

**Solano Concrete Long-term Off-channel
Mining Permit
Habitat Restoration Plan**

ADDENDUM

Introduction

This addendum to the Habitat Restoration Plan (HRP) was generated to incorporate the conditions of approval of the long-term mining permit specific to the biological resources.

Condition 51.

As shown in the attached revised Figure 8, hedgerow plantings have been added and will be provided around the northern and western edges of the Hutson parcel.

These plantings will be provided in Phase 1 as required by the condition. As noted in the HRP, the 3:1 slopes will be planted with a diverse mix of oak woodland and native grassland species. Valley oaks will be dominant in this area at a density of approximately 6 per acre.

Condition 55.

The HRP contains a preliminary maintenance guideline including weed control prescriptions. The conditions of approval added weed control efforts for two specific species, tamarisk and giant reed. Both species are problematic on-site (and throughout much of the mining reach). In accordance with the conditions, weed control efforts shall work to eliminate these species from the project site.

Tamarisk removal is best done through either whole plant spraying with Garlon 3A when the trees are below 6 ft in height or cutting and spraying the stump with a 100% concentration of Garlon immediately after cutting. Giant reed is best removed through backhoe excavation of the plant (which grows in clumps) and burning of the residue.

The HRP had proposed establishing seasonal marsh in the mining-related depression north of the Snyder East parcel in the phase 6 area. The conditions of approval require that the existing riparian woodland in this area be retained and enhanced, rather than construction of seasonal marsh. This basin has several dense clusters of willows and cottonwood. These will be expanded with the same species mix and

densities noted in the HRP for riparian woodland areas and the upper slopes of the basin planted with the species mix and densities noted for the oak woodland habitats in the HRP. These plantings shall be located so as to not interfere with bank swallow habitat (see condition 61 below).

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Condition 59.

The conditions require that provisions to protect the Valley Elderberry Longhorn Beetle (VELB) consistent with the USFWS protocols (the "FWS guidelines") on this species be included in the HRP. The HRP is hereby amended to include the following actions:

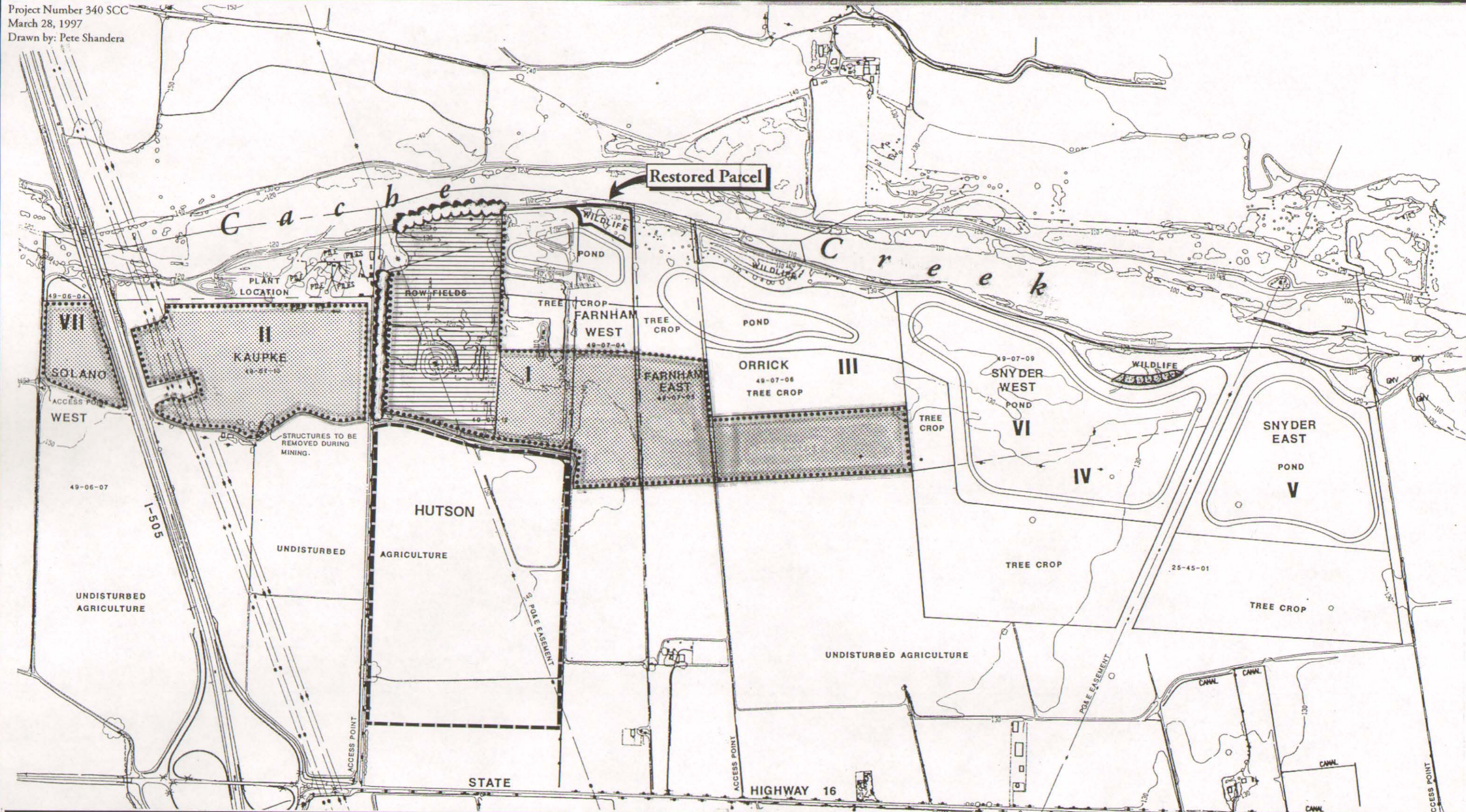
1. Prior to the initiation of each phase, a VELB survey shall be completed of the project area by a qualified biologist in accordance with the conditions of approval.
2. Wherever possible, all VELB habitat shall be avoided, including fencing or flagging of elderberry shrubs during construction as directed in the FWS guidelines.
3. All elderberries with evidence of VELB use that will not be preserved shall be transplanted to an appropriate site as directed in the FWS guidelines.
4. Additional elderberry stems and associated riparian vegetation shall be planted in accordance with the procedures and at the ratios required in the FWS guidelines.
5. All plantings shall be monitored and maintained in accordance with the FWS guidelines. Plants that die shall be replaced as directed in the guidelines.

Condition 61.

Condition 61 requires that the HRP be revised to provide bank swallow habitat. Bank swallow nesting in the sheer face of the active mining portion of the Hutson

parcel was observed in 1991, 1992, and 1993. The swallows have obviously become acclimatized to the noise and other effects of mining (acclimatization to periodic and frequent machine noises is a common feature in many birds).

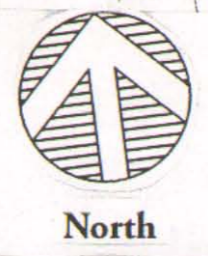
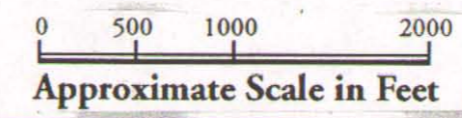
The project proponent will restore to the extent necessary the bluffs above the mining-related riparian habitat in the northern portion of the Snyder East parcel in the Phase 6 area. This site is already suitable habitat with near-vertical bluffs. Bank swallows have recently begun nesting in these bluffs and no further enhancement actions appear necessary aside from preservation of this area.



Key to Map Symbols	
Areas with Deed Restrictions for Habitat Management Native Grass Side Slopes
Habitat Management Area 140 acres (Unmined)	Reclaimed Row Fields, 183 acres
Habitat Management Area 40 acres (Hutson Parcel)	Vertical Bluffs
	Hedgerows

General Notes

1. See Vegetation plan for existing and proposed vegetation.
2. All structures related to mining and processing material will be removed upon completion of reclamation work.



ZENTNER and ZENTNER

FIGURE 3
 Habitat Management Lands
 Solano Concrete