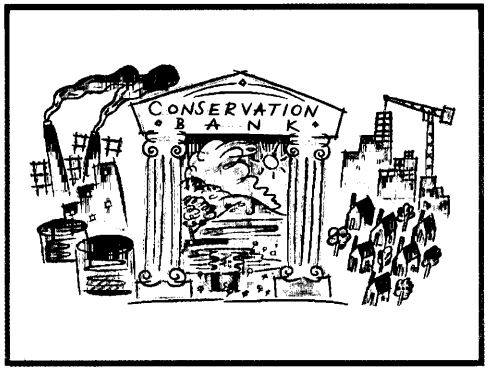
Conservation Banking – *A Technical Report*



Conservation Banking:
An economic incentive
to conserve habitat

Prepared for:

California Department of Fish and Game
and California Wildlife Foundation

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Preface

This report has been prepared as a reference for a variety of audiences, but the primary target is someone who is considering establishing a conservation bank. The text is addressed to that person — when we say "you", we mean the person seriously interested in setting up a conservation bank. However, we hope that the report also will be useful to, among others, the staffs of resource agencies, such as the California Department of Fish and Game or the U.S. Fish and Wildlife Service; local governments asked to cooperate in setting up a conservation bank; organizations or individuals interested in encouraging conservation efforts; local land trusts or land managers who manage conserved land; and bankers or other investors asked to evaluate a proposed conservation bank.

A slide show covering much of this material and a brochure describing the basic concept of conservation banking have been prepared as part of the program, funded by the Ford Foundation, to provide information about conservation banking.

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What is a Conservation Bank?

A conservation bank is privately or publicly owned land managed for its natural resource values. The bank owner sells habitat credits to parties who are required to compensate for environmental impacts of their activities or who wish to fund land conservation efforts. Developing a conservation bank establishes legal links between the owner of the bank and resource agencies, such as the California Department of Fish and Game, U.S. Fish and Wildlife Service, or the U.S. Army Corps of Engineers.

A conservation bank is a free-market enterprise that:

- *offers landowners economic incentives to protect natural resources;*
- *saves developers time and money by providing them with the certainty of pre-approved compensation lands; and*
- *provides long-term protection of habitat.*

Conservation banking provides a win-win-win solution by matching the financial goals of the land banker, the needs of developers, and the protection of natural systems that sustain all of us. It creates economic value by maintaining or restoring, rather than destroying, wildlife habitat.

This technical report explains how to set up a conservation bank. First an overview of the process is presented in Chapter 2, then three different examples of existing conservation banks are described in Chapters 3, 4, and 5. Finally, information for setting up a conservation bank is presented in Chapter 6, illustrated by the examples. The last chapter describes lessons that have been learned in the process of establishing these and other early conservation banks.

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2: Overview

The California Department of Fish and Game (Fish & Game) and U.S. Fish and Wildlife Service cooperate in the agreements and approvals necessary to establish conservation banks. However, for brevity, in the remainder of this report we refer only to Fish & Game. That doesn't mean that Fish and Wildlife Service will not be involved in evaluating and approving a conservation bank.

Fish & Game personnel are eager to help if you want to establish a conservation bank. Contact Fish & Game early in the process. Describe what you have in mind. If you own a specific parcel of land, visit the site with Fish & Game biologists and ask them to evaluate its potential suitability as a conservation bank. If you do not already own property, consult with Fish & Game staff — they may know about land on the market that has already been identified as a suitable bank.

You may need to have a qualified biologist map the habitat types, document and map the presence of sensitive species, and identify the need and suitability for restoration of the parcel. After visiting the site and reviewing the survey reports, Fish & Game will evaluate the overall conservation value of the land, taking into account the specific habitats, sensitive species, regional significance, and long-term viability of the parcel as habitat.

In making your decision to establish a bank, you will want to evaluate the following financial factors:

- *Costs to evaluate the conservation bank's feasibility, conduct negotiations, write and/or evaluate contracts, acquire the land, and set up the management and reporting structure;*
- *Enhancement and on-going land management costs;*
- *Geographic extent and potential market for the credits;*
- *Projected income from compatible uses; and*
- *Non-profit or for-profit status of the conservation bank.*

2.1 Conservation Banking Agreement

The Conservation Banking Agreement with Fish & Game will identify the precise location of the property, all the habitat types and species that will benefit from the bank, and the "credit area" that is eligible to use it. The Agreement will indicate the kind of enhancements and restoration that the conservation bank owner/operator is committed to carry out. Land ownership, land management, and long-term funding are also part of the Conservation Banking Agreement. A sample Conservation Banking Agreement is in Appendix A.

Land ownership may be maintained by the owner of the conservation bank, or title may be transferred to others as provided in the Conservation Banking Agreement. If ownership of the bank is retained, a conservation easement is provided to Fish & Game or another approved entity for the bank (or phase, if the bank is divided into phases). For each credit sold, an appropriate credit is deducted from the bank ledger, but a specific acreage is not identified since the entire conservation bank (or phase) is considered conserved once the first conservation credit has been sold.

As credits are sold, money is paid into an endowment fund, the size of which depends on the interest rate when the endowment is deposited as well as the required enhancement and land management activities. If interest rates are low, a larger endowment will be required to ensure sufficient earnings for land management on the property. The land manager, an entity with the skills to develop and maintain the conservation value of the bank, must be identified when the bank is established.

2.2 Land Management Plan

The Conservation Banking Agreement will require that a land management plan be prepared. The plan will have two parts: how the land is managed before credits are sold, and how the conserved areas (i.e., acreage for which credits have been sold) will be managed.

The land manager is responsible for preparing and implementing the management plan, and maintaining the records needed to show what has been achieved. The management plan includes:

- *Habitat improvement measures specific to a particular location and the target habitats and species found there (e.g., fencing, erosion repair, stabilization of stream banks, restoration; burning; wetland development; irrigation; native tree and shrub planting);*
- *Pest control;*
- *Monitoring plans for habitats and target species, including target species' habitats; and*
- *Reporting requirements.*

Reports are required to document compliance with the agreements under which the bank was established and to provide the information needed to evaluate changes in the conservation value of the bank lands. Using the information assembled in the reports, the land manager and/or the wildlife agencies can recommend needed changes to benefit the target habitats and species.

Examples of already existing conservation banks are described in the next three chapters: Coles Levee Ecosystem Preserve; Wildlands, Inc.; and Carlsbad Highlands Conservation Bank. There can be different driving forces for creating a conservation bank. In the case of the Coles Levee Ecosystem Preserve, ARCO had owned the property for many years and established the conservation bank mainly to meet compensation obligations for its extensive oil and gas operations in the San Joaquin Valley. The Carlsbad Highlands Conservation Bank was started by the Bank of America on property it acquired as part of a financial transaction; since the land was occupied by listed species and connected two larger areas that were already conserved, the Bank determined that developing the parcel would be expensive and difficult and that the best use of the property was as a conservation bank that would support the Natural Community Conservation Planning effort in San Diego County.

3: Coles Levee Ecosystem Preserve

Highlights of Coles Levee Ecosystem Preserve:

- *ARCO continues oil and gas production at the preserve, manages the preserve, and retains ownership of the conserved land.*
- *If ARCO needs to disturb an area that has already been conserved, another area within the preserve can be conserved as specified in the ARCO agreement.*
- *The conserved land compensates for ARCO activities in the San Joaquin Valley and for the activities of others who have purchased credits from ARCO.*

3.1 Location and History

Coles Levee Ecosystem Preserve is a 6,056-acre conservation bank located in the San Joaquin Valley west of Bakersfield. The Coles Levee Ecosystem Preserve was established in 1992 by ARCO Western Energy, the land owner, by agreement with the California Department of Fish and Game and with the concurrence of the U.S. Fish and Wildlife Service. The western boundary of the property abuts the Elk Hills Naval Petroleum Reserves. The California Aqueduct abuts the Preserve and provides a connection to the Tule Elk Reserve and other habitats, such as the Lokern area, to the north. Similarly, the Kern River connects the Preserve to other natural areas to the east along the river.

Oil and gas were discovered at Coles Levee in the 1930s and at peak production more than 15,000 barrels of oil and 40 million cubic feet of gas were produced each day. In the mid-1990s, production had dropped to approximately 1,000 barrels of oil and 15 million cubic feet of natural gas per day.

3.2 Target Habitats and Species

Seven different plant communities are found at Coles Levee:

- *Valley saltbush scrub*
- *Valley sink scrub*
- *Valley mesquite*
- *Cottonwood riparian*
- *Alkali sink*
- *Vernal pool*
- *Non-native valley grassland*

The high profile listed wildlife species found at Coles Levee include the San Joaquin kit fox, San Joaquin antelope squirrel, giant kangaroo rat, Tipton kangaroo rat, and blunt-nosed leopard lizard. Three listed plants, Hoover's woolly-star, Hoover's woolly-threads, and Kern mallow, are also found there. In addition to the listed species, there are over 20 species of mammals, 35 species of birds, 15 species of reptiles, and 100 species of plants at Coles Levee.

3.3 Ownership, Compatible Uses, and Land Management

ARCO retains ownership of the surface and mineral rights, but has granted a conservation easement for the entire 6,056-acre preserve to Fish & Game. ARCO manages the property for its oil and gas production and as a preserve to provide compensation for its oil field activities in the San Joaquin Valley. It has sufficient ecological assets to sell credits to others with compensation requirements for San Joaquin Valley species. Grazing may be used by ARCO as one means to manage vegetation at Coles Levee.

When ARCO either designates a specific area as compensation for its activities or sells habitat

credits to third parties, an endowment fee must be paid to Fish & Game. These funds are kept in a segregated, interest-bearing account and the interest is paid to ARCO for management of the conserved lands. ARCO must fund the management of the entire preserve, regardless of the amount of reimbursement from the endowment account. Because of early sales of large numbers of credits and the overlap of some management responsibilities (e.g., fence maintenance, security) with the on-going oil and gas operations, the interest from the endowment has been adequate to date to fund management of the entire preserve.

The agreements between ARCO and Fish & Game identify mitigation measures to be implemented during activities at the Coles Levee Ecosystem Preserve. They include limitations on off-road driving, requirements for trash control, environmental preactivity surveys to identify areas where special habitat protection measures are needed, fire prevention programs, stockpiling of soil when surface disturbance occurs, reclamation and limited restoration of disturbed areas or when facilities are abandoned, and installation of raptor protection improvements on all new electricity transmission and distribution lines.

Additional measures to protect listed species include implementing buffer zones, inspections, limitations on activities at particular locations and/or times, and other measures based on information from the environmental preactivity surveys.

ARCO expects the field to be retired within 15 to 20 years, at which time all existing structures (e.g., gas plants, oil wells, gathering lines) will be removed and these areas restored to native vegetation.

3.4 Nature of Credits and the Potential Market

For each acre of habitat credit that ARCO sells, it identifies one acre on the ground as dedicated compensation land. The potential market for credits is very large. The credit area includes most of the southern San Joaquin Valley and nearby areas where the target species occur.

4: Wildlands Mitigation Bank

Highlights of the Wildlands Mitigation Bank:

- *Wildlands, Inc., sells wetland habitat credits for compensatory mitigation for lost wetland habitat acreage.*
- *Scientific study of efforts is used to improve knowledge of wetland restoration and creation.*
- *Created wetlands can be implemented and functioning prior to project impacts, thereby reducing the loss of habitat function.*

4.1 Location

The Wildlands Mitigation Bank is located in the northwest corner of Placer County, south of the Bear River near Highway 65. The total area is 323 acres, with 80 acres in the first phase now operating. The conservation bank was established in 1994.

4.2 Target Habitats and Species

In the first phase, restored and created habitats include seasonal emergent marsh, perennial emergent marsh, open water marsh, riparian, and vernal pools. Oak woodland and oak savanna habitats are being developed in upland areas. Target species include the giant garter snake, western pond turtle, red-legged frog, Swainson's hawk, valley elderberry longhorn beetle, vernal pool fairly shrimp, and several sensitive plant species, particularly plant species endemic to vernal pools.

Phase 2 and Phase 3 will include the same habitats targeted in Phase 1, with the possible addition of perennial stream channels, intermittent stream channels, and elderberry savanna. The mix of habitats in Phases 2 and 3 will depend on demand.

4.3 Ownership, Compatible Uses, and Land Management

The land is owned by Wildlands, Inc. At the initiation of each phase, habitat preservation is guaranteed by a permanent conservation easement in favor of Fish & Game. The jurisdictional wetland areas are also protected by recorded deed restrictions in favor of the United States Army Corps of Engineers. When the sale of credits stops, Wildlands, Inc. may continue to manage the land or it may, with the agreement of the Corps of Engineers and Fish and Game, transfer management to a third party.

The Wildlands Mitigation Bank is managed solely for its habitat value. The land management will focus on the restoration and creation of wetland habitats. The Wildlands Mitigation Bank offers an ideal opportunity for long-term scientific study of the development, colonization, and use of created habitats by numerous plant and wildlife species. Wildlands, Inc., has developed performance standards to be used by this and future wetland restoration and creation projects.

For each phase, Wildlands, Inc., funds an endowment that is adequate to manage the habitats in perpetuity. This money is kept in an interest-bearing segregated account and the interest is used to pay for land management. This will be the case both while the bank is active and after the bank has been closed.

4.4 Nature of Credits and the Potential Market

For the sales of habitat credits, Wildlands, Inc., must supply jurisdictional wetlands as

shown in the Table 1. For newly created habitats that have lower conservation value, more acres must be conserved by Wildlands, although the purchaser of credits is not affected by the changes in conservation value of the lands over time. Periodically the Corps of Engineers and Fish and Game evaluate the new habitats and, as the habitat becomes better established and supports more species, the conservation requirements are lowered. For all but the riparian habitats, the full value of the habitat is likely to be reached within one to two years of its creation. Riparian habitats are slower to develop their full conservation value because of the time it takes trees to reach a significant height.

The credit area is a 40-mile radius around the Wildlands, Inc. site, including Sacramento, Davis, Woodland, Folsom, Auburn, and numerous smaller communities where considerable development that may impact wetlands is anticipated. This bank should be appealing to project proponents who have compensation obligations for wetlands impacts in the credit area for the following reasons:

- *Corps of Engineers' policies allow a permittee to purchase wetland habitat credits from a Corps-approved bank, such as Wildlands, to offset unavoidable impacts under Section 404 of the Clean Water Act;*
- *Wetlands restoration and creation is complex and expensive;*
- *Substantial delays could result from project-specific creation of wetlands; and*
- *Wildlands, Inc., assumes full liability for the success, maintenance, and monitoring of the recreated and preserved wetland habitats.*

Table 1:
Wildlands Mitigation Bank Habitat Credits

Habitat Type	**Wildlands Sells Credits at Ratios Listed Below**	
	Initially (1995)	*Present* (1996-97)
Seasonal emergent marsh	2:1	1:1
Perennial emergent marsh	2:1	1:1
Open water marsh	2:1	1:1
Riparian	3:1	2:1
Vernal Pools	3:1	1:1

5: Carlsbad Highlands Conservation Bank

Highlights of the Carlsbad Highlands Conservation Bank:

- *Credits sold by Carlsbad Highlands Mitigation Bank were used to compensate for impacts to any non-riparian or non-wetland habitat in San Diego County.*
- *The development was phased. When the credits for a phase were completely sold, then the land in that phase was deeded to Fish & Game or another appropriate entity.*

5.1 Location

Carlsbad Highlands Conservation Bank, a 182-acre conservation bank in Carlsbad, a community in the coastal portion of San Diego County, was established in 1995. Bank of America acquired the property in a financial transaction. When analyzing potential uses of the property, the Bank of America reached the conclusion that the best economic use was as a conservation bank.

5.2 Target Habitats and Species

The area is dominated by coastal sage scrub, an important natural community that is habitat for the California gnatcatcher and may provide habitat for a number of other sensitive species.

5.3 Ownership, Compatible Uses, and Land Management

The land was owned by the Bank of America, which benefited by selling the conservation credits and by retaining the assigned development units. The conservation bank was developed in three phases. At the initiation of each phase, the Bank granted a permanent conservation easement to Fish & Game. When all the credits in a phase were sold, then the land in that phase was deeded to Fish & Game.

The conservation easement grants Fish & Game:

- *The right to enter the property at reasonable times to monitor compliance;*
- *The right to prevent any activity or use of the property that is inconsistent with habitat conservation; and*
- *All mineral, air, and water rights required to protect and sustain the biological resources.*

The conservation easement specifically prohibits off-highway vehicles, grazing, or surface entry for exploration or extraction of minerals. In general, the conservation easement allows activities that are not inconsistent with its habitat conservation purposes. In addition, a road right-of-way passes through the parcel and an easement was granted that allows construction of a road disturbing up to 20 acres of land within the conservation bank.

The land in the conservation bank was relatively undisturbed and required no enhancement. However, if the Bank of America had chosen to do so, it could have enhanced the property, in an attempt to generate more credits from the enhanced areas.

5.4 Nature of Credits and the Potential Market

The Bank of America sold 57 credits in Phase 1, 60 credits in Phase 2, and 65 credits in Phase 3. The phases were implemented in order. Each credit satisfied a one-acre compensation obligation.

The credit area included all of San Diego County, where there is considerable development proposed for coastal sage scrub habitats. Although some developers have arranged for compensation for the impacts of their projects through direct negotiation as part of the Natural Community Conservation Planning efforts in San Diego County, this bank was in a good position to meet the needs of smaller project and sold out in its first year of operation.

6: Establishing a New Conservation Bank

This chapter describes the process of setting up a conservation bank in some detail. The flowchart in Figure 1 illustrates the steps in the process, as well as interaction with the cooperating resource agencies.

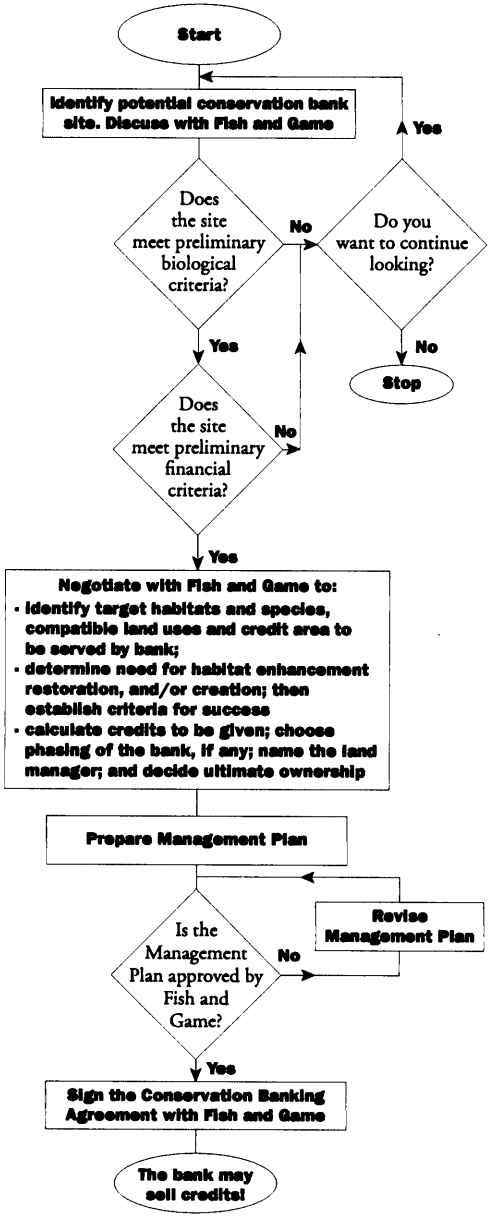
6.1 Choosing and Evaluating a Site

A conservation bank site must contain sensitive species or the potential to attract them or it must have a sensitive habitat or the potential to create it; otherwise it will have nothing of value to sell. Sensitive species need the right habitats, in the right locations, to flourish. So you first need to find a site that meets the biological requirements. After that, you will need to ensure that the site is also financially viable. Once you find a place that meets both the biological and financial criteria for success, you are ready to set up a conservation bank. Getting to that point may take some time and effort.

If you want to set up a conservation bank, but do not already own a particular parcel or have one in mind, you will have to find your site. Be sure to contact Fish and Game — their staff may know of suitable property. Conservation organizations, such as The Nature Conservancy or the Center for Natural Lands Management, may be able to suggest potentially suitable property. If a Habitat Conservation Plan (HCP) has been prepared for the area of interest, it is likely that lands with high conservation value have been identified in that process — contact the staff of the local implementing agency of the HCP to see if they have already identified suitable properties.

Figure 1:

Establishing a Conservation Bank: The Process



Information on conservation planning in California is available from the Fish & Game Environmental Services Division in Sacramento. Some key addresses and phone numbers are in Appendix A of this report.

Be sure to meet with Fish & Game biologists to discuss the biological characteristics of the site before buying property for a conservation bank. There is no guarantee that a particular piece of property will meet the biological criteria for a conservation bank, even if it is recommended by knowledgeable parties. And if you already own property, you should carry out the biological analysis and obtain preliminary approval from Fish & Game before making a commitment to start a bank.

6.1.1 Biological Characteristics

Analysis of the biological characteristics should answer four major questions:

- *Does the site fit into a regional conservation strategy?*
- *What resources are present on the site?*
- *What is the potential for restoration (or some other form of improvement)?*
- *Will the site provide habitat for target species that is viable in the long term?*

Regional Conservation Strategy: For most species and habitats, it is important for there to be linkages to other habitat areas. Multiple preserves aimed at protecting the habitat of target species should be linked to allow the movement of individuals and the resulting genetic flow between conserved areas. Ideally, linkages would also provide habitat as well as connecting other conserved habitats; however, if that is not feasible, the linkages must at a minimum be suitable as movement corridors.

For individual animals or plants, interconnected conserved areas represent islands of managed habitat that may supply ideal habitat for foraging and breeding. From the standpoint of genetic flow, interconnected conserved areas tend to maintain populations naturally. Local crises (for example, disease, flooding, fire, predation) may cause a population at one site to diminish or die out, but the site can be recolonized by other nearby populations. Likewise, if favorable conditions lead to local population growth in certain years, interconnected conserved areas can allow out-migration to nearby suitable areas.

Interconnectedness is of greatest concern for mobile, non-flying vertebrates with relatively large home ranges, such as the San Joaquin kit fox and the giant garter snake. It would be of lesser concern for flying animals, such as birds or bats, although some species of birds do not disperse over long distances. Connectivity is also a consideration when roosting or nesting habitat is separated from foraging habitat. Although some species, especially plants, with very restricted habitats may be adequately conserved with relatively small specialty preserves, very few conservation banks are likely to be established for such a limited function. Conservation banks are normally habitat based and designed to serve a number of species. The Coles Levee Ecosystem Preserve is a good example of a habitat-based conservation bank.

Fish & Game can provide information about regional conservation strategies. This kind of information is often developed as part of regional conservation planning. For example, detailed regional conservation strategies are included in documents prepared for the Natural Community Conservation Planning effort in San Diego County. There is also a preliminary regional strategy for the southern San Joaquin Valley that was developed to support habitat conservation planning there. To obtain either of these maps, or similar information for other areas in California, contact the Fish & Game Environmental Services Division in Sacramento (see Section 6.3 for the address and phone number).

Resources on the Site: The biological resources on the site must be described and mapped by a qualified biologist. This information is gathered in a biological assessment. If the site is large, it would be useful to have aerial photographs of the area and to organize the information in a database to facilitate analysis.

Sources of this information may be specific biological surveys conducted by qualified biologists as part of the analysis of the site. Fish & Game also maintains the California Natural Diversity Data Base, with species and habitat information from earlier surveys and published sources. Additional potential sources of survey information are museum collections; academic studies conducted by researchers and their students; surveys conducted by conservation groups or wildlife organizations; or data collected by current land managers.

Restoration Potential: With three specific exceptions described below, high-quality natural lands are the priority for conservation banks. Natural lands, particularly those already supporting the target species, have several advantages. Natural lands usually cost no more than degraded or developed land and already are known to support certain habitats or species: you won't have to bring them back. It takes no input of time and money to create the desired habitat and, in most cases, requires only modest expenditures to maintain or do some limited enhancement of the habitat.

It takes considerable time and money to restore degraded upland. Often, too, our knowledge and understanding of ecological processes is insufficient to dependably produce the habitat we aspire to restore or create.

The first exception to targeting exclusively high quality natural land is the use of restorable land as a buffer to existing high-quality habitat. This may be particularly beneficial where natural processes would allow succession toward beneficial habitat types, such as in a riparian zone. If the proposed conservation bank has enough viable habitat to meet the near-term demands, it is possible that the restoration of degraded or developed buffer areas could be completed by the time the additional habitat would be needed for the sale of credits.

The second exception relates to habitat connectivity. Some degraded areas, if restored, may be sufficiently important in implementing a viable regional conservation strategy that the drawbacks of restoration would diminish in importance. Even with the disadvantages of restoration mentioned above, the location of such parcels may make them highly attractive components of a conservation bank. The restoration needed to develop an effective corridor in a degraded area may be less difficult to accomplish than that needed to develop a larger area that could provide habitat.

Third, federal and state policies for wetland mitigation call for a combination of protection of natural habitat and restoration and/or creation of habitat of the type impacted. Thus, some restoration or creation of vernal pools, marsh, riparian or other wetland habitat must be considered and this can be a major component of a conservation bank. The main focus of the Wildlands Mitigation Bank, described in Chapter 4, is the creation of new wetland habitats to satisfy requirements that there be no net loss of wetlands.

Long-term Viability: Before a conservation bank is established, an assessment should be made by biological experts as to the likelihood that the target habitats and species will persist on the site. Factors such as the size and location of the bank; local land use patterns; the need for enhancement, reclamation, and/or restoration; and the kind of land management required are very important in evaluating long-term viability.

Size: There is no minimum or maximum size for a conservation bank. It may be developed in phases, especially if restoration is required. However, the bank (and its phases, if there are any) must be large enough to be ecologically self-sustaining, either on its own (large areas, like Coles Levee Ecosystem Preserve) or as part of a larger conservation strategy (Carlsbad Highlands Conservation Bank).

Land Use Considerations: Current and prospective land uses near the site can have a profound impact on its long-term habitat value and cost of management. Check the

land use plans of owners and agencies with local jurisdiction to make sure that development patterns anticipated in the area are compatible with the conservation value of the land. Easements (for roads, transmission lines, pipelines, aqueducts, communications facilities, or any other facilities) also should be evaluated for their potential impact. Requirements for buffer zones to protect conservation bank habitats from incompatible adjacent land uses could reduce the number of credits available for sale.

Habitat Enhancement, Reclamation, Restoration, or Creation: Almost all newly conserved lands require some enhancement, such as trash clean-up and installation of fencing and signage. Other lands may require some level of restoration, such as recontouring (if the land has been leveled) or removal of invasive exotic vegetation. In some areas, extensive restoration, or even the creation of a new habitat type, may be necessary — be warned: either of these can be a complex, time consuming, and expensive process.

If Fish & Game approval of a site is contingent on habitat reclamation, restoration, or creation, you should determine at this stage what actions should be taken and the criteria for success so that costs can be estimated with reasonable accuracy as part of the financial analysis.

Management: Some minimal management, such as maintenance of fencing and signage; trash control; and patrolling is required for all conserved land. Other lands may benefit from active ecological management to maintain a mosaic of habitats, to manage the hydrologic regime, or to reduce competition from non-native species, to name a few possibilities. Management techniques may include seasonal grazing, mowing, prescribed burning, irrigation, trapping of pests, or chemical applications to control noxious species. It may be necessary to develop wetlands, plant native trees and shrubs, or perform other comprehensive habitat reclamation or restoration as part of establishing a viable conservation bank.

Monitoring is also a component of conservation bank management. At a minimum, habitat condition must be monitored. In addition, the population levels of target species may have to be monitored.

Although this discussion of habitat improvement and management may seem out of place here, it is critical to the long-term viability of habitat and of the conservation bank. At this stage, it is not necessary to prepare a complete description of enhancement, reclamation, or restoration or to develop the detailed management plan. However, it is essential to generate enough detail to permit realistic cost estimates to be made.

6.1.2 Financial Issues

A conservation bank requires investments and incurs operating costs. How these compare with the income it can generate will determine whether you proceed.

Costs: Costs for setting up a conservation bank include the purchase of the land, enhancement expenses (signage, fencing, trash clean-up, etc.), property taxes, and maintenance (such as patrolling and fence repair). These are the normal expenses associated with land ownership.

To establish a conservation bank, it may be necessary to hire a qualified biologist to do one of more of the following tasks: gather and review existing biological information, conduct surveys according to approved protocols, and prepare a biological assessment of the site. There will be legal fees for attorneys you hire to review (and perhaps assist in negotiating) the conservation banking agreement with Fish & Game and other agencies. Legal fees can be reduced by patterning new agreements after already-approved agreements. If habitat reclamation, restoration, or creation is required, then those costs must be entered in the ledger. Finally, you may decide to advertise your conservation bank, incurring additional expenses. Be sure to include the cost of these tasks in your evaluation, taking into account the time needed to accomplish them.

Estimates of land management costs can be obtained from Fish & Game. The Center for Natural Lands Management also has a computer program that can be used to estimate land management costs. Finally, land mangers of operating preserves or conservation banks may be willing to provide information about their management costs. Section 6.3 lists some information sources.

Sources of Revenue: Income from a conservation bank comes from the sale of conservation credits, at prices you will set. Conservation banks respond to market forces — if you are providing a commodity that is in high demand, then you will be able to charge more. However, people in the market for compensation credits have the option of purchasing land themselves and then deeding it to an acceptable land manager, so that mechanism provides a constraint on what you can charge.

Additional revenue can be generated by a variety of compatible land uses that can be carried out on conserved land. At the Coles Levee Ecosystem Preserve, ARCO continues to produce oil and gas and may drill new wells within the conservation bank area. Under the terms of the conservation banking agreement, if ARCO needs to drill in an area for which conservation credits have been sold, then it can transfer the designation to another area before drilling.

In habitats where grazing can be used to maintain appropriate habitat conditions, it is likely that a conservation banking agreement, and associated management plan, can be developed to allow grazing of livestock. Other agricultural operations may be feasible, depending on the crop produced and the target species.

It is also possible to develop a conservation bank as part of surface mining operations, where suitable reclamation and restoration can be agreed upon. Another example of conservation coexisting with other land uses is found at duck clubs, where hunting at certain times of the year is not incompatible with the conservation goals of the area. Other recreational uses, especially less intrusive activities like photography, bird watching, and hiking, can be accommodated in conserved areas (although off-highway vehicles do not pass muster and mountain bikes may be unsuitable). If the target species at the site can be observed without disturbing them, the conserved wildlife itself can be an attraction. There can be money in eco-tourism.

If you would like to explore potential compatible land uses at a conservation bank, be sure to discuss the issue with Fish & Game. Often Fish & Game staff are familiar with places where conservation and other land uses coexist successfully. They can also point out potential pitfalls.

6.1.3 Deciding to Proceed

When you and Fish & Game have reached agreement that the site is acceptable from a biological perspective and you have decided that it makes the grade financially, then it is time to get down to the details. Most of these issues will have been investigated to some extent in the evaluation stage — otherwise you would not have been able to decide that the site is acceptable.

6.2 Negotiating the Approvals: the Conservation Banking Agreement

The conservation banking agreement is the legal contract between you and Fish & Game (and other agencies, as appropriate). It describes what the bank provides, what your obligations are, and what the obligations of Fish & Game and the other signatories are.

6.2.1 Basic Definitions

The agreement must describe the extent and location of the conservation bank, identify the credit area for the conservation bank, and list the target habitats and species.

Location and Size of the Conservation Bank: A map of the conservation bank and its legal description are included in the agreement. If the conservation bank is to be developed in phases, the location of each phase is shown on the map.

Credit Area: The credit area is the region eligible to use the conservation bank. This may be quite specifically defined (typical for habitat-based banks) or more flexible (when the bank is focused more on species). A preliminary definition of the credit area should have been determined during the evaluation phase, since it would be very difficult to assess the potential market without having some idea of the credit area.

The credit area for the Carlsbad Highland Mitigation Bank is San Diego County. The Wildlands Mitigation Bank serves an area within a 40-mile radius of the bank. The Coles Levee Ecosystem Preserve credit area is loosely defined to include the habitat for the species known to occur at the preserve — this includes most of the southern San Joaquin Valley.

Target Habitats and Species: The target habitats and species at a particular conservation bank are those for which habitat credits may be sold. The purchaser of the habitat credits satisfies compensation obligations incurred because of impacts to the same habitats and/or species in another location. Compensation obligations may be expressed in three different forms: as a requirement for habitat, for species, or for open space (that is, multiple habitats without distinction as to habitat type). The requirement depends on how the area to be developed and the area to be conserved fit into the regional conservation strategy.

For example at Coles Levee Ecosystem Preserve, purchasers of credits usually are compensating for impacts to one or more of the many species found at the Coles Levee Ecosystem Preserve. However, in some cases, purchasers are in the market for vernal pool or alkali sink habitat credits, with no requirement that a particular species be present in either of those habitat types. At Wildlands, Inc., the commodity for sale is credits for particular wetland habitat types, with no specific requirements for species presence. The Carlsbad Highlands Mitigation Bank sells open-space credits for impacts to any non-wetland or non-riparian habitat in San Diego County.

6.2.2 Land Ownership and Land Management

This part of the conservation banking agreement contains a description of how the conservation bank will be developed, including land ownership both during the active period of the bank and after sale of credits stops; the use of conservation easements; specific information about land uses that are either compatible or prohibited; and an outline of what will be in the Management Plan.

Land Ownership and Phasing of Development: At its inception, a conservation bank has owners who hope to sell habitat credits. Since there is some risk associated with this venture, the owner may choose to divide the bank into phases. In that case, the owner would negotiate with Fish & Game how to subdivide the property so that the land in any phase constitutes an ecologically self-sustaining unit, either on its own or as part of a larger conservation strategy that does not depend on the other phases of the same conservation bank being implemented. Then the conservation banking agreement is written so that the phases can be implemented sequentially, with no obligation for the owner to proceed to a new phase. Both Carlsbad Highlands Conservation Bank and Wildlands Mitigation Bank employ this strategy.

Carlsbad Highlands included three consecutive phases, with each of the three areas consisting of coastal sage scrub habitat. For this particular conservation bank, a conservation easement for all of the land in a particular phase segment was conveyed to Fish & Game when that phase was first made available for the sale of credits. When the phase was is completed, title was transferred to Fish & Game.

Wildlands, Inc. has also phased the development of its 323-acre conservation bank. The first phase is an 80-acre segment with creation of five wetland habitats: seasonal emergent marsh, perennial emergent marsh, open water marsh, riparian, and vernal pools. For subsequent phases, Wildlands, Inc. will negotiate

with Fish & Game the amounts and types of habitats to be restored or created, depending on development patterns in the credit area for the conservation bank and the resulting demand for particular wetland habitat types.

Compatible Land Uses: The conservation banking agreement can be as detailed or as broad as you and Fish & Game agree is appropriate. At a minimum it requires that uses be consistent with the purposes of the conservation easement. This is the case at the Wildlands Mitigation Bank, where no activities other than habitat restoration, creation, and management are planned. The agreement for the Carlsbad Highlands Conservation Bank is more specific; off-highway vehicles, grazing, and surface mining are prohibited. At the Coles Levee Ecosystem Preserve, where specific land uses are allowed, there are a number of mitigation measures implemented to protect the habitat when the various activities occur. However, since ARCO does not allow public access to the property, there was no need for the agreement to prohibit, for example, off-highway vehicle use in the area. Each agreement describing what is allowed and what is prohibited must be crafted to respond to three factors: protection of the conservation value of the bank; meeting the needs of the conservation bank owner; and addressing threats to the conservation value of the bank from nearby land uses.

Components of the Management Plan: In most cases, the management plan for a particular conservation bank (or phase) must be approved by the time the first credit is sold. Preparation of the plan requires practical knowledge about the habitats and species found on the site and effective ways to manage the land. Plan preparation and land management are not tasks for novices: hire someone who has experience and knowledge in the habitats and species at your conservation bank or contract the management to an experienced group. That will increase the chances that Fish & Game will give its (required) approval of your choice of land manager.

Habitat Improvement: The management plan spells out the requirements for enhancement, restoration, and creation of habitat and the criteria for success. It also describes, as appropriate, vegetation management, erosion control, pest control, prevention of trespass, or any of the other issues that may arise in the long-term management of natural lands. That management must be appropriate for long-term maintenance of the habitat.

Monitoring of Habitats and Species: In order to document the functioning of the bank, the land manager may be responsible for conducting surveys of habitat types and species occurrences. These surveys allow the land manager and Fish & Game to adjust the land management plan in response the current conditions and trends, and to adjust the credit levels in response to changes in habitat and population levels of sensitive species.

The monitoring section of the management plan must describe the frequency of surveys, what will be included in the surveys, protocols to be followed, and the timing and contents of required reports. The interval between surveys and the intensity of the survey effort depends on the type of habitat, the species known to occur on the site, the amount of habitat improvement (enhancement, restoration, or creation), and other factors that may affect the area. However, in many areas, general habitat surveys are conducted annually. Then every 3 or 4 or 5 years, specific surveys for individual species are conducted. Survey results are submitted to Fish & Game within a few months of completion of each survey.

Funding: Adequate funding for implementation of the management plan, both during the active period of the conservation bank and after sale of credits has stopped, must be guaranteed. There must also be a provision for what happens if the bank owner fails to perform as expected.

6.2.3 Agency Access to the Conservation Bank
Fish & Game requires that an appropriate resource agency must have the right to enter

the part of the conservation bank under a conservation easement for:

• *Inspections;*

• *Specified resource management responsibilities;*

• *Review of the bank management and operation for compliance with the terms of the agreements; and*

• *Resource management should the bank's land manager fail to implement the approved management plan.*

6.2.4 Auditing and Reporting

The management plan also contains a description of the auditing, record keeping, and reporting needed to show what has been achieved.

Bank operators are required to maintain a database of the credits sold and the corresponding areas conserved. The amount of unsold credit should also be identified. Annual reports are submitted to Fish & Game showing the activity in the most recent year and the cumulative transactions since the bank began operation. If the conservation bank is phased, the database should identify the phase with which each transaction is associated.

6.3 Who Can Help?

This section includes some names, addresses, and phone numbers of people who may be helpful. The text in italics lists the type of information they may be able to provide.

Fish & Game

Conservation and Mitigation Banking webpage
http://www.dfg.ca.gov/hcpb/conplan/mitbank/mitbank.shtml

Natural Community Conservation Planning webpage
http://www.dfg.ca.gov/nccp/index.html

Regional Conservation Plans (HCP/NCCP), potential bank sites and compatible land uses
Gail Presley
Natural Community Conservation Planning
Habitat Conservation Planning Branch
California Department of Fish and Game
1416 Ninth Street, Room 1341
Sacramento, CA 95814
Phone: (916) 653-9834
Fax: (916) 653-2588
Email: gpresley@dfg.ca.gov

Conservation/mitigation bank database
Debbie McEwan
Habitat Conservation Planning Branch
California Department of Fish and Game
1416 Ninth Street, Room 1341
Sacramento, CA 95814
Phone: (916) 657-4436
Fax: (916) 653-2588
Email: drmcewan@dfg.ca.gov

Regional Conservation Bank Coordinators:

Craig Martz
Northern California - North Coast Region
Department of Fish and Game
601 Locust Street
Redding, CA 96001
(530) 225-2281
Email: cmartz@dfg.ca.gov

Terry Roscoe
Sacramento Valley - Central Sierra Region
Department of Fish and Game
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
(916) 358-2883
Email: troscoe@dfg.ca.gov

Carl Wilcox
Central Coast Region
Department of Fish and Game
P. O. Box 47
Yountville, CA 94599
(707) 944-5525
Email: cwilcox@dfg.ca.gov

Steve Juarez
San Joaquin Valley - Southern Sierra Region
Department of Fish and Game
1234 East Shaw Avenue
Fresno, CA 93710
(559) 243-4014 x224
Email: sjuarez@dfg.ca.gov

Don Chadwick
Southern Coast Region
Department of Fish and Game
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4276
Email: dchadwick@dfg.ca.gov

Jeff Drongesen
Eastern Sierra - Inland Deserts Region
Department of Fish and Game
4775 Bird Farm Road
Chino, CA 91710
(909) 606-2401
Email: jdronges@dfg.ca.gov

U.S. Fish and Wildlife Service
HCPs in Field Office area
Carlsbad Field Office
2730 Loker Avenue West
Carlsbad, CA 92008
Assistant Field Supervisor
Phone: (619) 431-9440
Fax: (619) 431-9624

Ventura Field Office
2493 Portola Road, Suite B
Ventura, CA 93003
Assistant Field Supervisor
Phone: (805) 644-1766
Fax: (805) 644-3958

Sacramento Field Office
Endangered Species Program
2800 Cottage Way
Sacramento, CA 95825
Phone: (916) 414-6600
Fax: (916) 414-6710
http://sacramento.fws.gov/es/default.htm

Conservation Banking webpage
http://sacramento.fws.gov/es/cons_bank.htm

Conservation Planning with HCPs webpage
http://sacramento.fws.gov/es/hcp.htm

Center for Natural Lands Management
Cost of enhancement, restoration, and management
Ms. Sherry Teresa
425 E. Alvarado Street, Suite H
Fallbrook, CA 92028-2960
Phone: (760) 731-7790
Fax: (760) 731-7791
e-mail: cnlm@cnlm.org
http://www.cnlm.org

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Appendix A

Sample Conservation Banking Agreement

CONSERVATION BANK IMPLEMENTATION AGREEMENT FOR THE SAN VICENTE CONSERVATION BANK

This San Vicente Conservation Bank Implementation Agreement (Agreement) is made and entered into this eleventh day of June, 1996 by and between the Boys and Girls Clubs of East County Foundation (Foundation), The Environmental Trust, Inc. (TET), the California Department of Fish and Game (CDFG), and the United States Fish and Wildlife Service (USFWS). CDFG and USFWS are referred to collectively as the "Wildlife Agencies" and TET, The Foundation, CDFG, and USFWS are to be referred to collectively as the "Parties." The purpose of this Agreement is to establish the terms and conditions for establishing a Conservation Bank on approximately 320 acres of land owned by the Foundation as illustrated on Exhibit A and described in Exhibit B to be known as the "San Vicente Conservation Bank I."

RECITALS

A. The Foundation and TET are owners of approximately 320 acres of real property located in the County of San Diego, California and more completely described in Exhibit A and B attached, hereafter referred to ("Property").

B. Under the California Endangered Species Act, California Fish and Game Code Section 2050 et.seq. ("CESA"), California Fish and Game Code Section 1802, and other State laws, CDFG has jurisdiction over the conservation, protection, restoration, enhancement, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. CDFG is also the manager and trustee of fish and wildlife resources and their habitat pursuant to California Fish and Game Code Section 1802.

C. USFWS has jurisdiction over the conservation, protection, restoration, enhancement, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species under the Endangered Species Act, 16 U.S.C. 153 1, et seq. ("ESA"), and the Fish and Wildlife Coordination Act, 16 U.S.C. 661-666c, Fish and Wildlife Act of 1956, 16 U.S.C. 742(f) et.seq and other federal laws.

D. As illustrated in Exhibit C, the Property is largely undisturbed and supports four native plant communities: Diegan coastal sage scrub (DCSS), southern mixed chaparral (SMC), perennial grassland (PG), and cismontane alkali marsh (CAM). Moderate and high quality Diegan coastal sage scrub represent the dominant vegetation type occurring on the Property; DCSS covers approximately 198 acres of the site. Southern mixed chaparral covers approximately 121 acres. Perennial grassland covers approximately one acre. Cismontane alkali marsh is scattered along ephemeral streams, floodplains, and possibly some seeps within the study area; no estimate of its coverage has been made.

E. The San Vicente Conservation Bank I represents an excellent opportunity to implement the ongoing regional biological resource planning efforts in San Diego County by conserving highly valuable resources within an area which is recognized as an essential part of a regional biological preserve system. More specifically, the Property is strategically located in a core biological area and regional preserve area of San Diego County's Multiple Species Conservation Program (MSCP). In addition to its strategic location with respect to the MSCP, the Property is located in the vicinity of several existing preserves including the Sycamore Canyon County Open Space Preserve, San Vicente Reservoir, and the Iron Mountain Preserve; in fact, the Property shares a common boundary with the Iron Mountain Preserve.

F. Preservation of the Diegan Coastal Sage Scrub on the Property would further the goal of assembling conserved habitat for the California gnatcatcher. Preservation of the southern mixed chaparral and perennial grassland would

also be beneficial because it would help build a large continuous preserve by providing overall habitat diversity and continuity with sensitive habitats within the Iron Mountain Preserve system. The entire 320 acres is considered valuable with respect to regional biological resource planning and appropriate for use as mitigation for a variety of biological habitats.

G. It is anticipated that construction and development activity within San Diego County (referred to as the "Credit Area") will necessitate the mitigation of impacts to endangered, threatened, and sensitive species and biologically sensitive habitats through the preservation of off-site lands which possess corresponding or similar habitat values.

H. On the terms and conditions hereinafter provided, the parties hereto desire to establish a conservation bank with respect to portions of the Property (referred to as the "San Vicente Conservation Bank I" or, alternatively, the ("Conservation Bank") in order to provide for the conservation in perpetuity of such portions of the Property, the use of such land as mitigation as provided in Recital G above, and the sale of conservation bank credits by Property Owner to third party purchasers ("Credit Purchasers") in need of such mitigation.

I. The Parties desire to enter into this Agreement to set forth the terms and conditions pursuant to which the San Vicente Conservation Bank I will be established and implemented.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

1. Establishment and Conveyance of San Vicente Conservation Bank I.

(a) Under this Agreement, the San Vicente Conservation Bank I shall be dedicated for conservation purposes as follows: the Property identified on Exhibits A and B shall be preserved and managed as permanent natural open space by the Environmental Trust, Inc. In exchange for permanent protection and management of the biological resources, this Agreement will allow the sale of conservation credits within the Credit Area for the purpose of compensating for loss of sensitive biological resources in San Diego County.

(b) Within 90 days of the execution of this agreement, the following shall be delivered to the CDFG and the USFWS for Parcel A.

(i) a duly executed and acknowledged Conservation Easement granted from TET to the CDFG for Parcel A similar to the form attached hereto as Exhibit D ("Conservation Easement") with legal description of the property attached thereto.

(ii) a current title report for Parcel A in the form attached hereto accompanied by title insurance. Title exceptions, including any existing rights of way, easements, and encumbrances, shall be fully revealed.

(iii) a copy of the Quit Claim Deed for Parcel A from the Foundation to TET.

(c) Until fee title is transferred to TET, Parcel B will be placed into a conservation easement which names TET as the easement recipient (Exhibit D). As soon as feasible after the execution of this Agreement, the Foundation shall initiate a boundary adjustment to expand the boundary of parcel "A" to include all of parcel "B" as shown on Exhibit A. Within one year, fee title to parcel "B" shall be conveyed from the Foundation to TET by warranty deed and accompanied by a conservation easement in favor of CDFG similar to the form attached in Exhibit D, and an accurate title report and title exceptions as provided for Parcel A under Section 1(b)(ii) above. If conditions beyond the Foundation's control prevent transfer of fee title within the one-year period, the Foundation shall exercise good faith efforts to effect the title transfer in a timely manner and shall keep the

Wildlife Agencies apprised of their progress.

(d) In the event that TET is dissolved, fee title to the land and the endowment fund associated with the management of the entire Conservation Bank shall transfer to CDFG, or to a third party, and on terms approved by the Wildlife Agencies.

(e) The Foundation shall pay all transfer taxes and recording charges associated with the conveyance of Parcels A and B to TET.

2. Conservation Bank Evaluation and Acceptance.

(a) Representatives of the Wildlife Agencies have inspected and evaluated the Property for purposes of determining its biological values in connection with the sale of Conservation Credits. As a result of the benefits accruing to wildlife resources, including endangered and threatened species and their habitat, upon the establishment and the dedication of the Conservation Bank for conservation purposes, the Wildlife Agencies acknowledge and agree that, as described in section 1, the Property as a whole, possesses biological values which support the Conservation Credits acknowledged in section 2(b) and may serve as mitigation, on a one acre for one credit basis, for adverse biological impacts to land within the Credit Area which possess corresponding habitat values. Corresponding habitat values is intended to be defined as having generally similar or equivalent habitat values.

(b) 320 Conservation Credits will be acknowledged and accepted by the Wildlife Agencies concurrent with the execution and delivery of this Agreement and the Conveyance Documents. The parties acknowledge that this Agreement may be amended in the future to reflect mutually agreed upon process to increase the Conservation Credits by inclusion of additional lands.

(c) The San Vicente Conservation Bank I is potentially suitable, as determined by the Wildlife Agencies, to mitigate impacts to sensitive and declining vegetation types such as Diegan sage scrub, habitat for certain species designated endangered or threatened under CESA or ESA, rare or sensitive species, and general multi-species habitat values. Coastal obligate species and habitats, and certain rare endemic and endangered species may not have corresponding habitat values and, therefore, may not be appropriately mitigated at the San Vicente Conservation Bank I. The Wildlife Agencies shall determine the appropriate mitigation and ratio during the project environmental review stage.

(d) The Wildlife Agencies shall retain full authority to establish the number of conservation credits required to offset impacts to such species and habitat. The Wildlife Agencies shall have the right to inspect the Property upon 24 hour notice to TET to confirm that the land is being managed in accordance with this Agreement. Nothing contained in this Agreement shall be deemed to limit the Wildlife Agencies' respective authority to determine appropriate mitigation for species and resources under their jurisdiction, and CDFG and USFWS each expressly retain their respective rights under applicable law, including, without limitation, CESA and ESA, respectively, to regulate the taking of endangered or threatened species.

3. Conservation Credits.

(a) The Conservation Bank shall have a total of 320 Conservation Credits in recognition of the intrinsic value of the property's coastal sage scrub, and contribution made by the southern mixed chaparral toward building a large, continuous, biologically-diverse preserve system (Exhibit E).

(b) The Conservation Credits shall be used for "multi-species mitigation" on a one credit to one acre basis as qualified in section 2(c).

(c) The use of any of the "wetland credits" within the Conservation Bank will be subject to permitting and mitigation requirements of

Section 404 of the Federal Clean Water Act and CDFG Section 1600 of the Fish and Game Code (Streambed Alteration Agreement), and shall be "in-kind" mitigation resulting in no net loss of wetland acres and values.

(d) It is understood by the Wildlife Agencies that no enhancement, such as habitat restoration of the Conservation Bank lands to maintain or increase Conservation Credits, is required by this Agreement.

(e) The Foundation shall be entitled to sell Conservation Credits to Credit Purchasers and shall have the exclusive right to determine the price for any and all Conservation Credits offered for sale or conveyance.

4. Database for Conservation Bank Transactions.

(a) The sale or conveyance of Conservation Credits shall be accounted for in the following manner:

(i) A database shall be established for purposes of tracking the conveyance of Conservation Credits. Until such time as the Wildlife Agencies have been notified in writing that all Conservation Credits have been conveyed, TET shall be responsible for maintaining a numerical accounting of the credits sold during any calendar year. Upon delivery of Endowment Deposits, in accordance with Section 5, TET shall concurrently deliver to each of the Wildlife Agencies and the Foundation an updated accounting of all Conservation Credits sold and total endowment accumulated, as of the date of the most recent conveyance of Conservation Credits. The database maintained by TET shall include the number of Conservation Credits sold, project name and the name of the entity receiving the Conservation Credits. TET shall make the database available to the Wildlife Agencies or the Foundation upon written request.

5. Management of Conservation Bank Land.

(a) TET or its successors and assignees shall oversee and maintain the Conservation Bank lands in perpetuity.

(b) As the manager, TET shall be responsible for resource management and monitoring conservation credit transactions.

(c) Resource management shall be consistent with the Management and Monitoring Plan attached as Exhibit F.

(d) Conservation Credit monitoring shall involve the following responsibilities:

(i) Tracking the sale of each Conservation Credit.

(ii) Providing the Wildlife Agencies with a record of each transaction including the name of the purchaser, the number of credits purchased, and the endowment received. An annual report will be provided to the Wildlife Agencies which will include a summary of the year's transactions and a table indicating the number of credits sold to date and the balance remaining to be sold and the total endowment paid. The report shall be provided within 60 days after the end of each calendar year.

(iii) Funding for the short-term management activities of TET shall be provided through the payment from the Foundation to TET of a sum of $25,000. Payment shall be due within 14 days of execution of this Agreement by all parties. The purpose of the fund is to provide working capital for short-term management activities until the permanent endowment is funded through the sale of Conservation Credits. TET will invest $20,000 of the $25,000 into an investment program designed to generate interest to support annual maintenance activities. The investment will be in a low risk program designed to balance the generation of interest with TET's fiduciary responsibility to assure funds for long-term maintenance. The balance of the initial payment ($5,000) shall be used by TET for the first year of maintenance and monitoring, overhead, and for initial

start-up costs (e.g., signage, access control, and trash removal).

(iv) Long-term management efforts shall be funded by an assessment of $450 per acre which will be collected as Conservation Credits are sold. This assessment shall be paid directly to TET immediately upon completion of each sale and placed in a dedicated, non-wasting account. The Foundation and TET shall demonstrate to the satisfaction of the Wildlife Agencies that the long-term management assessment charge will establish a sufficient endowment and investment program to assure that the management and monitoring plan described in Exhibit F will be carried out.

(v) An accounting of the endowment fund will be included in the annual report submitted to CDFG and USFWS.

(vi) All funds collected under provisions 5(d)(iii) and (iv) shall be used exclusively for management and monitoring of the San Vicente Conservation Bank I.

(vii) Notwithstanding anything to the contrary, contained in this agreement, in the event the Wildlife Agencies reasonably determine that portions of the San Vicente Conservation Bank I have been substantially damaged subsequent to the date of this Agreement as a result of off-road vehicle use or other similar human activity on such property, and: (1) the effect of such activity has been to eliminate or degrade the habitat values as described in the document titled "San Vicente Conservation Bank I Mitigation Bank Program" dated July 12, 1995, and prepared by Lettier/McIntyre and Associates for the subject property; (2) the damage could reasonably have been prevented by property owner; and (3) the property owner has not reasonably restored habitat value to such damaged area or provided the Wildlife Agencies with satisfactory assurance that habitat value will be restored, that the Wildlife Agencies may reduce the number of Conservation Credits allocated to the Conservation Bank for the damaged area; provided, however, that in no event shall such reduction exceed the number of Conservation Credits allocable to the aggregate acreage of such damaged area.

6. Term of Agreement: Termination Rights.

(a) Except as to the management obligations described in section 5 and in Exhibit F, which shall continue in perpetuity as a covenant running with the land, this Agreement shall end on the date that all Conservation Credits have been conveyed.

7. Cooperation. The Wildlife Agencies, the Foundation, and the TET agree to reasonably cooperate in the implementation of this Agreement, including confirming to prospective Credit Purchasers that Conservation Credits are available within the San Vicente Conservation Bank I, and that said bank is "approved" by the Wildlife Agencies.

8. Entire Agreement. This Agreement and its related Exhibits contain the entire agreement of the parties with respect to the matters covered by this Agreement, and no other agreement, statement or promise made by any party, which is not contained in this Agreement shall be binding or valid.

9. Modification. This Agreement is not subject to modification or amendment except in writing signed by all parties and any attempted modification not in compliance with this requirement shall be void. The parties shall use their good faith efforts to complete such modifications within ninety (90) days after the initial request is made for a modification by the requesting party.

10. Notices. All notices, demands, or requests from one party to another may be personally delivered, sent by facsimile, sent by recognized overnight delivery service, or sent by mail, certified or registered, postage prepaid, to the addresses stated in this paragraph and shall be effective at the time of personal delivery, facsimile transmission, or mailing. Any party may change the address by giving the other party written notice of such change.

Property Owner: Boys and Girls Clubs
of East County Foundation
Administrative Office
260 E. Chase Ave., Suite 204
El Cajon, California 92022
Attn: Jerry Fazio
Fax No. (619) 440-2331

CDFG
Legal Advisor's Office
California Department of Fish and Game
1416 9th Street
Sacramento, California 94236
Fax No. (916) 654-3805

with a copy to:
Regional Manager
California Department of Fish and Game
330 Golden Shore, Suite 50
Long Beach, California 90802
Fax No. (310) 590-5193

USFWS
United States Fish and Wildlife Service
911 N.W. 11th Ave.
Portland, Oregon
Attn: Regional Director
Fax No. (503) 231-6118

with a copy to:
United States Fish and Wildlife Service
2730 Loker Avenue West
Carlsbad, California 92008
Attn: Field Office Supervisor
Fax No. (619) 431-9618

TET
The Environmental Trust
10981 San Diego Mission Road, Suite 245
San Diego, CA 92108-2448
Fax No. (619) 283-3940

10. Exhibits. All Exhibits referred to in this Agreement are attached to this Agreement and are incorporated herein by this reference.

11. Counterparts. This Agreement may be executed by the parties in several counterparts, each of which shall be deemed to be an original executed document, all of which together shall constitute a single executed agreement. This Agreement shall become binding upon a Wildlife Agency immediately upon execution by such entity, and the Foundation and TET even if this Agreement has not yet been executed by the other Wildlife Agency; provided that, until a Wildlife Agency has executed the Agreement, that Agency shall not be obligated to accept any Conservation Credits as mitigation for impacts to species and habitats under its jurisdiction.

12. Governing Law. This Agreement shall be governed by the laws of the State of California and applicable Federal law.

13. This Agreement shall be binding upon and in use to the benefit of the Parties and their successors and assignor, provided that no conveyance of the Property within San Vicente Conservation Bank I except as provided in Section 1 of this Agreement shall be made without the prior written concurrence of the Wildlife Agencies upon any assignment or delegation of the rights and duties of this Agreement by TET and/or the Foundation and subject to the prior written approval of the Wildlife Agencies of the proposed assignee or delegatee and the written assumption by the proposed assignee or delegatee of TET's and/or the Foundations dates and obligation under this Agreement, TET and/or the Foundation, as applicable, shall be released from and shall no longer have any obligations, responsibilities, liabilities, right or duty under this Agreement. Not withstanding the foregoing, TET and/or the Foundation, as appropriate, shall remain liable for any breach of this Agreement occurring before such assignment or delegation.

In Witness hereof, the Parties have executed this Agreement effective subject to Section 11, as of the latest date upon which it is executed as among the Parties hereto.

[Signature pages follow]