation Within UCP Survey Area
13. Succulent Owl's Clover 1999-2001 Survey Results
14. Plant Survey Infrastructure Project
15. CNDDDB Occurrence Data of Succulent Owl's Clover
16. Colusa and Orcutt Grass 1999-2001 Survey Results
17. CNDDDB Occurrence Data of Colusa and Orcutt Grass
18. Soils Mapped in Action Area and Plant Occurrences
19. Vernal Pool Crustaceans in LRDP Survey Area
20. Wildlife Species Occurrences 1999-2001 Surveys Within Action Area
21. Wildlife Species CNDDDB Occurrences Within Action Area
22. San Joaquin Kit Fox Travel Corridor Width
23. Vernal Pool Habitat in Eastern Merced County
24. Campus Parkway Project

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Major Land Uses of the UC Merced Campus (revise with new acreages to reflect total of 980 acres).....	4-1
2a. Plant Survey Methodologies.....	8-1
2b. Vernal Pool Crustacean Survey Methodologies.....	8-2
2c. San Joaquin Kit Fox Survey Methodologies.....	8-2
3. Vernal Pools In LRDP and UCP Survey Areas Sampled for Federally-listed Vernal Pool Crustaceans.....	8-5
4. Succulent Owl's Clover in LRDP Survey Area.....	8-11
5. Colusa Grass Occurrences in LRDP Survey Area.....	8-15
6. Average Annual Precipitation in Merced (Merced Municipal Airport).....	8-17
7. Average Monthly Precipitation and Monthly Total Precipitation in Merced (Merced Municipal Airport).....	8-17
8. San Joaquin Valley Orcutt Grass Occurrences in LRDP Survey Area.....	8-21
9a. Habitat Types Directly Impacted by Main Campus and Infrastructure Project.....	9-1
9b. Habitat Types Preserved on Campus Natural Reserve and Remainder of VST.....	9-1
10. Listed Species Habitat Acreages on the Campus Site and Remainder of VST.....	9-2
11. Infrastructure Project Impacts.....	9-20
12. Direct Species Habitat Impacts.....	9-25
13. Conserved Species Habitat on Campus Natural Reserve and Remainder of VST.....	9-26
14. Indirect Impacts to Species Based on Habitat Acreages and Point Localities.....	9-11
15. Vernal Pool Species Point Localities and Acreages.....	9-37
16. Slopes on Conserved Habitat.....	9-53
17. Effects of Main Campus and UCP Including the Infrastructure Project on Federally-Listed and Proposed Species.....	12-2