

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

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.

VPG DES 4: Protection and Buffer Zones for Extremely Rare and/or Range-Limited Species

Populations of the following Covered Species that occur in vernal pools shall be protected in perpetuity if they are found on a site where a Covered Development Activity is proposed: Colusa grass, Solano grass, San Joaquin Valley Orcutt grass, Ferris's milk-vetch, as well as Conservancy fairy shrimp. All development projects shall include site-specific buffer zones that encompass, at a minimum, the immediate watershed for the occupied vernal pools and a 500 foot buffer beyond the watershed boundary. Applicants shall prepare and implement management plans and provide sufficient endowments for long-term management of these areas consistent with reserve management and approval requirements described in Sections 7.3 and 10.5.3.

VPG DES 6: Corridors

Projects in the following areas shall preserve and/or establish corridors linking the vernal pool complexes and reserves:

1. Upper Union Creek/northeastern McCoy Creek watersheds (Subareas 1B, 1C, and 1D) and Jepson Prairie (Subarea 1A)



2. Jepson Prairie (Subarea 1A) and the Potrero Hills (Subarea 1F and 2F) (Figure 4-8).

Corridors should have the following minimum dimensions:

1. Corridors 500 feet or less in length shall have a minimum length of 500 feet.
2. Corridors more than 500 feet in length but less than 1,320 feet in length shall have minimum dimensions of 1:1 (i.e., a 700-foot long corridor shall be 700 feet in length).
3. Corridors 1,320 feet or longer shall have a minimum width of 1,320 feet. All corridors shall be protected and maintained under a permanent Conservation Easement as required under Sections 7.3 and 10.5.2.