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

RLF CON 4: Best Management Practices to be Implemented During O&M and Construction Activities

This measure is applicable to project design considerations and is required to be implemented throughout the Inner Coast Range Natural Community (Figure 3-5). These mandatory requirements include the following:

1. Biological Monitor
   a. At least 15 days prior to the onset of work activities, the applicant shall submit the name(s) and credentials of biologists who will conduct California red-legged frog monitoring activities. No work activities shall begin until written approval has been received from SCWA.
   b. Prior to commencement of work activities, the Approved Biologist shall conduct a training session for all construction personnel. At minimum, the training shall include: (1) a description of California red-legged frog and its habitat; (2) project-specific measures being implemented to conserve the red-legged frog and the possible penalties for not complying with these requirements; (3) who is authorized to handle and relocate frogs; and (4) identification of the boundaries of permitted work areas.
   c. The Approved Biologist shall be present at the work site to monitor compliance with all minimization measures. The Approved Biologist shall have the authority to halt any action that might result in impacts in excess of anticipated levels. The Approved Biologist will submit a report detailing the results of the activities to SCWA within 7 days of the completion of the habitat disturbance.
2. Habitat Protection and Take Avoidance During Work Activities
   a. Exclusion fencing shall be installed prior to any required preconstruction surveys and maintained between project work areas and adjacent to preserved habitat during all work activities. Exclusion fencing will consist of silt fabric, plastic, plywood, aluminum, or other SCWA-approved material. The base of the fence will be buried a minimum of 3 to 5 inches in the ground to prevent animals from crawling under and be a minimum of 3 feet in height above ground to serve as a barrier for animals moving on the ground surface. The fence will be pulled taut at each support to prevent folds or snags and the supports shall be placed on the inside of the exclusion fence. Exclusion fences shall also include provisions (e.g., ramps, one-way doors, or exit funnels) for California red-legged frogs and other species to leave the work area.

Construction personnel will also install an orange plastic-mesh construction fence 1 foot on the development side of the exclusion fence to increase visibility unless the exclusion fence is composed of high visibility materials. Exclusion fencing shall be inspected weekly and repaired immediately when damage is observed during construction work.

b. Control of dense vegetation in and adjacent to water delivery canals (either mechanical or chemical) shall not be conducted until individuals have had sufficient time (minimum of 24 hours) to move away from the work area to more suitable habitats.

3. Preconstruction Surveys
   a. The Approved Biologist shall survey the work site 2 weeks prior to the onset of construction activities. Any life stage of California red-legged frogs (adults, tadpoles, or eggs) found in construction areas shall be captured and relocated to secure sites approved by SCWA in consultation with the HCP Technical Review Committee. Only Approved Biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.
4. Work Timing
   a. Work activities in riparian and aquatic habitat shall be completed between June 15 and October 15. If the applicant can demonstrate a need to conduct activities outside this time period, SCWA may authorize such activities in writing after consulting with USFWS and CDFW.
   b. Ground-disturbing, mechanical clearing of vegetation and associated work activities in uplands shall be conducted between June 1 and November 1 or until the first fall rain that produces 0.25 inch of rainfall, unless prior surveys have been conducted and California red-legged frogs are shown to be absent from the site and the site boundary is fenced to preclude California red-legged frogs from moving onto the site.
5. Dewatering Activities
   a. If pumping will be used to dewater the project site, intakes shall be completely screened with wire mesh no larger than 5 millimeter in size to prevent California red-legged frog adults and tadpoles from entering the pump.
   b. Prior to dewatering, the Approved Biologist shall capture and relocate any native fish or other vertebrate species found at the project site. Captured animals shall be relocated to a suitable pool or other location in the same waterbody above or below the project site.

c. All dewatering shall be pumped into a temporary siltation pond/desilting basin, Baker tank, or similar detention device in order to allow adequate time for settling of sediments prior to their release downstream in accordance with the approved SWPPP.

d. Following adequate settling time, water shall be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

6. Exotic Species Removal

a. The Approved Biologist shall permanently remove and humanely euthanize any exotic wildlife species, such as bullfrogs and crayfish, to the extent possible from within the project site.

7. Site Restoration

a. After completion of any work activities that would temporarily disturb California red-legged frog aquatic or upland habitat, temporarily disturbed areas shall be restored to their original condition, including pre-work topography and hydrology. Disturbed areas shall be reseeded, if necessary, using local, native, noninvasive species seed mixes. All such restoration work shall be conducted under the supervision of an Approved Biologist.

b. Plastic monofilament or wire mesh straw waddles or erosion control blankets shall not be used. Only erosion control materials (blankets, roles, mats, etc.) with a minimum 2-inch square mesh made of natural coir fibers or other netting approved by SCWA in consultation with the HCP Technical Review Committee shall be used.

8. Firebreak Construction and Maintenance

a. Mowing to establish fuel breaks is preferred to disking. Mowing shall generally be conducted as late as possible in the spring, reducing the herbaceous cover to less than 2 inches in height.

b. Where mowing is not practicable or will not provide an adequate fuel break, disking may be implemented under the following conditions:

1) Prior to firebreak construction, “No Disk” zones shall be established for wetlands and any significant habitat areas such as California red-legged frog aquatic habitat, as well as areas with concentrations of fossorial mammal burrows. “No Disk” zones shall be permanently staked using metal fence posts placed at least 50 feet from the edge of the pools. A post and sign shall be installed on either side of the pool

("No Disk" zone) to warn the disk operator of the presence of habitat from either direction.

2) At those points designated as "No Disk" zones, the disk operator shall raise the disk blades out of the soil and cross the "No Disk" zone. Not until the disk blades are beyond the "No Disk" sign on the opposite side of the sensitive habitat shall the operator be allowed to lower the blades, and in no case shall the operator allow the blades to touch the soil while in the "No Disk" zone.

3) "No Disk" zones shall not be crossed if water is standing in wetlands, aquatic habitat, or if the soil is wet. In such cases, the operator must raise the disk blades and make a detour around the wetland or aquatic area. Operators shall consult a site map, if available, to determine the best route around this area.

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.

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.