

Radio System Upgrades at Willow Creek Summit and Windy Devil Annex

Mitigation Action Plan

SUMMARY

This Mitigation Action Plan is for the Radio System Upgrades at Willow Creek Summit (WCS) and Windy Devil Annex (WDA) Project. The project would construct two communication stations in Custer County, Idaho to modernize and improve the VHF radio system in use by BPA field personnel and bring the Idaho Falls Radio Region into alignment with BPA's territory-wide VHF system overhaul.

This Mitigation Action Plan is for the Proposed Action and includes all of the integral elements and commitments made in the environmental assessment (EA) to mitigate potential adverse environmental impacts.

BPA, Custer Telephone Cooperative, Inc. (CTCI, BPA's development partner at WCS), BPA's general construction contractor (GC Contractor), BPA's access road contractor (AR Contractor), and a best management practices contractor (BMP Contractor), should one of the previously-listed entities choose to contract out BMP implementation and monitoring, are responsible for implementing the mitigation measures during various phases of project construction. Relevant portions of this Mitigation Action Plan will be included in the construction contract specifications, which will obligate the contractors to implement the mitigation measures identified that relate to contractor responsibilities during and after construction.

If you have any general questions about the project, contact the Project Manager, V. Charley Majors: toll-free telephone 800-622-4519, direct telephone 360-619-6683, or e-mail vcmajors@bpa.gov

If you have questions about the Mitigation Action Plan, contact the BPA lead for the environmental review, Mike O'Connell: toll-free telephone 800-622-4519, direct telephone 503-230-7692, or e-mail mjoconnell@bpa.gov.

If you have questions about the Mitigation Action Plan during implementation, contact the BPA environmental lead for project implementation, Fred Walasavage toll-free telephone 800-622-4519, direct telephone 541-296-3615 x181, or e-mail fwalasavage@bpa.gov.

This Mitigation Action Plan may be amended if revisions are needed due to new information or if there are project adjustments.

MITIGATION MEASURES

Minimization and mitigation measures identified to reduce potential impacts associated with the Proposed Action are provided in the Mitigation Action Plan Table.

Mitigation Action Plan Table

MINIMIZATION AND MITIGATION MEASURE	IMPLEMENTATION ¹	Site
Geology and Soils		
Control dust on roads during construction using water trucks or other US Forest Service (USFS)- and US Bureau of Land Management (BLM)-approved, method of dust control.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Do not drain equipment oil or fuel onto the ground. Haul oil, fuel and other chemicals to an approved site for disposal. All fuel storage tanks must meet current fire department, federal, state and local government safety and hazardous materials requirements.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Inspect and maintain access roads after construction to ensure proper function and nominal erosion levels.	After construction (CTCI/BPA)	WCS/WDA
Do not use petroleum-based products for dust abatement.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Vegetation		
Monitor project construction areas for noxious weed and invasive species for at least 3 years, unless control is achieved earlier. Following consultation with the BLM, BPA and CTCI would be responsible for weed treatment within the area specified. All treatments would adhere to federal guidelines and regulations and ensure that BLM-approved chemicals are used.	After construction (CTCI/BPA)	WCS
All spraying of noxious weeds would be conducted using spot spraying methods that would limit the exposure of pollinators to herbicides. No insecticides or pesticides would be used.	After construction (CTCI/BPA)	WCS
Keep equipment on the USFS road and existing access road until reaching the construction site to minimize impacts to individuals of Welsh's buckwheat on the road edges.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WDA
Keep equipment to the south of the existing towers as Welsh's buckwheat has established around existing towers and structures.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WDA
Do not grade the access road to the north of WDA construction because this would eliminate the Welsh's buckwheat individuals in the roadbed and put those on road edges at risk.	During construction (AR Contractor)	WDA
Avoid Welsh's buckwheat in trenching for the power conduit burial from the transformer at the existing Windy Devil Communications Site to the new WDA site. Contact USFS for identification of route.	During construction (GC Contractor or local electric utility)	WDA
Contact the USFS Lost River Ranger District, so that the deciding official (district manager) can determine whether USFS personnel would need to be onsite to ensure minimal impact to this population [of Welsh's buckwheat] or whether flagging or other means of identifying the sensitive plant would be necessary to reduce impacts.	Before construction (GC Contractor, AR Contractor, BMP Contractor)	WDA

Minimize or avoid unnecessary ground disturbance and clearing activities in the construction areas, and do not drive over, or otherwise disturb areas outside the designated construction areas.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Minimize the amount of bare soil created in areas where activities disturb or remove vegetation. Employ BLM/USFS-approved methods of soil stabilization to effectively control erosion and weeds. Gravel or equivalent mulch would be acceptable materials for placement along pads and roadways.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Flag all weed populations that need to be avoided during construction.	Before construction (BPA, BMP Contractor)	WCS/WDA
Inform contractors on how to identify noxious weed species that occur in the project areas and explain required actions to prevent their spread.	Before construction (BPA, BMP Contractor)	WCS/WDA
Train contractors to avoid flagged or identified sensitive vegetation areas.	Before and during construction (BPA, GC Contractor, AR Contractor)	WCS/WDA
Store heavy construction equipment during construction within disturbance limits agreed to by BLM/USFS.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Staging areas would not be cleared of vegetation, equipment and supplies would be placed on top of vegetation where practicable.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Store cleared vegetation next to the area from which it is stripped to avoid transporting soil-borne noxious weed seeds, roots, or rhizomes.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Ensure erosion control measures, sediment-barrier installations, or mulch are from state-cleared sources that are free of noxious weeds.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Ensure road fill materials are obtained from weed-free quarries.	During construction (AR Contractor)	WCS/WDA
Thoroughly clean all vehicles used in the construction, maintenance and operations of project prior to moving equipment across or onto BLM/USFS-managed lands. Use high-pressure washing or other effective method to clean the insides of bumpers, wheel wells, undercarriages, inside belly plates, excavating blades, buckets, tracks, rollers, drills, buckets, shovels, and any digging tools, etc., to remove potential weeds, seeds, and soil carrying weed propagules, and vegetative material.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Revegetation of disturbed areas would use a BLM seed mix that includes multiple pollinator- friendly forbs.	After construction (All)	WCS
Seed disturbed areas with certified seed of native species in the late fall (preferred, as conditions allow) to deter erosion and curtail the introductions of weeds. Obtain BLM/USFS staff approval for any seed mixture and dispersal method prior to purchase and implementation.	After construction (All)	WCS/WDA
Wildlife		
Do not allow vehicles and construction activities in the elk winter range, which includes the entire WCS site and access roads, from December 15 to April 30.	Before, during and after construction (All)	WCS
Remove predatory bird nests from the communication tower when they are observed; obtain US Fish and Wildlife Service (USFWS) and Idaho Department of Fish and Game (IDFG) permission beforehand.	After construction (CTCI, BPA)	WCS

CTCI will procure vegetation planting materials for a BLM habitat improvement project in the nearby Lower Goldberg Allotment per a compensatory mitigation agreement among the Idaho state wildlife agencies and the BLM to improve greater sage-grouse late brood-rearing habitat.	Upon BLM request (CTCI)	WCS
Conduct brush removal, tree trimming, grading, and any other ground-disturbing activities for construction and maintenance outside of the primary bird nesting season to the extent possible. For threatened, endangered, and sensitive (TES) species identified in the EA, the primary nesting season begins as early as March 7 (burrowing owl) and extends through August 15 (ferruginous hawk and golden eagle) (BLM 2020). If construction activities must occur during the primary bird nesting season, a nest clearance survey should be scheduled within 10 days prior to the planned disturbance. If an active nest is identified before or during construction, coordinate with appropriate personnel at IDFG and/or USFWS to determine measures to avoid or minimize impacts on the nesting bird.	During and after construction (GC Contractor, AR Contractor, BPA/CTCI)	WCS/WDA
Perform construction activities after the end of sage grouse nesting season, July 15 or later.	During construction (GC Contractor, AR Contractor)	WCS
Security lighting for on-ground facilities, equipment, and infrastructure should be motion- or heat-sensitive, down-shielded, and of a minimum intensity to reduce nighttime bird attraction and eliminate constant nighttime illumination while still allowing safe nighttime access to the site.	During and after construction (GC contractor)	WCS/WDA
If birds are nesting on communication towers that require maintenance activities, contact the state natural resource protection agency and/or the USFWS for permits, recommendations, and requirements.	After construction (BPA/CTCI)	WCS/WDA
Keep towers' maximum heights (including antennas) below 199 feet above ground level to remain clear of the height of average bird flight.	During and after construction (BPA/CTCI, GC contractor)	WCS/WDA
Install freestanding towers such as lattice towers or monopoles. Guy wires would be a hazard to birds in flight.	During construction (GC Contractor)	WCS/WDA
Do not install lighting on towers.	During construction (GC Contractor)	WCS/WDA
Towers should be removed from the site within 12 months of cessation of use, preferably sooner.	After construction (BPA/CTCI)	WCS/WDA
Cultural Resources		
Locate equipment and material storage areas, and access roads to avoid known cultural resource sites and limit ground disturbances.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Conduct archaeological monitoring in the vicinity of cultural site Temp Site AH-05 as well as the two cultural isolate sites, Temp Sites AH-03 and AH-04.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS
Depict cultural site Temp Site AH-05 as a sensitive 'avoidance' area in construction documents, on construction maps, and in the field.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS
Mark all cultural site boundaries with flagging for avoidance prior to construction to prevent disturbance to the site. Remove flagging upon completion of the proposed Project work	Before and after construction (BPA)	WCS
Depict cultural site 10CR1978 (Horseshoe Mine and Taylor Homestead site) as a sensitive 'avoidance' area in	During construction (GC Contractor, AR Contractor, BMP	WDA

construction documents, on construction maps, and in the field.	Contractor)	
Follow BPA's Inadvertent Discovery Procedure, which requires that if an inadvertent discovery of cultural resources is made, all work in the vicinity would stop immediately and the BPA archaeologist and other agreed-upon contacts for each site would be notified.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Visual Resources		
Paint the WCS Communication Station buildings, conduit, fencing, and any other project features that can be painted Covert Green from the Standard Environmental Colors chart (BLM 2008).	Before and during construction (GC Contractor)	WCS
Paint the WDA buildings a color to blend in with the background landform, dark gray to green, or as instructed by USFS.	Before and during construction (GC Contractor)	WDA
Screen the propane tanks if required by BLM/USFS.	Before and during construction (GC Contractor)	WCS/WDA
The tower material must comply with the communications site plans. Use dark gray galvanized matte finish for all lattice structures. Finish should be specified and verified as non-reflective. Dish antennas on the lattice towers would be gray.	Before and during construction (GC Contractor)	WCS/WDA
Use surface-salvaged rock and brush on fill slopes and trench lines to soften the color and texture contrast. Where practicable, place salvaged large rocks so their previously exposed faces are up, to retain the look of the surrounding landscape. This would include fill slopes, the top of trenched utility lines, and the side of site access.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Remove visually obtrusive erosion-control devices, such as silt fences, plastic ground cover, and straw bales, as soon as the area is stabilized following construction.	During and after construction (BMP Contractor)	WCS/WDA
Other Resources		
At WCS and WDA, where no specific directives are included for station design, construction, and site restoration, the current BLM Willow Creek Summit Communications Site Plan, and USFS Windy Devil Communications Site Management Plan are to be referenced as the guidance documentation.	Before, during, and after construction (All)	WCS/WDA
Limit construction noise to daylight hours.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Operate and maintain all equipment to minimize noise generation and ensure engines have appropriate mufflers.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Remove all trash and construction debris from the sites and dispose of properly.	During and after construction (All)	WCS/WDA
Place signs (approved by the BLM/USFS) at each intersection along the access roads letting the public know what hours and dates construction vehicles would be operating in the area.	Before construction (GC Contractor, AR Contractor)	WCS/WDA
Coordinate the routing and scheduling of construction activity with Idaho Transportation Department, county road staff, and BLM/USFS as necessary.	Before construction (GC Contractor, AR Contractor)	WCS/WDA
Post signs along roads to warn of construction activity, merging traffic, and temporary disruptions, as necessary.	Before and during construction (GC Contractor, AR Contractor)	WCS/WDA
Prepare a Stormwater Pollution Prevention Plan (SWPPP) and an Erosion Control Plan (ECP) as determined by	Before construction (GC Contractor, AR Contractor)	WCS/WDA

regulatory requirements addressing measures to reduce erosion and runoff and stabilize disturbed areas.		
Use mechanical barriers for erosion in disturbed areas as specified in the SWPPP or ECP.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan that requires storage of fuel and other potential pollutants in a secure location away from washes. This plan must also ensure that spill containment and cleanup materials are readily available on site and restocked within 24 hours if used.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
All fuel storage tanks must meet current fire department, federal, state and local government safety and hazardous materials requirements	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Do not drain equipment oil or fuel onto the ground. Haul oil, fuel and other chemicals to an approved site for disposal.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Restrict refueling and servicing operations to locations where spilled material cannot enter ephemeral drainages.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Maintain vehicles and equipment in good working order to prevent oil and fuel leaks.	Before and during construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Do not use dust abatement additives or stabilization chemicals (typically magnesium chloride, calcium chloride salts, or lignosulfonate) within 25 feet of drainages (including ephemeral), and when using, apply them so as to minimize the likelihood that they would enter drainages.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Set a speed limit for construction vehicles on unpaved access roads of no greater than 25 miles per hour to minimize dust.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Encourage carpooling and the use of shuttle vans among construction workers to minimize construction-related traffic and associated emissions.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Turn off equipment engines when not in use to minimize exhaust emissions.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Use local rock sources for construction where practicable to reduce transportation distances for construction materials.	During construction (GC Contractor, AR Contractor)	WCS/WDA
Use fire-prevention measures, such as an on-site fire trailer to prevent brush fires and the need for emergency response.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Secure all equipment at the end of workdays to protect equipment and the public.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Conduct crew safety meetings to start each workday to review potential safety issues and concerns.	During construction (GC Contractor, AR Contractor, BMP Contractor)	WCS/WDA
Conduct monthly meetings between BPA, CTCI, and the construction contractor to discuss safety concerns.	Before and during construction (GC Contractor, AR Contractor, BPA/CTCI)	WCS/WDA
Do not allow radio frequency emissions from communication site to exceed the applicable public safety limits, as set by the Occupational Health and Safety Administration (OSHA) and the Federal Communications Commission (FCC).	After construction (BPA/CTCI)	WCS/WDA

NOTES:

¹ Where “BMP Contractor” is listed in the Implementation column, this does not obligate any entity to retain one, it should be interpreted as one would or could implement the mitigation if retained on contract. If no BMP Contractor were retained, the GC and/or AR Contractors would be responsible for implementation.