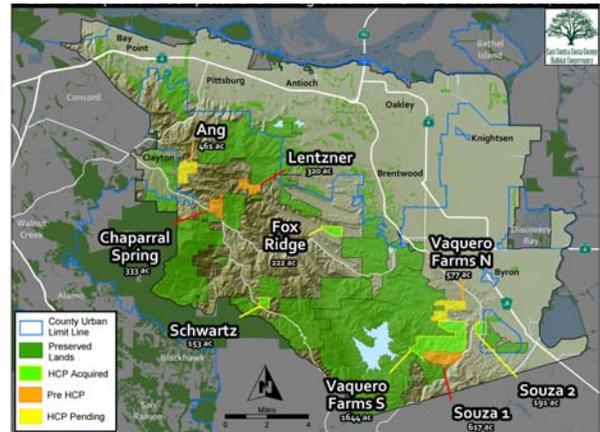


Draft East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan 2008/2009 Annual Report



March 2010



East Contra Costa County
Habitat Conservancy



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Acronyms and Abbreviations

CDFG	California Department of Fish and Game
CNDDDB	California Natural Diversity Database
Conservancy	East Contra Costa County Habitat Conservancy
EBRPD	East Bay Regional Park District
ESA	Endangered Species Act
HCP/NCCP	Habitat Conservation Plan/ Natural Community Conservation Plan
NCCPA	Natural Community Conservation Planning Act
Permittees	Contra Costa County, Contra Costa County Flood Control and Water Conservation District, City of Brentwood, City of Clayton, City of Oakley, City of Pittsburg, East Bay Regional Park District, and East Contra Costa County Habitat Conservancy
Plan	East Contra Costa Habitat Conservation Plan/Natural Communities Conservation Plan
USFWS	U.S. Fish and Wildlife Service

EXECUTIVE SUMMARY

[pending]

I. INTRODUCTION

East Contra Costa County HCP/NCCP Background

Eastern Contra Costa County is a unique region where the San Francisco Bay Area, Sacramento–San Joaquin River Delta, and Central Valley meet (Figure 1). The area retains a rural lifestyle supporting housing, farms, and ranches. It features a rich landscape that is home to a number of rare plants and animals. Over 150 rare species occur in the East County area including the San Joaquin kit fox (*Vulpes macrotus mutica*), California red-legged frog (*Rana aurora draytonii*), California tiger salamander (*Ambystoma californiense*), Alameda whipsnake (*Masticophis lateralis euryxanthus*), western burrowing owl (*Athene cunicularia hypugea*), vernal pool fairy shrimp (*Brachinecta lunchi*), and Diablo helianthella (*Helianthella castanea*). Located east of San Francisco, the area’s convenient location, natural beauty, and mild climate have led to rapid population growth. Contra Costa County’s population is predicted to grow by 127,000 people by 2025, providing important new housing for the San Francisco Bay Area’s growing workforce. A significant portion of this growth will occur in the East County in habitat that supports state and federal listed species, resulting in a conflict between conservation and development.

Between 2001 and 2006, the East Contra Costa County Habitat Conservation Plan Association developed an HCP/NCCP (Plan) that provides regional conservation and development guidelines to protect natural resources while improving and streamlining the permit process for state and federally listed species and wetland regulations. The Plan was approved at the local level in 2006 and permits were issued by CDFG and USFWS in 2007. The Plan will allow Contra Costa County (County), the Contra Costa County Flood Control and Water Conservation District (County Flood Control District), the East Bay Regional Park District (EBRPD), the Cities of Brentwood, Clayton, Oakley, and Pittsburg, and the East Contra Costa County Habitat Conservancy (Conservancy) (collectively, the Permittees) to control endangered species permitting for activities and projects in the region that they perform or approve while providing comprehensive species, wetlands, and ecosystem conservation and contributing to the recovery of endangered species in northern California. The Plan will help to avoid project-by-project permitting that is generally costly and time consuming for applicants and often results in uncoordinated and biologically ineffective mitigation.

The Plan was developed by a team of scientists and planners led by Jones & Stokes with input from independent science reviewers, stakeholders, and regulators. Within the 174,018-acre inventory area, the permits issued provide take authorization under the state and federal Endangered Species Acts for between 8,670 and 11,853 acres of urban development and 1,126 acres of rural infrastructure projects. The primary means to offset these impacts was to conserve lands in a Preserve System. The Preserve System will encompass 23,800 to 30,300

acres of land that will be managed for the benefit of 28 covered species as well as the natural communities that they, and hundreds of other species, depend on for habitat. By proactively addressing the long-term conservation needs, the Plan strengthens local control over land use and provides greater flexibility in meeting other needs such as housing, transportation, and economic growth in the area.

The Plan is being implemented by the Conservancy. The Conservancy is comprised of a Governing Board, Executive Director, and staff. The Governing Board consists of elected officials from participating city councils and the County Board of Supervisors. The Governing Board is the decision-making body of the Conservancy. The Executive Director serves as the primary link between Conservancy staff, local jurisdictions, regulatory agencies, other decision makers, and the general public. The Executive Director's responsibilities include staff and consultant management, acquisition of outside funding, coordination with external advisors and agencies, compilation of annual reports to CDFG and USFWS, periodic reporting to the Governing Board, and implementation of all adaptive management and monitoring efforts described in the Plan. Conservancy staff coordinates real estate activities, administer grants, maintain the budget, review applications for take authorization, and oversee conservation strategy, monitoring, and adaptive management implementation.

The EBRPD is expected to be a primary landowner and land manager for the Preserve System, and so far all land acquisitions have been performed by EBRPD. EBRPD has more than 75 years of experience managing public open space lands and now owns more than 100,000 acres. All HCP/NCCP Preserve System Lands acquired by EBRPD will ultimately be available for public access.

Annual Report

The primary purpose of this Annual Report is to provide the Governing Board, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and general public the opportunity to review the actions of the Conservancy and progress made toward implementing the Plan. These entities will use the Annual Report to assess the success of the Plan and provide recommendations to the Plan's Governing Board and Conservancy staff for Plan implementation in subsequent years. The goals of the Annual Report include:

- Providing the information and data necessary for the Permittees to demonstrate to CDFG and USFWS that the Plan is being implemented according to the Plan and the Implementing Agreement, and the permits.
- Disclosing and documenting issues with Plan implementation that require consultation and resolution with CDFG, USFWS, and/or the Permittees.
- Identifying administrative or minor changes to Plan components implemented in the last calendar year that were adopted to increase the success of the Plan.

This is the first Annual Report prepared by the Conservancy to document the progress of the Plan. This Annual Report summarizes the Plan implementation activities undertaken from the full start of Plan Implementation on January 18, 2008 (when the last set of local ordinances passed³) to December 31, 2009 per the conditions of the Plan and Implementing Agreement. The required elements of an Annual Report are identified below.

- Covered Activities and Impacts
- Land Acquisition
- Habitat Restoration and Creation
- Preserve Management
- Monitoring, Research, and Adaptive Management
- Stay-Ahead
- Changed Circumstances and Remedial Measures
- Finances
- Program Administration
- Next Year

Except where noted, data is provided only for the current reporting period (2008–2009).

Covered Activities and Impacts

Section I describes of all covered activities implemented during the reporting period. This includes an accounting of the acreage of impact by project, activity type, and land-cover type. Conditions on covered activities applied to each project are also identified. In addition, impacts on riparian and wetland land-cover types are reported by watershed.

Land Acquisition

Section II describes the land acquisitions that occurred during the reporting period, including a summary of land acquisition funding from local, state, and federal sources. When used, conservation easements and their respective holders are identified. Each land acquisition conservation measure implemented is identified and a summary of natural community protection during reporting period and permit term is provided. In addition, progress towards all acquisition requirements, including land-cover types, habitat connectivity, covered plant populations, and wetland protection is assessed.

Habitat Restoration and Creation

Section III describes natural community creation and restoration conservation measures implemented during the reporting period and permit term, including riparian and wetland

³ The cities of Brentwood and Clayton and Contra Costa County passed local implementing ordinances on January 15, 2008. The cities of Oakley and Pittsburg passed their ordinances on January 18, 2008.

restoration by watershed. Each restoration and creation conservation measure implemented is also identified.

Preserve Management

Section IV describes all land management activities undertaken on Plan preserves and discusses the management issues facing the Conservancy at each preserve unit. Each enhancement conservation measure implemented is identified. Conceptual ecological models developed to date are identified and any recent changes are identified.

Monitoring, Research, and Adaptive Management

Section V summarizes monitoring, research, and adaptive management that occurred during the reporting period. These actions are summarized at the landscape-level, natural-community level, and species-level. The monitoring and research program efficacy and recommended changes to the program are assessed. A description of how research was integrated to monitoring, assessment, and compliance elements is provided. The efficacy of habitat enhancement, creation, and restoration methods in achieving performance objectives is assessed and changes to improve the efficacy of the methods are identified. The appropriateness of performance indicators and objectives based on the results of effectiveness monitoring are assessed and changes to performance indicators and objectives recommended if needed. Finally, the adaptive management process utilized during the reporting period is described.

Stay-Ahead

Section VI assesses compliance with the stay-ahead provision, a set of requirements to ensure progress toward preserve assembly exceeds progress toward build-out of covered activities. This includes a cumulative summary of impacts and conservation for all land-cover types.

Changed Circumstances and Remedial Measures

Section VII describes actions taken or anticipated regarding changed circumstances, including remedial actions.

Finances

Section VIII includes accounting of all revenues received by type (e.g., development fees, wetland fees, grants), an evaluation of the economic assumptions on which the Plan was based, and an assessment of progress towards a complete funding strategy for implementation after the permit term.

Program Administration

Section X summarizes any administrative changes, minor modifications, or major amendments proposed or approved during the reporting year. Policy clarifications and early implementation tasks that occurred during the reporting period are described under each relevant section.

Next Year

Section XI summarizes the 2010 work plan. This section is not a requirement of the Plan, but is provided to provide information to USFWS, CDFG, and the general public about upcoming activities.

II. COVERED ACTIVITIES AND IMPACTS

This section describes the activities and projects within the inventory area covered by the Plan and for which the Plan requires compensation, avoidance, and minimization of impacts to covered species (Figures 2 and 3). These are the *covered activities* for which incidental take authorization was granted by the permits. Covered activities in this Plan fall into the following four distinct categories.

- **Urban Development Area Projects.** All activities and projects associated with urban growth within the urban development area as defined by the Plan.
- **Rural Infrastructure Projects.** Transportation projects, flood protection projects, and utility projects occurring outside the urban limit line that support urban development.
- **Rural Infrastructure Operation and Maintenance Activities.** Road, flood protection facility, and utility line or facility operation and maintenance projects that occur outside the urban development areas and urban limit line.
- **Preserve System Activities.** Management and recreational facilities; habitat enhancement, restoration, and creation; species surveys, monitoring and research; emergency activities; utility construction and maintenance; and neighboring landowner activities that occur within the Preserve System.

Covered Activities Receiving Take Coverage

There were a total of eleven covered activities receiving take coverage under the Plan during the reporting period (Table 1). Covered activities included three activities within the urban development area, five rural infrastructure projects, and three activities within the Preserve System. This includes two activities covered by the City of Pittsburg, three activities by Contra Costa County⁴, and six activities by the Conservancy.

Conditions on Covered Activities

The purpose of conditions on covered activities is to meet regulatory standards to avoid and minimize potential impacts of these impacts on the covered species. The conditions also reduce and minimize impacts to important natural communities. The conditions on covered activities include such actions as pre-construction surveys, minimizing development footprints adjacent to preserves, establishing of stream setbacks and fuel management buffers, management of the urban-wildland interface, maintenance of hydrologic conditions, avoidance of direct impacts on extremely rare plants, best management practices for flood control, and

⁴ The County Costa County also resurfaced Vasco Road in 2009. Although this project was covered by the Plan, no impact occurred and project was exempt from all fees. This project is not counted in the covered activity totals.

design requirements for roads outside the urban development area. Each condition is described in detail in Chapter 6 of the Plan under Section 6.4, *Specific Conditions on Covered Activities*. Specific project circumstances determine which conditions apply to each project. For example, Condition 1.12 *Implement Best Management Practices for Rural Road Maintenance*, only applies to rural road maintenance projects. Compliance with the conditions on covered activities is an important part of the conservation strategy.

A wide variety of the landscape-level, natural community-level, and species-level conditions on covered activities were applied during the reporting period as shown in Tables 2 and 3. Across the eleven covered activities implemented during the reporting period, landscape-level conditions on covered activities were applied 22 times (zero to four conditions applied per covered activity). Natural community-level conditions on covered activities were applied six times (zero to one conditions applied per covered activity). Species-level conditions on covered activities were applied 97 times (three to 15 conditions applied per covered activity).

Impacts on Land Cover Types and Covered Plants

Covered activities impacts were tracked by land-cover type impacted (Table 4), impacts on covered plant occurrences (Table 5), and aquatic and stream impacts by watershed (Tables 6). During the reporting period, 49.1 acres were permanently impacted and 41.1 acres were temporarily impacted across all land-cover types (Table 4). No uncommon vegetation,⁵ uncommon features or habitat elements⁶ were impacted. Finally, no covered plant occurrences were removed by covered activities (Table 5).

Impacts on aquatic land-cover types during the reporting period were limited to two watersheds (Table 6). This included to 0.2 acre of permanent impacts to riparian woodland/scrub in the Sand Creek watershed. In the Lower Marsh Creek watershed, less than .038 acres of riparian woodland/scrub and 38.7 feet of perennial stream were temporarily impacted and 0.3 feet of perennial stream were permanently impacted.

Covered Activity Implementation Policies and Early Implementation Requirements

During the reporting period, the following two implementation policies were developed to address issues related to covered activities that were not clearly defined in the Plan.

- Communication Tower Impact and Fee Calculations
- Land Acquisition in Wind Turbine Areas

⁵ Uncommon vegetation types are subtypes of land-cover types. They include specific native grasses, alkali grasses, and other uncommon vegetation types.

⁶ Uncommon features or habitat elements include rock outcrops, caves, springs/seeps, sand deposits, mines, buildings (bat roosts), and potential nest sites (trees or cliffs).

In addition, a map was developed for the following to fulfill early implementation requirements.

- Stream setback

Each of these items is discussed below.

Communication Tower Impact and Fee Calculations

An implementation policy was developed to clarify Plan requirements as they relate to communication tower impact and fee calculations. The Plan allows public and private utility projects inside the urban development area to receive take coverage under the Plan. Projects outside the urban development area may receive take coverage pending case-by-case review and approval by USFWS, CDFG, and the Conservancy. This approach allows for alternative project siting or redesign to avoid or minimize impacts on covered species and natural communities and also enables a project-specific assessment of impacts.

One type of rural utility project frequently encountered during the first year of implementation was communication towers, particularly cellular telephone communication towers. Neither the Plan nor the Implementing Ordinance adopted by Contra Costa County mandates participation in the Plan by applicants with communication tower projects such as cell towers, but such applicants typically are required to seek a biological opinion from USFWS in connection with permits needed from the Federal Communications Commission. Due to the prevalence of these projects and the difficulty the Conservancy felt the need to codify an approach for calculating the impacts and mitigation fees for communication tower projects seeking coverage under the Plan.

The Conservancy adopted an approach that is consistent with the avoidance and mitigation provisions of the Plan, is acceptable to USFWS and CDFG, and can be implemented by local agencies and communication tower applicants (Figure 4). A memorandum was developed in 2008 to provide background, detailed protocol, and rationale for the new communications tower policies. The following Protocol for Communication Tower Impact and Fee Calculations was developed in 2008 to address coverage of communication towers under the Plan.

- The full development fee will be charged for the base area of each permanent structure (including permanently disturbed areas around the base such as permanently disturbed paved or fenced areas and areas covered with gravel) plus a 100-foot buffer around each base area.
- The temporary impact fee will be charged for the area of each trench plus a 25-foot buffer on either side of the trench.
- The full development fee will be charged for the area of any new road (paved, all-purpose, or gravel) plus a buffer on either side of the new road (50 feet for paved or all-purpose and 35 feet for gravel).

- A reduction of the buffer to 25 feet on either side of the new road is allowed if the road is designed to minimize impacts (i.e., a dirt road that does not provide a dark surface and/or hard surface that will attract snakes as a basking site).
- No permanent or temporary impact fee will be charged for use of an existing road despite a small increase in traffic.
- When a buffer area of an existing structure overlaps with a buffer area of a proposed structure, overlapping buffered areas will be discount by 50%. The actual footprint of the new structure will not be discounted..
- Temporary impact fees (1–2 years) will be charged for each replacement structure plus a 100-foot buffer around each structure. No credit will be given for overlapping buffered areas.

Land Acquisition in Wind Turbine Areas

A second implementation policy was developed to clarify Plan requirements as they relate to land acquisition in wind turbine areas and to better achieve the Plan goals and objectives. Regarding wind turbines, the intent of the Plan is to reduce the overall effects of wind turbines on the covered species and raptors within the Preserve System. As such, the Conservancy and fee simple owner of a Preserve System property will retire wind leases, require turbine reconfiguring, and/or take other measures to reduce the biological impacts of wind turbines on Preserve System Lands, as more specifically set forth below, unless the Conservancy and fee simple owner lack the legal authority or control to do so or unless these turbines are shown to have minimal adverse impacts with USFWS and CDFG concurrence. Of the various options presented, retiring wind leases and removal of turbines will reduce the overall effects of wind turbines on the covered species and raptors more than the other options.

The following measures and conditions were developed in close coordination with CDFG and USFWS. They have been approved by the Habitat Conservancy Board; however, their formalization is pending a letter of approval from the CDFG and USFWS. In order to reduce impacts from all wind turbines within the Preserve System, the following measures and conditions apply.

- Preserve System lands with severed wind rights will not be credited until all the wind rights are also acquired, other than the Vaquero Farms South and Vaquero Farms North properties.
- The Conservancy, CDFG and USFWS acknowledge that non-renewal of wind leases and removal of turbines will eliminate impacts. If the Conservancy and the future owner of the subject Preserve System lands choose to renew wind leases on Preserve System lands, the reasons for this decision will be provided to USFWS and CDFG in a letter authorized by the Conservancy Board prior to lease renewal.
- During the term of existing wind leases, the Conservancy, CDFG and USFWS will cooperate in reviewing and providing input on applications to modify or extend existing

wind generation activities, including re-powering activities. The following measures will be considered to reduce the biological effects: siting of turbines to minimize impacts, reduction in the number of turbines, road removal and reduction, restoration of past effects from wind activity, or other measures that limit or reduce the impact of wind projects.

- If wind leases are renewed on future acquisitions, CDFG, USFWS, the Conservancy and the fee simple owner of the Preserve System lands in question will meet and confer to discuss and agree on the measures that will be included in such renewal to reduce the effects of wind turbine operations on covered species, provided that the parties recognize that these measures will continue to permit reasonable generation of electricity from Contra Costa County's wind energy resource area. The following measures will be considered to reduce the biological effects: siting of turbines to minimize impacts, reduction in the number of turbines, road removal and reduction, restoration of past effects from wind activity, or other measures that limit or reduce the impact of wind projects. This measure will also apply to Vaquero Farms, should the Conservancy and the future fee simple owner of the land subsequently secure the wind rights.
- If measures to reduce biological effects fail to reduce the impacts of wind turbines to a biologically sustainable level, the Conservancy, CDFG and USFWS will meet and confer to discuss and agree on supplementary measures that may be taken to reduce the impacts of wind turbines within the Preserve System to a biologically sustainable level, including but not limited to removal of turbines and retirement of leases at the next available opportunity.
- Prior to any acquisition with wind turbines, the Conservancy, USFWS, CDFG and future fee simple owner will agree on a structure of the transaction that allows the wind turbine review process outlined above to take place at the appropriate time; and how the future wind turbine review process will be conducted; to ensure the acquisition meets the intent described above.
- The Conservancy, USFWS, and CDFG recognize that the Souza 1 property was identified in the Plan as an existing acquisition and an initial component of the Preserve System. The Conservancy and the fee simple owner of this property are encouraged to pursue the range of measures outlined above.

In regards to Preserve System lands with existing wind turbines, the Conservancy, USFWS, and CDFG support the following measures to address impacts related to wind turbines on Vaquero Farms South, and when applicable, on Vaquero Farms North.

- Continue to pursue acquisition of all wind rights.
- Cooperate in reviewing and providing input on applications to modify or extend existing wind generation activities, including re-powering activities.

- Improve accounting for wind turbine infrastructure impacts. The Plan excludes a 50-foot buffer around each wind turbine string from land acquisition credits. If re-powering projects result in substantially larger turbines, the Conservancy, USFWS, and CDFG will meet and agree on a larger buffer and associated reduced credit to the Preserve System.
- The Plan does not specify a minimum mapping unit for mapping roads and other supporting infrastructure (i.e., storage areas) in the Preserve System nor does it specify exclusion of such features from land acquisition credits. In order to more accurately account for the physical infrastructure, the area of the roads and supporting infrastructure will be mapped to a minimum mapping unit of 0.1 acre and excluded from grassland and other land cover acquisition credits (roads will generally be mapped as ruderal unless paved, in which case they will be mapped as urban; building and corporation yards will be mapped as urban). With this approved accounting, removal and reclamation of wind power infrastructure will result in an increase in land acquisition credits when natural land cover is restored. Conversely, expansion of wind turbines and supporting infrastructure will result in a decrease in land acquisition credits as natural land-cover types are converted to disturbed land-cover types.

Stream Setbacks

An map was developed to clarify Plan requirements for stream setbacks. The Plan⁷ sets forth stream setback provisions that vary by type of stream. The Plan requires the Conservancy to develop a map illustrating which setback provisions apply where. The map was issued in 2008 and is accessible from the Conservancy website. Determinations on the specific provisions applicable to a specific project will be made by local land use agencies on a case-by-case basis.

⁷ Conservation Measure 1.7 of the Plan describes stream setback provisions that apply to activities covered by the Plan. As described in the Plan's Table 6-2, the setback provisions vary by type of stream and whether the stream is in an urban, agricultural, or natural area. Stream types are distinguished by specific characteristics including whether the stream has concrete banks; if flow is ephemeral, intermittent or perennial; and stream order.

Table 1. Reporting Period Summary of Covered Activities

Activity Type	Covered By	Project Name	Location	Size (acres)	Date	Description
Activities within Urban Development Area						
Industrial (temporary impacts only)	City of Pittsburg	Mount Diablo Recycling Center	1300 Lverage Road, Pittsburg, CA	5	2008	The project will convert a 5 acre site to a storage area for four years for debris boxes for the recycling center. A 6' chain link fence was installed around site. Existing vegetation was cleared and 4'-6' recycled base rock would be installed over the entire site.
Industrial (temporary impacts only)	City of Pittsburg	RileMart Company (Construction Staging Area) [1]	2515 Antioch Pittsburg Highway, Pittsburg, CA	12.5	2008	After issuance of a non-compliance letter from the City dated Sept. 23, 2008 for work without necessary permits, the applicant was required to comply retroactively with HCP provisions. City charged fees on whole parcel.
Transportation	Conservancy	State Route 4 Bypass, Segment 4, Phase 2	Antioch through Brentwood	48.9	2008 (impacts have not yet commenced)	Construct two eastbound lanes from south of Lone Tree Way to south of San Jose Avenue including on/off ramps, extension of Sand Creek Road, and a clear span bridge crossing of Sand Creek
Rural Infrastructure Projects [2]						
Utility	Contra Costa County	U.S Coast Guard/SBA Towers Telecommunications Facility	5755 Nortonville Road, unincorporated Pittsburg, CA	1	2009	The project is construction and operation of: a 105 ft tall non-guyed lattice tower with a total of four tower-mounted antennas, including a top-mounted antenna and lightning rod totaling 13 ft additional in height, and additional equipment.
Utility	Conservancy	Keller Canyon Landfill Gas Power Plant	Keller Canyon Landfill, 901 Bailey Road, Pittsburg, CA	<1	2008	Construction of a landfill gas power plant on the existing Keller Canyon Landfill. The components include a power plant, a leach field and trench, and an underground 21 KV line from the plant to a tie-in location with the PG&E grid at Bailey Road
Utility (temporary impacts only)	Conservancy	Contra Costa-Las Positas 230 kV Transmission Line Reconductoring Project	Contra Costa to Alameda County	22	2009	Reconductor 24 miles of the CCC-Las Positas 230 kV line and 5.6 miles of the CCC-Lone Tree 230 kV line and install cage top extensions along the lines on 12 lines. Only temporary impacts.

Table 1. Reporting Period Summary of Covered Activities

Activity Type	Covered By	Project Name	Location	Size (acres)	Date	Description
Utility	Contra Costa County	Martin Cell Tower	East side of Vasco Road, west of Armstrong Road	1	2008	Construction of a wireless telecommunications facility and consists of an equipment shelter, and two 20-foot mono-pines.
Transportation	Contra Costa County	Marsh Creek Bridge Emergency Repair	Over Marsh Creek, located roughly 1.8 miles east of Morgan Territory Road in Central Contra Costa County	<1	2008	Repair of ten steel I-beam support piles.
Activities within the HCP/NCCP Preserves						
Restoration	Conservancy	Lentzner Springs Wetland Restoration Project	Adjacent to Black Diamond Mines Regional Preserve near Antioch, CA; APN 075-180-006	<1	2008	The project will restore 0.15 acres of alkali wetland and 0.37 acres of native grassland that is currently in a degraded stated.
Restoration	Conservancy	Vasco Caves Wetland Creation Project	Vasco Caves Regional Preserve	1	2008	This project consists of the development and construction of a wetland pond that will also provide habitat for sensitive wildlife species.
Restoration	Conservancy	Souza II Wetland Restoration Project: Phase I	6100 Armstrong Road, Byron, CA	30	2009	Restoration of the natural hydraulic function of the tributary to Brushy Creek that crosses the site by reconnecting it to its flood plain, restoring suitable habitat for covered amphibians, covered shrimp and covered plants.

[1] Project did not received take coverage under the Plan; however, project was required to comply with permit conditions and pay fees.

[2] The Public Works Department resurfaced Vasco Road in 2009; however, no impacts occurred and project was exempt from all fees and avoidance measures.

Project Name	Natural Community		Landscape									
	2.11 Enhance Cultivated Agricultural Lands to Benefit Covered Species	2.12 Wetland, Pond, and Stream Avoidance and Minimization Measures	1.6 Minimize Development Footprint Adjacent to Open Space	1.7 Establish Stream Setbacks	1.8 Establish Fuel Management Buffer to Protect Preserves and Property	1.9 Urban-Wildland Interface Design Elements	1.10 Maintain and Improve Hydrologic Conditions and Minimize Erosion	1.11 Avoid Direct Impacts on Extremely Rare Plants or Fully Protected Wildlife Species	1.12 Implement Best Management Practices for Rural Road Maintenance	1.13 Implement Best Management Practices for Flood Control Facility Operations and	1.14 Design Requirements for Covered Roads outside UDA	
Mount Diablo Recycling Center							✓					
RileMart Company [1] (Construction Staging Area)												
U.S Coast Guard/SBA Towers Telecommunications Facility							✓	✓				
Keller Canyon Landfill Gas Power Plant			✓				✓	✓				
Contra Costa-Las Positas 230 kV Transmission Line Reconductoring Project		✓	✓	✓			✓	✓				
State Route 4 Bypass, Segment 4, Phase 2		✓					✓	✓				
Martin Cell Tower							✓	✓				
Marsh Creek Bridge Emergency Repair		✓						✓	✓			
Lentzner Springs Wetland Restoration Project		✓					✓					
Souza II Wetland Restoration Project: Phase I		✓					✓	✓				
Vasco Caves Wetland Creation Project		✓			✓		✓	✓				

[1] Project did not received take coverage under the Plan; however, project was required to comply with permit conditions and pay fees.

Table 3. Reporting Period Summary of Species-Level Conditions on Covered Activities by Project

Project Name	Species-Level Measures[1]																													
	Townsend's Big-Eared Bat			San Joaquin Kit Fox			Golden Eagle			Western Burrowing Owl			Swainson's Hawk			Giant Garter Snake			CA Tiger Salamander		CA Red-Legged Frog		Covered Shrimp			Covered Plants				
	Planning Surveys	Preconstruction Surveys	AMM	Planning Surveys	Preconstruction Surveys	AMM	Construction Monitoring	Planning Surveys	Preconstruction Surveys	AMM	Construction Monitoring	Planning Surveys	Preconstruction Surveys	AMM	Construction Monitoring	Planning Surveys	Preconstruction Surveys	AMM	Construction Monitoring	Planning Surveys	Minimization	Planning Surveys	Minimization	Planning Surveys	Preconstruction Surveys	AMM	Construction Monitoring	Planning Surveys	AMM	
Mount Diablo Recycling Center											✓				✓	✓	✓					✓								
RileMart Company (Construction Staging) [2]											✓										✓									
U.S Coast Guard/SBA Towers Telecommunications Facility				✓	✓						✓	✓																	✓	
Keller Canyon Landfill Gas Power Plant	✓	✓		✓	✓						✓	✓																	✓	
Contra Costa-Las Positas 230 kV Transmission Line Reconductoring Project				✓	✓		✓	✓		✓	✓	✓	✓		✓	✓		✓										✓	✓	
State Route 4 Bypass, Segment 4, Phase 2 [3]				✓	✓		✓	✓			✓	✓			✓	✓					✓		✓					✓		
Martin Cell Tower				✓	✓		✓				✓	✓									✓		✓					✓		
Marsh Creek Bridge Emergency Repair	✓	✓	✓																			✓	✓							
Lentzner Springs Wetland Restoration Project				✓	✓		✓	✓		✓	✓		✓								✓	✓	✓	✓	✓			✓		
Souza II Wetland Restoration Project: Phase I [4]				✓	✓		✓				✓	✓	✓	✓							✓	✓	✓	✓	✓			✓	✓	
Vasco Caves Wetland Creation Project				✓	✓		✓				✓	✓		✓														✓		

[1] The implementation of these conditions and their results can be found in the planning survey reports and are available upon request from the Conservancy.

[2] Project did not obtain permits before work commenced and did not receive take coverage under the Plan; however, project was required to comply with permit conditions and pay fees.

[3] Both implemented and required conditions are identified. Although project has received take coverage under the Plan, project implementation is not complete.

[4] Avoidance and minimization measures implemented to avoid impacts to Brittlestem.

Table 4. Reporting Period Cumulative Impacts on Land Cover Types from Covered Activities and Conservation Measure Implementation (includes projected impacts from activities not yet performed)

Land Cover Type	Reporting Period		Cumulative	
	Impacts		Impacts	
	(acres, unless otherwise noted)		(acres, unless otherwise noted)	
	Permanent	Temporary	Permanent	Temporary
Terrestrial				
Annual grassland	23.4	16.3	23.4	16.3
Alkali grassland	--	--	--	--
Ruderal	13.8	22.7	13.8	22.7
Chaparral and scrub	--	--	--	--
Oak savanna	--	0.6	--	0.6
Oak woodland	--	--	--	--
<i>Subtotal terrestrial</i>	<i>37.2</i>	<i>39.7</i>	<i>37.2</i>	<i>39.7</i>
Aquatic				
Riparian woodland/scrub	0.19	0.04	0.19	0.04
Perennial wetland ¹	--	--	--	--
Seasonal wetland	--	--	--	--
Alkali wetland	--	--	--	--
Pond	--	--	--	--
Reservoir (open water) ²	--	--	--	--
Slough/Channel ³ (includes stream)	--	--	--	--
<i>Subtotal aquatic</i>	<i>0.19</i>	<i>0.04</i>	<i>0.19</i>	<i>0.04</i>
Stream (length in linear feet)				
Total stream length	0.3	38.7	0.3	38.7
<i>Stream length by width category</i>	--	--	--	--
≤ 25 feet wide	--	--	--	--
> 25 feet wide	0.3	38.7	0.3	38.7
<i>Stream length by type and order</i>	--	--	--	--
Perennial	0.3	38.7	0.3	38.7
Intermittent	--	--	--	--
Ephemeral, 3 rd or higher order	--	--	--	--
Ephemeral, 1 st or 2 nd order	--	--	--	--
<i>Subtotal stream length</i>	<i>0.3</i>	<i>38.7</i>	<i>0.3</i>	<i>38.7</i>
Irrigated agriculture				
Cropland	9.4	0.5	9.4	0.5
Pasture	--	--	--	--
Orchard	1.7	--	1.7	--
Vineyard	--	0.4	--	0.4
<i>Subtotal irrigated agricultural</i>	<i>11.2</i>	<i>0.8</i>	<i>11.2</i>	<i>0.8</i>
Other				
Nonnative woodland	--	--	--	--
Wind turbines	0.6	0.6	0.6	0.6
<i>Subtotal other</i>	<i>0.6</i>	<i>0.6</i>	<i>0.6</i>	<i>0.6</i>
Uncommon Vegetation Types (subtypes of above land cover types)				
Purple needlegrass grassland	--	--	--	--
Wildrye grassland	--	--	--	--
Wildflower fields	--	--	--	--

Table 4. Reporting Period Cumulative Impacts on Land Cover Types from Covered Activities and Conservation Measure Implementation (includes projected impacts from activities not yet performed)

Land Cover Type	Reporting Period		Cumulative	
	Impacts		Impacts	
	(acres, unless otherwise noted)		(acres, unless otherwise noted)	
	Permanent	Temporary	Permanent	Temporary
Squirreltail grassland	--	--	--	--
One-sided bluegrass grassland	--	--	--	--
Serpentine grassland	--	--	--	--
Saltgrass grassland (alkali grassland)	--	--	--	--
Alkali sacaton bunchgrass grassland	--	--	--	--
Other uncommon vegetation types	--	--	--	--
<i>Subtotal uncommon vegetation types</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Uncommon Landscape Features or Habitat Elements				
Rock outcrop	--	--	--	--
Cave	--	--	--	--
Springs/seeps	--	--	--	--
Scalds	--	--	--	--
Sand deposits	--	--	--	--
Mines (number)	--	--	--	--
Buildings (number)	--	--	--	--
Potential nest sites (number)	--	--	--	--
<i>Subtotal uncommon landscape features (acres)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
<i>Subtotal uncommon landscape features (number)</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Totals (excludes subtypes)				
Acres	49.1	41.1	49.1	41.1
Linear feet	0.3	38.7	0.3	38.7
<p>¹Perennial wetlands are equivalent permanent wetlands as identified in the in the Application Form and Planning Survey Report and wetlands as identified in Appendix J. It also includes all wetlands of indeterminate hydrology.</p> <p>² Reservoir (open water) is equivalent to aquatic as used in Appendix J and Application Form and Planning Survey Report.</p> <p>³Sloughs/channels is equivalent to -streams as identified in the Application Form and Planning Survey Report.</p>				

Table 5. Reporting Period and Cumulative Impacts to Covered Plants

Common Name	Scientific Name	Known Occurrences that May Be Removed by Covered Activities	Impacts (occurrences)	
			Reporting Period	Cumulative
Mount Diablo manzanita	<i>Arctostaphylos auriculata</i>	0	--	--
Brittlescale	<i>Atriplex depressa</i>	1	[see note ¹]	[see note ¹]
San Joaquin spearscale	<i>Atriplex joanquiniana</i>	0	--	--
Big tarplant	<i>Blepharizonia plumosa</i>	1	--	--
Mount Diablo fairy lantern	<i>Calochortus pulchellus</i>	0	--	--
Recurved larkspur	<i>Delphinium recurvatum</i>	1	--	--
Round-leaved filaree	<i>Erodium macrophyllum</i>	2	[see note ²]	[see note ²]
Diablo helianthella	<i>Helianthella castanea</i>	0	--	--
Brewer's dwarf flax	<i>Hesperolinon breweri</i>	0	--	--
Showy madia	<i>Madia radiata</i>	0	--	--
Adobe navarretia	<i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>	1	--	--
Total		6	0	0

¹ Temporary impacts occurred to brittlescale as part of the Souza 2 Wetland Restoration Project. The project is intended to create more suitable habitat for brittlescale. Seeds were collected and propagated.

² Temporary impacts occurred to round-leaved filaree as part of the PG&E Contra Costa Las Positas Project. The soil was protected from disturbance, the site was returned to pre-project conditions, and seeds collected on site were propagated.

Table 6. Impacts to Aquatic and Stream Land Cover Types by Watershed:
Reporting Period and Cumulative

Watershed/ Basin	Land Cover Type	Impacts			
		Reporting Period		Cumulative	
		Permanent	Temporary	Permanent	Temporary
Lower Marsh	Aquatic (acres)				
	Riparian woodland/scrub	--	0.0	--	0.0
	Perennial wetland ¹	--	--	--	--
	Seasonal wetland	--	--	--	--
	Alkali wetland	--	--	--	--
	Pond	--	--	--	--
	Reservoir (open water) ²	--	--	--	--
	Slough/Channel ³ (includes stream)	--	--	--	--
	<i>Subtotal aquatic</i>		<i>0.0</i>		<i>0.0</i>
	Stream (linear feet)				
	Total stream length	0.3	38.7	0.3	38.7
	<i>Stream length by width category</i>	--	--	--	--
	≤ 25 feet wide	--	--	--	--
	> 25 feet wide	0.3	38.7	0.3	38.7
	<i>Stream length by type and order</i>	--	--	--	--
	Perennial	0.3	38.7	0.3	38.7
	Intermittent	--	--	--	--
	Ephemeral, 3 rd or higher order	--	--	--	--
	Ephemeral, 1 st or 2 nd order	--	--	--	--
<i>Subtotal stream length</i>	<i>0.3</i>	<i>38.7</i>	<i>0.3</i>	<i>38.7</i>	
Sand	Aquatic (acres)				
	Riparian woodland/scrub	0.19	--	0.19	--
	Perennial wetland ¹	--	--	--	--
	Seasonal wetland	--	--	--	--
	Alkali wetland	--	--	--	--
	Pond	--	--	--	--
	Reservoir (open water) ²	--	--	--	--
	Slough/Channel ³ (includes stream)	--	--	--	--
	<i>Subtotal aquatic</i>	<i>0.19</i>	<i>0.00</i>	<i>0.19</i>	<i>0.00</i>
	Stream (linear feet)				
	Total stream length	--	--	--	--
	<i>Stream length by width category</i>	--	--	--	--
	≤ 25 feet wide	--	--	--	--
	> 25 feet wide	--	--	--	--
	<i>Stream length by type and order</i>	--	--	--	--
	Perennial	--	--	--	--
	Intermittent	--	--	--	--
	Ephemeral, 3 rd or higher order	--	--	--	--
	Ephemeral, 1 st or 2 nd order	--	--	--	--
<i>Subtotal stream length</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	

Table 6. Impacts to Aquatic and Stream Land Cover Types by Watershed:
Reporting Period and Cumulative

Watershed/ Basin	Land Cover Type	Impacts			
		Reporting Period		Cumulative	
		Permanent	Temporary	Permanent	Temporary
Total	Aquatic (acres)				
	Riparian woodland/scrub	0.19	0.04	0.19	0.04
	Perennial wetland ¹	--	--	--	--
	Seasonal wetland	--	--	--	--
	Alkali wetland	--	--	--	--
	Pond	--	--	--	--
	Reservoir (open water) ²	--	--	--	--
	Slough/Channel ³ (includes stream)	--	--	--	--
	Total aquatic	0.19	0.04	0.19	0.04
	Stream (linear feet)				
	Total stream length	0.3	38.7	0.3	38.7
	<i>Stream length by width category</i>	--	--	--	--
	≤ 25 feet wide	--	--	--	--
	> 25 feet wide	0.3	--	0.3	--
	<i>Stream length by type and order</i>	--	--	--	--
	Perennial	0.3	--	0.3	--
	Intermittent	--	--	--	--
	Ephemeral, 3 rd or higher order	--	--	--	--
	Ephemeral, 1 st or 2 nd order	--	--	--	--
	Total stream length	0.3	38.7	0.3	38.7

Figure 2 East Contra Costa County Habitat Conservation Plan Inventory Area

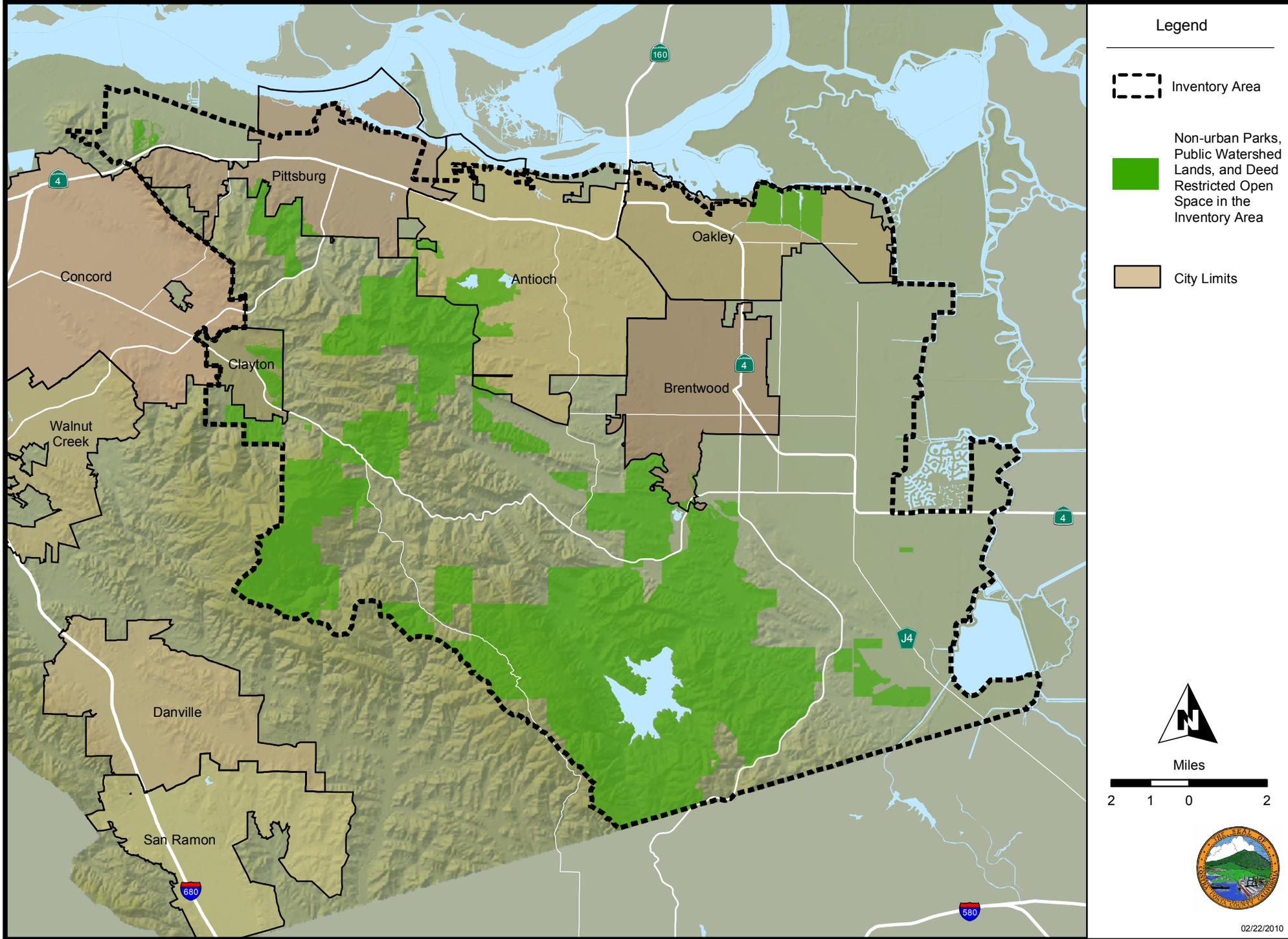


Figure 3 Location of Covered Projects

