

Banking on wildlife gener



California gnatcatcher.

Photo © Robb Hirsch



Vernal pool.

Photo © Ray VanEck

Most Californians hear the word “bank” and think of their ATM. But California has another type of bank – one where deposits are land and the benefits priceless. It is called a conservation or mitigation bank.

What is a Conservation or Mitigation Bank?

A habitat bank is privately or publicly owned land protected and managed for its specific natural resource values. The bank owner sells habitat

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credits to developers or others who are required to compensate for environmental impacts of their activities to those same types of natural resources. There are two types of habitat banks: conservation banks and mitigation banks. The concepts for both are similar: mitigation banks restore, enhance, and create wetlands and are established to compensate for impacts to wetlands; conservation banks preserve, restore, or enhance habitat for listed and/or special status species.

Conservation and mitigation banks utilize a free-enterprise concept where a land owner proposes to establish a bank as a means of generating income from their property without developing it. Developers are looking for ways to mitigate their impacts to species or habitats quickly and cost-effectively. Wildlife agencies such as the California Department of Fish and Game (DFG) and the U.S. Fish and Wildlife Service are looking for ways to conserve habitat for species without relying on small, piecemeal mitigation sites that may not adequately protect the species and habitats in the long-term. One of the “tools” that can meet the needs of all of these interests is habitat banking.

A mitigation bank typically involves creation, restoration, enhancement and, sometimes, preservation of wetland

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habitats. The habitat creation, restoration, or enhancement in the bank is carefully monitored and managed to ensure the habitat is established and maintained successfully. Credits are often released for sale by the agencies at monitoring and management milestones such as construction of various amenities or necessary habitat structures, when hydrology requirements are met, and when wetland vegetation has been established. A conservation bank differs from a mitigation bank in that preservation of high quality habitat is a more common component and creation or restoration is used less frequently. In conservation banks, the habitat must still be monitored and adaptively managed to ensure the habitat is maintained as suitable for the target species.

Banks that propose to create, restore, or enhance habitat may require the banker to enlist the expertise of biologists, hydrologists, geologists, restoration ecologists, and heavy equipment operators. These experts can help the banker develop a comprehensive habitat development plan that is likely to establish the habitat with success. Many bankers also enlist the assistance of attorneys, accountants, real estate brokers, escrow companies, non-profit organizations, and private entrepreneurial land managers.

The need to hire these types of professionals has led to more businesses being involved in mitigation and conservation banking than families, though families involved in habitat banking are becoming more common. Small land owners looking to secure their property for future generations or to protect it from development are less likely to have the capital to invest in the upfront expense of creating or restoring habitat. Since habitat creation and restoration is the focus of mitigation banks, small land owners do not frequently participate in this program. However, if high-quality habitat is present on the property, or could be with some enhancement and appropriate

management, then applying to become a conservation bank is more likely, as start-up expenses are less.

Who Are The Bank Owners?

There are several different faces to bank ownership: family-owned and operated banks; habitat development entrepreneurs that establish banks and restore and manage properties for public and private clients; public agencies looking for ways to mitigate the impacts of their planned development projects; and developers who are also looking for feasible conservation options to compensate for their project impacts.

One example of a family-owned conservation bank is the Bryte Ranch Conservation Bank in Sacramento County. The Bryte family property contains some of the largest remaining vernal pools in the Sacramento old terrace vernal pool region. A bank is evaluated and assigned a certain number of credits based on a development plan and the site conditions among other factors. The bank, once established, may sell credits until sold out. And a bank can sell all of its credits especially if it is an area with development and mitigation needs for the type of habitat the bank contains. In the future, the bank can be transferred to another owner after review and approval by the agencies, but the agencies require that the bank property be protected in perpetuity by a conservation easement, or the banker may propose later to add to the bank or may propose to enhance an area not previously evaluated for additional credits. However, if the banker is found to be out of compliance with the bank agreement or management plan, the agencies may suspend their credit sales until efforts to correct the situation are satisfactory.

In the case of the Bryte family, they have moderately grazed the property for many years, actually helping maintain the unique vernal pool vegetation. In the Sacramento area, vernal pools and their associated rare vegetation and invertebrates are threatened by housing

and industrial development. A real estate broker worked with the family to conserve the Bryte Ranch property and capitalize on that conservation.

The Bryte family chose to establish a conservation bank which would protect the land in perpetuity from development, and that would allow them to continue to use the land for agricultural practices compatible with habitat preservation. They could also realize some income from the sale of conservation credits.

Another example of a bank owner is a land management and stewardship corporation called Wildlands, Inc. Wildlands, Inc. was one of the first entrepreneurial companies to establish mitigation and conservation banks in California. Wildlands establishes banks independently and in collaboration with landowners and conservation organizations. Their flagship and first mitigation bank, Wildlands' Wetlands Bank, was established in 1994 in Placer County. Wildlands restored and created seasonal wetlands, marsh, and riparian habitat on the site. Wildlands often gives tours of this bank site and have good reason to be proud of their habitat restoration accomplishments, their management of the site and their overall stewardship practices. In addition to enhancing, protecting, and monitoring the habitat, Wildlands has been known to conduct field trips for local schools to educate the children and the community about nature.

What Is DFG's Role In Banking?

DFG is the trustee agency for protection of wildlife and habitat in California. DFG is mandated to provide for the conservation, protection, restoration, and enhancement of wildlife. In keeping with this responsibility, DFG seeks compensation for development impacts in a manner that provides long-term viability of species and habitats. In 1995, the California Resources Agency and California Environmental Protection Agency adopted the *Official Policy on*

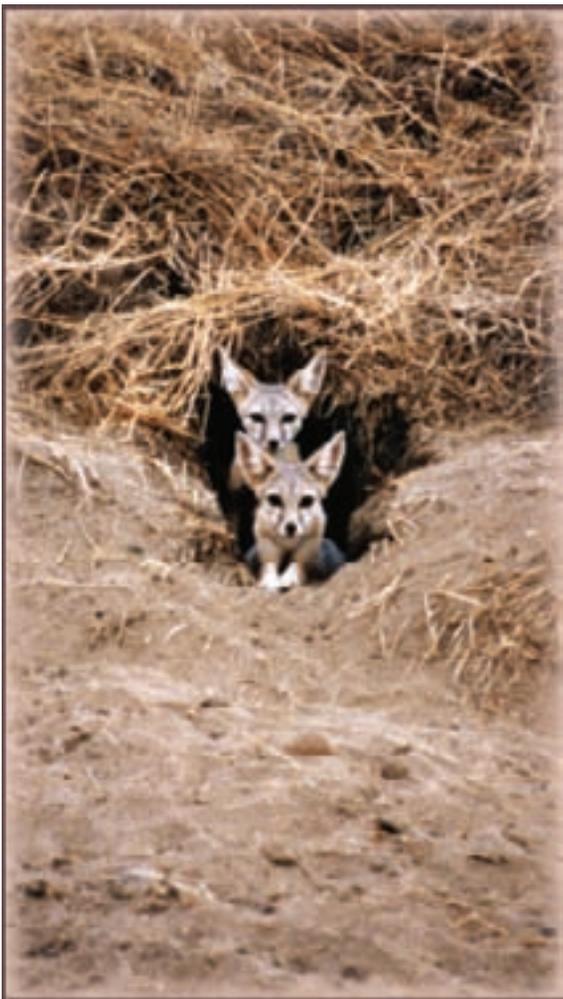


Photo © Jeremy Rowell

San Joaquin kit fox.



Photo © Eileen Marie Oram

Adult burrowing owl.

Conservation Banks to illustrate California's support of the concept of banking and to establish guidelines the agencies would follow in approving conservation banks. The policy provides formal guidance on preferred habitat types, mechanisms for permanent protection and the basic elements needed to establish a conservation bank. DFG has been reviewing and developing agreements with bank owners to ensure that conservation banks meet criteria (found in the policy), and continues to improve the standards and review process to this day. DFG staff are responsible for providing the assistance and expertise to bank owners to establish banks that protects natural resources in perpetuity.

Anyone can propose a conservation bank. A prospective banker may contact a DFG regional conservation banking coordinator and arrange an appointment to tour the property and discuss the suitability of the site as a mitigation or conservation bank. The coordinators can provide the prospective banker with

some materials about the review process such as information the DFG needs to evaluate the bank site, a document checklist, and information on which agencies the banker should include in the review and approval of the bank. That individual or corporation must have control over the land on which the bank is proposed. DFG has no qualification requirements for conservation banking. However, if the individual or entity does not have the expertise to plan and establish a bank, experts will need to assist in the preparation and/or implementation of the bank proposal, development plan, property surveys, a biological resources report, management plan, funding analysis, and the bank agreement.

What Have We Accomplished With Banking?

In recent years, DFG's Habitat Conservation Planning Program made significant progress in working with public and private entities to establish

conservation banks throughout California. Between 1999 and 2003, over 7,150 acres of habitat for threatened and endangered species were conserved in conservation and mitigation banks and about 3,585 acres are proposed for protection in future banks. Examples of priority habitats include sites that can support multiple life stages of the target species (typically threatened, endangered, or special status species); provide adequate food, shelter, and protection from predators and disturbance; provide habitat movement corridors for wide-ranging species; support endemic species; support a high diversity of wildlife; or protect functional wetlands. The priority habitats differ from place to place depending on the location and focus for that area. The conservation banks range in size from as small as 28 acres to protect vernal pool plants and crustaceans to more than 3,200 acres for more wide-ranging species like San Joaquin kit fox. Banks have been created in 21 of 58 California counties. The

established conservation banks protect numerous state threatened and endangered animals and plants including the San Joaquin kit fox, giant garter snake, Least Bell's vireo, Alameda whipsnake, Sebastopol meadowfoam, Bogg's Lake hedge-hyssop, and slender Orcutt grass. Other special status species in California conserved by conservation banks include the burrowing owl, California tiger salamander, western spadefoot, Mason's lilaeopsis, and delta tule pea. Federally listed animals protected include the California red-legged frog, valley elderberry longhorn beetle, Coastal California gnatcatcher, Quino checkerspot, Conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp.

A few of the diverse banks approved by DFG's Habitat Conservation Planning Program include:

- Agua Fria Conservation Bank - conserving habitat for San Joaquin kit fox in Merced County;
- Arco Coles Levee Ecosystem Preserve - conserving about a dozen endangered species, including the San Joaquin kit fox and kangaroo rat in Kern County. In 1993, the public-private partnership between Arco

Western Energy and the Department of Fish and Game the Department in creating the 6,000 acre Arco Coles Levee Conservation Bank was recognized with receiving the prestigious Innovations in State and Local Government Award from the Harvard School of Government and the Ford Foundation.

- Brushy Creek Conservation Bank - conserving burrowing owl habitat and known colonies of burrowing owls in Alameda County;
- Bryte Ranch Conservation Bank - protecting vernal pools and suitable habitat for state listed vernal pool plants in Sacramento County;
- Pope Ranch - creating and restoring 391 acres of freshwater marsh habitat for giant garter snakes in Yolo County;
- Rancho Jamul Wetlands Mitigation Bank - restoring 53.6 acres of riparian habitat in San Diego County;
- Stillwater Plains Mitigation Bank - creating and preserving vernal pools and state listed plants in Shasta County.

Many more proposed banks currently in the review stages will go a long way toward conserving listed and special status species. One such site is as a 1,862-acre site in Solano County that will provide habitat for more than 10 state and federally listed and special status species.

Approved conservation banks not only provide a viable alternative to the costly process of conventional project permitting and mitigation at a single site. They can also contribute to large scale conservation planning efforts such as the Natural Community Conservation Planning Program in southern San Diego County, by providing habitat linkages for wildlife, and contributing to recovery strategies for federally listed species.

For more information about habitat banking, please visit DFG's web page at www.dfg.ca.gov/hcpb/conplan/mitbank/mitbank.shtml. 

Tina Bartlett is the statewide Banking Coordinator for DFG's Habitat Conservation Planning Branch in Sacramento and leads regular banking coordination meetings with DFG biologists from around the state.

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