Date: July 31, 2024

To: Potential Bidders for the *Butte Creek Camp Fire Post-Fire Recovery Project*

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Addendum 1: Pacific Watershed Associates responses to questions submitted by potential bidders for the *Butte Creek Camp Fire Post-Fire Recovery Project, Butte County, California (Centerville Road).*

Thank you for your attendance at the July 22 Pre-Bid Site Tour. Listed below are Pacific Watershed Associates (PWA) and Butte County Resource Conservation District (BCRCD) responses to questions submitted in writing by potential bidders for the *Butte Creek Camp Fire Post-Fire Recovery Project, Butte County, California*. Questions from potential bidders are listed in bold below, and PWA's responses follow in italics.

Q1 – Does the Owner Furnish Backfill Material if the excavation spoils are unsuitable, i.e. Rock.

This bid assumes that the on-site excavated materials will be suitable for use as culvert backfill. Prior to the start of work, soil testing will be performed on the existing materials to determine backfill suitability, and if they are found unsuitable, alternative materials will be purchased and delivered by PWA/BCRCD.

Q2 – How will the Contractor be compensated for delay or standby time awaiting owner furnished material like suitable backfill?

PWA will coordinate closely with the selected Contractor to minimize delays, and the Contractor will not be compensated for delays. In addition, the selected Contractor may include a trucking rate sheet with their bid and we may be able to offer the opportunity to provide trucking for the project, depending on our grant contract flexibility.

Q3 – Can the Contractor work outside of shown footprint if required for access and/or traffic management?

Disturbance within the stream channel and adjacent riparian areas may not extend further upstream or downstream than the extents designated in the construction plans. Work may extend slightly outside the footprint within reason as needed along the road surface and adjacent hillslope, but general effort shall be made to minimize overall disturbance. The footprint shown on the grading plan is approximate and was generated to quantify our stream impacts for permitting purposes.

Q4 – In order to complete work within allowed time multiple sites may need to be constructed concurrently and therefore there may not be available material to balance the job. Will the Owner provide adequate import material to support the Contractors work plan and its cost?

At this time, we do not anticipate a need for imported fill material. The Grading Plan (Exhibit A, Appendix F) contains estimated cut/fill totals for each site, and PWA will coordinate with the selected Contractor to sequence the stream crossing excavation schedule to allow balancing of material as needed.

Q5 – Looking at the schedule, and with current site conditions (Park Fire), is the advertise bid award and notice to proceed timeline realistic?
At this time, we are anticipating that the bidding timeline will proceed as planned.

Q6 – If there is any start delay, will the project require and provide for a winter suspension?
The current bid assumes work will be completed in one season. The October permitting deadline applies only to the stream crossing culverts that require environmental permitting. The remaining work (all ditch relief culverts and road shaping, etc) may continue beyond the October deadline and into early 2025 as permitting weather allows.

Q7 – If the Project is suspended what SWPPP measures will need to be put in place? Will it be considered change order work?
At this time, it is assumed that the project is SWPPP exempt.

Q8 – Is Bid Item 5 going to be removed due to the Owner furnishing the Culvert pipe and possible backfill materials?
Culvert materials will be purchased by PWA, and delivery will be scheduled to the staging area or another location to be determined between PWA and the selected contractor. Bid Item 5 shall include the contractor's costs for coordinating and accepting delivery *of the materials, which includes* proper unloading and storage *of the culvert materials. In addition, the Contractor will be responsible for* mobilization *of the culverts to the project sites as needed for installation.*

Q9 – In regards to Table 3, item 305. Is this item just pertaining to labor or also material?
Item 305 should not include a purchase price for rock materials, only a per-ton rate to spread, moisture condition, and compact the road rock as needed. The road rock will be provided by PWA and delivery will be arranged by PWA.

In addition, ***Appendix D*** was mistakenly omitted from the construction plan provided (Exhibit A) and can be found attached to this addendum. Materials described in the revegetation plan will be purchased by PWA and delivered to the staging area. Costs for application of seed and straw at each stream crossing should be included in the bid prices for Stream Crossing Improvement Work (Exhibit B, Table 2).

Bids are due by 3:00 p.m. Wednesday, August 8, 2024. Submit Exhibit B page 6-10 and Exhibit C completely filled out, with additional pages and information as needed. Bids should be submitted via email to tylerc@pacificwatershed.com. **Please note that receipt of *Addendum 1 dated July 31, 2024* must be acknowledged on the Contractor Bid Worksheet signature page.**

encl:
Appendix D: Proposed Revegetation and Effectiveness Monitoring Plan

cc: Thad Walker, Butte County Resource Conservation District, thad@bcrcd.org

Appendix D

Proposed Revegetation and Effectiveness Monitoring Plan

Butte Creek Camp Fire Post Fire Recovery Project,
Butte County, California

INTRODUCTION

It is important to inspect and monitor erosion control and sediment reduction projects to evaluate the effectiveness of constructed treatments and determine if any additional measures are recommended after implementation. Projects that require permit coverage with local, regional, state, and/or federal regulatory agencies may have additional (or site specific) requirements. PWA presents this proposed plan with recommendations for revegetation and monitoring implemented treatments included as part of *Butte Creek Camp Fire Post Fire Recovery Project.* This proposed plan is prepared to supplement permit applications prior to construction. The enclosed document offers guidance and outlines recommendations that may be modified as needed to meet regulatory requirements for up to five years after construction and/or until performance standards and success criteria have been met[1].

The proposed revegetation and effectiveness monitoring plan includes recommendations, guidelines, and/or references related to: (1) post construction erosion control and revegetation; (2) invasive species prevention; (3) site inspections and monitoring; (4) performance standards and success criteria; and (5) operations, maintenance, and scheduling.

POST CONSTRUCTION EROSION CONTROL AND REVEGETATION

Disturbed area resulting from implementing recommended treatments at project sites and/or along access roads will be evaluated after project completion and locations that have the potential for erosion and sediment delivery will be treated with erosion and sediment control measures before the onset of winter rains. Riparian and stream areas estimated to be disturbed at the 19 stream crossings proposed for upgrading is a total of 0.68 acres with individual disturbance areas ranging from less than 0.01 acres up to 0.11 acres at Site 119 (Appendix E: Table E6). Every effort will be made to minimize the extent of disturbance and vegetation removal throughout the project area. Table E7 in Appendix E provides estimates of area likely to be affected during construction with recommendations for erosion and sediment control and revegetation at each site requiring regulatory permitting. Recommended erosion and sediment control Best Management Practices (BMPs) include the application of a native seed blend to be approved by BCRCD, straw (or other mulch), and revegetation planting as determined by regulatory agencies.

Guidance related to recommended revegetation, erosion and sediment control measures

- Erosion control seed and mulching should be applied after construction is complete and prior to onset of winter rains and/or before November 1.
- Seed should be applied at manufacturer's specifications or at a rate of 2lb/1,000ft².
- Weed-free mulch should be applied using a minimum 1 bale of straw per 800 ft^2 after seeding and/or replanting.

[1] Monitoring and reporting schedules, performance standards, and success criteria may vary based on the type of permit coverage as dictated by any specific regulatory agency.

- Application of additional seed, mulch, and/or plants as needed to meet revegetation success criteria as required to meet performance standards dictated by permits.

INVASIVE SPECIES PREVENTION

Restoration projects should not be vectors for invasive species. Therefore, this section describes protocols and actions to take before, during, and after implementation activities following BMPs for preventing plant pathogen introductions on private properties as a result of the *Butte Creek Camp Fire Post Fire Recovery Project, Butte County, California.*

Native shrubs and trees are susceptible to damage and death resulting from infection with pathogens and insects, including recently introduced exotic pathogens and pests. Mortality of native plants is generally undesirable owing to increased fire danger, adverse impacts to habitat quality and biodiversity, shading, and aesthetics. Many pathogens can be spread unintentionally by staff, subcontractors, and visitors unless precautions are taken. This BMP provides guidelines for reducing the risks of plant pathogens in the property. The following specific protocols are proposed before, during, and after the project to prevent the spread of invasive species.

Equipment cleaning

Before and after the project, all subcontractors will ensure any equipment, vehicles, shoes, and boots are clean before entering the Project area after working on another job. Personal field gear and heavy equipment working on the project must be properly decontaminated before starting the project.

- Clean soil and vegetation off equipment.
- Spray or wipe the equipment with Lysol, Chlorine bleach mixture (1 part bleach to 9 parts water), Clorox Clean-up® swipes, 10% denatured alcohol, or similar substances.

During the project, if working in an infested area, all personal field gear and equipment must be properly decontaminated before relocating to another area.

- Sweep, wash off or otherwise remove accumulations of plant debris (especially leaves), soil and mud, and blow out air filters, preferably on site.
- Truck-mounted pumpers, garden hoses, or a pressure washer can be used for cleaning large equipment.
- Spray or wipe the equipment with Lysol, Chlorine bleach mixture (10 parts bleach to 90 parts water), Clorox Clean-up® swipes, 10% denatured alcohol, or similar substances.
- Equipment crews and field vehicles will have access to a sanitation kit including a broom, hose, five-gallon pump sprayer and Lysol, denatured alcohol or similar sterilizing spray or wipes.

Tree removal

Trees infected but still living or killed by *Phytophthora ramorum* are susceptible to rapid decay and unpredictable failure with an increased risk of trunk and limb breakage. *P. ramorum* is the plant pathogen known to cause the disease sudden oak death (SOD). Trees that pose a risk to people, property, livestock, etc. will be removed. Trees that do not pose a risk may be left standing. Cut trees as close to the ground as practical. Stump grinding is not recommended because the equipment may become contaminated by soil and result in pathogen spread when used at another location. Any tree removal will be completed when conditions are warm and dry (June through October), and outside the wetter months (November through May) which favor pathogen spread. Do not transport or move host plants, infected soil, or plant material such as firewood, wood chip or bark mulch from infested areas.

Debris disposal

When brushing, pruning or cutting live or dead host plants in an infested area, leave trunks, foliage, slash, and chips at the same area. Locate landings, roads, chipping sites, equipment access, staging areas, and other equipment activity areas away from host plants in infested areas, especially those host plants showing symptoms of SOD.

If chipping is to take place in an infested area, leave chips and vegetation of infected or host plants at the same location on the property. Chip infected and host plants first. Chip non-host plants last to assist in cleaning out the chipper of potentially contaminated material. Disposal of infested material is extremely important because branches, twigs, and leaves from California bay laurel, tanoak, rhododendron, and other host plants may harbor the sudden oak death pathogen. If infested plant debris or infected live plants are moved, they may inadvertently transfer the pathogen to uninfected areas. For this reason, we recommend that plant material remain on-site.

***Mulch*:** Use weed-free mulch (straw, wood, or plant chips) to cover bare soil areas after seeding and/or planting. If using locally sourced mulch, do a visual survey, reject any debris if any trunks or stems are oozing sap. If a mulch smells like alcohol, vinegar, ammonia, or sulfur it is probably "sour." The smell is created when a wood-derived mulch is piled high and the inside portion of the pile is deprived of oxygen. This causes anaerobic activity, which creates a build-up of acetic acid in the mulch. The acid build-up is toxic to plants, and if the mulch is spread on the landscape without treatment, the volatile acid will quickly cause plants to wilt and subsequently die. Sour mulch can be treated by spreading it out thinly, soaking it with water, and allowing it to dry. After airing out, the smell should be gone, and mulch is safe to spread.

SITE INSPECTIONS AND MONITORING

Recommended erosion control and sediment reduction treatments and application of post project BMPs are designed to significantly reduce the risk of catastrophic erosion and sediment delivery from occurring, as well as significantly reduce the contributions of fine sediment from roadbeds associated with surface erosion and gully erosion processes. Once implemented, the longevity of the erosion control and erosion prevention treatments installed for the project will be primarily dependent on frequent proper inspections, operations, and maintenance practices for the years to come. Land managers are responsible for the upkeep of project treatments to ensure their continued effectiveness. Therefore, PWA suggests conducting routine site inspections, project effectiveness monitoring, and maintenance.

Following construction for up to two years after completion, or as dictated by regulatory permit requirements, the landowner will implement a *Revegetation and Effectiveness Monitoring Plan* to evaluate Project success. Periodic site inspections should be conducted to: 1) document conditions at the project site, including geomorphic monitoring; 2) evaluate the success of the implemented restoration and revegetation plans; and 3) recommend and implement remediation measures, both heavy equipment and labor intensive, to minimize future water quality impacts from the property, meet performance measures and achieve success criteria. Inspector(s) should be familiar with the locations of treatments as well as design expectations and function. Field inspections and monitoring visits should document existing conditions, note changes, and provide recommendations for maintenance, repair and/or consultation with technical professionals. Recommendations regarding inspections and monitoring visits include:

- Establish photo point locations to reoccupy during site inspections to document conditions and any change(s) over time.
- Utilize available documentation such as construction plans, drawings, and treatment location maps as references during inspections to identify locations of recorded observations.

- Record observations from inspection and monitoring visits in a notebook or create a template to document existing conditions, observations, notes, collected data, photos, mapped problematic locations, etc.
- Compile documentation from all field inspections and monitoring visits and maintain paper records in an inspection binder or save electronic files in a central location.
- Prepare and submit monitoring reports as required.

PWA recommends conducting site inspections three times a year: once in the *spring*, once in the *fall*, and once during the *winter*. Additional inspections should be made after larger storm events.

Spring Inspections and Monitoring

- Schedule inspections when vegetation can be easily observed and native, non-native, and invasive species identified
- Identify problematic road surface locations where maintenance and/or repairs are needed, schedule and implement construction activities while soil moisture is best to attain proper compaction
- Identify problematic site locations where professional consultation and/or regulatory input may be required
- Schedule and implement activities that require construction during dry weather, low flow conditions, and/or within approved windows as dictated by permits

Fall Inspections and Monitoring

- Inspect project road surface drainage/site treatment locations.
- Identify disturbed (bare) soil areas and/or locations needing additional erosion/sediment control BMPs or revegetation efforts.
- Inspect and evaluate additional completed maintenance or repair efforts made post-project completion.
- Identify and highlight problem areas to keep an eye on over winter (post storm inspections).
- Inspect all culvert inlets/outlets and ditches; remove any obstructions that may restrict capacity and/or cause diversion(s).

Winter (and after larger storm events) Inspections and Monitoring

- Inspect project road surface drainage/site treatment locations and identify problem areas needing winter maintenance or emergency repairs.
- Inspect all culvert inlets/outlets and ditches; remove debris from behind trash racks and any obstructions that may restrict capacity or cause diversion(s).
- Identify problematic site locations where professional consultation and/or regulatory input may be required.
- Consult resource professional(s) and/or regulatory agency staff for guidance when necessary.

PERFORMANCE STANDARDS AND SUCCESS CRITERIA

PWA provides general recommendations and typical guidelines related to performance standards and success criteria. Additional standards and/or criteria may be detailed in secured permit documentation that Butte County RCD and Department of Public Works must be aware of to meet regulatory agency permit requirements.

Revegetation

Performance measures for total cover of vegetation, cover of native species, and cover of invasive species will be used to determine the success of revegetation. Invasive species will be defined as those rated high or included as a red alert species by the California Invasive Species Council (http://www.cal-ipc.org/). See Table D1 below for recommendations of performance criteria for revegetation.

Table D1. Performance criteria for revegetation

Year	% Total Vegetation[1]	Absolute cover of native vegetation
1	50	40
2	85	50

[1] Absolute cover of invasive plants shall be no more than 10% in any year.

Any trees larger than 4" dbh that are removed during the project will be replaced with new plantings as determined by secured permits. We currently anticipate about four Bigleaf Maple trees will need to be removed at three culvert replacement sites (Sites 138, 148, and 149)**.** Effort will be made to keep root balls and only remove limbs or trunks as needed for heavy equipment access.

Geomorphic Stability

Assessment of the geomorphic stability of Project sites shall be performed by a qualified professional. Locations of erosion and sediment delivery (greater than 10 yd^3) will be identified, dimensions and volumes of erosion and sediment delivery noted for each feature, and conditions documented with photographs. If greater than 10 yd^3 of erosion is documented or if increased sedimentation is observed, professional evaluation will be conducted to determine if remediation measure(s) should be installed (erosion control, revegetation, etc.).

OPERATIONS, MAINTENANCE, AND SCHEDULING

Project treatments were designed and are to be installed based on identified land use, management requirements, conservation goals, and access needs.

Conduct maintenance during the year based on the results of regular inspections. Spring, summer, and fall is the time for larger repairs. Make repairs to existing drainage features and/or construct new drainage features, such as:

- Enhance/construct road surface structures (i.e. rolling dips).
- Clean/cut ditches.
- Clean out/construct sediment basins.
- Improve/change road shaping.
- Replace culverts, install trash racks, enhance critical dips.
- Repair/enhance armor along fillslopes.
- Control ditch and berm vegetation along roads (keep ditches open, not bare. Knock down all vegetated berms).
- Grade or mow roads as necessary – keep proper road shape to maintain drainage.
- Rock surfacing or patchwork for improved access and/or to maintain year-round use roads.

Winter is the time for minor maintenance and "emergency" repairs, such as:

- Clean culvert inlets/outlets and remove large objects from ditches and rolling dips that are found obstructing flow.
- Install secondary erosion control measures until summer fix (straw bales, straw waddles, erosion blanket, visqueen, etc.).
- Contact a professional for advice on any large scale "emergency repairs".