Project Design, Review, and Approval, Implementation and Construction, and Mitigation Requirements for Natural Communities and Covered Species

CM CON 3: Best Management Practices to be Implemented During O&M and Construction Activities

1. Temporary fill/disturbance of coastal marsh habitats shall be avoided to the maximum extent practicable. Any projects resulting in the loss of marsh vegetation for more than one growing season shall be required to mitigate at the ratios specified in Section 6.4.7.
2. Native vegetation trimmed or removed on the project site will be stockpiled during work. After construction activities, when removal of temporary mats and construction-related materials and application of native seed mix have been completed, stockpiled native vegetation will be reapplied over temporarily disturbed wetlands to provide temporary soil protection and as a seed source.
3. Where wetland vegetation removal is required, work will be conducted using hand-held tools, unless other methods are approved by SCWA, USFWS, and CDFW, to enable wildlife to escape. Vegetation will be cut starting at the outside edge (nearest unvegetated or disturbed areas) working toward the project limits to allow wildlife opportunity to escape toward appropriate cover.
4. Removal of vegetation in wetland habitat will be conducted with an Approved Biologist present. This monitor will watch for special-status wildlife species and temporarily stop work if special-status species are encountered. Wildlife will be allowed to escape before work is resumed. Service-approved biologist with appropriate qualifications to handle special-status species will be allowed to move special-status species to safe locations as permitted by the terms of their credentials.
5. Temporarily affected wetlands (restored within 1 year) will be restored by removing construction related debris and trash. Affected areas will be seeded with a ee, site-appropriate native seed mix, as provided in the revegetation plan developed in cooperation with the Resource Agencies. Mulch with certified weed-free mulch. Rice straw may be used to mulch upland areas.
6. Prior to removing upland habitat adjacent to pickleweed-dominated coastal marsh habitat, the upland habitat shall be mowed during the dry season so that vegetative cover has a height of no greater than 2 inches for a period of at least 2 weeks prior to the habitat removal.

CM CON 4: Use of Riprap

In order to avoid attracting predators of Covered and Special Management Species associated with salt marsh habitat, the use of rock riprap shall be avoided to the maximum extent practicable within 500 feet of coastal salt marsh habitat. Where such use is

unavoidable, all exposed riprap shall be covered with soil and revegetated with native marsh plants.

CM DES 1: Habitat Avoidance
Permanent fill of coastal marsh habitat shall be avoided to the maximum extent practicable. Where permanent fill is proposed, the Plan Participant (or third-party applicant) shall provide documentation explaining why avoidance is not practicable and/or would not contribute to the conservation goals and objectives of the HCP, in accordance with the procedures in Section 10.4.1. The determination of compliance with CM DES 1 of any proposed activity that would result in the filling of coastal marsh habitat will be made by SCWA in consultation with the HCP Technical Review Committee (see Section 10.2.6).

CM DES 2: Buffers
Coastal marsh habitat shall be protected from direct and indirect impacts from Covered Development Activities through establishment of site-specific buffers that are designed to preclude changes to water and soil salinity and the flooding/inundation regime. Buffers shall be preserved in perpetuity and managed consistent with the reserve criteria described in Sections 7.2 and 10.5. Habitats within 500 feet of the boundary of existing (as of the effective date of the HCP) roads or development (includes vacant but graded and filled building pads) shall be considered to be indirectly impacted and subject to the mitigation requirements in Section 6.4.7.

SH DES 1: Nest Tree Protection
Trees with active Swainson's hawk nests or with historically active nests (i.e., occupied within the last 10 years) shall be avoided to the maximum extent practicable. Applicants proposing to remove an otherwise healthy nest tree shall provide written justification for the tree removal to SCWA. Sufficient rationale for tree removal shall be primarily based on declining or poor suitability of the tree as a nesting site for Swainson's hawk and/or to meet public safety needs. The justification letter shall provide a clear analysis of the biological value of the tree to Swainson's hawk under pre-project conditions and post-project conditions (if the tree were to be avoided), and will consider the presence of alternate nest sites in the vicinity of the project site. Nest trees shall only be removed if there is a biological basis that the use of the tree is unlikely under post-project conditions. SCWA, in consultation with the HCP Technical Review Committee, will be responsible for approval of the requests to remove healthy nest trees.

SMS DES 1: Preconstruction Surveys
In Valley Floor Grassland and Vernal Pool, Coastal Marsh, and Riparian, Stream, and Freshwater Marsh Natural Communities, preconstruction surveys shall be conducted between February 1 and August 31 to identify and subsequently avoid nesting areas for applicable Special Management Bird Species. An Approved Biologist shall conduct these

surveys no more than 15 days before the anticipated start of construction. Surveys shall be designed and of sufficient intensity to document nesting activity within 100 feet of planned work activities for passerine and within 500 feet of planned work activities for raptors. These surveys may be concurrently conducted with surveys for Covered Species.

VPG DES 1: Habitat Avoidance

In Covered Activity Zones 2 and 3 (Figure 1-4) maximum avoidance of vernal pools and other seasonal wetlands is required except for approved habitat enhancement/restoration activities described in Section 10.5.4. In Covered Activity Zone 1, maximum avoidance is required in the following locations where:

1. The wetlands contribute to habitat quality and value or reserve/preserve lands established (or expected to be established) in perpetuity for conservation purposes
2. The wetlands are adjacent to or contiguous with riparian or stream corridors or permanently protected lands, or
3. The wetlands are located in or contiguous to High Value Vernal Pool Conservation Areas.

Where temporary or permanent fill is proposed in any vernal pools or other seasonal wetlands in Covered Activity Zones 2 or 3 as well as the above-listed locations in Covered Activity Zone 1, the Plan Participant or eligible third-party applicant shall provide documentation explaining why avoidance isn't practicable and/or would not contribute to the conservation goals and objectives of the HCP, in accordance with the procedures in Section 10.4.1. The determination of compliance with VPG DES 1 of any proposed Covered Activity that would result in the filling of vernal pools or other seasonal wetlands will be made by SCWA in consultation with the HCP Technical Review Committee (see Sections 10.4.1 and 10.2.6).

VPG DES 2: Site Design Standards

The following site design standards shall apply to all Covered Development Activities affecting Valley Floor Grassland and Vernal Pools:

1. All Locations Specified Under VPG DES 1: (a through d below)
    a. All avoided areas shall be preserved and managed consistent with the requirements in Sections 7.3 and 10.5. These areas shall also include sufficient buffers in compliance with the criteria outlined in VPG DES 3 and VPG DES 4.
    b. Development shall be designed to minimize direct and indirect impacts to wetlands and edge effects to preserved areas.
    c. The applicant shall incorporate measures into the project design to accomplish the following:

1) Preserve and maintain sufficient unaltered watershed area to prevent significant adverse changes in water quality, and the volume and timing of inflows to preserved wetlands.
2) Avoid changes in nutrient input from adjacent upland sources into preserved wetlands.
3) Provide sufficient upland habitat to support associated amphibian and terrestrial fauna and vernal pool plant pollinator species.
4) Accommodate linkages/corridors between individual aggregations of vernal pools in a larger vernal pool complex.
5) Provide a terrestrial buffer to protect the core wetland and associated upland habitat from edge effects associated with surrounding land uses (i.e., prohibit backyards from backing up to preserves, place firebreaks on the development side of preserve/development boundaries, provide for a vegetated buffer between roads and preserve boundaries).
6) Minimize the potential for spread of invasive species from the development into preserved lands.

d. Development shall not isolate existing populations or suitable habitat areas. To maintain connectivity between adjacent reserves, a corridor shall be established linking these areas. Corridor reserves shall conform to the minimum requirements specified in VPG DES 6, Corridors.

VPG DES 2

The following site design standards shall apply to all Covered Development Activities affecting Valley Floor Grassland and Vernal Pools:

2. Contra Costa Goldfield Core Population Areas (High Value Vernal Pool Conservation Areas 1B, 1C, 1D, 1E, 1F, 1G, and 1H
   a. No more than 10 percent of suitable wetland habitat for Contra Costa goldfields shall be directly impacted per project.
   b. The 10 percent of suitable habitat impacted under Condition 1 shall not contain more than 50 percent of the current or historically documented occupied habitat on the site. The extent of occupied habitat shall be determined based on at least 2 years of field surveys/mapping at the site (occupied habitat area shall be based on the total area of the hydrologically contiguous occupied wetland, not just Contra Costa goldfield cover).
   c. Implementation of Conditions 1 and 2 shall not result in preserves less than 80 contiguous acres in size.

VPG DES 3: Buffer Criteria for Covered Development Activities

Vegetated buffers shall be established around preserved vernal pools and seasonal wetlands. Buffers shall be consistent with the following criteria:

1. Vegetated buffers shall consist of valley floor grassland and vernal pool vegetation and/or other natural vegetation (i.e., oak savanna/woodland, coastal marsh or riparian habitats, if applicable)
2. Buffers shall not contain any irrigated or landscaped lands, fire breaks, or public or maintenance access trails or roads.
3. Habitats (vernal pools, uplands, etc.) within 250 feet of development in High and Medium Value Vernal Pool Conservation Areas and 100 feet in Low Value Vernal Pool Conservation Areas (Figure 4-8) (see potential exceptions below under VPG DES 4 for Extremely Rare and/or Range-Limited Species) will be considered to be indirectly impacted. All such indirect impacts shall be subject to mitigation requirements under Section 6.4.2.
4. Buffers shall be preserved in perpetuity and managed consistent with the HCP reserve criteria described in Sections 7.3 and 10.5.