

REPORT TO THE LEGISLATURE

CALIFORNIA WETLANDS MITIGATION BANKING

State of California
Resources Agency
Department of Fish and Game

November 17, 2001

EXECUTIVE SUMMARY

Assembly Bill 642, Ch. 950, Stats. of 2000, by Assembly Member Lempert enacted Fish and Game Code, Section 1851, and requires the California Department of Fish and Game (Department) to provide biennial reports to the Legislature that describe basic information and the status of existing wetlands mitigation banks in California. This is the first report since the enactment of this requirement.

Fish and Game Code, Section 1851 requires the following information to be reported for each bank:

- Bank creator contact information - "The name, address, and telephone number of the person or agency who created the wetlands mitigation bank site."
- Bank operator contact information - "The name, address, and telephone number of the wetlands mitigation bank operator and the address or other appropriate physical description of the location of the wetlands mitigation bank site."
- Bank creation date - "The date the wetlands mitigation bank site was created," which was interpreted in this report as the date that the bank agreement was signed.
- Bank's service area - "A description of the wetlands mitigation bank site's service area."
- Pre-bank habitat functions on site - "A description of existing habitat functions at the wetlands mitigation bank site prior to its development as a wetland mitigation bank site."
- Types of financial assurances - "The type of financial assurances secured by the wetlands mitigation bank operator to ensure management of the wetlands mitigation bank site in perpetuity"
- Bank goals - "Whether goals were established for the wetlands mitigation bank site and what percentage of those goals have been achieved."
- Wetlands acres and habitat functions created - "Utilizing existing information compiled by the United States Army Corps of Engineers or other federal agencies, the number of wetlands acres and habitat functions created at the bank site."
- Credits issued - "The number of credits issued and to whom."
- Biological productivity of created wetlands - "An assessment of the biological productivity of the created wetlands."
- Wetland acres and habitat functions lost as result of permitted projects - "Utilizing existing information that is publicly available within the records of state or federal agencies, a comparison of the wetlands acreage and habitat functions that were created at the bank site and those that were lost as a result of the permitted projects for which credits were obtained."

BACKGROUND ON WETLAND MITIGATION BANKING

Under existing State and federal statutes, any individual, firm, or public agency that undertakes activities that destroy, degrade, or adversely alter the environment may be required to set aside and/or restore habitat in order to offset the adverse impacts of the proposed activity. For the area impacted, a project proponent may be required to set aside or restore a specified amount of acreage or resources.

Environmental mitigation is required under several State laws. For example, under the California Environmental Quality Act, if a proposed project will "substantially diminish habitat for fish, wildlife or plants," mitigation is required. Compensatory mitigation may also be required as a condition to "take" (kill, capture, etc.) a species under the California Endangered Species Act.

Environmental mitigation is also required under federal statutes. For example, under the Federal Endangered Species Act, a habitat conservation plan that is designed to protect and recover a threatened or endangered species can require that a landowner "minimize or mitigate" for activities that are damaging to the species. The Federal Clean Water Act also requires mitigation for activities that alter or harm existing wetlands.

CONVENTIONAL MITIGATION

Despite their purpose to offset environmental impacts, mandated mitigation measures often have had insufficient net beneficial impact. Often, mitigation is undertaken on site at the development or project, resulting in piecemeal patches of conservation, requiring complex in-kind compensation (such as replacing wetlands with similar wetlands elsewhere), and/or do not address the broader conservation objectives of the project's region.

For example, a typical property owner who seeks to develop or alter land may take the steps necessary to satisfy the mitigation requirements by doing so on a portion of the land to be developed. On a parcel of ten acres, two or three acres might be set aside as a reserve in order to mitigate for the proposed development. While such a set-aside might satisfy the legal requirements, it may not substantially advance regional environmental objectives. The set-aside or restored land may not be of high ecological importance, or may not be connected to other protected open space with priority habitat value. Over the long term, the set-aside land may lose some or all of its biological value because of its small size. Further, the process of designing and monitoring new mitigation projects for each development project can be time consuming and costly.

WETLAND MITIGATION BANKING

Since the mid-1980s, the State and others have actively sought to prevent the

inadequate, fragmented habitat conservation that too often results from project-by-project mitigation. One incentive-based approach has been the development of mitigation banks.

Mitigation banks are typically designed to consolidate the acquisition of mitigation land into large and biologically meaningful parcels. Banks are designed to maximize restoration of otherwise degraded or unrestored habitat. At the same time, mitigation banks serve to streamline the regulatory process for those parties needing to mitigate for project impacts. Mitigation banks also have several ecological advantages that benefit resources, including:

- **Mitigation Before Impact.** Creating wetlands and demonstrating their function prior to project impacts reduces temporal loss of habitat values and function.
- **Large Preserve Size.** Consolidating wetland protection from many small isolated impacts into one larger area of habitat, protected in perpetuity, better protects threatened ecosystems.
- **Resources and Expertise.** Consolidating financial resources, planning, and biological expertise at mitigation banks improves successful establishment and long-term management of compensatory habitats.

Wetland mitigation banks are large areas of constructed, restored, or preserved wetlands set aside for the express purpose of providing mitigation for project impacts to wetland habitats. A bank is authorized to sell credits which represent the habitat values created on the bank. Credits are sold to landowners or others who need to provide compensation for wetlands lost to development where avoidance or on-site mitigation is not feasible.

In recent years, the Department of Fish and Game (Department) has sought to consolidate mitigation required for wetlands alteration under the State Fish and Game Code and the Federal Clean Water Act. In April 1995, the California Resources Agency and the California Environmental Protection Agency issued a joint policy on conservation (mitigation) banks (See Appendix B). This policy provided the rationale for establishing banks and policy on establishment and operation of banks. In addition, wetlands mitigation banking was made a specific priority of the State Wetlands Conservation Policy.

In November 1995, five federal agencies (U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S.D.A. Natural Resources Conservation Service, U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration) issued, in the Federal Register, formal policy on the establishment, use, and operation of mitigation banks.

METHODS IN GATHERING DATA

Data was compiled for all existing wetlands mitigation banks established since 1993. This data came from formal bank agreements and, if available, bank management plans and annual reports. Bank agreements typically contained information about bank creators, bank operators, bank creation dates, bank service areas, and types of financial assurances. Bank management plans, in some cases, provided information on bank goals and pre-bank habitat functions. Annual reports, in some cases, provided information about the numbers of wetlands acres and habitat functions created at the bank, the number of credits issued, and wetland acres lost as a result of permitted projects.

Fish and Game Code, Section 1851 requests information that differs from the 1995 State and federal policy given to bank operators for describing and reporting on mitigation banks.¹ These State and federal policies were written five years before the legislation and neither document was specific to wetland mitigation banks. Although both policy documents requested information on baseline biological conditions, they did not call for descriptions of habitat functions prior to bank establishment. Both documents called for monitoring plans, but neither of them requested information about newly-created habitat functions or an assessment of wetland productivity. These State and federal policies also did not require a description of the habitat functions that are lost as a result of permitted projects.

The new requirements in Fish and Game Code, Section 1851 for reporting on wetland banks do not define or provide guidance on how to report on habitat functions or productivity. For the purposes of this report, we used concepts from the U.S. Environmental Protection Agency's functional wetlands assessment approach to describe a set of habitat functions that could be measured for wetlands. These included:

1. Hydrology
 - a. Short-term Flood Water Surface Storage
 - b. Long-term Surface Water Storage
 - c. Flood Energy Dissipation
 - d. High Water Table Maintenance

¹1995 Resources Agency/California Environmental Protection Agency Formal Policy on Conservation Banks; 1995 Federal Register Guidance for Establishment, Use, and Operation of Mitigation Banks

2. Biogeochemical
 - a. Nutrient Cycling
 - b. Retention of Inorganic Sediments
 - c. Retention/Removal of Imported Elements

3. Biology
 - a. Plant Habitat
 - b. Fish and Wildlife Habitat

All available documents were examined to find any suggestion that the above functions existed prior to the bank creation or were created as a result of the bank.

The lack of a definition in Fish and Game Code, Section 1851 for “productivity” results in some confusion for reporting and interpreting bank progress. The terms “productivity” and “production” are often confused, even by ecology students. Primary productivity, as used by ecologists, is the rate at which new plant growth occurs. This contrasts with primary production, or biomass, which is the amount of living plant material. Younger ecosystems often have high rates of productivity and low biomass, compared to older ecosystems in which rates of productivity decrease as biomass increases. Measuring productivity of wetlands over time may thus result in decreasing numbers, even though there is more standing vegetation on the site.

The reports from bank operators measure changes in biomass over time, since productivity is a much more challenging feature to measure. Thus, this report interprets the intended assessment of “productivity” to be an assessment of the site’s biomass (or primary production), rather than the rate of productivity.

A computerized database, the California Environmental Resources Evaluation System (CERES), was developed to contain the information requested in Fish and Game Code, Section 1851 for each bank. The section requires the Department to “utilize the CERES Environmental Information Catalog to make this information available to the public.” However, the California Environmental Information Catalog, maintained by CERES, does not provide direct access to data. It only provides users with information about how to obtain specific data sets. To better meet the intent of the Legislature, complete data reports will be available to the public from the Department’s web page, with a link to the CERES Environmental Information Catalog. We will work with CERES to ensure that they have an equivalent link from the catalog to these reports on the Department’s web page.

FINDINGS

Appendix A describes each of the fourteen existing wetlands mitigation banks. These reports are organized to provide information about a) important contacts for each bank; b) a brief synopsis of the bank itself (creation date, service area, and financial

assurances); c) habitat functions, goals and productivity; d) impacts mitigated by the bank; and e) credits issued by the bank.

Basic information (contacts, bank synopsis) was available for all banks. These banks are located mostly in the Bay Area (five banks) and the Sacramento region (four banks). Three banks are located in the South Coast region and two banks are located near Redding.

Bank creation dates are based on the date that the bank agreement was signed. This is not necessarily the date on which the bank began implementation. Three banks (Cottonwood Creek Wetland Mitigation Bank, Wildlands Inc. Mitigation Bank, and Wikiup Wetlands Mitigation Bank) are more than six years old. Seven banks have agreements that are less than three years old and two of them have not yet formally signed an agreement. Due to the relatively recent dates for bank creation, and subsequent implementation, much of the information requested by the Legislature is not yet available.

The Department is a signatory on bank agreements for ten banks. Of these, the U.S. Army Corps of Engineers (COE) co-signed on six banks. The U.S. Fish and Wildlife Service (FWS) and the U.S. Environmental Protection Agency (USEPA) were signatory along with the Department on several of these banks.

Two banks have agreements signed by agencies other than the Department. Laguna Creek was signed by the FWS and Cottonwood Creek was signed by COE, FWS, EPA, U.S.D.A. Natural Resources Conservation Service, and the Central Valley Region Water Quality Control Board.

The fourteen banks total 3150 acres. These banks have 9940 credits available, although credit data was not reported from three banks (Santa Ana River Mitigation Bank, Southwest Santa Rosa Vernal Pool Preservation Bank, and Wildlands Inc. Mitigation Bank). Only two banks (Pilgrim Creek and Cottonwood Creek) provided information about issuance of any credits.

Most of the banks (twelve) established endowment funds. Six of these established performance bonds for maintenance and four banks provide bonds for wetlands creation. The Santa Ana River Mitigation Bank, for which the Department has not signed an agreement, did not report any financial assurances.

We could interpret wetland restoration goals from existing reports for only four banks. For other banks, the existing reports either failed to report goals or the text was too ambiguous in referring to specific goals.

Information on productivity and losses or creation of functions and acres was missing from many of the existing reports, primarily because it was not required in the 1995 policy. Pre-bank habitat functions could be inferred from only seven banks using

available reports, and only four of those banks provided enough information to infer the creation of new habitat functions. Three banks provided information on the number of wetland acres created at the bank. Two banks reported on the number of wetland acres lost, and no banks reported on the habitat functions lost as the result of permitted projects. No banks reported on the biological productivity (or biomass) of the created wetlands.

RECOMMENDATIONS

Developing and tracking mitigation banks is a relatively new, and still evolving, process. Current State and federal reporting policy, as well as individual bank agreements, do not compel bank operators to provide some of the information requested by the Fish and Game Code, particularly as it concerns habitat functions, productivity of created wetlands, and losses as a result of permitted projects.

The Department will evaluate ways to best meet the Legislature's interest in information about banks, including possibly revising the current State policy to require this additional information. If necessary, the Department will revise policy on reporting and require that all new banking agreements use this revised reporting policy in preparing bank documents. The Department will also encourage existing bank operators to provide this additional information in future annual reports.

APPENDIX A

Wetland Mitigation Bank Database - 2001 Report

Carinalli Mitigation Bank

Contact Information:

Bank Owner: Domenico and Lynda
Carinalli
Address: 4905 Gravenstein Highway
South
City, State, Zip: Sebastopol, CA 95472
Phone Number: (707) 573-1770

Bank Manager: Same as Owner
Address:
City, State, Zip:
Phone Number:

Bank Information:

Bank Creation Date: 11/17/01
Service Area: Sonoma County
Financial Assurance Type:
Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation
Signatory Agencies: US Army Corps of Engineers, USEPA, US FWS, DFG

Total Bank Credits: 14
Total Bank Acreage: 28

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Restore/enhance vernal pools, valley oak savannah, and native grassland

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage
Maintenance of high-water table

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage
Maintenance of high-water table

Total Wetland Acres Created: 10.7

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

Data Not Reported*

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Data Not Reported*	Data Not Reported*		

Total Credits Purchased: Data Not Reported*

*Data not required by 1995 policy

Clay Station Mitigation Bank

Contact Information:

Bank Owner: Elliot Homes, Inc.
Address: 2930 E. Bidwell St.
City, State, Zip: Folsom, CA 95630
Phone Number: (916) 984-1300

Bank Manager: Bjorn Gregerson (ECORP)
Address: 2260 Douglas Blvd. Suite 160
City, State, Zip: Roseville, CA 95661
Phone Number: (916) 782-9100

Bank Information:

Bank Creation Date: 7/28/99
Service Area: 3800 Sq. Miles over 10 counties
Financial Assurance Type:
Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation

Total Bank Credits: 87
Total Bank Acreage: 405

Signatory Agencies: US Army Corps of Engineers

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Create wetlands, restore vernal pools and seasonal marsh, provide habitat connectivity

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Little or No Habitat Function

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage

Total Wetland Acres Created: 38.05

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

Data Not Reported*

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Data Not Reported*	Data Not Reported*		

Total Credits Purchased: Data Not Reported*

*Data not required by 1995 policy

Cottonwood Creek Wetland Mitigation Bank

Contact Information:

Bank Owner: DFG
Address: 601 Locust St.
City, State, Zip: Redding, CA 96001
Phone Number: (916) 225-2312

Bank Manager: Same as Owner
Address:
City, State, Zip:
Phone Number:

Bank Information:

Bank Creation Date: 4/1/94
Service Area: Sacramento Valley floor in Shasta and Tehama Counties

Total Bank Credits: 40
Total Bank Acreage: 90

Financial Assurance Type:

Financial Assurances: Performance Bond for Maintenance Period
 Financial Assurances: Endowment Fund
 Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: US Army Corps of Engineers, USFWS, Natural Resources Conservation Service, Central Valley Region Water Quality Control Board, US EPA

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Restore wetlands, upland wildlife habitat; preserve valley oak habitat; maintain riparian habitat

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Plant habitat
 Fish and Wildlife Habitat
 Short-term water storage

Functions After Bank Creation

Plant habitat
 Fish and Wildlife Habitat
 Short-term water storage
 Long-term water storage

Total Wetland Acres Created: 22.21

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

15.306

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Private Party	1.15	Private Party	0.93
Private Party	0.20	Private Party	1.33
Private Party	0.52	Private Party	1.32
Private Party	2.46	Private Party	0.08
Private Party	2.00	Other Private Parties	13.91

Total Credits Purchased: 23.9

*Data not required by 1995 policy

Kimball Island Mitigation Bank

Contact Information:

Bank Owner: Wildlands, Inc.
Address: 5910 Auburn Blvd.
City, State, Zip: Citrus Heights, CA 95621
Phone Number: (916) 331-8810

Bank Manager: Same as Owner
Address:
City, State, Zip:
Phone Number:

Bank Information:

Bank Creation Date: 3/31/98
Service Area: Portions of Sacramento,
Alameda, Contra Costa, and San
Joaquin counties

Total Bank Credits: 109 acre-equivalents
Total Bank Acreage: 109

Financial Assurance Type:

Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: US Army Corps of Engineers, USFWS , DFG , National Marine
Fisheries Service

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Restore fish and wildlife habitat,
provide and enhance habitat
connectivity, diversity, and structure

Percentage of Goals Achieved

60%

Habitat Functions:

Functions Before Bank Creation

Little or No Habitat Function
Short-term water storage

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage

Total Wetland Acres Created: 87.61 acres and 57,009 In ft riparian

Overall Wetland Biological Productivity: Medium

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Available*

Wetland Acres Lost:

Data Not Available*

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Private Party	33.1 ac marsh		
Private Party	0.165 ac riverine		
Private Party	34,866 In ft riverine		
Private Party	57,009 In ft riparian		

Total Credits Purchased: 54.65 ac

*Data not required by 1995 policy

Laguna Creek Conservation Bank

Contact Information:

Bank Owner: Conservation Resources,
LLC
Address: 3600 American River Dr.
City, State, Zip: Sacramento, CA 95864
Phone Number: (916) 974-3383

Bank Manager: Same as Owner
Address:
City, State, Zip:
Phone Number:

Bank Information:

Bank Creation Date: 12/29/98
Service Area: Sacramento County
Financial Assurance Type:

Total Bank Credits: 37
Total Bank Acreage: 780

Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: USFWS

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Create and restore riparian and seasonal wetlands.

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Plant habitat
Short-term water storage

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage
Energy dissipation

Total Wetland Acres Created: Data Not Reported

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

Data Not Reported*

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Data Not Reported*	Data Not Reported*		

Total Credits Purchased: Data Not Reported*

*Data not required by 1995 policy

Mt. Burdell Wetlands Mitigation Bank

Contact Information:

Bank Owner: Mount Burdell Enterprises
Address: 365 Bel Marin Keys
Boulevard
City, State, Zip: Novato, CA 94949
Phone Number: (415) 884-2164

Bank Manager: Tony Georges
Address:
City, State, Zip:
Phone Number: (415) 454-4151

Bank Information:

Bank Creation Date: 9/12/00
Service Area: 20 mile radius

Total Bank Credits: 480
Total Bank Acreage: 77.8

Financial Assurance Type:

Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: US Army Corps of Engineers, USEPA, US FWS, DFG

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Provide seasonal wetlands and riparian habitats.

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage
Nutrient cycling

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage
Nutrient cycling

Total Wetland Acres Created: Data Not Reported

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

Data Not Reported*

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Data Not Reported*	Data Not Reported*		

Total Credits Purchased: Data Not Reported*

*Data not required by 1995 policy

Pilgrim Creek Mitigation Bank

Contact Information:

Bank Owner: DFG
Address: 4949 Viewridge Ave
City, State, Zip: San Diego, CA 92123
Phone Number: (858) 467-4201

Bank Manager: SANDAG
Address: 401 B Street
City, State, Zip: San Diego, CA 92101-4231
Phone Number: 619-595-5604

Bank Information:

Bank Creation Date: 1/12/00
Service Area: San Diego County
Financial Assurance Type:
Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation
Signatory Agencies: USEPA, USFWS, DFG

Total Bank Credits: 50
Total Bank Acreage: 121

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Restore freshwater marsh and willow scrub

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Plant habitat
Short-term water storage
Nutrient cycling
Retention of inorganic sediments

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage
Retention of inorganic sediments

Total Wetland Acres Created: Data Not Reported

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

Data Not Reported*

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Private Party	0.69		
Governmental Agency	1.00		

Total Credits Purchased: 1.69 ac

*Data not required by 1995 policy

Rancho Jamul Wetlands Mitigation Bank

Contact Information:

Bank Owner: Wildlands, Inc.
Address: 5910 Auburn Blvd.
City, State, Zip: Citrus Heights, CA 95621
Phone Number: (916) 331-8810

Bank Manager: Same as Owner
Address:
City, State, Zip:
Phone Number:

Bank Information:

Bank Creation Date: 10/31/00
Service Area: Southern San Diego County
Total Bank Credits: 113.5
Total Bank Acreage: 250

Financial Assurance Type:

Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: US Army Corps of Engineers, USEPA, USFWS, DFG

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Restore, enhance, and preserve floodplain and wetlands; provide habitat and habitat connectivity; increase species diversity; assist recover Least Bell's vireo

Percentage of Goals Achieved

100% for Phase 1A

Habitat Functions:

Functions Before Bank Creation

Little or No Habitat Function

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage

Total Wetland Acres Created: 31 (additional 50 ac enhanced)

Overall Wetland Biological Productivity: Low

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Available*

Wetland Acres Lost:

Data Not Available*

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Private Party	2.52 ac wetlands		

Total Credits Purchased: 2.52 ac

*Data not required by 1995 policy

Santa Ana River Mitigation Bank

Contact Information:

Bank Owner: Riverside County Park and
Open Space District

Address: P.O. Box 3507

City, State, Zip: Riverside, CA 92519

Phone Number: (909) 275-4398

Bank Manager: Same as Owner

Address:

City, State, Zip:

Phone Number:

Bank Information:

Bank Creation Date: 2/11/97

Service Area: Riverside County

Financial Assurance Type:

Financial Assurances: Performance Bond for Maintenance Period

Financial Assurances: Endowment Fund

Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: US Army Corps of Engineers, USFWS, Riverside County, Riverside
County Park/Open Space District

Total Bank Credits: 173.97

Total Bank Acreage: 173.97

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Eliminate giant reed(Arundo donax)
from the area, maintain the site
reed-free for twenty years, and
recover the native cottonwood-willow
forest.

Percentage of Goals Achieved

62%

Habitat Functions:

Functions Before Bank Creation

Fish and Wildlife Habitat
Short-term water storage

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Nutrient cycling

Total Wetland Acres Created: Data Not Reported

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

Data Not Reported*

Credit Summary:

Credits Purchased By:

Data Not Reported*

Credits Purchased:

Data Not Reported*

Credits Purchased By:

Credits Purchased:

Total Credits Purchased: Data Not Reported*

*Data not required by 1995 policy

Southwest Santa Rosa Vernal Pool Preservation

Contact Information:

Bank Owner: Sonoma Vernal Pool Inc.

Bank Manager: Vernal Pool Technologies, LLC

Address:

Address: 475 Noonan Ranch Ln.

City, State, Zip:

City, State, Zip: Santa Rosa, CA 95403

Phone Number:

Phone Number: (707) 569-9404

Bank Information:

Bank Creation Date: 5/9/97

Total Bank Credits: 39.4

Service Area: Sonoma County

Total Bank Acreage: 39.4

Financial Assurance Type:

Financial Assurances: Performance Bond for Maintenance Period

Financial Assurances: Endowment Fund

Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: US Army Corps of Engineers, DFG

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Preserve vernal pools and endangered species populations

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage

Total Wetland Acres Created: Data Not Reported

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

Data Not Reported*

Credit Summary:

Credits Purchased By:

Data Not Reported*

Credits Purchased:

Data Not Reported*

Credits Purchased By:

Credits Purchased:

Total Credits Purchased: Data Not Reported*

*Data not required by 1995 policy

Springtown Natural Communities Reserve

Contact Information:

Bank Owner: Environmental Mitigation
Exchange Company
Address: 21 Sunnyside Ave
City, State, Zip: Corte Madera, CA 94925
Phone Number: (415) 925-2000

Bank Manager: Same as Owner
Address:
City, State, Zip:
Phone Number:

Bank Information:

Bank Creation Date: 1/17/97
Service Area: 40 mile radius

Total Bank Credits: 517
Total Bank Acreage: 51.74

Financial Assurance Type:

Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: DFG

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Preserve existing alkali meadow and provide habitat for the CA tiger salamander.

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage

Total Wetland Acres Created: Data Not Reported

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

Data Not Reported*

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Data Not Reported*	Data Not Reported*		

Total Credits Purchased: Data Not Reported*

*Data not required by 1995 policy

Stillwater Plains Mitigation Bank

Contact Information:

Bank Owner: Stillwater Plains Mitigation Bank, Inc.
Address: 21923 Dersch Rd.
City, State, Zip: Anderson, CA 96007
Phone Number: (530) 365-4233

Bank Manager: Same as Owner
Address:
City, State, Zip:
Phone Number:

Bank Information:

Bank Creation Date: 5/8/00

Total Bank Credits: 48

Service Area: Shasta County

Total Bank Acreage: 834

Financial Assurance Type:

Financial Assurances: Performance Bond for Maintenance Period

Financial Assurances: Endowment Fund

Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: US Army Corps of Engineers, DFG

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Preserve existing vernal pools

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Plant habitat

Fish and Wildlife Habitat

Short-term water storage

Functions After Bank Creation

Plant habitat

Fish and Wildlife Habitat

Short-term water storage

Total Wetland Acres Created: Data Not Reported

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

Data Not Reported*

Credit Summary:

Credits Purchased By:

Data Not Reported*

Credits Purchased:

Data Not Reported*

Credits Purchased By:

Credits Purchased:

Total Credits Purchased: Data Not Reported*

*Data not required by 1995 policy

Wikiup Wetlands Mitigation Bank

Contact Information:

Bank Owner: Wikiup Partners
Address: 987 Airway Court
City, State, Zip: Santa Rosa, CA 95404
Phone Number: (707) 571-7659

Bank Manager: Same as Owner
Address:
City, State, Zip:
Phone Number:

Bank Information:

Bank Creation Date: 7/28/95
Service Area: Santa Rosa Plain
Financial Assurance Type:
Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation
Signatory Agencies: US Army Corps of Engineers, DFG

Total Bank Credits: 60
Total Bank Acreage: 12

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Provide a habitat that resembles that of the natural Santa Rosa Plain and provides habitat for native amphibians, water associated birds and aquatic invertebrates.

Percentage of Goals Achieved

Data Not Reported*

Habitat Functions:

Functions Before Bank Creation

Plant habitat
Fish and Wildlife Habitat

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage
Nutrient cycling

Total Wetland Acres Created: Data Not Reported

Overall Wetland Biological Productivity: Data Not Reported*

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Reported*

Wetland Acres Lost:

0.2

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Data Not Reported*	Data Not Reported*		

Total Credits Purchased: Data Not Reported*

*Data not required by 1995 policy

Wildlands Inc. Mitigation Bank

Contact Information:

Bank Owner: Wildlands, Inc.
Address: 5910 Auburn Blvd.
City, State, Zip: Citrus Heights, CA 95621
Phone Number: (916) 331-8810

Bank Manager: Same as Owner
Address:
City, State, Zip:
Phone Number:

Bank Information:

Bank Creation Date: 10/1/94
Service Area: 40+ mile radius, covering all or portions of 8 counties
Financial Assurance Type:

Total Bank Credits: 194.53
Total Bank Acreage: 315 (additional 330 acres pending)

Financial Assurances: Performance Bond for Maintenance Period
Financial Assurances: Endowment Fund
Financial Assurances: Performance Bond for Wetlands Creation

Signatory Agencies: US Army Corps of Engineers, USFWS, DFG

Biological Information:

Restoration Goals:

Wetland Restoration Goals

Establish wetland and riparian habitat types in the area and restore native vegetation to the upland buffer areas.

Percentage of Goals Achieved

100% for Phase I

Habitat Functions:

Functions Before Bank Creation

Little or No Habitat Function

Functions After Bank Creation

Plant habitat
Fish and Wildlife Habitat
Short-term water storage

Total Wetland Acres Created: 195.83

Overall Wetland Biological Productivity: High

Operational Information:

Impacts Mitigated by Bank:

Wetland Functions Lost:

Data Not Available*

Wetland Acres Lost:

Data Not Available*

Credit Summary:

Credits Purchased By:	Credits Purchased:	Credits Purchased By:	Credits Purchased:
Private Party	97.8 ac wetlands		
Private Party	17.5 ac riparian		
Private Party	28 ac vernal pools		

Total Credits Purchased: 143.3 ac

*Data not required by 1995 policy

APPENDIX B

Official Policy on Conservation Banks

April 7, 1995

Douglas P. Wheeler
The Resources Agency

James M. Strock
**California Environmental
Protection Agency**

The executive and legislative branches have endorsed the use of conservation banks as a means to accomplish important resource management goals. This document provides formal policy guidance on how to achieve this directive.

INTRODUCTION

A conservation bank is a single parcel, or a series of contiguous or non-contiguous parcels, of habitat which is managed for its natural resource values. The resource benefits derived from this management regime are sold as "credits" to project proponents who seek mitigation opportunities to compensate for resource impacts elsewhere. Credits may be generated to meet any number of resource conservation needs, including compensation for impacts to wetlands, threatened or endangered species, environmentally sensitive habitat areas, mudflats, sub-tidal areas, and less sensitive resources.

Conservation banks, if properly established and managed, serve several useful functions. First and foremost, banks provide for the conservation of important habitats and/or habitat linkages.

Second, they provide a viable alternative to the current practice of requiring piecemeal mitigation for individual project impacts. Individualized mitigation projects which have little connection with their surrounding ecosystem are often much more prone to failure than a mitigation project which is incorporated into a larger, ecosystem-based conservation bank or regional conservation plan.

Third, conservation banks can take advantage of economies of scale that are often not available to individualized mitigation projects.

Fourth, conservation banks provide significant incentives for private landowner participation and represent one of the best examples of private/public partnerships in an

era of shrinking budget resources.

Fifth, conservation banks can be a major funding component for the creation of an ecosystem preserve under a regional conservation plan.

Sixth, and finally, conservation banks simplify the regulatory compliance process while achieving greater conservation goals.

CONSERVATION BANKING

For purposes of providing guidance on conservation banking, all departments shall designate and train personnel to actively work with potential bank developers in accordance with the following precepts:

1. The priority for mitigation should be to accomplish it at a site which provides for the long-term conservation of habitat and species. As such, off-site mitigation is specifically sanctioned in the context of an otherwise permissible conservation bank.
2. A bank may be established pursuant to regulatory permit or contract between the bank developer and the appropriate regulatory agency(s). Where a bank is established pursuant to contract, care must be taken to create a legally enforceable instrument.
3. There is no minimum or maximum size of a conservation bank, and it may be divided into clearly defined subareas. However, the bank and each of its subareas (if any) should be large enough to be ecologically self-sustaining or part of a larger conservation strategy that has a reasonable expectation of being accomplished.
4. Upon sale of the first credit in the bank or subarea, the land in the bank or subarea must be permanently protected through fee title or conservation easement. The land-use restrictions should run with the land and be recorded in the appropriate county(s) of jurisdiction.
5. Before selling bank credits, a proposed conservation bank should be approved by the appropriate resource management agency(s). Basic elements in any approvable bank proposal should include, but are not limited to:
 - a. Identification of a bank manager;
 - b. Identification of the geographical boundaries of the bank and the service area of the bank;
 - c. Provision for fundamental property protection measures (e.g., fencing some or all of the bank property if deemed appropriate, control of off-road vehicle use, etc.);
 - d. Provisions for the resolution of current or prospective land use conflicts involving the bank lands (e.g., rights-of-way issues, existing use issues, adjacent land-use issues); and

- e. Provisions requiring an annual report by the bank manager to be submitted to the appropriate regulatory agency(s).
- 6.** Prior to the sale of credits, a resource management plan should be approved by the appropriate regulatory agency(s). A sufficient level of funding with acceptable guarantees (e.g., cash, letters of credit, public charity, public funding mechanism) should be provided to fully ensure the operation and maintenance of the bank as may be required.
- 7.** Provision should be made for long-term management of bank lands after all mitigation credits have been awarded. Generally, land management responsibilities should ultimately vest in a resource management agency or qualified non-profit organization, although a private entity may be an acceptable long-term manager.
- 8.** Provision should be made for ensuring implementation of the resource management plan in event of non-performance by the bank owner and/or operator.
- 9.** Provisions should be made in any bank establishment for the monitoring and reporting of identified species/habitat management objectives.
- 10.** An easement or other agreement should be established at the bank in favor of appropriate resource management agency(s) guaranteeing the agency's right of entry onto bank lands for the following purposes:
 - a. Inspections;
 - b. Specified resource management responsibilities;
 - c. Quality Assurance/Quality Control review with regard to bank management and operation; and
 - d. Resource management should the bank operator fail to implement prescribed resource management responsibilities.
- 11.** Bank credits should be established by reference to an environmental baseline which may, but need not be, assessed at the time of the bank creation. This baseline will be used to establish credits for a number of categories requiring resource management, including, but not limited to, the following:
 - a. Resource Preservation (the preservation of specified resources through acquisition or other appropriate means);
 - b. Resource Enhancement (the enhancement of a degraded resource);
 - c. Resource Restoration (the restoration of a resource to its historical condition); and
 - d. Resource Creation (the creation of a specified resource condition where none existed before).
- 12.** The award of bank credits should be negotiated on a case-by-case basis between

the project proponent in need of the subject credits, the regulatory agency(s) of jurisdiction, and the bank manager. Generally:

- a. Credits may be negotiated for available or prospective resource value establishment;
- b. Credits may be based on habitat acreage, habitat quality, contribution to a regional conservation strategy that has been approved by the appropriate regulatory agency(s), or any other basis acceptable to the regulatory agency(s);
- c. Actual awards of bank credits need not be withheld pending full realization of the targeted resource value at the bank. Credit availability may vary in accordance with agreed upon performance criteria for the development of the resource value in question; and
- d. Awarded bank credits, subject to the approval of the regulatory agency(s), should be made transferrable.

13. Whether out-of-kind mitigation credit will be allowed at a particular bank will require a fact-specific inquiry on a case-by-case basis for the project creating the impacts.

14. The creation of any conservation bank should be listed with the Resources Agency in accordance with forthcoming guidance for purposes of maintaining a statewide bank inventory.

CONCLUSION

Conservation bank agreements developed between the bank developer and the appropriate regulatory agency in accordance with the preceding precepts shall be considered consistent with State policy regarding conservation banks, assuming no violation of federal and State laws. Training manuals on this subject are forthcoming.