

Chapter 8

Plan Implementation

8.1 Overview

Implementation of the HCP/NCCP begins when the Implementing Agreement is executed and the Section 10(a)(1)(B) incidental take permit and NCCP permit are issued. Primary responsibility for implementing the Plan rests with the Permittees. However, as described in this chapter, other groups are responsible for implementing some aspects of the Plan. The successful execution of the conservation strategy, monitoring program, covered-activity approvals, and reporting that are part of the Plan require coordinated actions among local jurisdictions, CDFG, USFWS, public land managers, and the private sector.

In general, local jurisdictions will implement the HCP/NCCP through their planning departments and through an Implementing Entity as described below. This chapter describes the overall implementation policies of the Plan, including institutional arrangements, organizational structure, approval processes, land acquisition, and roles and responsibilities of signatories to the Implementing Agreement and other stakeholders.

8.2 Implementation Structure

Plan implementation will be overseen by the Implementing Entity, which will be a Joint Exercise of Powers Authority formed by the cities and the County (Figure 8-1). Day-to-day implementation of the HCP/NCCP will be managed by an Executive Director and her/his staff and consultants. The Implementing Entity has the authority to delegate some of its responsibilities to existing or newly created entities including agencies and nongovernmental organizations, though the Implementing Entity is ultimately responsible for ensuring implementation of the HCP/NCCP. Many existing organizations and agencies in the East County area already have significant expertise and experience in resource conservation, and the Implementing Entity may be able to more effectively and efficiently ensure implementation of the HCP/NCCP by partnering with these existing institutions. However, the Implementing Entity shall have the authority to directly implement all aspects of HCP/NCCP itself should this be necessary. Options that could be considered to implement some or all of the duties of the Implementing Entity include those listed below.

- Staff dedicated to the Implementing Entity and independent of other agencies.
- Staff wholly or partly dedicated to the Implementing Entity but housed within one or more existing government agencies.
- A land trust specifically formed to implement the Plan.
- Contracts with existing organizations that have relevant experience and expertise, such as experience with land management or monitoring (e.g., EBRPD¹, C DPR, Center for Natural Lands Management).

Other organizations with important roles in HCP/NCCP implementation include the regulatory agencies, other land management agencies, Science Advisors, and the public (Figure 8-1). The roles, responsibilities, and relationships of each group are described below. Unless otherwise stated, all obligations and responsibilities described in this chapter rest with the Implementing Entity.

8.2.1 Participating Local Jurisdictions

The following local jurisdictions will be Permittees under the HCP/NCCP.

- City of Brentwood.
- City of Clayton
- City of Oakley.
- City of Pittsburg.
- Contra Costa County.
- Contra Costa County Flood Control and Water Conservation District.
- East Bay Regional Park District.
- The Implementing Entity for the HCP/NCCP (see below)

It is expected that each of these jurisdictions will be a Permittee on the ESA Section 10(a)(1)(B) incidental take permit and the NCCPA permit providing authorization for take that occurs from covered activities within their respective jurisdictions (Chapter 2). Each will also be a signatory to the Plan's Implementing Agreement. However, the participating jurisdictions will vest the responsibility for implementing the Plan to the Implementing Entity as described below. In other words, the Implementing Entity will oversee implementation of the Plan on behalf of the participating jurisdictions. Nevertheless, the participating jurisdictions will ultimately be responsible for compliance with all

¹ EBRPD is expected to be a significant partner during Plan implementation. Since publication of the Draft HCP/NCCP, EBRPD intends to sign the Implementing Agreement and become a Permittee under the HCP/NCCP. As further described in Section 9.4 of the Implementing Agreement, EBRPD will agree to maintain its level of acquisition effort in the HCP/NCCP inventory area, subject to the availability of funding, and estimates that this will result in the acquisition of approximately 10,000 acres in the HCP/NCCP area over the 30-year life of the Plan.

the terms and conditions of the Plan's permits and for the performance of the Implementing Entity. Each local jurisdiction will provide staff to advise the Implementing Entity on HCP/NCCP implementation (Figure 8-1).

It is anticipated that most applications for coverage under the HCP/NCCP will come from private developers in the participating cities and the County. These jurisdictions will be responsible for determining the completeness of each project application (see *Applicant Responsibilities and the Application Process* below for details). If the application is complete and the applicant has complied with all relevant terms of the HCP/NCCP as determined by the participating jurisdiction, the participating jurisdiction will grant take authorization under the HCP/NCCP as part of its normal project review process (e.g., grading permit issuance, EIR certification). Participating local jurisdictions will also be responsible for reporting the relevant details of approved projects to the Implementing Entity (for entry into the HCP/NCCP database), for monitoring developer compliance with the avoidance and minimization requirements specified in the applicable conservation measures (see Chapter 6), and for collecting fees.

8.2.2 Implementing Entity

The Implementing Entity consists of the Governing Board, the Executive Director, and Staff. The Implementing Entity executes the requirements of the Plan as well as the Implementing Agreement. The Implementing Entity also coordinates with Science Advisors, outside consultants, and other land management agencies to ensure adequate and coordinated implementation of the Plan. The Implementing Entity includes a network of staff scientists, administrators, and other specialists that carry out planning and design, habitat restoration, monitoring, adaptive management programs, and periodic coordination with and reporting to regulatory agencies.

The Implementing Entity will be responsible for overseeing and ensuring the day-to-day tasks of implementing the HCP/NCCP "on the ground," although some of the activities may be delegated to and carried out by contractors or partners such as land management agencies. The Implementing Entity's duties will consist of routine Plan activities such as identifying suitable conservation properties, undertaking survey and monitoring efforts on HCP/NCCP preserves, contacting neighboring landowners to explain coverage under the permit, maintaining a database of relevant preserve information, and tracking habitat losses and acquisition.

The Implementing Entity will be composed of administrative and technical staff or consultants led by an Executive Director (see below for details of the organizational structure of the Implementing Entity). The Implementing Entity will hold title to lands or easements it purchases and will oversee cooperative agreements with other land management entities that own and/or manage preserves for the Implementing Entity as part of the HCP/NCCP Preserve System. The Implementing Entity may contract out its functions to a third party such as a local land management agency (e.g., EBRPD or CCWD).

Implementing Entity Governing Board

The Implementing Entity Governing Board will consist of elected officials from participating city councils and the County Board of Supervisors. The Governing Board, as the decision-making body for the Implementing Entity, will help to oversee compliance with those responsibilities set forth in the HCP/NCCP and assigned to the Implementing Entity. The Governing Board will meet quarterly for the first 5 years of Plan implementation, or as often as needed to effectively oversee plan implementation during these critical first years. Meeting frequency can be reduced after 5 years, if desired. The Implementing Entity will receive advice from the groups discussed below through the Governing Board.

8.2.3 Other Land Management Agencies

Local land management agencies are important to the success of the Plan. HCP/NCCP preserves will often border existing parks or public lands run by EBRPD, the California Department of Parks and Recreation (CDPR), CCWD, and other public agencies or private land trusts. These agencies will be invited to help guide implementation of the Plan as advisors to the Implementing Entity and/or the Governing Board. In addition, land managers from these organizations will be invited to coordinate closely with the Implementing Entity to ensure that management actions are compatible across the region. Significant cost savings can be achieved by coordination of local land management agencies in undertaking joint management actions that are consistent with this Plan. These land management agencies may wish to establish a formal committee to facilitate this coordination and information sharing.

Technical Advisory Committee

If the Implementing Entity relies on other land management agencies to perform some of its duties, then senior land management staff of these other agencies will participate in a Technical Advisory Committee that includes preserve management staff of the Implementing Entity. The Technical Advisory Committee will report to the Executive Director and serve as a coordinating body to ensure that land management, monitoring, and other HCP/NCCP activities are applied consistently across the Preserve System. Representatives of USFWS and CDFG will serve as advisory members of the Technical Advisory Committee.

8.2.4 Regulatory Agencies

USFWS and CDFG are the regulatory agencies that issue the federal and state permits for incidental take and regulate implementation of the Plan. They will receive annual reports concerning plan implementation, and they will guide the efforts of the Governing Board such that the Plan remains in compliance.

Representatives of these agencies will serve as advisory members to the Governing Board and the Technical Advisory Committee, if one is formed. Regulatory agencies are responsible for providing guidance to the Implementing Entity and Permittees on how to fulfill the terms of the permits. Regulatory agencies will also assist the Implementing Entity in attempting to secure state and federal funding for HCP/NCCP implementation (see Chapters 9 and 10).

As described in Chapter 1, the East Contra Costa County HCPA is pursuing regional wetlands permit programs with the U.S. Army Corps of Engineers and Regional Water Quality Control Board. If these permit programs are approved, representatives of these agencies would also be included as advisory members to the Governing Board and the Technical Advisory Committee, if one is formed. The East Contra Costa County HCPA is also pursuing a programmatic streambed alteration agreement with CDFG. Although CDFG is already an advisor to these groups, they may choose to add an additional representative(s) to address stream issues.

8.2.5 Science Advisors

Science Advisors with expertise in conservation biology, management of local natural communities and agricultural lands, or the ecology of covered species will be invited to provide input to the Governing Board as needed. The Science Advisors' primary function is to provide technical advice and help assemble the best available scientific data on the Plan's preserve assembly, monitoring, and adaptive management program. A separate group of scientists will be convened periodically in an Independent Conservation Assessment Team to provide outside review of overall Plan progress. More detail on the structure, role, and schedule of Science Advisors and the Independent Conservation Assessment Team is provided below (see *Structure of the Adaptive Management Decision-Making Process*).

8.2.6 Public Input

Public input is fundamental to ensuring success and continuing support and of the HCP/NCCP throughout its implementation. The NCCP Act requires that the Implementing Agreement provide for periodic reporting to the public on the progress of NCCP implementation. Meetings of the HCP/NCCP Governing Board will be open to the public, and public comments will be heard at each meeting. (The Governing Board may need to hold periodic closed-door sessions to discuss confidential items such as land transaction negotiations or legal matters.) In addition, the public can contact the staff of the Implementing Entity to comment on various aspects of Plan implementation. All data and reports associated with the monitoring program for this Plan will be available to the public, with the exception of reports documenting surveys on private lands considered for acquisition but not yet acquired by the Implementing Entity.

Public Advisory Committee

The HCP/NCCP Governing Board will establish and appoint a public advisory committee to solicit input from stakeholders with interest in Plan implementation. The committee will report directly to the HCP/NCCP Governing Board. Committee members will be drawn from a variety of interest groups, including conservation advocacy organizations, landowner groups, and development interests. Staff from local jurisdictions and the regulatory agencies should participate in advisory committee meetings to help assure broad coordination among those parties interested in and responsible for implementing the Plan. Meeting frequency will be determined by the Implementing Entity and the committee; quarterly meetings are recommended to start. Meetings will be open to the public. The committee may sunset at the end of the permit term.

The public advisory committee will provide input to the HCP/NCCP Governing Board and staff on all aspects of Plan implementation, with an emphasis on the following topics.

- Expenditure of funds for habitat conservation measures.
- The general permit issuance process (but not project-by-project input on permits).
- Operation of preserves and adaptive management.
- Adherence to plan commitments (e.g., no surprises, neighboring landowner protections).

The criteria listed below will guide establishment and operation of the public advisory committee.

- The committee will include representation of organizations and individuals with direct interest in Plan implementation, and will be composed of the following members appointed by the Governing Board:
 - three private permit seekers, (e.g., private developers or their representatives);
 - three conservation advocates, (e.g., established organizations that represent members in the inventory area);
 - three private landowners and/or agriculturalists, or their representatives;
 - three people representing suburban and rural residents of the Plan area; and
 - public agency staff, who shall also attend and participate in committee meetings.
- Despite formal membership, committee meetings will be open to the public, and members of the public will be encouraged to participate in discussions and be part of committee recommendations.

- The committee shall attempt to operate by consensus. When consensus is not possible, the conflicting positions should be communicated to the Governing Board.
- The committee shall strive in their recommendations to be objective, balanced, and constructive to help the Plan succeed biologically, financially, and within the social context of East Contra Costa County.

Annual Public Workshop

At least once annually, the HCP/NCCP Governing Board will report on the progress of implementation directly to the public in a workshop. The Board will summarize habitat losses and gains, habitat restoration and creation, and management and monitoring accomplishments for the previous year. The meeting will provide a forum for the public to ask questions and provide comments directly to the Board on the overall progress of HCP/NCCP implementation. Periodic formal review of Plan progress in a public forum may also be appropriate and could perhaps coincide with the 5-year conservation audits by the Independent Conservation Assessment Team (see below for a description of this group and its function).

8.3 Responsibilities of the Implementing Entity

The Implementing Entity is tasked with the actual implementation of HCP/NCCP measures as described in the Plan. These wide-ranging responsibilities include but are not limited to those listed below.

- Developing and maintaining annual budgets and work plans.
- Obtaining grants.
- Receiving, managing, tracking, reporting, and expending funds or endowments, including fee revenues collected or paid by other Permittees.
- Researching land acquisition opportunities (fee title or conservation easement).
- Negotiating land acquisition or conservation easements with private landowners.
- Negotiating land acquisition or conservation easements in partnership with other organizations.
- Training staff in local jurisdictions to review applications for take authorization in compliance with the Plan. Assisting local jurisdictions to ensure that project proponents comply with the provisions of the Plan, including performance of required avoidance, minimization, and mitigation measures.

- Promoting coordination among Permittees to ensure that the Plan is implemented consistently and effectively.
- Approving offers of land in lieu of the development fee that may be made by project proponents (see Section 8.6.7) and making determinations on other implementation matters that require approval of the Implementing Entity, as specified in this Plan or the Implementing Agreement (see summary in Section 8.7).
- Reviewing applications for take authorization submitted by Participating Special Entities (see Section 8.4 below) and documenting permit usage by each Permittee.
- Monitoring landowner compliance with conservation easement terms.
- Developing system-wide and site-specific management plans for the Preserve System and individual preserves.
- Designing and implementing habitat enhancement, restoration, and creation and managing the affected areas in an adaptive management framework (see additional detail below).
- Administering the Neighboring Landowner Assurances Program described in Chapter 10.
- Obtaining additional permits for site-specific projects in the Preserve System (e.g., wetlands permits, cultural resources compliance).
- Implementing species-specific conservation measures within the Preserve System.
- Periodic mapping of the inventory area to update the land cover calculations.
- Coordinating and communicating with local land management agencies.
- Creating and maintaining databases.
- Designing a scientifically-valid monitoring program and monitoring habitat and species on HCP/NCCP preserves (see additional detail below and in Chapter 7).
- Overseeing land management activities in an adaptive management framework (see additional detail below), either independently or in partnership with other organizations.
- Assuring that mitigation and conservation measures are being implemented roughly proportional in time and extent to the impact on habitat or covered species authorized under the Plan (e.g., see Conservation Measures 1.1, 2.3, and 2.10 and Section 8.6.1) and notifying the other Permittees of the requirement to make the land in lieu of fee provision compulsory when the Plan is out of compliance or in jeopardy of being out of compliance with the Stay Ahead provision, as well as notifying them when this requirement may be lifted (see Section 8.6.1).
- Calculating the amounts of automatic annual fee increases and distributing these calculations to the cities and the County, in accordance with Chapter 9 of the HCP/NCCP.

- Performing the periodic fee audits described in Chapter 9.
- Preparing the Annual Report (see Section 8.10 below).
- Assuring involvement in the implementation of the Plan by the public, science advisors, interested agencies, and others.

The Implementing Entity will utilize specialists to ensure proper implementation of these varied tasks. In consideration of these tasks and responsibilities, a potential organizational structure of the Implementing Entity is shown in Figure 8-2. However, the actual structure used may differ depending on staff qualifications and arrangements with local agency partners to fill all or some of these roles.

Key roles are briefly described below. Each role could be performed by one or more staff residing in different agencies, could be contracted to private specialists, could be filled at different stages of Plan implementation, or could be combined. Several roles could be performed by the same person.

8.3.1 Executive Director

The Executive Director reports to the Governing Board and directs the activities of the Implementing Entity and the implementation of the Plan under the authority granted by the Governing Board. 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. The Executive Director and his/her staff is also responsible for training staff persons of local jurisdictions to review and process applications for coverage under the HCP/NCCP. The Executive Director will oversee periodic audits of local jurisdictions to ensure compliance with the terms of the Plan. Audits will occur at the end of Plan years 1, 3, 6, 10, 15, 20, and 25 (i.e., more frequently in early years of implementation than in later years). The Executive Director will serve as the primary link between Implementing Entity staff, local jurisdictions, regulatory agencies, other decision makers, and the general public.

8.3.2 Scientific Oversight

Scientific oversight is needed from a senior biologist to direct all technical aspects of HCP/NCCP implementation, including the monitoring and adaptive management program. S/he will collect and analyze data as required by the Plan, keep abreast of current scientific methods and concepts, and provide continuous oversight of the monitoring and adaptive management program (e.g., monitoring methods, study designs) to ensure that the Preserve System incorporates the most appropriate strategies. The Implementing Entity will be responsible for communication with external scientists, including agency scientists, the Science

Advisors, and the larger conservation science community. The Implementing Entity must also encourage relationships with agency and academic scientists to facilitate collaborations that will contribute to the conservation goals of the HCP/NCCP.

8.3.3 Real-Estate Activities

The Implementing Entity conducts relevant financial and legal analyses to guide selection of parcels for the Preserve System, and conducts or manages appraisals and transactions. A specialist will be needed in real-estate law, zoning, and local regulations to fulfill the fiduciary duties of the Implementing Entity for its properties. The Implementing Entity may work with other organizations who partner with it to acquire land to fulfill requirements of the Plan. Existing agencies may already have staff with these skills; the Implementing Entity could partner with such agencies to obtain these skills externally.

8.3.4 Grant Administration

The Implementing Entity is responsible for managing all grants, contracts, and other funding sources during plan implementation. The Implementing Entity must establish clear accounting procedures and methods for disbursing funds and actively pursue and acquire additional funding for implementation of the Plan. The Implementing Entity will actively write grant applications to secure these funds. The Implementing Entity may work with other organizations who partner with it to seek grants to fulfill requirements of the Plan. Existing agencies may already have staff with these skills; the Implementing Entity could partner with such agencies to obtain these skills externally.

8.3.5 Budget Analysis

The Implementing Entity is responsible for developing and monitoring budgets, processing invoices, managing financial reserves, identifying cost savings, and managing administrative contracts (e.g., liability insurance). The Implementing Entity must also track expenditures and cash flow and establish and maintain an internal accounting system and procedures.

8.3.6 GIS/Database Maintenance

The Implementing Entity must develop GIS and other database systems to collect, store, and utilize spatial data necessary for Plan implementation. The Implementing Entity will use GIS to guide preserve design and monitoring programs. Implementing Entity staff or designees will organize and summarize monitoring data, in spatial and non-spatial formats, such that the monitoring

program effectively informs adaptive management strategies. The Implementing Entity will track all data related to the progress of meeting HCP/NCCP goals and objectives (e.g., land acquisition requirements by land cover type, covered species habitat, plant populations). The Implementing Entity will also coordinate development and management of the public web site.

8.3.7 Preserve Management and Monitoring

The Implementing Entity has primary responsibility for ensuring the day-to-day management of the preserves in accordance with the Plan. The Implementing Entity will direct the management of land acquired for the HCP/NCCP Preserve System and coordinate with managers of other preserve lands (e.g., regional parks, land trusts, mitigation banks, CCWD, CDFG) to form a biologically cohesive network of protected areas in the inventory area. These activities will include regular patrol, trash removal, fence/gate installation and repair, road maintenance, and other necessary activities. The Implementing Entity will prepare Preserve Management Plans for all units of the Preserve System (see Chapter 5) to guide management at the site level. The Implementing Entity will also be responsible for interim management of acquired lands prior to completion of these Preserve Management Plans.

The Implementing Entity is also responsible for designing and implementing the monitoring and adaptive management program described in Chapter 7. Responsibilities include designing a scientifically robust monitoring program, including sampling design, survey protocols, experimental management, pilot studies, and prioritizing monitoring and research needs. The Implementing Entity will also implement field studies, maintain monitoring equipment, collect field data, and analyze monitoring data to evaluate and redirect management actions, if needed. The Implementing Entity is also responsible for developing overall management plans for the Preserve System, preserve-specific management plans, and habitat restoration designs and construction drawings, or for overseeing contractors conducting these tasks.

Approval of Monitoring Personnel for Take of Federally Listed Covered Species

Some monitoring activities may require handling or disturbing federally-listed covered species² which would result in take. Take of federally-listed covered species resulting from monitoring activities or for scientific purposes is authorized under the HCP/NCCP provided that:

² As of the Plan date, there are eight federally-listed covered species: San Joaquin kit fox, Alameda whipsnake, giant garter snake, California red-legged frog, California tiger salamander, vernal pool fairy shrimp, vernal pool tadpole shrimp, and longhorn fairy shrimp.

- Such take occurs during activities specifically described in the monitoring protocols developed for the Preserve System and is consistent with monitoring provisions set forth for specific sites in the Preserve Management Plans approved by CDFG and USFWS.
- The person performing the monitoring activities demonstrates an understanding of the monitoring protocols, data collection techniques, and handling procedures for the federally-listed covered species through (1) training with the Implementing Entity or their representatives on these procedures and standards, and (2) appropriate previous experience with the federally listed covered species or similar species.
- The person performing the monitoring activities carries out their duties in conformance with the protocols and procedures specified in the training.
- The names, contact information, and written certification of training and qualifications for the monitoring personnel handling or disturbing federally listed covered species are provided to USFWS prior to each person conducting this monitoring. USFWS must approve each person before they are authorized to take federally listed covered species. This documentation will also be on file with the Implementing Entity.

These provisions are consistent with the USFWS policy as described in the *Habitat Conservation Planning Handbook* (U.S. Fish and Wildlife Service and National Marine Fisheries Service 1996).

Structure of the Adaptive Management Decision-Making Process

As described in Chapter 7, adaptive management is a critical element of the HCP/NCCP because it addresses many of the uncertainties of the Plan and provides for continual adjustment and improvement towards meeting Plan goals and objectives. Key to the success of the adaptive management program is a clear and effective structure for making decisions on the basis of new data from Plan monitoring and information from other sources. The Implementing Entity will be advised by five groups that play an important role in adaptive management (Figure 8-1).

- Regulatory Agencies.
- Other Land Management Agencies (or a Technical Advisory Committee).
- Science Advisors.
- Independent Conservation Assessment Team.
- The Public.

The Implementing Entity's responsibilities for implementing the adaptive management plan are listed below.

- Designing a scientifically robust effectiveness monitoring program.
- Gathering monitoring and research data, including relevant information developed by others, and maintaining databases.
- Disseminating HCP/NCCP-generated monitoring and research data, including monitoring reports and research papers, to others.
- Assessing the effectiveness of conservation measures.
- Identifying the need to modify existing or to adopt additional conservation measures and defining what to change and how to change it.
- Identifying the need to modify the monitoring program and defining what to change and how to change it.
- Identifying the need for and implementing experimental pilot projects.
- Identifying and prioritizing research needs and conducting critical directed research.
- Developing the adaptive management elements of Preserve Management Plans.
- Incorporating monitoring, research, and other adaptive management-related activities into annual work plans.
- Creating and maintaining a network of Science Advisors (see below) to provide advice to the Implementing Entity, as needed, on adaptive management and monitoring issues including important data gaps, monitoring and management methods, and data interpretation.
- Periodically convening the Independent Conservation Assessment Team (see below) to conduct a program-wide review of HCP/NCCP implementation, including monitoring and adaptive management, and providing recommendations to improve HCP/NCCP implementation.

Regulatory Agencies. The role of the regulatory agencies (i.e., USFWS, CDFG, EPA, USACE) is to provide policy-level feedback to the Implementing Entity regarding recommended changes to HCP/NCCP implementation based on the results of research and monitoring and on the recommendations of the Science Advisors and the Independent Conservation Assessment Team. Resource agency staff also offer expertise in the biology and conservation of the covered species and natural communities. Types of feedback the resource agencies are likely to provide could include assessments of the consistency of proposed changes with terms and conditions of HCP/NCCP permits, costs associated with the proposed changes relative to successful implementation of other elements of the HCP/NCCP, how conservation measures are working in practice and how they can be improved, and attainment of overall HCP/NCCP goals and objectives.

Land Management Agencies. As discussed above, other land management agencies in the inventory area are encouraged to coordinate with the Implementing Entity to share information and resources in implementing management across preserve boundaries and on a regional scale. Input from other land management agencies in the inventory area is an important component

of successful adaptive management. Land management agencies that manage land on behalf of the Implementing Entity (i.e., as part of the Preserve System) will form a Technical Advisory Committee to coordinate management and ensure consistency across the Preserve System.

Science Advisors. The Implementing Entity will consult Science Advisors who will provide regular advice on Plan implementation. Science Advisors will be scientists and resource managers with expertise in one or more of the following areas.

- Covered species.
- Landscape ecology.
- Natural communities in the HCP/NCCP preserves.
- Ecological processes.
- Resource management.
- Biological monitoring.
- Statistical analysis and experimental design.

Science Advisors will be selected by the Implementing Entity with input from CDFG and USFWS. The role of the Science Advisors is to provide the Implementing Entity with science-based expert opinion and recommendations, focused “white papers,” peer reviews, and feedback regarding key scientific aspects of HCP/NCCP implementation such as reserve design, reserve management, and monitoring protocols. Science Advisors will be contacted by the Implementing Entity as needed. They may also meet as a group as needed to address specific topics. The Implementing Entity may also request that the Science Advisors review the following types of information prepared by or for the Implementing Entity.

- Research proposals.
- Research and monitoring reports and recommendations to the Implementing Entity provided by others.
- Monitoring priorities, sampling design, survey protocols, data analysis, and data storage.
- Proposals for experimental pilot or demonstration projects to test unproven natural community enhancement/creation/restoration or management techniques.
- Proposed changes in preserve design and management, natural community enhancement/creation/restoration techniques, alternative conservation measures, and monitoring methods, based on interpretation of monitoring or research results and consistent with the protocols for, and limitations on, the Adaptive Management Program (see Chapter 7).

Independent Conservation Assessment Team. The Independent Conservation Assessment Team will be composed of highly recognized scientists and resource managers who are independent of the HCP/NCCP and the Science Advisors. Selecting Team members who are independent of the Plan is important to ensure an unbiased assessment of HCP/NCCP implementation. The role of the Independent Conservation Assessment Team is to provide periodic review of overall HCP/NCCP implementation, including the following specific areas.

- Progress toward land acquisition and habitat restoration goals by land cover type.
- The appropriateness of monitoring and management methods to achieve Plan goals.
- The appropriateness of monitoring data interpretation.
- Changes that may be needed in conservation, management, or monitoring to better achieve Plan goals (see Chapter 7 for additional discussion on the protocols for, and limitations on, the Adaptive Management Program).

The Independent Conservation Assessment Team will provide policy-level recommendations to the Implementing Entity. The Independent Conservation Assessment Team will be selected and convened by the Implementing Entity at least every 5 years. CDFG and USFWS will be consulted regarding prospective members. A 5-year interval will allow progress to be made towards Plan compliance (e.g., land acquisition and restoration) and biological goals and objectives and for sufficient monitoring data to be collected to allow for a thorough and meaningful progress review. It is expected that the composition of the Team will change each period due to turnover, although some consistency in membership is preferred.

The Public. As discussed above, members of the public will have opportunities to learn about Plan status and provide input to the Implementing Entity on management during periodic (at least annual) public hearings and regular meetings of the public advisory committee, which will be open to the public. Members of the public may offer important contributions to a successful adaptive management program, such as providing data on covered species, critical reviews of monitoring data, and suggestions for improved land management.

8.3.8 Legal and Financial Services

Legal counsel will provide guidance during Plan implementation on an as-needed basis for drafting and reviewing conservation easements, reviewing of land purchases, assisting with land transaction negotiations, and assisting with easement violations if they occur. Legal counsel will be required in the unlikely event that the Implementing Entity is sued. Financial analysis assistance will be required periodically to review the program's cost/revenue balance and ensure that development fees are adjusted with changing land costs and inflation.

8.3.9 Consultants and Contractors

Consultants will be retained to meet any technical or scientific needs that cannot be effectively or efficiently addressed through in-house staff due to insufficient expertise or availability. It is expected that consultants will be utilized more heavily during the early stages of Plan implementation, becoming less necessary as the Implementing Entity develops and becomes more familiar with the Preserve System. Contractors will be needed for construction tasks requiring specialized skills or the use of heavy equipment, such as road grading, restoration grading, plant propagation, restoration planting, and water-well construction and maintenance.

8.4 Participating Special Entities

Organizations not subject to the jurisdiction of the Permittees may have projects or ongoing activities within the inventory area that could affect covered species and that may require take authorization. Such organizations may include school districts, water districts, irrigation districts, transportation agencies, local park districts, geologic hazard abatement districts, or other utilities or special districts that own land or provide public services. These agencies, known as Participating Special Entities, can request coverage under the HCP/NCCP during Plan implementation; such coverage would provide take authorization for their projects. In addition, there may be cases where an organization that is subject to the land use jurisdiction of the Permittees seeks take authorization for activities that do not require land use permits (pipeline maintenance projects, for example). Such cases may also be addressed through the provisions described below for providing take coverage to Participating Special Entities.

The Participating Special Entity will submit a complete application for the proposed activity directly to the Implementing Entity with copies to the local jurisdiction in which the project occurs, CDFG, and USWFS. This application will contain the following components.

- A detailed description of the activity proposed for coverage under the HCP/NCCP.
- A map of the proposed activity area.
- An analysis of the potential impacts of the proposed activity on covered species and their habitats.
- The results of required planning surveys (described in Chapter 6, *Conditions on Covered Activities*).

In order to grant take authorization to these local agencies, the Implementing Entity will need a legally enforceable contractual relationship with the Participating Special Entity. The Implementing Entity will issue a Certificate of Inclusion to the Participating Special Entity that will allow the proposed activity

to be covered under the HCP/NCCP if the conditions listed below are met. A template of the Certificate of Inclusion is found as an exhibit to the Implementing Agreement (Appendix B).

- The Implementing Entity signs a contract with the Participating Special Entity binding them to the relevant terms of the HCP/NCCP.
- The Implementing Entity finds that the proposed activity complies with all terms and requirements of the Plan, the permits, and the Implementing Agreement, and CDFG and USFWS concur.
- The impacts of the proposed activity fall within those analyzed in the HCP/NCCP and the EIR/EIS in general type, magnitude, and effects.
- The impacts of the proposed activity do not substantially deplete the amount of take coverage available for future project applicants considered by this Plan.
- The proposed activity does not conflict with the conservation strategy or the ability of the Implementing Entity to meet the Plan goals and objectives.

The Certificate of Inclusion will be issued to the Participating Special Entity upon payment of the fee specified in the contract and completion of any and all other steps required by contract to occur prior to issuance of the Certificate of Inclusion. The Implementing Entity may require Participating Special Entities to pay fees over and above those specified in Chapter 9 to cover indirect costs of extending permit coverage under the HCP/NCCP, including the costs of Implementing Entity staff time to assist with permit coverage, a portion of the costs of the initial preparation of the Plan, and a portion of the costs of conservation actions designed to contribute to species recovery. The Certificate of Inclusion will include an attached map depicting the parcel number, acreage, and owner of lands to which the take authorization(s) would apply. Also see the Implementing Agreement for additional details and procedures that apply to Participating Special Entities.

8.5 Local Implementing Ordinances

To implement the HCP/NCCP on the local level, each participating jurisdiction must adopt an implementing ordinance that will reference the HCP/NCCP and the jurisdiction's obligations under the Plan. Most importantly, the ordinance will establish the fees on local applicants seeking coverage under the Plan, as described in Chapter 9. Ordinances will be finalized and adopted by each jurisdiction not later than 90 days after Permit issuance by CDFG and USFWS. A draft template of the HCP/NCCP implementing ordinance is found in Appendix F.

8.6 Land Acquisition

The Implementing Entity is responsible for ensuring acquisition of land for the Preserve System in accordance with Conservation Measure 1.1. The conservation strategy that guides land purchases is described fully in Chapter 5.

To be incorporated into the Preserve System and count toward the land acquisition requirements of the Plan, acquired lands must meet the following criteria. Acquired lands must:

- Contribute to meeting the goals and objectives of the Plan as described in Chapter 5.
- Permanently protect the biological functions and values that contribute to the Plan. For lands owned by the Implementing Entity or EBRPD, permanent protection must be ensured through restrictive covenants, deed restrictions, or equivalent title restrictions, recorded in favor of CDFG and USFWS. For lands owned by other entities, permanent protection must be ensured by a conservation easement consistent with the requirements of Section 8.6.3 or by some other permanent dedication of land to the Preserve System that is approved by CDFG and USFWS.
- Be managed in perpetuity according to a Preserve Management Plan, as described in Chapter 5, Conservation Measure 1.2 or 1.3. Acquisitions may be counted toward meeting the obligations of the Plan before the Preserve Management Plan has been completed if the Implementing Entity owns the land or if the property owner is bound by a conservation easement or other agreement that requires preparation of a Preserve Management Plan consistent with the requirements of Conservation Measure 1.2 and 1.3 in Chapter 5.

The land acquisition process will follow the steps listed below for land acquired in fee title or through conservation easements. These steps are also illustrated in Figure 8-3. The Implementing Entity could perform these steps on its own or in conjunction with acquisition partners.

1. Identify sites that have the potential to meet acquisition requirements within a given Zone or Subzone.
2. Approach property owner with proposal to acquire land through conservation easement or fee title.
3. If property owner is willing, enter into agreement with property owner to conduct planning surveys of property for land cover types (including jurisdictional wetlands and waters), habitat for covered species, and species covered by the Plan. Planning surveys for land acquisition (also called pre-acquisition surveys) will incorporate the same procedures as planning surveys for covered activities described in Chapter 6.
4. Conduct necessary pre-acquisition surveys at the Implementing Entity's expense (see Chapter 5, *Habitat Acquisition and Analysis Zones*).

5. Determine if site meets HCP/NCCP acquisition requirements and ensure that property encumbrances (e.g., existing easements, property title, resource extraction rights, presence of hazardous materials [Phase I environmental assessment]) do not conflict with HCP/NCCP goals and objectives. For easements, reach agreement on easement terms and management for HCP prior to purchase.
6. Conduct appraisal of property rights (easement or fee) or obtain appraisal conducted by property owner (appraisal costs will be determined case by case).
7. Rank available sites on the basis of cost versus ability to meet Plan requirements and biological goals and objectives. Sites that meet specific requirements, goals, and objectives that are difficult to fulfill should be assigned high priority.
8. For high-ranking sites, make offer to property owner and develop easement conditions, if appropriate.
9. Negotiate fair-market price and easement conditions, if applicable, with owner.
10. If a site is purchased in fee title, the Implementing Entity will prepare a Preserve Management Plan for the site based on site conditions. If a conservation easement is purchased, the Implementing Entity will prepare a management plan with the landowner (though easement negotiations may resolve some management issues). Management plans will be consistent with the Plan's conservation strategy and the framework for adaptive management.
11. Examine all leases that apply to the property for consistency with HCP/NCCP goals and objectives. Inconsistent leases will be terminated or modified to conform with the HCP/NCCP.
12. Initiate preserve management and monitoring, and conduct habitat restoration (if applicable).

8.6.1 Stay-Ahead Provision

The Implementing Entity is required to ensure that progress towards assembling the Preserve System stays ahead of the total impacts allowed under the permit. To improve the chances of meeting this requirement, the Implementing Entity is encouraged to acquire land before permits are issued according to a *Jump-Start* guideline.

Jump-Start Guideline. The Implementing Entity should acquire at least 500 acres of land before issuance of ESA and NCCPA permits according to the land cover and habitat requirements in Table 5-15. Jump-start guidelines recommend approximately 2% of the expected preservation requirement and represent an aggressive but realistic goal for land acquisition prior to permit issuance.

As documented in Table 5-21, 2,383 acres have been acquired or preserved during Plan development that will be counted toward the land acquisition requirements described in Chapter 5 once conditions described in Table 5-21 have been met. Additional acquisitions are also in process. Precise acreages of land cover types conserved during Plan development will be determined through site-specific resource inventories performed in accordance with the final HCP/NCCP.

Stay-Ahead Provision. During the first year after permit issuance, the Implementing Entity will be establishing its structure, collecting initial HCP/NCCP fees, and actively pursuing land acquisition deals with willing landowners. To allow time for these start-up tasks to occur, the Stay-Ahead provision will only apply after 1 year of Plan implementation.

After 1 year of implementation, the Implementing Entity must measure its compliance with the Stay-Ahead provision by one of the following two methods during the first 10 years of the permit term (i.e., from the beginning of Year 2 to the end of Year 10). Two methods are provided to give the Implementing Entity more flexibility and to provide an incentive for land acquisition in key areas of the inventory area.

The Implementing Entity will strive to achieve the Stay-Ahead provision using both methods, but must comply with at least one of the two methods for the first 10 years. After Year 10, the Implementing Entity must use only the Measurement Method #1 to measure compliance with the Stay-Ahead provision.

Stay-Ahead Measurement Method #1. The amount of each land cover type conserved by the Implementing Entity as a proportion of the total requirement for each land cover type (Table 5-8) must be equal to or greater than the impact on that land cover type as a proportion of the total impact expected under the maximum urban development area by all covered activities (Table 5-8). For example, if 25% of the expected impacts on oak woodland have occurred, then at least 25% of the required land acquisition for oak woodland must also have occurred. The exceptions to this rule are annual grassland, alkali grassland, ruderal land cover, and all cultivated agriculture land cover types (cropland, irrigated pasture, vineyard, orchard), which will be aggregated for the purposes of measuring compliance with the Stay-Ahead provision. That is, the sum of the current and expected impacts on these land cover types will be measured for Stay-Ahead purposes against the sum of the acquisitions and acquisition requirements for these land cover types.

OR

Stay-Ahead Measurement Method #2. The amount of annual grassland conserved by the Implementing Entity in Zone 2 as a proportion of the total requirement for annual grassland acquisition in Zone 2 (see Table 5-14) must be equal to or greater than the impact on annual grassland and all cultivated agriculture land cover types (cropland, irrigated pasture, vineyard, orchard) as a proportion of the total impact expected under the maximum urban development

area scenario on these land cover types by all covered activities. For example, if 40% of the expected impacts on annual grassland and cultivated agriculture land cover types have occurred, then at least 40% of the required acquisitions of annual grassland in Zone 2 must also have occurred. This option provides an incentive for the Implementing Entity to acquire land in Zone 2 early in Plan implementation because land in this zone is likely to be more expensive and at higher risk than land in other zones.

Under either measurement method, land may be counted toward the Stay-Ahead provision once it is incorporated into the Preserve System. The criteria for incorporating land into the Preserve System are described in Section 8.6, *Land Acquisition*.

The Plan allows a 5% deviation from the strict requirements above without penalty to account for the likely pattern of infrequent land acquisition of large parcels. This allowable deviation will apply to either method employed by the Implementing Entity to calculate compliance with the Stay-Ahead provision.

The Implementing Entity will monitor the status of the Stay-Ahead provision throughout Plan implementation. The Stay-Ahead provision will also be evaluated on an annual basis by USFWS and CDFG. Beginning with the Year 2 annual report, the Implementing Entity will report on the status of the Stay-Ahead provision. As long as the ratio between impacts as a percentage of estimated impacts and acquisition as a percentage of required acquisitions remains within a 5% deviation (under either measurement method for the first ten years) then the Stay-Ahead provision will have been satisfied. If the annual evaluation shows that the Stay-Ahead provision is not satisfied, then the Implementing Entity and USFWS and CDFG will meet and confer to mutually develop a plan to achieve the Stay-Ahead provision, as further described below.

Land acquired in full or in part by state or federal agencies to contribute to species recovery under this Plan will also contribute to compliance with the Stay-Ahead provision. Because a portion of the Plan's conservation actions depend on commitments by the state and federal governments, the Implementing Entity's compliance with the Stay-Ahead provision will depend in part on the fulfillment of these commitments. The Implementing Entity must recognize, however, that funds from public agencies will be available on budget cycles that may or may not correspond to the timing of covered activities in the permit area. Therefore, the Implementing Entity must acquire land on its own and cannot rely solely on the timely availability of state or federal funds to acquire land.

Rough Proportionality

The Stay-Ahead provision will also be evaluated on an annual basis (beginning at the end of Year 2) by CDFG based on analysis provided by the Implementing Entity to determine if the "rough proportionality" standard of NCCPA is being met. If the Plan is found to be out of compliance with the Stay-Ahead provision by more than a 10% deviation (i.e., 5% over the allowable deviation of 5% for

Stay Ahead), then CDFG will determine whether the Plan has maintained rough proportionality. If CDFG issues a notification to the Implementing Entity that rough proportionality has not been met, then CDFG and USFWS and the Implementing Entity will meet to develop a plan to remedy the situation. If the federal and state commitment to the Plan cannot be provided in order to meet the rough proportionality requirement, the Plan will be reevaluated in light of these limitations, with possible adjustments made to the permit coverage and assurances or adjustments to the conservation obligations.

Stay-Ahead Reporting and Process For Addressing Deficits in Land Conservation

The Implementing Entity will report the status of the Stay-Ahead provision in each annual report, beginning with the second annual report. If the Stay-Ahead provision is not met for any land cover type, the Implementing Entity, CDFG, and USFWS will meet and confer within thirty days of the annual report to develop and implement a mutually agreeable plan of action as described in Conservation Measure 1.1 and the Implementing Agreement to remedy the situation and achieve compliance with the Stay-Ahead provision. The mutually agreeable plan of action may include a range of potential solutions, including:

- changes to the manner in which the Plan is implemented (e.g., more direct acquisition of land by the Implementing Entity rather than relying on partnerships, shifting the Implementing Entity's budget allocations to place a higher priority on land acquisition, or accelerating the process for being able to count land already acquired against Stay-Ahead requirements by, for example, recording easements more quickly),
- making it a requirement that project proponents provide land in lieu of fees,
- temporarily or permanently adjusting certain Plan provisions through an amendment or other process (e.g., the method for measuring compliance with the Stay-Ahead provision), or
- slowing or stopping permit issuance until land acquisition catches up with impacts.

If, after the exercise of all available authority and utilization of all available resources, the federal and state contribution committed to the Plan cannot be provided in order to meet the Stay-Ahead provision, the Plan and the Stay-Ahead provision will be reevaluated in light of these limitations, with possible adjustments made to the permit coverage and assurances, permit term, conservation obligations, or other aspects of the Plan given the extent of the federal/state contribution. See below for more information on the land in lieu of fee requirement when the Stay-Ahead provision is not being satisfied or is at risk of not being satisfied.

Requirements for Providing Land Instead of Paying a Fee When Stay-Ahead Provision Is Not Being Met

If the Implementing Entity determines the Plan is at risk of non-compliance with the Stay-Ahead provision, the Implementing Entity may notify the other Permittees that it is necessary to temporarily require project proponents to provide land instead of paying a fee. If the Stay Ahead provision is not satisfied for any land cover type based on the criteria discussed above, the Implementing Entity will notify the other Permittees that it is necessary to temporarily require project proponents to provide land instead of paying a fee, unless CDFG and USFWS agree, after conferring with the Implementing Entity, that a different plan of action devised with the Implementing Entity will remedy the situation and it is not necessary to require project proponents to provide land instead of paying a fee.

Land will be provided to the Implementing Entity according to the guidelines below in *Land Dedication in Lieu of Development Fee*. Developers will always have the option of providing land in lieu of the development fee, but provision of land in lieu of a fee will be required if the Implementing Entity determines it is at risk of non-compliance with the Stay-Ahead provision. If the Implementing Entity initiated the requirement due its own determination that the Plan was at risk of non-compliance, the requirement to provide land instead of a fee will be lifted (i.e., it will revert back to an option) as soon as the Implementing Entity determines that it is no longer at risk of non-compliance with the Stay-Ahead provision. If the Implementing Entity initiated the requirement following non-compliance with the Stay-Ahead provision, the requirement will be lifted as soon as the Implementing Entity demonstrates in writing to the satisfaction of CDFG and USFWS that the Plan is in compliance with the Stay-Ahead provision.

8.6.2 Land Acquired by Other Organizations or through Partnerships

Agencies and organizations such as EBRPD, Save Mount Diablo, Trust for Public Land, The Nature Conservancy, and local land trusts are expected to continue actively acquiring land in the inventory area even after the HCP/NCCP is approved, either on their own or in partnership with the Implementing Entity and/or other organizations. Because many of these acquisitions will help meet the goals and objectives of this HCP/NCCP, it is appropriate that the Implementing Entity receive credit towards HCP/NCCP requirements if the acquisitions are consistent with goals of the HCP/NCCP. It is expected that the Implementing Entity will be involved in many of the land acquisitions in the inventory area during the permit term. If the Implementing Entity partners with other groups and provides matching funds, larger land acquisitions will be possible than if the Implementing Entity were to purchase the land on its own. Land acquired through partnerships with other agencies and organizations can be

counted towards HCP/NCCP requirements only if the acquisition contributes to meeting the goals, objectives, and overall success of the Plan, and the land will be protected, managed, and monitored in perpetuity under the terms of the Plan.

Land acquired through partnerships will be credited toward HCP/NCCP acreage or other requirements of the conservation strategy when it contributes to the goals and objectives of the HCP/NCCP, contains a conservation easement or other permanent dedication of land to the Preserve System, will be managed in perpetuity pursuant to a Preserve Management Plan (see Conservation Measure 1.2 in Chapter 5), and is approved by the Implementing Entity. For lands owned and managed by EBRPD, restrictive covenants, deed restrictions, or equivalent title restrictions recorded in favor of CDFG and USFWS may substitute for a conservation easement. Partial credit will be determined based on the purpose and location of the acquisition, the management of the land acquired, and consistency with the goals and objectives of the HCP/NCCP. Land acquired through partnerships could be managed by the Implementing Entity or by other groups or agencies. Land acquired with state or federal money will be credited towards the state/federal contribution discussed in Section 9.3.3 (Chapter 9). All acquisitions credited towards the land acquisition requirements of the Plan can be credited towards the Stay-Ahead provision as discussed in Section 8.6.1 above, regardless of who owns or manages the property and regardless of the source of funding for acquisition or management.

Mitigation for Activities Not Covered by the HCP/NCCP

By creating a framework for habitat conservation, the HCP/NCCP could attract additional mitigation to the HCP/NCCP inventory area by projects located in or around the inventory area but not covered by the HCP/NCCP. Land acquired, preserved in perpetuity, and managed for natural resource purposes to mitigate for the impacts of activities not covered by the HCP/NCCP may complement and augment the conservation achieved by the HCP/NCCP if the location and management of the land is consistent with the goals of the HCP/NCCP. For example, mitigation from non-covered activities may preserve areas that would not have been preserved under the HCP/NCCP. Alternatively, mitigation may accomplish conservation objectives of the HCP/NCCP, enabling conservation under the HCP/NCCP to be redirected to other areas or conservation purposes (as described in Chapter 5 Conservation Measure 1.1, in the section *Conservation in the Inventory Area beyond HCP/NCCP Requirements*).

Project proponents with projects in or near the inventory area that are not covered by the Plan but that affect covered species may be interested in using the HCP/NCCP as a vehicle to mitigate their projects. These projects may be required to conduct mitigation or conservation actions under a variety of state and federal regulations, including ESA, CESA, CWA, Porter-Cologne Water Quality Control Act, NEPA, or CEQA. If these actions are compatible with the HCP/NCCP, there are advantages to using the conservation strategy of the Plan

as a guide to mitigating non-covered projects because of lower costs and greater conservation benefits. Some non-covered project proponents may be interested in contributing land to the HCP/NCCP as their mitigation. See also *Mitigation Funding from Activities Not Covered by the Plan* in Chapter 9, section 9.3.2, regarding the contribution of mitigation funds to the HCP/NCCP

If mitigation by non-covered projects occurs in areas that are a priority for conservation in the HCP/NCCP, the Implementing Entity, CDFG, and USFWS will confer and determine how to redirect HCP/NCCP resources to other objectives. In such circumstances, HCP/NCCP resources may be redirected toward other areas such as the following.

- Additional land acquisition that will be prioritized as described in Chapter 5 Conservation Measure 1.1, in the section *Conservation in the Inventory Area beyond HCP/NCCP Requirements* (note that such additional land acquisition may not match the size and extent of such non-Plan mitigation acre for acre due to differences in land cover types, conservation value, cost, and other factors).
- Other measures necessary to achieve the objectives of the Plan.

Mitigation for covered species by non-covered projects cannot be counted towards either the mitigation requirements or the Stay-Ahead provision of the HCP/NCCP and must result in a redirection of HCP/NCCP resources toward other conservation purposes as described above.

CDFG and USFWS will, to the extent consistent with their responsibility to ensure effective mitigation proximate to the location of impact, promote mitigation in the HCP/NCCP inventory area by non-covered projects to complement and augment the conservation to be achieved by the HCP/NCCP.

Land Acquisition During Plan Development (Interim Projects)

Consistent with the NCCP Act Section 2810 (b)(8) and the Planning Agreement signed November 2003, all projects that have occurred during Plan development (“interim projects”) have been included in the analysis of take under this Plan (see Chapter 4). Consistent with this requirement, parcels or portions of parcels acquired during Plan development can be counted toward meeting the requirements of the HCP/NCCP according to the procedures and criteria described above for reviewing lands acquired by other organizations. The Implementing Entity may expend funds to augment management of these interim purchases if such augmentation is necessary to credit such lands towards HCP/NCCP land acquisition requirements. If such lands were purchased in whole or in part to mitigate for impacts of activities covered by this Plan, both the impacts and the conservation must be considered for purposes of evaluating compliance with the Stay-Ahead provision.

Lands acquired during Plan development that may be counted toward Plan requirements are shown in Table 5-21 and Figure 5-12. Lands conserved pursuant to mitigation requirements of CDFG or USFWS may immediately be counted, as described in Table 5-21. Other lands may be counted once they meet the criteria described above for incorporating land into the Preserve System. Other lands conserved during Plan development may not appear in Table 5-21 or Figure 5-12 if the conservation action happened during production of the final HCP/NCCP document or if preparers of the Plan were not aware the property had been conserved. Such lands may be counted toward Plan requirements on the same basis as lands that are shown in the map and table.

Private Mitigation Banks

A conservation or mitigation bank is privately or publicly owned land managed for its natural resource values. In exchange for permanently protecting the land, the bank operator is allowed to sell habitat credits to developers who need to satisfy legal requirements for compensating environmental impacts of development projects³. A conservation or mitigation bank is a free-market enterprise that performs the following functions.

- Offers landowners economic incentives to protect natural resources.
- Saves developers time and money by providing them with the certainty of preapproved compensation lands.
- Provides for long-term protection and management of habitat.

Many of the goals of private mitigation banks are the same as those of regional HCPs or NCCPs, including this Plan. In other areas, a conflict between private banks and the public HCP/NCCP arises because the public plan can charge less to developers than the private mitigation bank. However, private mitigation banks may be appropriate in the inventory area for specific high-value resources such as wetlands or if the bank has a service area⁴ that extends outside the HCP/NCCP inventory area. There are currently no approved conservation or mitigation banks in the inventory area with available credits (one mitigation bank near the Byron Airport has all credits sold). Several mitigation banks are in development in the inventory area and several approved banks in Alameda County have service areas that include the inventory area.

Credits sold by private mitigation banks can count towards the HCP/NCCP if they are consistent with the conservation, monitoring, adaptive management, and other relevant provisions of the Plan. Mitigation bankers wishing to establish a bank whose credits can count towards HCP/NCCP requirements must notify USFWS and CDFG so this can be considered during bank development and agency approval. If requested, the Implementing Entity can provide technical

³ For additional information on banking see: www.dfg.ca.gov/hcpb/conplan/mitbank/mitbank.shtml

⁴ Bank service areas are the areas within which projects are eligible to buy credits from that bank.

assistance to those interested in establishing banks in the inventory area to help ensure the bank's consistency with the HCP/NCCP. Credits sold by banks outside the inventory area cannot count towards Plan goals even if the bank's service area is within the inventory area.

8.6.3 Conservation Easements

This Plan assumes that the Implementing Entity and its partners will purchase most of the land for the Preserve System in fee title because doing so would ensure better compliance with the terms of the Plan, and because conservation easement purchases have been rare in the inventory area. The exception to this is in Zone 6, where most or all acquisitions will be through conservation easements. The Implementing Entity will purchase conservation easements on two general types of land: grazing lands and cultivated agriculture, each of which is described below. Likewise, conservation easement easements will also be required for lands in the Preserve System that are owned by organizations that partner with the Implementing Entity (see section 8.6.2 above).

All conservation easements acquired to meet the goals of the HCP/NCCP will be in perpetuity and according to California Civil Code sections 815 et seq. All conservation easements will be voluntarily offered by the holder of the underlying fee, and not as a mandatory condition of any project approval. The conservation easements will be dedicated to the Implementing Entity, CDFG, or another entity approved by USFWS and CDFG, including but not limited to land trusts, parks agencies, and other qualified nonprofit organizations. At a minimum, USFWS and CDFG will be named as third party beneficiaries on all conservation easements. It is the responsibility of participating landowners to abide by the terms of these conservation easements. The terms and prices of conservation easements will be negotiated on a case-by-case basis between the landowner and the Implementing Entity.

The specific terms of the conservation easement will be developed on a case-by-case basis depending on site conditions, landowner preferences and operations, and species and habitat needs. Each conservation easement will be drafted to ensure that the property will be kept in its natural or existing condition, to protect the existing conservation values of the property forever, and to confine the allowable uses of the property to those activities that ensure or promote the preservation or enhancement of those conservation values consistent with the Plan, and to prevent any use of the property which would impair or interfere with the conservation values of the property. The conservation values shall be specifically described in terms of both the native species and their habitat, and other natural communities on the property.

Except as necessary to maintain or enhance conservation values, each conservation easement will prohibit:

- Unseasonal watering; incompatible use of fertilizers, pesticides, biocides, herbicides or other agricultural chemicals; weed abatement activities;

incompatible fire protection activities; and other activities and uses which may adversely affect the purposes of the conservation easement;

- Use of off-road vehicles and use of motorized vehicles except on existing roadways;
- Recreational activities including, but not limited to, hiking, horseback riding, biking, hunting or fishing unless the owner agrees to such access and then only when consistent with maintaining conservation values and with the recreation plan for the Preserve System;
- Commercial or industrial uses;
- Any legal or de facto division, subdivision or partitioning of the property;
- Construction, reconstruction or placement of any building, billboard or sign, or any other structure or improvement of any kind that does not directly support any allowable existing agricultural operation⁵;
- Depositing or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other materials;
- Planting, introduction or dispersal of non-native or exotic plant or animal species;
- Filling, dumping, excavating, draining, dredging, mining, drilling, removing or exploring for or extraction of minerals, loam, soil, sands, gravel, rocks or other material on or below the surface of the property;
- Altering the surface or general topography of the property, including building of roads;
- Removing, destroying, or cutting of trees, shrubs or other vegetation, except for allowable agricultural uses and as required by law for fire breaks, maintenance of existing foot trails or roads, prevention or treatment of disease, or control of non-native or exotic plants; and
- Manipulating, impounding or altering any natural water course, body of water or water circulation on the property, and activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters.

To approve and accept a conservation easement, the Implementing Entity shall first obtain the following documentation.

- A baseline survey of the property documenting the presence and condition of covered species and natural communities.
- A preliminary title report and legal description of the property.

⁵ Allowable agricultural operations are ones consistent with the biological goals and objectives of the Plan and could include cropland, pasture, moderate livestock grazing, and others. Intensive agricultural uses such as orchards, vineyards, or intensive livestock use (e.g., dairy, feedlot) would generally be incompatible with the Plan. Allowable agricultural uses will be determined on a case-by-case basis by the Implementing Entity.

- Evidence of all other easements, covenants, restrictions, and reserved rights.
- A Phase I environmental analysis for hazardous materials.
- A map of the parcel in relation to other components of the Preserve System, or other properties subject to other permanent protections for conservation purposes.
- A Property Analysis Report (PAR) or comparable assessment of the initial and capital costs and ongoing management funds required to manage and monitor the lands.

In addition, all recorded conservation easements must include the items listed below.

- The baseline inventory of covered species and natural communities present.
- A detailed list of the allowable uses and use restrictions on the parcel, consistent with the minimum requirements stated above.
- Any mandatory terms and conditions to maintain or enhance the habitat pursuant to section 6.2.1 of this Plan and/or Conservation Measure 2.11.
- Provisions for access both by the Implementing Entity or other party to monitor the terms of the conservation easement and to carry out all applicable management and monitoring requirements, and by the public, if appropriate.
- Provisions for enforcement and available remedies for the Implementing Entity or other party in the event that title holder or third party violates the terms of the conservation easement.
- When a Preserve Management Plan is prepared for the property according to Conservation Measure 1.2 or 1.3, the Implementing Entity will record with the title a Memorandum of Unrecorded Preserve Management Plan, indicating where that Preserve Management Plan may be found and that the terms of such Preserve Management Plan will be followed.

Conservation Easements on Grazing Lands

Some ranchers in the inventory area may prefer selling a conservation easement to selling their land in fee title so they can remain on their land. Livestock grazing will be an important management tool in the Preserve System; accordingly, such conservation easements may meet the requirements of the HCP/NCCP, as long as they are properly recorded under California Civil Code sections 815 et seq. and this chapter. The Implementing Entity will have the flexibility to negotiate conservation easements on ranches in the inventory area as long as the terms of the conservation easement meet all Plan requirements. Any ranchland considered for a conservation easement will be ranked in the same manner as parcels under consideration for fee-title purchase (see step 7 in Section 8.6 above).

In addition to the requirements listed above, conservation easements on grazing lands will describe the nature of the grazing to be allowed, both spatially and temporally. Further, the Preserve Management Plan will specifically describe the grazing regime and any other land management measures that will ensure that grazing on the specific property will be compatible with the Plan and preserving the conservation values of the property.

Conservation Easements on Cultivated Lands

The Plan requires that up to 400 acres of cropland or pasture be protected and enhanced in the cultivated agricultural zone of Contra Costa County (Zone 6). It is expected that all acquisition in this Zone will be through the purchase of conservation easements on agricultural land. Such conservation easements may meet the requirements of the HCP/NCCP, as long as they are properly recorded under California Civil Code sections 815 et seq. and this chapter. During easement negotiation, the Implementing Entity and the landowner will reach agreement on the primary conditions of the conservation easement regarding maintaining or enhancing habitat for covered species (see Conservation Measure 1.3). If any of the prohibited uses listed in this Section (8.6.3) are necessary to maintain the existing agricultural uses, and would not impair or interfere with the preservation of the conservation values of the property, the Implementing Entity may identify it instead as an allowable use of the property. These terms will be included in the conservation easement and will become the foundation for the agricultural management plan that the Implementing Entity will develop in cooperation with the landowner according to Conservation Measure 1.3. The conservation easement will also include provisions for or restrictions on public access, as negotiated with the landowner.

Conservation easements on cultivated agricultural land will describe the agricultural practices that will be undertaken to ensure the land's suitability as Swainson's hawk foraging habitat and western burrowing owl foraging and breeding habitat, if applicable. If the site contains aquatic habitat that supports or could support tricolored blackbird, the conservation easement will also describe measures to maintain or enhance this species. In areas suitable for giant garter snake, agricultural lands will maintain and enhance habitat for this species.

8.6.4 Grazing Leases within the Preserve System

Livestock grazing is an important management tool that is expected to be used in the HCP/NCCP Preserve System. Existing grazing leases on newly established preserves will continue until a Preserve Management Plan is prepared for each preserve and approved by the Implementing Entity. After the management plan is approved, all grazing leases on the preserve(s) will be reviewed for consistency with the management plan and with the terms of the HCP/NCCP. If necessary, leases will be revised and brought into compliance with the Plan's conservation strategy and the framework for adaptive management.

If livestock grazing is introduced to a preserve or if the pre-existing grazing lease expires, the Implementing Entity will enter into a lease agreement with the livestock operator. The lease agreement will specify the desired vegetation and other habitat conditions and impose limits on the timing, stocking density, and duration of permitted grazing to meet those conditions. The lease agreement will also outline the responsibilities of each party for maintaining preserve infrastructure (e.g., fences, watering facilities). Grazing leases should not exceed 5 years and should be reviewed annually with the lessee to adjust grazing practices to best meet habitat goals. At the expiration of the lease, the Implementing Entity will review monitoring data to determine whether the lease should be reissued with no changes in grazing management, reissued with changes in the grazing regime, or not reissued. All new and renewed leases will include the following conditions of agricultural use and covenants to protect resources.

- Grazing capacity and stocking rates.
- Residual dry matter guidelines.
- Conditions under which the desired stocking rate can be changed or exceeded (e.g., seasonal adjustments to maintain habitat quality).
- Grazing and livestock practices.
- Pest-control restrictions.
- Reporting requirements.

8.6.5 Willing Sellers

A key principle of the HCP/NCCP is that land will only be acquired by the Implementing Entity from willing sellers. This principle will be strictly followed; the Implementing Entity will not condemn land in order to meet Plan conservation requirements. Likewise, the Implementing Entity will not partner or contract with a separate agency to condemn land for the HCP/NCCP nor will it contribute funding toward a condemnation.

Nothing in the HCP/NCCP shall prevent other organizations from exercising their powers of eminent domain for purposes other than implementation of the HCP/NCCP and with funds other than those raised as a result of this HCP/NCCP. If subsequent to such a condemnation, and after soliciting input from the Public Advisory Committee, the Governing Board of the Implementing Entity finds that the condemned lands are integral to the successful implementation of the HCP/NCCP, the Implementing Entity may seek agreement with the owner of the condemned lands to manage those lands in a manner consistent with the HCP/NCCP.

Given the many land acquisition requirements in Chapter 5 (see Conservation Measure 1.1), it is possible that one or several landowners that own key resources of interest to the Implementing Entity will refuse to sell, or that negotiations to

sell will fail. It is impossible to predict at this time where this may occur and in what context it will occur (e.g., how much of the Preserve System has been acquired, the extent of resources remaining to protect). This situation, if it occurs, is only expected near the end of the 30-year permit term when the final land acquisition requirements must be met. By this time, most or all of the development impacts will likely have occurred; consequently, any delays in land acquisition associated with a lack of willing sellers should not impede urban growth. This situation can be avoided if the Implementing Entity is closely tracking land acquisitions and negotiations with key landowners begin early in the permit term. A review of progress toward land acquisition goals will take place at least annually with each annual report submitted to CDFG and USFWS.

If key landowners are not willing to sell, the Implementing Entity, in coordination with USFWS and CDFG, will reconfigure the land cover acquisition strategy to ensure that the biological goals and objectives will be achieved and that the total extent and type of lands to be preserved under the HCP/NCCP will be acquired. If such a reconfiguration is not possible, options considered will include

- requiring applicants to provide land instead of fees to obtain coverage under the Plan, or
- slowing or stopping local permit issuance under the HCP/NCCP until key land acquisitions can be made.

8.6.6 Gifts of Land

The Implementing Entity may accept land as a gift or charitable donation. The Implementing Entity will evaluate the conservation benefit of the lands donated relative to the goals, objectives, and requirements of the HCP/NCCP. Donated land that does not meet these goals, objectives, and requirements may be sold or exchanged to enable acquisition of land that does meet these goals, objectives, and requirements.

8.6.7 Land Dedication In Lieu of Development Fee

Some applicants may own land that can help to meet the conservation goals of the Plan. Applicants that own land at the edge of a conservation area may wish to donate or place a conservation easement on the portion of their property within the conservation areas to reduce or eliminate their fee for development of the remaining portion of their property. Some applicants that wish to develop parcels wholly within the UDA may own other parcels within an area targeted for conservation; dedicating or placing a conservation easement on the site within the higher priority conservation areas could eliminate or substantially reduce their fee to develop their other property. Landowners wishing to develop parcels within the UDA may prefer to acquire their own mitigation lands within the higher priority conservation areas and donate these lands or easements on them to

the Implementing Entity instead of paying all or a portion of the fee. Finally, local jurisdiction Permittees (e.g. Contra Costa County, County Flood Control District) may wish to dedicate land to the Implementing Entity or establish conservation easement on their land in lieu of paying all or a portion of a development fee, temporary impact fee, or rural road fee (see Chapter 9 for details of these fees).

Guidelines for Providing Land In Lieu of Fee

Land may be provided in lieu of all or a part of the HCP/NCCP development fee if:

- the land supports biological resources that meet Plan requirements and contributes to Plan biological goals and objectives,
- the land has no property encumbrances that conflict with HCP/NCCP goals and objectives (see Section 8.6 above),
- the land is within an area designated as high or moderate priority for acquisition⁶ (see Chapter 5),
- the Implementing Entity has funding or funding commitments from the applicant or other sources to manage and monitor the dedicated land according to the requirements of the Plan, and
- or otherwise approved by the Implementing Entity, USFWS, and CDFG.

The Implementing Entity will consider requests for a fee reduction or waiver in exchange for land dedication (transfer or conservation easement) on a case-by-case basis. The amount of fee substitution will also be determined case-by-case according to the following rules and guidelines:

- Under the initial urban development area, the Implementing Entity must assemble a preserve system that is estimated to be 23,800 acres. The estimated impacts of all development-related covered activities (including rural roads) is 9,617 acres. For the Implementing Entity to fully achieve its land acquisition requirements, the amount of land dedicated per project must be equivalent to or greater than what would have been the project's proportional contribution to HCP/NCCP fee revenue.

To achieve this, the Implementing Entity must secure, on average, at least 2.1 acres of conservation land for every acre of impact in natural land cover types⁷ (Fee Zone II in Chapter 9) for all projects that contribute land in lieu of development fees. For impacts to cultivated and disturbed lands (Fee

⁶ Land along Marsh Creek, Kellogg Creek, or adjacent to Dutch Slough (Zone 6) are eligible for land dedication in lieu of development fees.

⁷ This average minimum acreage requirement applies only the HCP/NCCP and is not intended to serve as a basis for project mitigation for non-covered projects. This ratio reflects economies of scale and factors unique to the HCP/NCCP, so it should not be applied to other situations.

Zone I), the Implementing Entity must secure at least 1.1 acres of conservation land for every acre of impact.

- The amount of land required to fully offset the development fee for each project can be increased or decreased depending on the conservation value of the land and the importance to the assembly of the HCP/NCCP Preserve System.

Applicants are encouraged to provide baseline data on their offered properties that document their biological value to the Plan and explain how the site meets land acquisition requirements and biological goals and objectives. However, the property owner must provide access to the proposed site to allow Implementing Entity staff or their consultants to survey the site and verify its biological value for the HCP/NCCP Preserve System (at no cost to the applicant). The applicant will pay the cost of other due diligence (e.g., Phase 1 site assessment, appraisal, title search).

8.7 Roles and Responsibilities in Reviewing Applications for Take Authorization

Upon approval of the Plan by USFWS and CDFG, the Permittees will be issued permits for take of covered species. The Permittees will be capable of extending Plan coverage to landowners and other applicants within the Permit Area, provided that their projects or activities are covered by the Plan and are executed in accordance with the terms of the HCP/NCCP, the permits, and the Implementing Agreement. Landowners and other project applicants who receive this coverage are referred to as *Third Party Participants*.

To receive take authorization under the state and federal HCP/NCCP permits, project proponents must apply to their local jurisdiction (i.e., the appropriate city or the County, the local land use planning agency with land use authority for the project) for take authorization. For projects or project proponents not subject to the land use authority of a Permittee (i.e., special districts), the project proponent must apply to the Implementing Entity as a Participating Special Entity (see Section 8.4, *Participating Special Entities*). For projects conducted by a Permittee, the Permittee will be responsible for assuring that the project conforms to the requirements of the Plan. In each case, the project proponent and the Permittees must follow the process for receiving take authorization described in Chapter 6, Section 6.2, *Receiving Take Authorization under the Plan*.

The participating cities and the County will be the agencies with primary authority and responsibility for reviewing applications and authorizing take. Unless another entity is specifically identified in the Plan as responsible for a particular aspect of reviewing applications and authorizing take, the responsibility and authority will rest with the cities and the County (except for projects conducted by a Permittee, in which case all responsibility and authority will rest with that Permittee).

8.7.1 Implementing Entity Responsibilities

The Implementing Entity's responsibility and authority for reviewing and approving take authorization is enumerated below.

- Providing technical support and assistance to the cities and the County as they process applications for take and promoting coordination among Permittees to ensure that the Plan is implemented consistently and effectively.
- Reviewing applications from Participating Special Entities (Section 8.4) and authorizing take as appropriate.
- Approving offers of land in lieu of fees (see Chapter 8, Section 8.6.7) and of restoration or creation of jurisdictional wetlands in lieu of wetland mitigation fees (see Chapter 9, Section 9.3.1).
- Verifying that proposals to defer fee payment through ongoing assessments or other mechanisms conform to the requirements of Section 9.3.1.
- Approving development fee waivers within stream setbacks when dedications of land within stream setbacks are offered (see Chapter 6, Conservation Measure 1.7).
- Suspending the option for early payment of fees and authorization of take under certain circumstances (see Chapter 9, Section 9.3.1).
- Approving additional exceptions to stream setback requirements within the UDA beyond those provided in Table 6-2, according to the specific circumstances and the general criteria for reviewing exceptions described at the end of this section (see also Chapter 6, Conservation Measure 1.7).
- Approving avoidance and minimization analysis for projects proposing to fill more than 3 acres of jurisdictional wetlands and waters within the UDA, according to the specific circumstances and the general criteria for reviewing exceptions described at the end of this section (see also Chapter 6, Conservation Measure 2.12).
- Approving exceptions to fuel management buffer requirements for projects adjacent to existing or planned components of the Preserve System⁸, according to the specific circumstances and the general criteria for reviewing exceptions described at the end of this section (see also Chapter 5, Conservation Measure 1.8).
- Approving the design requirements for rural road projects categorized as *Small Projects* in Table 6-6, consistent with the conditions described in Table 6-6 and in Chapter 6, Conservation Measure 1.14.

⁸ CDFG and USFWS must be notified of requests for exceptions to fuel management buffer requirements.

8.7.2 CDFG and USFWS Responsibilities

CDFG and USFWS will not be involved in approving take authorization on a project-by-project basis, except in very limited circumstances (see below). CDFG and USFWS will instead be responsible for ensuring that the Plan overall is in compliance with the state and federal permits. Reviewing and commenting on Annual Reports and monitoring reports (see Section 8.10) will be a key means for CDFG and USFWS to monitor compliance with the permits. However, CDFG and USFWS will also monitor the Permittees as they grant take to individual projects. The Permittees are not required to transmit copies of application materials to CDFG and USFWS each time an application is approved. Permittees are required to provide such information to CDFG and USFWS upon request. CDFG and USFWS may offer comments to Permittees, but the granting of take authorization to individual covered activities will remain the purview of the Permittees. The purpose of CDFG and USFWS monitoring issuance of take authorization to covered activities is to facilitate communication so that systematic errors or differences of opinion can be addressed before they become serious problems.

The circumstances under which CDFG and USFWS may be involved in approving take authorization on specific projects include the following.

- Making determinations on requests by Permittees to determine the precise boundaries of the UDA, as further described in Chapter 2, Section 2.3.1 in the subsection entitled *Changes to the Urban Development Area*.
- Approving additional exceptions to stream setback requirements outside the UDA beyond those provided in Table 6-2, according to the specific circumstances and the general criteria for reviewing exceptions described at the end of this section (see also Chapter 6, Conservation Measure 1.7).
- Approving avoidance and minimization analysis for projects proposing to fill more than 3 acres of jurisdictional wetlands and waters outside the UDA, according to the specific circumstances and the general criteria for reviewing exceptions described at the end of this section (see also Chapter 6, Conservation Measure 2.12).
- Approving the design requirements for all rural road projects other than those categorized as *Small Projects* in Table 6-6 or road safety improvements where median barriers may impede wildlife movement, consistent with the conditions described in Table 6-6 and in Chapter 6, Conservation Measure 1.14.
- Determining HCP/NCCP permit coverage on a case-by-case for utility construction and recreation covered activities outside the UDA, as described in Chapter 2, Section 2.3.2.
- Determining the impact area of certain temporary impacts, as described Chapter 9, Section 9.3.1.

In reviewing such exceptions, CDFG and USFWS will respond within 60 days. If no response is received after 60 days, the Implementing Entity will have the authority to review and grant such exceptions.

When reviewing the requests for exceptions discussed above related to stream setback requirements, fill of 3.0 or more acres of jurisdictional wetlands and waters, and fuel management buffer requirements, the Implementing Entity, CDFG, and USFWS will consider the following criteria.

- Would granting the exception interfere with achieving the goals and objectives of the Plan?
- Do the special circumstances of the request warrant a limited departure from the general requirements of the Plan?
- Are the circumstances of the request truly unique or could many applicants make the same claim? The Plan allows exceptions to provide flexibility for unusual circumstances, but the granting of exceptions must not undermine the general applicability of key Plan requirements such as stream setbacks.

8.8 Implementing Agreement

Section 10(a)(2)(iv) of the ESA states that a conservation plan must specify “such other measures that the Secretary may require as being necessary or appropriate for the purposes of the plan.” USFWS Region 1 (the West Coast region) believes it is generally necessary and appropriate to prepare an Implementing Agreement for regional HCPs. The NCCPA requires an Implementing Agreement for all NCCPs, and specifies necessary provisions.

The purpose of an Implementing Agreement is to ensure that each party understands its obligations under the HCP Section 10(a) Permit and NCCP permit, and to provide remedies should any party fail to fulfill its obligations. Accordingly, an Implementing Agreement has been prepared for this Plan (Appendix B). This agreement specifies the responsibilities of each signatory; the minimization, conservation, and mitigation measures to be implemented; reporting and enforcement procedures; and any other permit conditions that USFWS and CDFG may require.

8.9 Data Tracking

8.9.1 Data Repository Development and Maintenance

The Implementing Entity will develop and maintain a comprehensive data repository to track implementation of all aspects of the HCP/NCCP. The data

repository will be operating within 8 months of permit issuance. The data repository and associated databases should be structured to be “user friendly,” such that a trained staffer (as opposed to a technician or programmer) can enter data. Additionally, the data repository will allow for future expansion and integration with external databases (e.g., linkage to agency or other GIS map libraries). The data repository should be structured to facilitate the following requirements.

- Data documentation such that future users can determine why, how, and where data were collected (documentation standards [i.e., data about the data] should be consistent for all types of monitoring and over time; adequate documentation will facilitate the future use of monitoring data).
- Quality assurance and quality control of the data.
- Access and use of the most current information in assessment and decision making (the database should allow repeated access to current and past information over time).
- Storage of spatial information in a GIS-linked database.

The primary types of information for which the data repository will be developed and maintained are listed below.

- Monitoring and research results.
- HCP/NCCP funding and expenditures.
- Status of covered activities, including implementation and impacts on covered species and natural communities.
- Status of HCP/NCCP natural community preservation/enhancement/creation/restoration conservation measures.
- Status of HCP/NCCP research investigations.
- Adopted changes to the HCP/NCCP.
- All reports/documents generated by the Implementing Entity.

The Implementing Entity may choose to develop a web-linked database to facilitate controlled transference of information by others into and out of the database (e.g., this could involve the use of BIOS, a CDFG-sponsored program to make biological data available on the web; see bios.dfg.ca.gov). Examples of benefits that could be associated with maintaining controlled web-linked access to selected elements of the comprehensive HCP/NCCP database are provided below.

- Development of database entry forms or use of Personal Digital Assistants (PDAs) that could allow direct input of information into the database by entities/individuals charged with implementing covered activities, conservation measures, monitoring surveys, and research studies.

- Access by agencies implementing the HCP/NCCP to digital monitoring, research, and other data for purposes of generating internal reports that may be needed to facilitate their participation in the HCP/NCCP.
- Access by agencies implementing the HCP/NCCP, other ecosystem restoration programs, outside researchers, and other interested parties to HCP/NCCP reports and documents.

The Implementing Entity will comply with the data-sharing requirements of the Implementing Agreement. If the Implementing Entity allows additional access to the project databases, such access will require strict controls and monitoring to ensure that the integrity of the databases are maintained (e.g., use of passwords to limit access of a particular entity to selected database functions, sampling data entry forms to ensure that entered information is complete and accurate).

8.9.2 Compliance Tracking

The Implementing Entity will track assembly of the Preserve System; implementation of covered activities; planning and other survey requirements; and implementation of all landscape-, community-, and species-level conservation measures to demonstrate compliance with the terms and conditions of the HCP/NCCP permits. To track compliance, the Implementing Entity will maintain baseline data as specified below.

- The location, extent, and timing of land acquisition and HCP/NCCP preserve establishment within each Zone and Subzone.
- Descriptions of conservation agreements, lands acquired in fee title, interagency memorandums of agreement, or any other agreements entered into for the purposes of protecting, enhancing, or restoring covered species habitat.
- The location, extent, and timing of impacts on land cover types and jurisdictional wetlands and waters (based on reports submitted by applicants for take authority under the HCP/NCCP);
- The location, extent, and timing of protection, enhancement, restoration, or creation of land cover types and jurisdictional wetlands and waters.
- The location, extent, and timing of implementation of all other conservation measures (e.g., preparation of recreation plan, preparation of Preserve Management Plans, construction of artificial perches, conducting monitoring).

The purpose of monitoring this baseline information will be to track the Implementing Entity's progress toward achieving HCP/NCCP biological goals and objectives for conservation of covered species and natural communities. This tracking of progress will help ensure that habitats for covered species and natural communities are conserved within the Preserve System at a rate commensurate with the timing and magnitude of impacts of the covered

activities. The comprehensive data repository for compliance tracking will be operating within 8 months of HCP/NCCP permit issuance.

The data will also be linked to supporting information documenting HCP/NCCP compliance. These reports and other data will be stored and archived electronically whenever possible. Appropriate supporting information includes the following categories.

- Planning survey reports submitted for covered activities and land acquisition.
- Preconstruction survey reports.
- Reports and other documentation related to the screening, selection, and acquisition of preserve lands.
- Development planning designs that demonstrate compliance with the urban-wildland interface design element guidelines.

HabiTrak is a standardized database developed by CDFG and others to track NCCP implementation. HabiTrak may be used to manage and store portions or all of this compliance tracking information. If HabiTrak is not used, the database developed for the Plan must be compatible with the HabiTrak system so that compliance tracking for this Plan can be compared with other NCCPs in California.

8.10 Reporting

The Implementing Entity will prepare Annual Reports over the term of the HCP/NCCP that document permit compliance (including impacts, land acquisition and restoration, as more fully described in Section 8.9.2 above), management actions, monitoring results, and research. The Annual Reports will summarize the previous calendar year's implementation activities and be completed by March 15 following the reporting year. No annual report shall be required for the first partial year. Annual Reports will require synthesis of data and reporting on important trends such as land acquisition, fee collection, and habitat restoration. A due date of March 15 will allow time for the data from the previous year to be assembled and presented in a clear and concise format.

Annual Reports will be submitted to the Implementing Entity Governing Board, designated representatives of USFWS and CDFG, and other interested parties, and will be available to the public and posted on the HCP/NCCP web site. The Implementing Entity may also distribute these reports to the Independent Conservation Assessment Team and Science Advisors, as appropriate, for their review. These advisory bodies will use results presented in the Annual Reports, as well as other available information and any additional monitoring reports produced through the Adaptive Management Program, to assess success of the HCP/NCCP in meeting the biological goals and objectives and to formulate recommendations to the HCP/NCCP Governing Board and Implementing Entity 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, USFWS, and the public that the Plan is being implemented properly and as anticipated.
- Disclosing any problems with Plan implementation so they can be corrected.
- Documenting issues with Plan implementation that may require consultation with CDFG and USFWS.
- Identifying administrative or minor changes to Plan components required to increase the success of conservation measures.

At a minimum, annual reports should include the following information.

- A description of all covered activities implemented during the reporting period categorized by activity type (i.e., urban development, preserve management, flood control channel maintenance, etc.) and acreage.
- An accounting of all conditions on covered activities applied to these activities (see Chapter 6).
- A description of all HCP/NCCP natural community protection/enhancement/creation/restoration conservation measures implemented during the reporting period. Riparian and wetland restoration and creation will also be reported by the watersheds described in Appendix J.
- A year-to-date summary of the extent of land cover types protected, enhanced, restored, or created. If conservation easements were used, the report will describe who holds the easements.
- An assessment of the progress towards all acquisition requirements by local, state, and federal sources, including land cover types, habitat connectivity, covered plant populations, and wetland protection (see Conservation Measure 1.1). Funding from local, state, and federal sources must be tracked separately.
- A summary of impacts on land cover types associated with implementation of covered activities and conservation measures throughout the permit area (i.e., within development areas and in the Preserve System). Impacts to riparian and wetland land cover types will also be reported by the watersheds described in Appendix J.
- A cumulative summary of impacts and conservation for all land cover types (i.e., from the start of the permit term).
- An assessment of compliance with the Stay-Ahead provision (Section 8.6.1).
- An accounting of all revenues received, by type (e.g., development fees, wetland fees, grants, etc.).
- An evaluation of the economic assumptions on which the Plan was based (e.g., cost of O&M, land acquisition, monitoring, etc.; revenue rates and grant funding projections)

- An assessment of progress towards a complete funding strategy for implementation after the permit term (Section 9.3.4).
- A summary of all land management activities undertaken on HCP/NCCP Preserves and a discussion of the management issues facing the Implementing Entity at each preserve unit.
- A presentation of the conceptual ecological models developed to date and any changes to them that have taken place.
- A description of the landscape-level, natural-community level and species-level monitoring undertaken during the reporting period and a summary of monitoring results.
- A description of any actions taken or expected regarding changed circumstances, including remedial actions.
- A description of the adaptive management process utilized during the reporting period (e.g., consultation with Science Advisors, convening of the Independent Conservation Assessment Team).
- A description of all HCP/NCCP research undertaken during the reporting period; a summary of research results; and a description of integration with monitoring, assessment, and compliance elements.
- An assessment of the efficacy of the monitoring and research program and recommended changes to the program based on interpretation of monitoring results and research findings.
- An assessment of the efficacy of habitat enhancement/creation/restoration methods in achieving performance objectives and recommended changes to improve the efficacy of the methods.
- An assessment of the appropriateness of performance indicators and objectives (Table 7-2) based on the results of effectiveness monitoring, and recommended changes to performance indicators and objectives.
- A summary of any administrative changes, minor modifications, or major amendments proposed or approved during the reporting year (see Section 10.3).

CD-ROMs with the following data should also be provided to CDFG and UWFWS and, upon request, to the public⁹:

- Copies of all non-confidential, non proprietary databases that track covered activities and land acquisition in the possession and control of the Implementing Entity in its current state.
- Copies of all relevant GIS data in possession and control of the Implementing Entity in its current state, including land cover, the location of

⁹ Data provided to the public will be subject to any restrictions on proprietary or confidential data or services that may be utilized by the Implementing Entity such as proprietary aerial photos, parcel databases, confidential species locations, or pending land transactions.

covered activities, and the boundaries of the current HCP/NCCP Preserve System.

- Copies of all non-confidential, non-proprietary financial data in possession and control of the Implementing Entity in its current state.

8.11 Schedule

Milestones for plan implementation are outlined below (start point = permit issuance date). This schedule does not prevent the Permittees from initiating and accomplishing these milestones earlier than anticipated. Responsible parties are noted in parentheses. The Implementing Agreement may establish more specific deadlines for certain tasks.

8.11.1 0–6 Months

- Establish HCP/NCCP Governing Board (cities and County).
- Acquire land to meet Jump Start guidelines described in Chapter 8 (Implementing Entity). Ideally, the Jump Start requirement will be met before the permit is issued.
- Hire Implementing Entity Executive Director (Implementing Entity Governing Board).
- Pass local ordinances to implement HCP/NCCP (cities and County) (see Implementing Agreement for timelines for passing ordinances).
- Develop checklists and other materials for local planners to ensure compliance by each project receiving coverage under the Plan. The checklist must include a statement of certification that project applicants meet the relevant terms of the HCP/NCCP.
- Develop template survey report that may be used by project proponents as a guide and by local jurisdictions to evaluate the completeness of survey reports they review.
- Train local jurisdiction staff to review and process HCP/NCCP applications (Cities and County with assistance from Implementing Entity). This task will also be ongoing.
- Provide each participating local jurisdiction with detailed maps of fee zones and land cover (Figure 9-1) so they can process and evaluate HCP/NCCP applications.
- Begin receiving and reviewing applications for coverage under the HCP/NCCP (cities and County) and collecting development fees (cities and County, Implementing Entity).

8.11.2 6 Months–1 Year

- Hire key administrative staff of Implementing Entity or secure agreements or contracts with other organizations to fulfill these roles.
- Establish HCP/NCCP Implementation web site (Implementing Entity).
- Prepare report documenting the expected benefits of the HCP/NCCP to non-covered special-status species to provide streamlining for future CEQA documents.
- Establish GIS and other databases to track land acquisition (gains) and HCP/NCCP impacts (losses) (Implementing Entity).

8.11.3 1–5 Years

- Continue to hire or contract out Implementing Entity technical and maintenance staff as Preserve System expands (Implementing Entity).
- Prepare Preserve System management plans as described in Chapter 5 (Implementing Entity).
- Design monitoring and adaptive management program, including work plans (Implementing Entity).
- Initiate management and monitoring on all new preserves.
- Continue to acquire land to assemble Preserve System and meet Stay-Ahead requirements described in Section 8.6.1 (Implementing Entity).
- Begin habitat restoration and creation design and additional environmental compliance for habitat restoration, if needed.
- Implement habitat restoration and habitat creation projects.
- Prepare an Exotic Plant Control Plan to address exotic and invasive plants on Preserve System lands (Conservation Measure 1.4).
- Prepare a Recreation Plan to address recreational uses on Preserve System lands (Conservation Measure 1.5).
- Open selected preserves to public access according to Recreation Plan.

8.11.4 6–30 years

- Complete hiring or contracting out of Implementing Entity technical and maintenance staff as Preserve System expands.
- Continue to plan, design, and implement habitat restoration and creation.
- Continue land acquisition to complete the Preserve System.

- Prepare and revise system-wide and preserve-specific management plans.
- Continue adaptive management and monitoring of biological resources.

8.11.5 More than 30 Years

- Continue adaptive management and monitoring of biological resources.
- Continue monitoring habitat restoration and habitat creation projects until they meet success criteria.