



HETCH HETCHY WATER SYSTEM IMPROVEMENT PROGRAM

ENVIRONMENTAL AWARENESS TRAINING Calaveras Dam Replacement Project

This Environmental Awareness Training brochure was prepared as a general overview of the environmental requirements for construction personnel. It is intended neither as a complete list of environmental requirements, nor as a substitute for Contract Documents or permits.

General Environmental Requirements

- All project personnel must attend Environmental Awareness Training prior to beginning work on the project site.
- Only work in designated project work areas and access roads.
- Do not enter restricted areas that contain sensitive or protected resources; observe all flagging, fencing, and field signs.
- Limit speeds to 15 mph on unpaved roads and staging/parking areas. Observe the posted speed limit on the West haul road.
- Do not litter with food or waste. Place all trash in containers with lids or covers to avoid attracting wildlife.
- Pets and firearms are not allowed on the project.
- Be courteous to recreational users and the general public. Direct questions to the designated public information liaison.

Hazardous Materials Management

- Maintain emergency spill response supplies on-site.
- Clean-up and contain all leaks and spills immediately, if safe to do so, and dispose of materials properly. Immediately report spills to your supervisor and the Environmental Inspector (EI).
- Inspect vehicles/equipment daily at start-up for leaks and repair immediately.
- Conduct all refueling and vehicle/equipment servicing in designated areas at least 100 ft. from wetlands, creeks, or drainage swales.
- Place a drip pan or absorbent material under vehicle/equipment until leaks are repaired and during refueling/servicing.
- Store hazardous materials and other wastes at least 100 ft. from wetlands, creeks, and drainage swales unless otherwise approved by the EI and allowed by California Department of Fish and Game.
- Store hazardous materials in a designated storage area in a watertight labeled container with secondary containment or enclosed storage shed.
- Use designated concrete washout areas. Contain concrete and other washout areas to avoid discharge of pollutants to soil or watercourses.

Air Quality and Dust Control

- Limit idling of diesel-fueled equipment/vehicles to no more than 5 minutes.
- Water all exposed surfaces (e.g., unpaved access roads, parking/staging areas, etc.) at least 2 times daily or apply nontoxic soil stabilizers. At Disposal Site 7, water 3 times daily or apply nontoxic soil stabilizers.
- Use water sweepers daily and prior to any rain event to clean all paved access roads and parking/staging areas in the project site and to clean track-out on public streets.
- Cover, water (at least 2 times daily or more as necessary to control dust), or apply nontoxic soil stabilizer to active stockpiles.
- Stabilize inactive spoil piles (i.e., 14 days or greater) with hydroseed, erosion control fabric, crimped straw, or other biodegradable material.
- Cover all trucks hauling soil, demolition waste and other loose materials prior to leaving the project site.
- Maintain spoils hauling trucks so that no spillage can occur from holes or other openings in cargo compartments.



Storm Water Control

- Best Management Practices (BMPs) are required year-round.
- Preserve existing vegetation whenever possible during grading and excavation.
- Install erosion control BMPs (runoff control and soil stabilization) along with sediment control BMPs for active construction areas.
- Notify your supervisor of missing, ineffective, or damaged BMPs to for installation, redesign, or maintenance/repairs.
- Locate portable toilets a minimum of 50 ft. from all creeks, ponds, and reservoirs.
- Locate stockpiles at least 50 ft. from creeks and drainage swales. Install fiber rolls or silt fence at base of stockpile upslope of creek/drainage swale.
- Install linear sediment controls (e.g., fiber rolls) along the toe, face, and at the grade breaks of exposed slopes.
- Use silt fences or silt curtains when fill placement or excavation is adjacent to or in Calaveras Reservoir.
- Provide effective soil cover for inactive (i.e., 10 days or greater) areas and all finished slopes and open space.

Paleontological and Cultural Resources

Paleontological resources are the fossilized remains of prehistoric organisms. Penalties can occur for intentionally disturbing or collecting fossils.

- Prior to starting any new grading, excavation or drilling work, check with your supervisor to determine if monitoring is required.
- Ensure that the Paleontological Monitor is on-site in high sensitivity areas requiring monitoring during ground disturbing activities.



Cultural resources are protected by state and federal laws and penalties can occur for intentionally disturbing or collecting them. Cultural resources may include concentrations of shellfish remains, bones, evidence of fire, artifacts (e.g., shell beads, arrowheads, stone mortars), structural remains, bottles, hardware, broken dishes, trash pits or privies as well as human remains.

Paleontological Monitors and Archaeological Monitors have the authority to halt work if there is a potential discovery. In the event of discovery of cultural or paleontological resources, implement the following discovery procedures:

- Halt work within 50 ft. of the discovery.
- Do not handle, collect, or damage the resource.
- Notify your supervisor and the EI immediately.
- Install fencing or staking to prevent vehicles/equipment or personnel from entering the area.

Resume construction only after the EI has given authorization.

Weed Control and Vegetation Protection

- Bring construction equipment to the site clean and free of soil, seed, and plant parts.
- Imported fill material and soil amendments shall be free of vegetation and plant material.
- Erosion control materials (e.g., straw, fiber rolls) shall be certified weed free by the County Agricultural Commissioner.
- Install protective measures (e.g., geotextile cushions, timber mats, etc.) to protect soil and vegetation in wetlands and aquatic habitats.
- Avoid injury or damage to trees, shrubs and grasses outside project work limits.

Wildlife Protection

- Do not feed, handle or disturb **any** wildlife. Handling of protected species can result in fines. If you encounter wildlife, leave it alone and back away slowly. Notify your supervisor and the EI.
- Immediately report any injured, dead, or trapped wildlife to your supervisor and the EI.
- Notify your supervisor and the EI prior to any work in areas with undisturbed vegetation.
- Cover trenches or excavations deeper than 2 feet left open overnight with plywood or other hard material or provide escape ramps (earth fill or wooden planks).
- Maintain wildlife exclusion fencing. Report any damaged fencing to your supervisor for immediate repair.
- EIs and Biological Monitors have the authority to halt work if protected wildlife is observed.
- Ensure that trenches, under construction vehicles/equipment, materials/supplies, storage areas or other suitable locations for California tiger salamander and Alameda whipsnake to hide are inspected by the Biological Monitor prior to filling the trench or moving the vehicle/equipment/materials.

California tiger salamander (*Ambystoma californiense*)



Status

Federal: Threatened
State: Threatened

Description

A large, stocky, terrestrial salamander up to 8 inches long. Back and sides are black with white or pale-yellow spots or bars.

Habitat

Found in grasslands and foothill regions. Prefers natural pools or stock ponds. During the dry months may be found in ground squirrel or other burrows where they enter a dormant state called *aestivation*.

California red-legged frog (*Rana draytonii*)



Status

Federal: Threatened
State: Species of Special Concern

Description

May reach a body length of 5 ¼ inches. Skin coloration can vary widely (reddish-brown to gray), with dark specks and blotches.

Habitat

Adult frogs require still or slow-moving water that is relatively deep, with shrubby or emergent riparian vegetation. Generally found near small ponds, quiet pools along streams, reservoirs, springs, and marshes. Inhabits small mammal burrows.

Callippe silverspot butterfly (*Speyeria callippe callippe*)



Status

Federal: Endangered
State: None

Description

Medium sized butterfly with wingspan of approx 2.2 inches. Upper wings are brown with extensive black spots and lines, and extremely dark basal area.

Habitat

Found in native grassland and adjacent habitats. Females lay their eggs on the dry remains of the larval food plant, Johnny-jump-up (*Viola pedunculata*), or on the surrounding plant debris.

Alameda whipsnake (*Masticophis lateralis euryxanthus*)



Status

Federal: Threatened
State: Threatened

Description

A slender, fast-moving snake 3 to 4 feet in length with a slender neck, broad head and large eyes. Back is colored sooty black with a distinct yellow-orange stripe down each side.

Habitat

An active daytime predator, adult snakes peak in surface activity during the spring mating season with a smaller peak during late summer and early fall. Rock outcrops are important for retreat opportunities. Generally retreats in November into a small mammal burrow or other shelter, and emerges in March.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)



Status

Federal: None
State: Species of Special Concern

Description

Body is around 7 inches long with a long furred tail. The rat has black protruding eyes and soft and smooth grayish-brown fur.

Habitat

Inhabits forested areas. Constructs large nests, called middens with woody debris, grass, leaves, and other materials.