

MULTI-REGION HCP MEASURES

General Field Protocols (MRHCP-FP-01-19)

FP-01: Conduct annual training on habitat conservation plan requirements for employees and contractors performing covered activities in the Plan Area that are applicable to their job duties and work.

Tailboard and site-specific training will also be conducted prior to commencing work.

- All covered species

FP-02: Park vehicles and equipment on pavement, existing roads, or other disturbed or designated areas (barren, gravel, compacted dirt).

- All covered species

FP-03: Use existing access and ROW roads. Minimize the development of new access and ROW roads, including clearing and blading for temporary vehicle access in areas of natural vegetation.

- All covered species

FP-04: Route off-road access paths and site work sites to minimize impacts on plants, shrubs, and trees, small mammal burrows, and unique natural features (e.g., rock outcrops).

- All covered species

FP-05: Notify conservation landowners at least 2 business days prior to conducting covered activities on protected lands (state- or federally owned wildlife areas, ecological reserves, or conservation areas); more notice will be provided if practicable or if required by other permits. If the work is an emergency, as defined in PG&E's Utility Procedure ENV-8003P-01, PG&E will notify the conservation land owner within 48 hours after initiating emergency work. Although this notification is intended only to inform conservation land owner, PG&E will attempt to work with the conservation land owner to address landowner concerns.

- All covered species

FP-06: Minimize potential for covered species to become trapped, injured, or killed in pipes, culverts, or under materials or equipment. Inspect pipes and culverts wide enough to be entered by a covered species that could inhabit the area where pipes are stored for wildlife species prior to moving pipes and culverts. Contact a biologist if a covered species or other federally-listed species is suspected or discovered.

- All covered amphibians, reptiles, and mammals

FP-07: Vehicle speeds on unpaved roads will not exceed 15 miles per hour.

- All covered wildlife species

FP-08: Prohibit trash dumping, firearms, open fires (such as barbecues), hunting, and pets (except for safety in remote locations) at work sites.

- All covered species

FP-09: In designated State Responsibility Areas, equip all motorized equipment with federally or state-approved spark arrestors. Ensure a backpack pump filled with water and a shovel and fire-resistant mats and/or windscreens is onsite during welding. During fire “red flag” conditions as determined by the California Department of Forestry and Fire Protection, prohibit welding. Each fuel truck will carry a large fire extinguisher with a minimum rating of 40 B:C. Clear parking and storage areas of all flammable materials.

- All covered species

FP-10: Minimize the covered activity footprint and minimize the amount of time spent at a work site to reduce the potential for take of species.

- All covered species

FP-11: Utilize standard erosion and sediment control BMPs (pursuant to the most current version of *PG&E's Stormwater Field Manual for Construction Best Management Practices*) to prevent construction site runoff into waterways.

- All covered aquatic species

FP-12: Stockpile soil within established work site boundaries and locate stockpiles so as not to enter water bodies, stormwater inlets, other standing bodies of water. Cover stockpiled soil prior to precipitation events.

- All covered species

FP-13: Fit open trenches or steep-walled holes with escape ramps of plywood boards or sloped earthen ramps at each end if left open overnight. Field crews will search open trenches or steep-walled holes every morning prior to initiating daily activities to ensure wildlife is not trapped. Field crews will not handle covered species. If any covered wildlife species is found, work will stop and a biologist will be notified. A biologist with appropriate take permits will relocate the species to adjacent habitat or the species will be allowed to naturally disperse, as determined by a biologist.

- All covered amphibians, reptiles and mammals

FP-14: If the covered activity disturbs 0.1 acre or more of habitat for a covered species in grasslands, the field crew will revegetate the area with a commercial “weed free” seed mix.

- All covered grassland species

FP-15: Prohibit vehicular and equipment refueling within 250 feet of the edge of wetlands, streams, or waterways. If refueling must be conducted closer to wetlands, construct a secondary containment

area subject to review by an environmental field specialist and/or biologist. Maintain spill prevention and cleanup equipment in refueling areas.

- Vernal pool species, California red-legged frog, mountain yellow-legged frog, Sierra Nevada yellow-legged frog, foothill yellow-legged frog, Yosemite toad, Santa Cruz long-toed salamander, California tiger salamander, giant garter snake

FP-16: Maintain a buffer of 250 feet from the edge of wetlands, ponds, or riparian areas. If maintaining the buffer is not practicable because the covered activity footprint is within the buffered area, other measures as prescribed by the biologist or the HCP administrator to minimize impacts such as flagging access routes or paths, requiring foot access, restricting work until the dry season, or requiring a biological monitor during the activity.

- Vernal pool species, California red-legged frog, mountain yellow-legged frog, Sierra Nevada yellow-legged frog, foothill yellow-legged frog, Yosemite toad, California tiger salamander, giant garter snake, Santa Cruz long-toed salamander

FP-17: Directionally fall trees away from an exclusion zone, if an exclusion zone has been defined. If this is not practicable, remove the tree in sections. Avoid damage to adjacent trees to the extent practicable. Avoid removal of snags and conifers with basal hollows, crown deformities, and/or limbs more than 6 inches in diameter.

- All covered species

FP-18: Nests with eggs and/or chicks will be avoided: contact a biologist or the Avian Protection Program Manager for further guidance. Work will be stopped until the crew can obtain clarification from a biologist or the Avian Protection Program Manager on how to proceed.

- All nesting bird species, including marbled murrelet and northern spotted owl

FP-19: Inspect and maintain exclusion fencing installed to exclude species from work areas.

- California tiger salamander, giant garter snake, Santa Cruz long-toed salamander

Appendix B – PG&E Best Management Practices for all Vegetation Management Activities

BMP # ^b	Best Management Practice
BMP 1 (FP-01)	Vegetation management (VM) employees and contractors must conduct ongoing training of environmental laws and procedures. VM employees and contractors performing VM activities must comply with these laws and procedures to minimize or avoid impacts on natural resources during work activities.
BMP 2 (FP-05)	On federal, state, local, and tribal agency land the land managers should be notified of pending work as far in advance as possible.
BMP 3	Roads, erosion control measures, fences, and structures damaged as a result of VM operations must be repaired and reported to the work group supervisor and the VM PG&E representative. Gates must be left as they are found.
BMP 4 (FP-02, FP-03, FP-04)	Vehicles and equipment must use pavement, existing roads, and previously disturbed areas to the extent practicable.
BMP 5	Motorized equipment must comply with Air Resources Board permitting requirements.
BMP 6	Vehicle idling, noise, and odor must be minimized to the extent practicable during work near residences, public buildings, or commercial buildings. Within 100 feet of school facilities work vehicle must not stand idling for more than 5 minutes, unless necessary for work purposes. Diesel-fueled work vehicles must not stand idling for more than 5 minutes at any location, unless necessary for work purposes.
BMP 7	Contractors must have the ability to communicate quickly with their supervisor and/or PG&E by having a working cell phone or radio on the job site at all times, or by identifying the closest area of cell phone reception or closest public phone and familiarizing all employees with that location.
BMP 8 (FP-15)	Vehicles and heavy equipment must be refueled at least 100 feet away from riparian areas. Handheld tools must be refueled outside of riparian areas. The fueling operator must stay with the fueling operation at all times. Do not top off tanks.
BMP 9	Petroleum and herbicide spill containment and cleanup materials must be available at the job site. Spills must be immediately cleaned up and contaminated materials disposed of properly. Spills of any amount must be reported immediately to the supervisor and the VM PG&E Representative for appropriate management.
BMP 10 (FP-11)	If the amount of contiguous, bare soil exposed in one location exceeds 0.1 acre immediately after completion of VM activities, erosion control measures must be implemented. These measures may include lop & scatter, broadcasting chipped material or compliance with other PG&E Erosion control measures.
BMP 11	Vehicle use within riparian areas is limited to existing roads and dry crossings, and they must be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be harmful to aquatic life.
BMP 12	Cleared or pruned vegetation and woody debris (including chips) must be disposed of in a manner to ensure that it does not enter surface water or a watercourse. All cleared vegetation and woody debris (including chips) must be removed from surface water or watercourses, and placed or secured where it cannot re-enter the watercourse.
BMP 13 (FP-07)	Vehicles should not exceed 15 mph on un-surfaced roads such as agricultural field roads and transmission ROW access roads.
BMP 14	Vehicles and heavy equipment must not be operated off roads within 25 feet of the edge of a vernal pool unless a biologist or natural resource professional evaluates and prescribes site specific AMMs.
BMP 15	VM activities in Valley Elderberry Longhorn Beetle (VELB) habitat must follow PG&E VELB Utility Standard ENV-7001S and Utility Procedure ENV-7001P-01.

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BMP 16 (FP-18)	VM activities impacting birds must follow Utility Procedure TD-7102P-27, to comply with the Migratory Bird Treaty Act.
BMP 17	Sudden Oak Death: VM activities in counties subject to the Sudden Oak Death quarantine must follow the guidance of the California Oak Mortality Task Force.
BMP 18	Environmental screening for mowing locations, fee strip weed abatement, and for electric transmission ROW reclamation work must be conducted by the VM environmental group prior to work.
BMP 19	VM personnel must verify that the environmental screening process for capital and other non-VM work was conducted by the work owner prior to VM starting VM activities. VM personnel and contractors must implement the environmental protection measures prescribed for the work.
BMP 20	Cultural Resources: Items identified through patrols and screenings: When previously identified cultural resources are found (e.g., old bottles, cans, buildings), they must be left in place and undisturbed. If it is necessary to move or disturb them to complete the work, or if human remains are found, stop work and contact the VM PG&E Representative. Unanticipated Discovery: If any new cultural resources (e.g., structure features, bone, shell, artifacts, or architectural remains) are encountered and site disturbance cannot be avoided during work activities, or if human remains are suspected, implement the following measures: • Stop all work within 100 feet of the discovery. • Notify the VM PG&E representative who will contact the Cultural Resource Specialist. • Secure location, but do not touch or remove remains and associated artifacts. • Do not remove associated spoils or pick through them. • Note the location and document all calls and events. • Keep the location confidential.
BMP 21	If a protected wildlife species is killed or injured as a result of VM activities, the incident must be reported immediately to a supervisor and the VM PG&E Representative for appropriate management.
BMP 22	Disturbance or removal of non-target vegetation within a work site should not exceed the minimum necessary to complete operations, subject to other public health and safety directives governing the safe operations and maintenance of electric and gas facilities.
BMP 23 (FP-09)	During designated fire season motorized equipment must have federally or state-approved spark arrestors; all vehicles must be equipped with firefighting tools as appropriate and in accordance with all applicable laws, rules, regulations, orders, and ordinances. When the fire danger rating is Very High or Extreme no vehicular travel is permitted off cleared roads except in case of emergency.
BMP 24 (FP-09)	During designated fire season the contractor must check and follow the requirements of the daily Project Activity Level when working on USFS land (or other properties as required), or follow the requirements of the fire danger rating system in hazardous fire areas and SRAs. These are measures of fire weather conditions and may restrict activities otherwise permitted.
BMP 25	The following provisions apply for VM activities during designated fire season in grass and wildland areas: • Smoking is not allowed while walking, working, or operating light or heavy equipment. • Smoking is allowed in a barren area, or within an area cleared to mineral soil at least 3 feet in diameter. • During fire adjective index ratings of Very High or Extreme smoking is not allowed at any time in grass and wildland areas.

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BMP 26 (FP-08)	Hunting, firearms, portable stoves, open fires (such as barbecues) not required by the VM activity, and pets (except for safety in remote locations) are prohibited in VM activity work sites. All trash, food items, and human-generated debris must be properly contained and/or removed from the site.	
BMP 27	Woody debris created by chipping, lop and scatter, or brush mowing operations must be left at an average depth of less than 18 inches from the ground surface unless otherwise specified in an easement or land owner agreement.	
BMP 28	A Licensed Pest Control Advisor must write prescriptions for all herbicide and tree growth regulator applications. Contractors must use a Qualified Applicator when applying herbicides and tree growth regulators for VM.	
BMP 29	Nozzle tip, pressure, and sprayer configuration should be such to produce a coarser droplet to minimize drift.	
BMP 30	Pesticides must not be transported in the same compartment with persons, food, or feed. Pesticide containers must be secured to the vehicle during transportation in a manner that will prevent spilling into or off the vehicle.	
BMP 31 (Plant-01)	Selective application techniques should be used for VM ROW maintenance operations wherever practicable so that desirable vegetation is not adversely impacted.	
BMP 32	The contractor must have a written training program for employees who handle pesticides. The written program must describe the materials and the information that will be provided and used to train the employees.	
BMP 33	Training must be completed before an employee is allowed to handle any pesticide, and must be continually updated to cover any new pesticides that will be handled. Training must be repeated at least annually thereafter.	
BMP 34	These special precautions must be observed during periods of inclement weather: • Applications must not be made in, immediately prior to, or immediately following rain when runoff could be expected. • Applications must not be made when wind and/or fog conditions have the potential to cause drift. • Basal bark applications must not be made when stems are wet with rain, snow, or ice.	
BMP 35 (Plant-01)	Herbicide Buffer Width from Stream, Wetland, or Other Sensitive Habitat	Herbicide designation or usage
	No buffer requirement	Approved for aquatic use
	25 feet	Not approved for aquatic use
	200 feet	Mixing, loading, cleaning
BMP 36	Mechanical clearing equipment must not be used to clear vegetation within 10 feet of towers, poles or guy wires. Only handheld tools such as chainsaws and weed eaters may be used in these areas.	
BMP 37	Contractor must flag guy wires 200 feet ahead of working an area, using brightly colored flagging, and a minimum of three flags per wire.	
BMP 38	During fire season contractor must have a water source containing a minimum of 300 gallons of water and 250 feet of 1-inch hose on site at all times during operation. The water source must either be self-propelled or always attached to a vehicle capable of moving it to where it is needed. Where access and terrain allows, contractor's water source must always be within 500 feet of the mowing/cutting operation. Excess water must be disposed of in accordance with all laws and regulations.	
BMP 39	Mechanical clearing equipment must have at least one 5 lb. or more Class ABC fire extinguisher with current inspection tag mounted in the cab and accessible by the operator.	

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BMP 40	During fire season or during high fire danger rating levels contractor must stay on site for a minimum of ½ hour after mechanical clearing operations end for the day to ensure fire safety. During extreme fire levels an additional support person must be dedicated to follow the equipment with a water type back pump and fire line tool. During extreme fire levels mechanical clearing will be limited to the hours of 5:00 a.m. to 12:30 p.m.
BMP 41	Watercourse protection zones must be marked with brightly colored flagging prior to the start of any mechanical clearing or timber operation. Water classes are defined by the California Forest Practice Rules: 14 CCR 916.5. The following watercourse protection zone widths must be maintained at all times, except on existing roadways: • Class I & II watercourses with a slope < 30%: No heavy equipment within 50 feet. • Class I & II watercourses with a slope > 30%: No heavy equipment within 75 feet. • Class III & IV watercourses: No heavy equipment within 25 feet. Protection zones may be increased in areas with steep slopes or highly erodible soils.

^a Vegetation Management BMPs are equivalent to field protocols in implementation.

^b Where PG&E distribution and transmission field protocols or AMMs are similar or overlap, they are referenced in parenthesis under the BMP number.