

Orchard Creek Conservation Bank (California)

I. OVERVIEW & BACKGROUND

Location:	Placer County, California
Date established:	January 1996
Size of bank:	632.2 acres
Species:	Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>) The site is currently occupied by fairy shrimp.
Method of credit generation:	Habitat preservation
Credits available:	All 74.55 credits have been sold.
Interesting features:	Relationship with Conservation Fund program/first vernal pool preservation bank

II. INTRODUCTION / SITE SELECTION

Orchard Creek Conservation Bank (Orchard Creek) is located in Placer County, California. The property is owned by New Paradigms LLC and used primarily as pastureland. Wildlands, Inc. and New Paradigms entered into an agreement to utilize the site for the purposes of a conservation bank, with Wildlands being the bank sponsor. Orchard Creek was established under a banking agreement between Wildlands, the U.S. Fish & Wildlife Service (USFWS), and the California Department of Fish & Game (CDFG). The Wildlife Heritage Foundation holds the conservation easement.

The property was a candidate for conservation banking because of its close proximity to an area where future impacts to vernal pools were anticipated. Placer County's land use plans called for industrial development near the property. The property, buffered from surrounding developments by a railroad and golf course, was seen as an advantage in providing mitigation for the losses expected to occur from the development. Turning the property into a conservation bank also saved it from development, as the property was also zoned "Industrial Reserve."

Orchard Creek is composed of approximately 90% annual grassland. The remaining 10% of the site is occupied by seasonal wetlands, seasonal marsh, vernal pools and swales, and perennial streams. The site contains 720 vernal pools ranging in size from 0.001 to 0.60 acres, as well as 102 vernal swales, with an aggregate acreage equaling 43.19 acres. The vernal pool fairy shrimp, a federally threatened species, occupies vernal pools on the property. Figure 1 shows an example of the vernal pool fairy shrimp.



Figure 1. The vernal pool fairy shrimp (*Branchinecta lynchi*).

III. SERVICE AREA DETERMINATION

The USFWS uses a species recovery plan to determine the appropriate service area. The service area for vernal pool preservation credits from Orchard Creek includes parts of Sutter, Sacramento, Placer, Yuba, Nevada and El Dorado counties. The banking agreement provides that Orchard Creek will not be used to mitigate impacts to any federally listed or proposed species which do not occur at the bank. Appendix A shows the service area for Orchard Creek's vernal pool preservation credits.

IV. CREDIT DETERMINATION / METHODOLOGY

The 632 acres that comprise Orchard Creek is made up of twenty-one contiguous parcels of land. At the time the bank was established, Wildlands' plan was to develop the bank in twenty-one separate phases (twenty 30-acre parcels and one 32-acre parcel). Each 30-acre phase was allotted 2.755 habitat credits and the 32-acre phase was allotted 2.754 habitat credits equaling a total of 57.854 credits. The banking agreement also provided that the total number of credits issued may be re-evaluated due to a change in the USFWS's methodology or upon Wildlands' discovery of new biological findings. In 1999, two more state listed plant species were discovered on the bank property (False Venus' looking glass (*Legenere limosa*) and dwarf calicoflower (*Downingia humilis*)), increasing the number of credits to 72.093. Then in 2003, an additional 1.33 acres of vernal pool were documented, which brought the total credits to 74.556.

V. FINANCIAL ASSURANCES

The banking agreement called for the establishment of an endowment fund to insure the perpetual operation and maintenance of the conservation bank. Anticipating the bank's development in phases, the agreement provided that before the banker could sell a new increment of credits, it must deposit \$650 for each previously sold credit into the endowment fund. Wildlands and CDFG entered into a Declaration of Trust, whereby CDFG is the Trustee of the endowment fund. Per the terms of the Declaration of Trust, and after the fifth year of the bank's operation, CDFG can make direct disbursements from the principal or income of the endowment fund.

A total of \$48,457.50 was deposited into the endowment fund. To date, Wildlands has not received disbursements from either the principal or income. Wildlands pays the Wildlife Heritage Foundation \$3800 a year to perform its oversight activities, which includes submitting a report to USFWS annually.

VI. MANAGEMENT (INITIAL & LONG TERM)

The conservation management plan, developed concurrent with the banking agreement, establishes the responsibilities of the bank sponsor during bank operation and the long-term steward once the bank closes. To ensure the continued viability of the management plan, it is referenced in the conservation easement. The Wildlife Heritage Foundation is the easement holder and perpetual steward of the property.

The management plan only called for a few initial improvements to the property. The entire acreage was to be enclosed by fencing to eliminate any disturbances. A system of mostly non-vehicular maintenance trails needed to be established to facilitate monitoring and management activities. Additionally, the plan required a graveled parking area to accommodate maintenance and visitors' vehicles.

Long-term management of Orchard Creek consists of weed control, accomplished primarily through grazing cattle on the pastureland (although the management plan referred to the use of sheep). In the Central Valley, cattle grazing is the preferred method because cattle walk through the pools when they are wet, and they preferentially graze on invasive exotic grasses instead of forbs. Sheep are not preferred because they will not walk in the pools when they are wet, and they preferentially graze on forbs instead of grasses. The timing and intensity of the grazing is formulated based upon the scientific literature and consultation with the regulatory agencies.

VII. INTERESTING FEATURES

Conservation Funds

In 1994, the USFWS listed four species of fairy shrimp under the Endangered Species Act. In 1995, the USFWS issued a programmatic biological opinion on vernal pools addressing the preferred means of mitigating effects on threatened or endangered vernal pool invertebrate species. The opinion stated a clear preference for habitat banking over small scale, on-site mitigation and established a 2:1 ratio for preservation and a 1:1 ratio for creation. But because the listing was new, no banks with the appropriate credits were available for current project proponents to purchase.

In anticipation of future vernal pool banks coming online, the USFWS established two funds into which project proponents could pay to offset their impacts to listed vernal pool species. The USFWS set up a Vernal Pool Preservation Fund (VPPF) with The Nature Conservancy (TNC) and a Vernal Pool Creation Fund (VPCF) with the Center for Natural Lands Management (CNLM). Later, the VPPF was transferred from TNC to CNLM. These funds were established using two-party agreements: agreements between the USFWS and CNLM. Each time a project proponent wanted to mitigate by depositing funds in a Conservation Fund, a three-party contract was formed (between the USFWS, the project proponent, and CNLM). Records were kept of each transaction, including how many acres were impacted, the area in which the impacts occurred, and the amount of the transaction.

Orchard Creek was the first conservation bank that received money from a Conservation Fund upon its establishment (Fitzgerald Ranch also received such funds). The USFWS, in conjunction with CNLM, went through the Conservation Funds' records for projects that occurred within Orchard Creek's service area and then transferred monies from the Conservation Fund to Orchard Creek. Orchard Creek then subtracted the appropriate number of credits from its ledger to reflect those credits as sold.

Currently the USFWS Sacramento Office oversees one Conservation Fund for vernal pools (the Vernal Pool Conservation Fund), which covers creation/restoration/preservation. There are also funds for six species, and they are primarily used when banks are not available. Banks can apply for the funds from within their service areas.

The first vernal pool preservation bank

Banking was in its infancy when Orchard Creek was first being contemplated, as was vernal pool preservation. When Wildlands found the Orchard Creek property, the current landowners (which numbered approximately 20) were at risk of losing their land due to an investment with New Paradigms. Wildlands proposed to form a consortium with the landowners in order to save them from bankruptcy. Wildlands had to overcome the landowners' skepticism by educating them on the benefits of banking, a process described as "contentious." The

landowners ultimately signed on to the idea of turning the property into a conservation bank, and they received financial benefits from the project.

Another challenge involved the conservation easements and the incremental process by which the bank came online. According to Wildlands, the USFWS was apprehensive about placing a conservation easement over a 632-acre parcel of land and approving the sale of 57 credits all at once. In accordance with the banking agreement, Orchard Creek was instead brought online 30-acre parcel by 30-acre parcel. Each parcel brought online resulted in a release of credits, and a conservation easement was signed for each phase of implementation. Once the entire 632 acres was brought into the bank, an umbrella conservation easement was signed. According to the USFWS, none of the 21 incremental conservation easements were recorded by CDFG, and the umbrella easement was not recorded until 2006.

VIII. APPENDIX

Appendix

Service Area Map for vernal pool preservation creditsA