## 3 RESPONSES TO LEAD AGENCY COMMENTS AND REVISIONS TO THE DRAFT EIR

Following distribution of the Draft EIR to the public, CBDA requested additional clarification of several items. The first section of this chapter lists responses to comments and editorial text revisions to the Draft EIR that were made in response to specific requested changes. The text clarifications do not alter any of the analyses or conclusions presented in the Draft EIR. The requested revisions from CBDA are numbered in sequence below and are directly followed with responses indicating how the Draft EIR text has been revised. The second section of this chapter includes a list of changes that were made in response to a comment on the Draft EIR (Comment D-1 in Chapter 2, "Comments and Responses to Comments on the Draft EIR"), as well as the others that have been initiated by EIR preparers to clarify or correct Draft EIR text. Text deletions are shown with double strikethrough, and text additions are shown with double underline.

## 3.1 RESPONSES TO LEAD AGENCY COMMENTS

CBDA-1: Under existing habitat types, provide a crosswalk to Multi-Species Conservation Strategy Natural Communities Conservation Plan (MSCS NCCP) communities.

Response: Table 3-2 on page 3-12 has been edited as follows to facilitate cross-referencing the Ecosystem Restoration Program (ERP) classifications with MSCS NCCP habitat types.

Table 3-2 Community Composition Per Tract (in approximate acres) to be Restored											
Active Restoration <u>Habitat Types</u>		Pine Creek (unit total 576	Capay (unit total 666	Dead Man's Reach	Total Acres to						
Holland Terrestrial Natural Community <sup>1</sup>	MSCS NCCP Habitat Type	acres)	acres)	(unit total 637 acres)	be Restored						
Mixed Riparian Forest	Valley/Foothill Riparian	21	136	96	253						
Cottonwood Riparian Forest	<u>Valley/Foothill</u> <u>Riparian</u>		55		55						
Valley Oak Riparian Forest	Valley/Foothill Riparian		23		23						
Valley Oak Woodland	Valley/Foothill Woodland		103 8		111						
Elderberry Savannah	Valley/Foothill Riparian		80	121	201						
Grassland	Grassland		175	14	189						
Passive Restoration			4		4						
Total acres to be restored		21	576	239	836						
<sup>1</sup> Throughout the document, habitat types are referred to using the Holland Terrestrial Natural Community classification.											

Source: Luster, pers. comm., 2005

CBDA-2: In Chapter 3, "Description of the Proposed Project", on page 3-19, there is a reference to "USFWS Guidelines" where avoidance of nesting birds is discussed. Please attach the guidelines.

Response: The Sacramento River National Wildlife Refuge (SRNWR) mowing guidelines to minimize impacts to nesting birds have been attached to this Final EIR as Appendix C. The paragraph in the Draft EIR has been edited to read:

Ongoing USFWS guidelines for SRNWR properties "SRNWR Mowing Guidelines: Avoiding and Minimizing Impacts to Ground Nesting Birds" (Appendix C) require that agricultural practices to control weed growth (e.g., mowing, spraying and disking) commence prior to April 15 before ground-nesting birds have the opportunity to establish residence. If mowing begins before April 15, mowing may continue throughout the summer. If mowing is not initiated prior to April 15, it cannot occur until after July 15 to avoid destroying nests or otherwise disturbing ground-nesting birds (Moroney, pers. comm., 2005). As described above, the Dead Man's Reach almond orchard would be removed in spring 2006. Prior to removal, the almonds would be harvested for the last time in fall 2005, and standard orchard maintenance practices (e.g., mowing and herbicide applications) would continue over the winter, which would discourage bird nesting and bat roosting in the orchard prior to the felling of the trees. Pursuant to these guidelines, project site preparation activities will be designed and timed to avoid potential disturbances to birds and their nests and roosting bats (Luster, pers. comm., 2005). Because project activities will be in compliance with <del>USFWS</del> SRNWR guidelines to avoid impacts to nesting birds, the proposed project is consistent with Mitigation Strategy 9.

CBDA-3: In Chapter 3, "Description of the Proposed Project," provide more information on gradual removal of irrigation, the time period for monitoring, and adaptive management strategies.

Response: According to TNC, using adaptive management, irrigation would not be pulled from the project site until the site achieves 80% survival of plantings, which typically occurs after a minimum of 3 years. The last paragraph on page 3-20 has been edited to read as follows:

Irrigation of project sites would occur at low frequencies but for long durations depending on conditions between March and October. At the end of the 3-year project period, <u>or when the project site achieves an 80% plant survival rate</u>, hard hose irrigation lines would be manually removed where it is possible to do so (Luster, pers. comm., 2005). (It is impossible to remove irrigation hose in some areas without damaging the root systems of newly established native plants.)

CBDA-4: Under performance measures, include goals for percent cover for all species types. However, if the project entails establishment of perennials or trees, then percent cover is much less important than density and species richness (of native species). Cover will be achieved over time and will be the last of any standards to be met. Density is the most important with density defined as the number of individuals (overall or by species) per unit area (sq. meter, etc.), and species richness defined as the number of different species to be established. Both of these standards should be based on natural conditions of a reference site. How is survivorship being measured? Is there a plant health or growth component being used? Plants can survive and not be healthy. Provide a cover performance standard if the concern is for ground cover to offset surface erosion (e.g., 80% cover of annuals with no bare areas larger than 3' x 3'). Provide a thorough discussion of the measures TNC will be instituting to minimize erosion on each of the restoration sites.

Response: TNC will rely on woody species survival rates as the primary indicator of success.

During plant establishment, much of the growth occurs below-ground as the root system

develops and taps into the groundwater supply. Focusing on the rate of above-ground growth by measuring percent cover could under represent restoration success in the initial establishment period. The ground cover performance standard is indicated on page 3-21 and shown below. Erosion will be minimized by planting ground cover forbs and grasses and by natural recruitment of annual grassland species in the fall and winter following site preparation in order to establish a new ground cover layer prior to high river flows. TNC has implemented this technique successfully on several other Sacramento River projects in similar conditions. Further discussion of this topic is provided in Response PM-1, 3rd paragraph and E-2.

In response to the request for density and species richness, the requested information has been added, and the last paragraph under "Performance Measures, Monitoring, and Reporting Requirements" on page 3-21 has been modified to read as follows:

Resulting data would be used to compare species growth across different restoration project sites. At the end of the 3-year establishment period, TNC requires an 80% overall average survival rate for plantings, as well as an 80% ground cover establishment criterion for understory forb and grass species. Density, species composition, and ground cover success criteria to be met at the end of the 3-year establishment period are provided in Table 3-3. If success criteria are unmet, TNC would replant woody species and/or ground cover. TNC provides restoration activity updates to the SRCA Forum Technical Advisory Committee and Board of Directors. Stated threshold goals and monitoring and reporting activities would be consistent for each year of the project in accordance with equivalent goals at other TNC project sites.

<u>Table 3-3</u> TNC Sacramento River-Chico Landing Subreach Habitat Restoration Project												
Conceptual Restoration Plan Planting Summary and Success Criteria												
Site Name	<u>Acres</u>	<u>Habitat</u>	Spacing (ft)	Native Woody Species Density (woody plants/acre)		Native Species Composition (# spp./community)		<u>Ground</u> <u>Cover</u>				
				<u>Planted</u>	Success Criteria <sup>1</sup>	<u>Planted</u>	Success Criteria	Success Criteria <sup>2</sup>				
Pine Creek (21.4 acres)	<u>21.4</u>	Mixed Riparian Forest	<u>11 x 15</u>	<u>264</u>	<u>211</u>	<u>30</u>	<u>29</u>	<u>≥ 80%</u>				
Capay (574 acres)	<u>54.8</u>	Cottonwood Riparian Forest	<u>11 x 15</u>	<u>264</u>	<u>211</u>	<u>22</u>	<u>21</u>	≥ 80%				
	<u>172.5</u>	Grassland	<u>no</u> irrigation	=	=	<u>10</u>	<u>10</u>	<u>≥ 80%</u>				
	<u>135.7</u>	Mixed Riparian Forest	<u>11 x 15</u>	<u>264</u>	<u>211</u>	<u>30</u>	<u>29</u>	<u>≥ 80%</u>				
	<u>4.4</u>	Passive Restoration	<u>no</u> irrigation	=	<b>=</b>	=	=	<u>≥ 80%</u>				
	<u>80.4</u>	Valley Oak Elderberry Savanna	<u>11 x 30</u>	<u>132</u>	<u>106</u>	<u>21</u>	<u>20</u>	≥ 80%				
	<u>23.4</u>	Valley Oak Riparian Forest	<u>11 x 15</u>	<u>264</u>	<u>211</u>	<u>23</u>	<u>22</u>	≥ 80%				
	<u>102.8</u>	Valley Oak Woodland	<u>11 x 30</u>	<u>132</u>	<u>106</u>	<u>21</u>	<u>20</u>	<u>≥ 80%</u>				
<u>Dead Man's</u> <u>Reach</u>	<u>14.2</u>	Grassland	<u>no</u> <u>irrigation</u>	=	<u>=</u>	<u>10</u>	<u>10</u>	<u>≥ 80%</u>				
(239.5 acres)	<u>96.0</u>	Mixed Riparian Forest	<u>11 x 15</u>	<u>264</u>	<u>211</u>	<u>30</u>	<u>29</u>	≥ 80%				
	<u>121.2</u>	Valley Oak Elderberry Savanna	<u>11 x 30</u>	<u>132</u>	<u>106</u>	<u>21</u>	<u>20</u>	≥ 80%				
	<u>8.0</u>	Valley Oak Woodland	<u>11 x 30</u>	<u>132</u>	<u>106</u>	<u>21</u>	<u>20</u>	<u>≥80%</u>				
<sup>1</sup> Can include native species volunteers that recruit naturally on the site												
<sup>2</sup> Include both native and non-native forb and grass cover												

In response to how survivorship will be measured and whether plant growth or health will be considered, TNC will consider both plant health and growth. As indicated in bullet #2 of the monitoring phases described on page 3-21, height of planted native plants will be measured along with survivorship and species composition. Also, as indicated at the top of page 3-21, assessments of whether plantings are "growing and thriving" will be made.

CBDA-5: Under Section 4.1, "Effects Found Not to be Significant," specify distance to nearest sensitive receptor and direction of prevailing winds for the discussion on air quality.

Response: The requested information has been added, and the 2<sup>nd</sup> paragraph under "Air Quality" at the top of page 4-2 has been edited to read as follows:

The proposed project would be implemented on federal property, and the general project area is sparsely populated. If odors are generated by application of herbicides or fertilizer or by decomposing mud or plants, these odors would be detectable to USFWS and TNC personnel and other contracted workers. No sensitive receptors (e.g. housing areas or other types of development) are present nearby. The nearest sensitive receptor to any of the project sites is a house located approximately 30 feet south of the western tip of the Capay Unit. For the other units, the nearest potentially sensitive receptors have been identified as a house and dairy farm approximately 1,053 feet southeast of the southeast corner of the Pine Creek Unit, and a farm shop approximately 185 feet south of the Dead Man's Reach Unit. Along this reach of river, prevailing winds are generally from the south-southeast (California Air Resources Board 1992). As discussed in the Initial Study, the project is not expected to violate or contribute to violations of ambient air quality standards. Therefore, project implementation is not expected to expose sensitive receptors to substantial pollutant concentrations.

CBDA-6: Under Section 4.1, "Effects Found Not to Be Significant", on Page 4-4, provide a brief synopsis of the SRNWR CCP and the types of recreational activities allowed.

Response: The requested information has been added, and the paragraph under "Recreation" beginning at the bottom of page 4-4 has been edited to read as follows:

The proposed project would not affect uses of existing regional or neighborhood parks. It is planned to occur on federal property under the management of USFWS. Restoration of habitat at the project sites would be consistent with the management guidelines contained in the SRNWR CCP. The CCP envisions that refuge properties would offer the public compatible wildlife-dependent recreational opportunities for hunting, fishing, wildlife observation and photography, environmental education, and interpretation (USFWS 2005). See Chapter 3, "Description of the Proposed Project," and Section 4.2, "Agricultural Resources and Land Uses," for further discussion.

CBDA-7: Exhibit 4.4-2 shows the entire area as row crop. There are 220 acres of fallow field, according to the text under "Capay" on page 4.4-9.

Response: There is no GIS layer available specifically for fallow land. The legend has been edited to identify this area as "Row Crop/Fallow Land." Revised Exhibit 4.4-2 is provided at the end of this chapter.

CBDA-8: There has been a sighting of giant garter snake at the Chico oxidation ponds. Does this affect the analysis?

Response: The giant garter snake sighting at the Chico oxidation pond is noted on page 4.4-16 of the Draft EIR. The ponds, which are being cultivated for rice, are within 5 miles of the

project sites. According to SRNWR biologists, giant garter snakes have not been observed within or near the proposed project area (Moroney, pers. comm., 2005). As discussed in the Draft EIR, the snakes require "...adjacent upland habitat for basking and burrows that provide sufficient cover and are at high enough elevations to function as refuges from flood waters during the snakes' inactive season (October–May)." The discussion in the Draft EIR on the potential for the project sites to provide suitable habitat for giant garter snake further states that: "Although the Sacramento River is unlikely to provide suitable habitat for giant garter snake, still and slow-moving aquatic habitats adjacent to the project sites could be suitable. Uplands in and adjacent to the project sites are of limited value due to their long history of ground disturbance from agricultural activities."

Management of resources within the Sacramento National Wildlife Refuge Complex, including the management of lands for the enhancement of wildlife habitat values, involved completion in 1998 of a *Programmatic Intra-agency Formal Section 7 Consultation on Management, Operations, and Maintenance of the Sacramento National Wildlife Refuge Complex, Willows, California.* This consultation included implementation of best management practices (BMPs) and mitigation measures to minimize potential impacts to giant garter snake. A summary of these BMPs and mitigation measures is provided on page 3-19 in Chapter 3, "Description of the Proposed Project," of the Draft EIR. These BMPs are presented verbatim in Appendix D of this Final EIR.

Section 4.4, "Biological Resources," of the Draft EIR discusses potential effects on wildlife. The discussion under Impact 4.4-b states that "...potential impacts to giant garter snake would be avoided through implementation of measures, such as timing of restoration activities and preconstruction surveys, as described in Section 3.4..."

The discussion under "Project Area Preparation" on page 3-19 of the Draft EIR has been edited to clarify the steps that would occur prior to project implementation. The last paragraph in that section has been edited to read:

Ongoing USFWS management guidelines require that a USFWS biologist conduct a site visit preconstruction survey to determine if there is any suitable giant garter snake habitat present at the project sites.

CBDA-9: The orchard at Dead Man's Reach is to be removed in spring 2006. Please clarify the timetable with respect to potential impacts on ground-nesting birds.

Response: Chapter 3, "Description of the Proposed Project," in the Draft EIR identifies activities prior to orchard removal that would prevent disturbances to ground nesting birds. Please refer to the discussion in the middle paragraph on page 3-19. Ideally, to protect ground nesting birds, the removal would occur before May 1. However, the orchard can only be safely removed after the threat of flooding has been diminished. Therefore, it is possible that removal will occur in May. In this event, TNC would implement measures to minimize impacts to ground nesting birds, consistent with SRNWR mowing guidelines (Appendix C). These guidelines rely on identifying areas of potential impact and implementing mowing activities prior to nest building and throughout the nesting season to minimize the potential for ground-nesting birds to become established in the area. No change to the Draft EIR text is necessary in response to this comment.