Ohlone Preserve Conservation Bank (California)

I. OVERVIEW & BACKGROUND

Location:	Alameda County, California
Date established:	June 2005
Size of bank:	640 acres
Species:	California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), and Alameda whipsnake (*Masticophis lateralis euryxanthus*) All species are currently present on the bank site.
Method of credit generation:	Habitat preservation
Credits available:	Between 660.7 and 1062.4
Interesting feature:	Multi-species bank with complex credit-determination formula

II. INTRODUCTION / SITE SELECTION

The Ohlone Preserve Conservation Bank (Ohlone Preserve) is located in Alameda County, California. Fletcher Conservation Properties owns and manages Ohlone Preserve, and the California Department of Fish and Game (CDFG) holds the conservation easement. Ohlone Preserve was established in 2005 through a Conservation Bank Agreement (CBA) between Fletcher Conservation Properties, CDFG, and the U.S. Fish & Wildlife Service (USFWS).

Ohlone Preserve consists of approximately 245 acres of grassland habitat, 175 acres of blue oak/bay laurel woodland and riparian habitats, 220 acres of chaparral habitat, and 0.5 acres of aquatic/pond habitat. Listed species occurring on the bank site include the California red-legged frog, California tiger salamander, and Alameda whipsnake.

The California red-legged frog (CRLF) is listed as threatened under the federal Endangered Species Act (ESA), and the USFWS finalized CRLF critical habitat designation in 2010. Ohlone Preserve lies in the Sunol Regional Wilderness core area of the South and East San Francisco Bay Recovery Unit. Figure 1 shows an example of the CRLF.

Figure 1. The California red-legged frog (*Rana aurora draytonii*).

The Central California population of the California tiger salamander (CTS) is listed as threatened under the ESA and as endangered under the California Endangered Species Act. The CTS has been eliminated from an estimated 58 percent of its historic breeding sites and has lost an estimated 75 percent of its habitat. Ohlone Preserve is within the geographic range of the CTS, and is documented breeding and foraging habitat for the salamanders. Figure 2 shows an example of the CTS.

Figure 2. The California tiger salamander *(Ambystoma californiense).*

The Alameda whipsnake (AWS) is listed a threatened species under both the ESA and the California Endangered Species Act. There are five remaining AWS population units (Recovery Units) with little or no genetic flow between them. Ohlone Preserve lies within the fifth distinct Recovery Unit—Unit 5 (Sunol to Cedar Mountain). Figure 3 shows an example of the AWS.

Figure 3. The Alameda whipsnake *(Masticophis laterialis euryxanthus).*

III. SERVICE AREA DETERMINATION

The service area for CRLF credits consists of an East Bay portion of CRLF habitat. The area includes all of Alameda and Contra Costa counties and a portion of Santa Clara and San

Joaquin counties. Appendix A-1 shows the CRLF service area. The service area for the sale of CTS credits includes all of Alameda, Santa Clara, San Mateo, and San Benito counties and a portion of Contra Costa, Stanislaus, San Joaquin, and Merced counties. Appendix A-2 shows the CTS service area. The service area for AWS credits includes the AWS Recovery Units 3–5, and 7. This includes portions of Alameda, Contra Costa, Santa Clara, and San Joaquin counties. Appendix A-3 provides a description of the AWS service area.

After the bank was established, Santa Clara County was essentially eliminated from the Service Area by the Santa Clara County HCP. Under the HCP, all compensation for listed species impacts is to be paid into a fund for use inside Santa Clara County. If after two years that money has not been spent, then it may be used for projects outside of Santa Clara County, including conservation banks.

IV. CREDIT DETERMINATION / METHODOLOGY

The credit determination for Ohlone Preserve is complex. Ohlone Preserve is a multi-species bank where much of the habitat overlaps between two or more species. Additionally, credits for CTS and AWS are based on a 1:1 ratio (1 acre preserved = 1 credit available), whereas CRLF credits are based on a 1:1.667 ratio (1 acre preserved = 1.667 credits available). When an acre of habitat is used by only one species, it is only available for impacts to that species. But when an acre of habitat is occupied by more than one species, it is available for either species, or as a multi-species acre for impacts to habitat that affects the same combination of species. When a multi-species acre is used for a single species, the other species credits will be debited accordingly. For example, a sale of 10 AWS credits from an area that overlaps with CRLF credits will reduce the number of AWS credits by 10 and the CRLF credits by 16.670 (10 x 1.667). Alternatively, a sale of 10 CRLF credits from an area that overlaps with AWS credits will reduces the number of CRLF credits by 10 and the number of AWS credits by 6 (10 ÷ 1.667). The USFWS formulated the following credits for Ohlone Preserve:

- The CRLF exclusively occupies 33.1 acres of habitat. Multiplied by 1.667, this generates 55.3 credits for CLRF only.
- The AWS exclusively occupies 2.3 acres of habitat. This generates 2.3 credits.
- There are .7 acres available exclusively as CTS upland (“CTSU”) habitat, which generate .7 credits.
- There are .5 acres available as either CRLF or CTS breeding (“CTSB”) habitat. Multiplied by 1.667, this generates .8 credits if used exclusively for CRLF, but only .5 credits if used for CTS.
- There are 370 acres available as either CRF or CTSU habitat. From this, up to 616.8 credits are available for CRLF impacts, and up to 370 credits are available for CTSU impacts.
- There are 184.9 acres available as either CRLF or AWS habitat. From this, up to 308.2 CRLF credits are available, or 184.9 AWS credits are available.

- There are 47 acres available as CRLF, AWS or CTSU habitat. From this, up to 78.3 acres are available for CRLF impacts, or 47 acres are available for either CTSU or AWS impacts.

In total, Ohlone was awarded up to 1059.4 CRLF credits, 0.5 CTSB credits, 417.7 CTSU credits, and 234.2 AWS credits. Appendix B-1 provides a table of the above credit determinations. Appendix B-2 is a copy of the credit ledger used by Fletcher Conservation Properties. The formulas in the ledger are designed to refigure the credits available after any particular debit.

V. FINANCIAL ASSURANCES

The CBA called for financial assurances for Ohlone Preserve in the form of an endowment fund and a contingency security. The endowment fund is a dedicated, interest-bearing account, established by CDFG concurrent with execution of the bank agreement and funded by the sale of credits. The purpose of the endowment fund is to fund the permanent management activities associated with managing the bank in perpetuity using only the accrued interest and earnings. In order to determine the annual cost of management, and therefore the amount of principal required, the bank sponsor provided a Property Analysis Record (PAR).

PAR is a computer program developed by the Center for Natural Lands Management, which assists in forecasting the perpetual tasks of managing a site, the cost of those tasks, and the associated long-term funding. After considering the costs of such tasks as site maintenance, surveys, habitat maintenance, water management, public services, reporting, equipment, operations, and administration—totaling $17,119 per year at Ohlone Preserve—the PAR analysis determined that the fund required a principal of $799,953, funded by depositing $1,250 each for the first 640 credits sold.

The bank agreement also called for a contingency security to assure performance of the of the owner's maintenance and management obligations during the interim period and prior to the sale of any credits. The amount of the contingency security was equal to the predicted cost for management and maintenance of the property for a period of three years—$51,357 in the form of cash and/or irrevocable standby letters of credit.

VI. MANAGEMENT (CURRENT & LONG TERM)

Because Fletcher Conservation Properties is the owner and long-term manager of the property, and because no restoration or creation activities requiring a monitoring period were done at the site, only one management plan was necessary upon establishment of the bank. The Habitat Management Plan provides specific management and monitoring guidelines for the perpetual stewardship of Ohlone Preserve, but also emphasizes that management will be

adaptive, which will allow the owner to use the results of new information to adjust management strategies.

Management of Ohlone Preserve focuses on three main areas. Vegetative management consists of using seasonal livestock grazing as a tool to reduce wildfire danger and to maintain a diversity of native herbs and forbs, eradicating exotic plants, and hand trimming brush within the chaparral to maintain open areas and edge habitat. Animal management consist of monitoring native and non-native predators of the listed species, monitoring potential hybridization of CTS, and targeted species monitoring for the CTS, CRLF, and AWS. Site maintenance consists of maintaining perimeter and exclusionary fencing, maintaining the access roads, and monitoring the dams and outflows of the water impoundments for erosion problems and structural integrity.

VII. APPENDICES

Appendix A

Appendix B