

OLYMPIC VALLEY PUBLIC SERVICE DISTRICT



Olympic Valley Fuel Reduction Project – Feather River Forestry Professional Services Agreement

- **DATE**: October 25, 2022
- TO: District Board Members
- **FROM**: Jessica Asher, Board Secretary and Mike Geary, General Manger
- **SUBJECT**: Professional Services Agreement (PSA) with Danielle Bradfield at Feather River Forestry for the Olympic Valley Fuel Reduction Project funded by CAL FIRE
- **BACKGROUND**: The District continues to proactively expand its role to address wildfire risks by increasing its current Defensible Space program and creating a new Fuels Management Program.

In 2020, the District entered a contract to prepare a Community Wildfire Protection Plan (CWPP) to identify and prioritize the fuels reduction and wildfire prevention strategy for the Valley, a portion of the Truckee River corridor, as well as surrounding wildlands.

In 2021, the Board approved a \$10,000 agreement with Feather River Forestry to leverage the CWPP to apply for the grant funds.

In September 2022, a grant agreement was executed with the CalFIRE/CA Climate Investments Fire Prevention Program for \$539,888 for completion of the Olympic Valley Fuel Reduction Project. The project will create a 120-acre fuel break on the ridgeline immediately north of the community (Project OV-1 on the attached map). The work will be implemented utilizing mechanical thinning methods with mastication of surface and ladder fuels, where needed, such that flame length, intensity, rate of spread, and potential duration of wildfire will be significantly reduced.

DISCUSSION: The grant agreement includes a contractual budget of \$23,160 for a Registered Professional Forester (RPF); see *Project Budget*, attached. Staff recommends contracting with RPF Danielle Bradfield with Feather River Forestry, who prepared the grant application, to achieve the project objectives by specifying the fuel break design and layout, silvicultural prescriptions, and appropriate treatment methodology. The RPF will also complete all required environmental compliance documents and permitting, including the Cal Fire Forest Fire Prevention Exemption and CEQA document, and provide project management services including bid support, contractor selection, inspection, and project and grant close-out.

These professional services provide for the design of an effective project in full compliance with all state and local regulations and provides professional guidance, administration, and project implementation to ensure the project meets the grant objectives. Feather River Forestry previously administered timber operations associated with fuel break implementation under similar grant processes in the same general area as this project. This prior experience helps to estimate work production rates for the fuel type and treatment methodologies proposed for the project.

There are very few RPFs in the region available for this work, however, Forest River Forestry is available and is highly recommended. Staff has worked with Feather River Forestry since 2021 and the contractual relationship proves to be cooperative, productive, and efficient.

- ALTERNATIVES: 1. Approve the PSA with Feather River Forestry for professional forestry services not-to-exceed \$23,160 and authorize the General Manager to execute all contractual documents.
 - 2. Do not approve the PSA with Feather River Forestry.
- **FISCAL/RESOURCE IMPACTS**: Feather River Forestry's scope of work and project budget are embedded in the CalFire *Project Scope of Work*, attached. The professional services agreement includes a not-to-exceed cost of \$23,160, which is reimbursable under the terms of the CalFire grant awarded for the project.
- **RECOMMENDATION**: Approve the PSA with Feather River Forestry and authorize the General Manager to execute the agreement.
- **ATTACHMENTS:** Olympic Valley Fuel Reduction Project Map of Project Area (OV-1)
 - CalFire Project Scope of Work
 - Project Budget

DATE PREPARED: October 20, 2022





California Department of Forestry and Fire Protection (CAL FIRE) California Climate Investments Fire Prevention Grants Program Project Scope of Work



Project Name: Olympic Valley Fuel Reduction Project

Project Tracking Number: 21-FP-NEU-0209

Project Description Summary: Please provide a paragraph summarizing proposed project including the location, habitable structures, acres treated, etc. (Please type in blank space below. Please note there is no space limitations).

The proposed Olympic Valley Fuel Reduction Project will create one fuel break strategically located adjacent to and within the community of Olympic Valley in Placer County, California. The fuel break will total 120 acres located upon the ridgeline immediately north of the community. The fuel break will be implemented utilizing mechanical thinning methods with mastication of surface and ladder fuels, where needed, such that flame length, intensity, rate of spread, and potential duration of wildfire will be significantly reduced. This project provides protection for the approximately 900 habitable structures in Olympic Valley as well as improved safety along the major evacuation routes of Squaw Valley Road and State Route 89.

A. <u>Scope of Work</u>

This item is broken into project specific criteria depending on the type of project being proposed: Wildfire Prevention Planning, Wildfire Prevention Education or Hazardous Fuels Reduction. Please *answer one section of questions* that pertain to the primary activity type for your project.

Section 1: Hazardous Fuels Reduction

1. Describe the geographic scope of the project, including an estimate of the number of habitable structures and the names of the general communities that will benefit.

The geographic scope of the project is the community of Olympic Valley, California, bound by Granite Chief Wilderness to the west, Alpine Meadows to the south, the Truckee River corridor and state route 89 to the east, and US Forest Service lands to the north. The Olympic Valley community, nearby Alpine Meadows community, and Lake Tahoe Basin will benefit from the improved public safety along Highway 89, the main evacuation route for each, and increased wildfire resilience resulting from proposed project.

The Olympic Valley community contains approximately 900 habitable structures with an assessed value for land and improvements in the Olympic Valley Fire Protection District over \$1.5 billion dollars. The total assessed value of single-family homes is approximately \$790 million with the average single family home value just over \$1 million dollars.

Placer County's Local Agency Formation Commission (LAFCO) estimates the permanent population of the community to be 950 and peak visitor population of 3,500-12,000. Per the 2021 Local Hazard Mitigation Plan, both resident and visiting populations are housed in approximately 663 residential units, 1,180 condominiums, and approximately 20 commercial entities consisting of private residences, ski resorts, hotels and supporting businesses.

2. Describe the goals, objectives, and expected outcomes of the project.

The goal of the Olympic Valley Fuel Reduction Project is creation of one fuel breaks adjacent to and within the community of Olympic Valley as identified in the Olympic Valley Community Wildfire Protection Plan.

Project objectives include 1) Creation of 120 acres of fuel break north of the community of Olympic Valley and immediately adjacent to the Five Creeks project 2) reduce wildfire's risk to human health and safety, and 3) reduce the risk of adverse wildfire effects and potential fire behavior (flame length, intensity, rate of spread, duration) through reduction of fuel loading and arrangement within the Defense Zone of the Olympic Valley Wildland Urban Interface.

Expected outcomes of the Olympic Valley Fuel Reduction Project include creation of 120 acres of fuel break within one treatment unit identified in the Olympic Valley CWPP utilizing a combination of fuel treatment methods including thinning from below, selective tree removal, and mechanical mastication.

The fuel break pretreatment areas are dominated by Sierra Mixed Conifer stand type of excessive stand density ranging from 180-220 square feet basal area per acre. Species composition is approximately 60% White Fir, 30% Jeffrey Pine, 6% Sugar Pine, and 4% Red Fir, with an average of 240 trees per acre over 8 inches DBH. The average stand diameter at breast height (DBH) of White Fir is 12.0", Jeffrey Pine is 14.3", Sugar Pine is 18.0", and Red Fir is 22.4". Cumulative pretreatment quadratic mean diameter is 13 inches DBH. Openings in the conifer overstory are dominated by native shrub species including manzanita and whitethorn and young growth White Fir regeneration under 3" DBH.

Following fuel break implementation using methods including mechanical thinning and mechanical mastication, stand conditions in each fuel break will exhibit reduced horizontal and vertical continuity of fuels such that the potential flame length, intensity, rate of spread, and duration of wildfire will be significantly reduced. This reduction in potential fire behavior provides for increased safety of residents and emergency personnel in a wildfire situation through reduced fire behavior.

Post-treatment stand conditions will exhibit reduced stand density of 75-100 square feet basal area per acre, depending on slope position, as a means to achieve these goals. The stand quadratic mean diameter will be increased approximately 5 inches DBH as trees retained will generally be larger, more fire tolerant trees. The residual stand will contain a species composition that provides for increased stand vigor and resilience to future disturbance such as fire, insects, disease, and drought. To this end, the relative site occupancy of White Fir will be reduced in favor of the more drought and fire tolerant native pine species. The residual stand will also exhibit lower crown bulk density and an increase in crown base height as a means to reduce fuel continuity and the probability of crown ignition and/or sustaining a running crown fire. Surface and ladder fuels will largely be removed through a combination of mechanical and hand thinning, and mechanical mastication.

Access roads leading from the community to the ridgeline north of the community will be improved as part of forest product extraction involved with fuel break implementation. This improvement will support ingress and egress of emergency personnel during a wildfire event, providing for protection of human health and safety.

3. Provide a clear rationale for how the proposed project will reduce the risks associated with wildfire to habitable structures.

Olympic Valley is situated between two ridgelines north and south of the community, the Granite Chief Wilderness to the west, and Highway 89/Truckee River Corridor to the east. Generally unmanaged timberlands exist to the north, east, and south of the community, presenting the risk of wildfire entering the community from these areas. Fuel break OV-1 along the northern ridgeline will preemptively allow for wildfire to be held outside of the community should it potentially enter from that direction.

Related, a wildland fire approaching the subject ridgeline will expose the Olympic Valley community to potentially significant ember cast, presenting the risk of fire spread within the WUI. Wind and convection columns can transport embers over considerable distances and cause susceptible structures to ignite even without active fire spread in the immediate area. Given that, reducing potential ember cast by keeping wildfire as far as feasible from the community is paramount to protecting the high-density residential setting within Olympic Valley.

Implementation of fuel break OV-1 will enhance existing ingress and egress from the wildlands north and south of Olympic Valley. Existing access roads will be cleared and made passable for forest product extraction, leaving these roads in an improved condition for use by emergency response personnel should a wildfire event occur. Further, hazardous fuels will be reduced along roads within the fuel breaks, further improving safety for fire suppression personnel. Collectively, these project outcomes will reduce the risks associated with wildfire to habitable structures.

4. Identify any additional assets at risk to wildfire that will benefit from the proposed project. These may include, but are not ted to, domestic and municipal water supplies, power lines, communication facilities and community centers.

The Local Hazard Mitigation Plan contains a list of critical facilities, infrastructure, and other District Assets within Olympic Valley which are additional assets at risk to wildfire that will benefit from the proposed project including 1) high voltage power lines and associated electric power substation, 2) AT&T Pac Bell Switching Station, 3) Olympic Valley Public Services District infrastructure including vertical and horizontal wells, two wellhouses, one above ground booster pump station, one below ground booster pump station, five RTU sites, three sewer flow meters, backup power and servers, water and sewer lines, 4) the Olympic Valley Fire Protection District, 5) Mutual Water Company infrastructure including structures and tanks, vertical wells, horizontal wells, one wellhouse, one above ground booster pump station, and water service lines, 6) Palisades Tahoe Ski Resort infrastructure including lifts, irrigation, and domestic water supply, 7) Resort at Squaw Creek water systems for irrigation, 8) Thirteen bridges on public and private roads within the community, 9) communication lines, and 10) The Truckee River, a Bistate/Federally regulated water way.

5. How will the project/activity utilize the left-over woody biomass? Will the project/activity use a biomass facility to reduce greater greenhouse gas emissions?

The project will remove targeted woody material to the greatest extent possible given market conditions, biomass facility availability, and wood product demand. Small logs removed from the fuel breaks will be delivered to purchasing mill(s) and/or firewood facilities in the region. The removal of firewood material from the project areas will allow for logs and tree tops down to a smaller end diameter to be removed, leaving less slash on site. Should a biomass energy facility be available within a feasible haul distance of the project area and be actively pursuing woods-produced chips at the time of project implementation, delivery of such chips will be prioritized to reduce overall greenhouse gas emissions.

B. <u>Degree of Risk</u>

 Discuss the location of the project in relation to areas of moderate, high, or very high fire hazard severity zone as identified by the latest Fire and Resource Assessment Program maps. Fire hazard severity zone maps by county can be accessed at: <u>http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps.php</u>

The proposed fuel break location is within the Very High Fire Hazard Severity Zone (VHFHSZ) as identified by the current Fire Resource Assessment Program Maps. The residential areas of the Olympic Valley community are also within the VHFHSZ. At the landscape level, the project area is situated amongst contiguous miles of Very High Fire Hazard Severity Zone within Placer County. A portion of the meadow system adjacent to Squaw Creek is identified as Moderate Fire Hazard Severity Zone, and this zone is

located over 2,000 feet from fuel break unit OV-1, with VHFHSZ in the matrix.

 Describe the geographic proximity of the project to structures at risk to damage from wildfire. (Please type in blank space below. Please note there is no space limitations).

The proposed project includes creation of a fuel break OV-1 adjacent to and within the community of Olympic Valley. This fuel break is located immediately adjacent to structures at risk to damage from wildfire in the eastern portion of the unit. This fuel break unit is situated at the property line of residential lots located in northeastern Olympic Valley.

C. <u>Community Support</u>

1. Does the project include any matching funds from other funding sources or any inkind contributions that are expected to extend the impact of the proposed project?

The project contains in-kind contributions from the grantee, Olympic Valley Public Services District, for labor and supplies. These in-kind contributions will provide for external communication mailings to all residents within the Olympic Valley Public Services District, involvement and coordination with District staff during the life of the project, and grant management and administration.

2. Describe plans for external communications during the life of the project to keep the effected community informed about the goals, objectives, and progress of the project. Activities such as planned press releases, project signage, community meetings, and field tours are encouraged.

The Olympic Valley Public Services District will provide planned press releases to the Sierra Sun and Moonshine Ink, two local publications. The initial press release will introduce the project goal, funding source, project objectives, deliverables, and approximate timeline. Subsequent press releases will include project status, next steps, expectations, and implementation timing and location details. Each press release will also be sent via US Postal Service to all property owners, approximately 1,300 households, and to the OVPSD distribution list of 1,000 residents and related stakeholders. Project signage will be provided at a conspicuous location within or adjacent to each fuel break unit. Temporary and permanent signage will provide information related to the funding source, as well as succinct information on fuel break location/extent, general silvicultural objectives, estimated timeline, and OVPSD contact information. Temporary signage will be placed prior to and during operations, and will address topics current to implementation. Permanent signage will address a project overview including goals, objectives, outcomes, cost, and implementation statistics.

Upon grant award, a community meeting will be scheduled to present the project goals and objectives to the public along with project deliverables, timelines for each project Project Tracking Number: 21-FP-NEU-0209

component, and a question-and-answer period. Site visits for the public will also be scheduled following project layout and during project implementation. The site visits will be facilitated by the project Registered Professional Forester and OVPSD staff and will provide for public education on the purposes of the fuel break, design rationale, silvicultural prescription, implementation methodology, and a question-and-answer session.

3. Describe any plans to maintain the project after the grant period has ended.

The silvicultural prescriptions for the proposed fuel breaks intend to return the landscape to a condition within the natural range of variability, allowing for prescribed underburns to maintain healthy forest conditions. Thus, maintenance of the fuel break OV-1 will be achieved through either prescribed fire or mechanical mastication based on vegetation type, aspect, amount of regrowth, and proximity to habitable structures. Should a specific area of fuel break not be feasible for prescribed fire due to potential smoke impacts or other valid public or resource concern, mechanical mastication and/or hand thinning will be used to reduce the volume and regrowth of fuels.

Visual monitoring of the fuel breaks performed by the OVPSD contract Registered Professional Forester (RPF) will dictate timing and location of maintenance treatments, and environmental compliance needs for identified maintenance actions. Depending on the results of the RPF's monitoring, appropriate and available funding sources will be considered as an overall strategy of the OVPSD fuels management program.

 Does the proposed project work with other organizations or agencies to address fire hazard reduction at the landscape level? (Please type in blank space below. Please note there is no space limitations).

The proposed project compliments three existing fuel reduction projects that have either been completed in 2014, or planned for 2022 implementation. The US Forest Service "Five Creeks" Project is located immediately adjacent to the northern boundary of proposed fuel break OV-1. The 6,151-acre Five Creeks Project aims to mitigate the potential for high severity fire within the WUI while maintaining habitat and ecosystem services through a series of actions that address forest restoration, fuels reduction, habitat enhancement and roads management.

The Five Creeks project area aligns with the Truckee River and the SR 89 corridor, south of the town of Truckee and north of Olympic Valley. The US Forest Service has identified the project area and vicinity as a high use area, adjacent to the Town of Truckee along the Truckee River/ State Route (SR) 89 corridor which experiences significant visitation and contains critical infrastructure including developed campgrounds, private residences, recreation residences, transmission lines, the Placer County Eastern Regional Landfill, mountain biking, hiking, and fishing trails, rock

climbing destinations, and vehicles traveling from Interstate 80 to Lake Tahoe. The SR 89 corridor also serves as a major evacuation route for the Lake Tahoe Basin. In order to promote safe conditions while maintaining and enhancing the ecosystem services provided by the area, treatment has been warranted by the agency due to the high use nature of the area, its proximity to urban areas, the potential for high severity fire, and forest health issues.

Due to the proximity of the Five Creek Project to the urban core of Olympic Valley and neighboring communities, management objectives for forests closest to the urban core and the WUI defense zone are to create or maintain an open forest structure, dominated by larger, fire tolerant trees. The resulting open-canopied forest and discontinuity of crown fuels, both horizontally and vertically, would result in a very low probability of sustained crown fire. Within the WUI threat zone, the objectives are to establish and maintain a pattern of area treatments that are effective in modifying wildfire behavior while maintaining or enhancing ecosystem services.

The objectives of the Olympic Valley fuel reduction project are consistent with those of the neighboring Five Creeks Project and Palisades Tahoe fuels management efforts. Due to the close proximity of each aforementioned project to one another, the efficacy of each will be increased, providing for hazard reduction at the landscape level.

Additionally, the Olympic Valley Fuel Reduction Project unit OV-1 will compliment the efforts of a privately funded 30-acre fuel reduction project adjacent to Squaw Valley Road. This project will occur on private timberlands under a Cal Fire Forest Fire Prevention Exemption and has been fully prepared by an RPF, with timber operations planned for July 2022.

Further, in year 2020 the Olympic Valley Firewise Community recorded 2,845 hours of home hardening efforts, 12,352 hours of defensible space efforts, 616 volunteer hours spent on Green Waste Days and related Firewise Community events, and additionally spent \$896,486.00 on defensible space and home hardening. Likewise, in 2021, Valley View Town Homes, a commercial entity in Olympic Valley, invested \$1.2 million to reside its residential complex's wood siding with fire resistant metal and composite siding, metal eves, and the removal of all flammable landscaping with non- flammable hardscape. The combined efforts of the proactive community members and commercial investors within Olympic Valley will complement the goals and objectives of the proposed project, ultimately extending the impact of the proposed project.

D. **Project Implementation**

1. Discuss the anticipated timeline for the project. Make sure to take seasonal restrictions into account.

The first year of grant funding will be dedicated to the design, layout, and permitting of the three fuel break areas. This time period allows for required resource surveys, identification of treatment areas and all required resource protection zones through flagging, creation of GIS maps to be used in permitting, identification of trees to be removed (timber marking), and completion and approval of the appropriate Cal Fire harvest document(s) and CEQA document.

Years 2-4 of the grant will be the operational seasons. The Olympic Valley Fuel Reduction Project is located at elevations ranging from 6,100' to 7,470' above sea level. The operational season conducive to mechanical and hand methods of fuel break implementation generally occurs during a six-month window from May through October annually. It is anticipated fuelbreak OV-1 would be implemented within a single operational season (year 2), though the valid term of the grant through provides additional operational seasons as provided as shown below, should it be needed for operator availability or market conditions.

Grant Component Timeframe Project design, layout, permitting Up to one year from grant award, estimated to be June 2022 through 2023. **External Communications** Upon grant award(est. 6/2022) through project completion (3/2026) with public field tours scheduled following project layout and during project implementation. Project signage to be placed prior to project implementation. Fuelbreak implementation Aug – November 2023, Quarterly Grant Reporting Annually on 4/30, 7/30, 10/30, and 1/30 during the valid term of the grant. Final Grant Reporting January – March 2026. Project Tracking Number: 21-FP-NEU-0209

The timeline below is consisted with the aforementioned approach:

Verify the expected time frames to complete the project will fall under the required completion dates depending on the source of the funds awarded.

The expected timeframe for the Olympic Valley Project is feasible based on the implementation of fuel breaks at similar elevations and within similar fuel types within the Truckee and Tahoe Basins. The contract RPF for the Olympic Valley Public Services District has completed the required design, layout, surveys, and permitting for similar fuel breaks within the one-year limitation established by the grant guidelines, including CEQA documents and Cal Fire Forest Fire Prevention Exemptions. The same documents are planned for use with the Olympic Valley Fuel Reduction Project.

Related, the Olympic Valley PSD's contract RPF has administered the timber operations associated with fuel break implementation under similar grant processes in the same general area as the subject proposed project. This prior experience has provided relevant production rates for the fuel type and treatment methodologies planned for subject project. Based on these known production rates, implementation of the Olympic Valley Fuel Reduction Project is anticipated to take two operational seasons. Due to the valid term of the Fire Prevention Grant through March of 2026, and additional operational season is available, should it be required for any reason. Based on these factors, full completion of all grant components will fall under the required completion dates for the CCI Fire Prevention Grant funding.

Using bullets, list the milestones that will be used to measure the progress of the project.

• Project unit design, layout, flagging/timber marking, submission and receipt of approved Cal Fire Forest Fire Prevention Exemption for OV-1: Completion Date: June 1, 2023

• Project advertisement/Request for Bids released/Bidder's Tour: Completion Date: June 30, 2023

- Bid selection and award: Completion Date: July 30, 2023
- Press release and advertisement of public field tour of project area: July 30, 2023
- Commencement of timber operations: August 15, 2023

• Completion of OV-1 timber operations: estimated to be November 15, 2023 (operations are expected to commence and complete all 120 acres during the 2023 operational season).

• Completion of press release regarding project commencement, expectations, timelines; Schedule and advertise public tour of active operations: August 30, 2023

• Final grant reporting: Completion date: March 31, 2026

Using bullets, list the measurable outcomes (i.e., project deliverables) that will be used to measure the project's success.

•Receipt of approved Cal Fire harvest document and CEQA document.

•Public involvement and education through field tours of project area before and during project implementation.

•Creation of 120 acres of fuel break within and adjacent to the community of Olympic Valley.

•Increased stand resiliency to wildfire as measured through reduction of stand density and increase in stand quadratic mean diameter within fuel break units.

If applicable, how will the requirements of the California Environmental Quality Act (CEQA) be met?

A Cal Fire Forest Fire Prevention Exemption will be used to meet the requirements of the California Environmental Quality Act (CEQA) for fuel break OV-1.

Are there any existing forest or land management plans; Conservation Easements; Covenant, Conditions & Restrictions (CC&R's); matters related to zoning; use restrictions, or other factors that can or will limit the wildfire prevention proposed activity?

No, there are no existing forest or land management plans; conservation easements, CCR's, matters related to zoning; use restrictions, or other factors that can or will limit the wildfire prevention proposed activity.

E. <u>Administration</u>

1. Describe any previous experience the project proponent has with similar projects. Include a list of recent past projects the proponent has successfully completed if applicable. Project proponents having no previous experience with similar projects should discuss any past experiences that may help show a capacity to successfully complete the project being proposed. This may include partnering with a more experienced organization that can provide project support.

The District is currently managing a CalFIRE Fire Prevention Grant for development of our Community Wildfire Protection Plan (Grant Agreement 5GG20117). In 2021 the District also managed administration of a \$20,000 grant for one acre of fuels reduction work. The Department has previously administered a "Staffing for Adequate Fire and Emergency Response" (SAFER) Grant and regularly administers several water/sewer

grants such as those from Placer County Water Agency and the CA Department of Water Resources. The District is currently managing grant funds up to \$450,000 per project and has managed numerous large planning and implementation projects such as the Olympic Valley Creek/Aquifer Interaction Study, redundant water supply project, and Truckee River Siphon construction project.

 Identify who will be responsible for tracking project expenses and maintaining project records in a manner that allows for a full audit trail of any awarded grant funds. (Please type in blank space below. Please note there is no space limitations).

The Olympic Valley Public Service District, which oversees the Olympic Valley Fire Department, would manage the project and be responsible for tracking project expenses and maintaining project records. As a government agency, the District manages all projects in a manner to allow for a full audit trail.

F. <u>Budget</u>

A detailed project budget should be provided in an Excel spreadsheet attached to this grant application. The space provided here is to allow for a narrative description to further explain the proposed budget. (Please type in blank space below. Please note there is no space limitations).

1. Explain how the grant funds, if awarded, will be spent to support the goals and objectives of the project. If equipment grant funds are requested, explain how the equipment will be utilized and maintained beyond the life of the grant.

The grant amount requested is based on the acres included in the proposed fuel breaks OV-1. Acreage was determined from field reconnaissance using global positioning system technology. RPF knowledge of 2020 and 2021 per-acre costs for RPF, LTO, and hand crew services for similar projects in the region were used to estimate the approximate per-acre costs during the valid term of this grant, summer 2022 through spring 2026. At the time of this grant application submission, industrial sawlog facilities are not purchasing green timber and due to the extent of fire salvage available to the market, this circumstance is expected to last through the valid term of this grant. Two firewood processing facilities and one non-industrial milling facility in the region may be interested in wood product resulting from implementation of the proposed project. However, due to the current market conditions, the value of wood product removed from the project area cannot be reasonably estimated with any level of accuracy. For this reason, forest product revenue is not included in the grant budget to accurately reflect the current and estimated market conditions during the grant term, and to ensure that ample grant funding is requested to ensure project completion regardless, should this unfortunate market circumstance continue as expected. In the event that revenue is generated from wood product removed from any of fuel breaks, the RPF will work with the Unit to document any such revenue and its application to further the project objectives.

2. Are the costs for each proposed activity reasonable for the geographic area where they are to be performed? Identify any costs that are higher than usual and explain any special circumstances within the project that makes these increased costs necessary to achieve the goals and objectives of the project.

The costs for each proposed activity are reasonable for the geographic area where the project will be implemented. Olympic Valley is located adjacent to the Truckee and Tahoe Basins. Regionally, this area is known for inflated costs of services, a high cost of living, and high fuel prices. These circumstances have proven to result in historically higher per-acre costs of fuels reduction treatments. The costs included on the proposed budget reflect per-acre treatment costs seen in year 2020 and 2021 within the region, adjusted for anticipated inflation in costs for years 2023-2025. Following project advertisement to prospective bidders, should the per acre cost come in under the anticipated costs reflected in the budget sheet, additional acres can be treated within the same parcels where the current treatments are located.

3. Is the total project cost appropriate for the size, scope, and anticipated benefit of the project?

The total project cost is within the range of costs normally experienced for the Truckee and Tahoe Basins. The Olympic Valley Project has the added benefit of tying directly into the Tahoe National Forest's "Five Creeks" project, as well as private lands near Squaw Valley Rd that will receive fuel reduction during June 2022 through a privately funded Cal Fire Forest Fire Prevention Exemption. Thus, the impact of the proposed project will be extended as it connects to existing planned fuel reduction projects to address fire hazard reduction at the landscape level.

4. Using bullets please list each object category amount that you are requesting and the detail of how that would support meeting the grant objectives.

• Salaries/Wages (\$24,295.00) and Employee Benefits (\$8,433.00): Internal District staff including the Fire Chief, General Manager, Prevention Officer, Project Manager, and Account Clerk would lead the administrative responsibilities for the project. Example tasks include leading external communication including being readily available to the community for public input and questions, providing local knowledge as part of project layout, writing and distributing press releases, writing, formatting, and sending project information mailers, planning and attending community meetings and site visits, maintaining a website with information for the public, providing bid administration support, and invoicing. This administrative leadership will be important to ensuring that the grant objectives and timelines are met, and that the community is kept informed of the project details.

Contractual- RPF (\$23,160.00): The OVPSD contract RPF will support meeting the grant objectives by providing professional forestry advice and services as it applies

to fuel break design and layout, silvicultural prescriptions, appropriate treatment methodology. The RPF will also complete all require environmental compliance documents, including the Cal Fire Forest Fire Prevention Exemption and CEQA document, and will provide administration of operations. This professional advice provides for the design of an effective project in full compliance with all state and local regulations, and provides professional guidance and administration of implementation operations to ensure meeting the grant objectives.

Contractual – Licensed Timber Operator for OV-1 (\$480,000.00): The Licensed Timber Operator (LTO) will implement the silvicultural prescription(s) developed by the RPF within the fuel break units. The LTO will be responsible for tree removal, processing, transportation, and slash abatement to meet the vegetation treatment goals and objectives identified in this grant.

Supplies: (\$4000.00) Mailing and handling of press release and project updates to Olympic Valley Public Services District property owners and residents, and temporary and permanent project signage.

G. **California Climate Investments**

The space provided here is to allow for a narrative description to further explain how the project/activity will reduce Greenhouse Gas emissions. (Please type in blank space below. Please note there is no space limitations).

1. How will the project/activity reduce Greenhouse Gas emissions?

The goal of the proposed project is to create a strategically located fuel break within and immediately adjacent to the community of Olympic Valley. The community is situated between two ridgelines to the immediate north and south, and generally unmanaged timberlands exist beyond those ridgelines. The proposed fuel break OV-1 is intended to reduce the risk of wildfire entering the community from the northern ridgeline. The fuel break locations along this ridgetops will preemptively allow for wildfire to be held outside of the community should it potentially enter from the north. This ridgeline fuel break also establishes a control line that could be used during fire suppression to keep fire from entering the wildland setting should an ignition occur within the community.

Implementation of the subject fuel break will enhance existing ingress and egress from the wildlands north of Olympic Valley. Existing access roads will be cleared and made passable for forest product extraction, leaving these roads in an improved condition for use by emergency response personnel should a wildfire event occur. Therefore, the proposed project will support improved access to the fire perimeter such that the fire Project Tracking Number: 21-FP-NEU-0209

can be extinguished more quickly, and will support suppression efforts that result in smaller scale fires that reduce carbon emissions and the overall carbon footprint of a potential wildfire event.

Further, a wildland fire approaching the northern ridgeline will expose the Olympic Valley community to potentially significant ember cast, presenting the risk of fire spread within the WUI. Reducing potential ember cast by keeping wildfire as far as feasible from the community is paramount to protecting the high-density residential setting within Olympic Valley, ultimately preventing the needs for the cleanup and rebuilding of the community after wildfire damage.

The stand density reduction within the proposed fuel breaks will enhance stand resilience to severe disturbances and foster development of species composition appropriate for slope position. The specific thinning objectives for the proposed project include reducing stand density, reducing ladder fuels, preparing stands for the safe reintroduction of fire, enhancing species composition, and accelerating growth of the residual stand. Generally, conditions will encourage fire resilient pine species, larger diameter trees, and more open stand conditions.

These actions reduce intertree competition and redistribute growth onto fewer stems per acre, hastening conifer growth and increasing the overall stand resilience to wildfire and damaging biotic agents. This increase in conifer growth will provide for a reduction in greenhouse gas emissions by increasing carbon sequestration. Providing for an increase in stand resilience to damaging agents also supports suppression efforts as the fuel reduction will reduce the flame length, intensity, rate of spread, and duration of potential wildfire. This result supports a reduction in greenhouse gas emissions by providing for smaller scale fires that reduce carbon emissions and the overall carbon footprint of a potential wildfire event.

Tracking #: 21-FP-NEU-0209 Project Name: Olympic Valley Fuel Reduction Project Budget

Budget Category	Item Description	Cost Basis			Cost Share (%)				Funding Source (\$)						Total (\$)	
		Quantity	Units	Co	ost/Unit	Grant	Grantee	Partner		Grant		Grantee	Г	Partner(s)		(+)
A. Salaries	and Wages															
	Fire Chief	87	Hours	\$	90	90%	10%	0%	\$	7,017	\$	780	\$	-	\$	7,797
	General Manager	60	Hours	Ş	124	90%	10%	0%	Ş	6,713	Ş	746	Ş	-	Ş	7,459
	Project Manager	169	Hours	> \$	42 55	90%	10%	0%	ې د	8 362	ې د	929	\$ \$	-	ې د	9 292
	Account Clerk	35	Hours	\$	56	90%	10%	0%	\$	1,751	\$	195	\$	-	\$	1,946
		0	Hours	\$	-	0%	0%	0%	\$	-	\$	-	\$	-	\$	-
		0	Hours	\$	-	0%	0%	0%	\$	-	\$	-	\$	-	\$	-
		0	Hours	\$	-	0%	0%	0%	\$	-	\$	-	\$	-	\$	-
Sub-Total Salaries and Wages:									Ş	24,295	Ş	2,699	\$	-	Ş	26,994
B. Employ	Eire Chief	87	Hours	Ś	23	90%	10%	0%	¢	1 772	Ś	197	Ś		¢	1 969
	General Manager	60	Hours	\$	40	90%	10%	0%	\$	2,183	\$	243	\$	-	\$	2,425
	Prevention Officer	12	Hours	\$	36	90%	10%	0%	\$	394	\$	44	\$	-	\$	437
	Project Manager	169	Hours	\$	23	90%	10%	0%	\$	3,442	\$	382	\$	-	\$	3,824
	Account Clerk	35	Hours	\$	20	90%	10%	0%	\$	643	\$	71	\$	-	\$	715
		0	Hours	\$	-	0%	0%	0%	Ş	-	\$	-	\$	-	\$ ¢	-
		0	Hours	\$ ¢		0%	0%	0%	<u>ې</u> د	-	Ş ¢	-	\$ ¢	-	Ş	-
	Sub-Total Employee Benefits:		nours	12		076	070	076	ې \$	8.433	ې S	937	\$	-	ې \$	9.370
C. Contrac	tual								Ļ	0,100	, Ŷ		Ļ		Ť	5,570
	Registered Professional Forester	120	Acres	\$	193	100%	0%	0%	\$	23,160	\$	-	\$	-	\$	23,160
	Licensed Timber Operator (OV-1)	120	Acres	\$	4,000	100%	0%	0%	\$	480,000	\$	-	\$	-	\$	480,000
		0	Acres	<u> </u>		1125%	0%	0%	\$	-	\$	-	\$	-	\$	-
		0	Acres	\$		0%	0%	0%	\$	-	\$	-	\$	-	\$	-
	Sub Total Contractual:	0	Miles	Ş	-	0%	0%	0%	ې د	-	Ş	-	\$ ¢	-	Ş	-
D. Travel a	& Per Diem:								Ş	505,100	Ş		Ş	-	\$	303,100
Di naver		0	Days	\$	- 1	0%	0%	0%	\$	-	\$	-	\$	-	\$	-
		0	Days	\$	-	0%	0%	0%	\$	-	\$	-	\$	-	\$	-
		0	Days	\$	-	0%	0%	0%	\$	-	\$	-	\$	-	\$	-
		0	Days	\$		0%	0%	0%	\$	-	\$	-	\$	-	\$	-
E. Cumulta	Sub-Total Travel & Per Diem:								Ş	-	Ş	-	Ş	-	Ş	-
E. Supplie	S Pross Release Mailing	2	Each	۱¢	1 443	0%	100%	0%	ć		ć	2 885	Ċ		¢	2 885
	Temporary Signage	2	Each	Ś	750	100%	0%	0%	ŝ	1.500	Ś	- 2,005	Ś	-	Ś	1.500
	Permenant Signage	2	Each	\$	1,250	100%	0%	0%	\$	2,500	\$	-	\$	-	\$	2,500
		0	Each	\$	-	0%	0%	0%	\$	-	\$	-	\$	-	\$	-
		0	Each	\$		0%	0%	0%	\$	-	\$	-	\$	-	\$	-
E Environ	Sub-Total Supplies:								\$	4,000	\$	2,885	\$	-	\$	6,885
F. Equipm	ent	0	Each	۱ċ.		0%	0%	0%	ć		ć		l ć		ć	
		0	Each	 		0%	0%	0%	ې د	-	ې د		ې د		ې د	-
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		0	Each	\$	-	0%	0%	0%	\$	-	\$	-	\$	-	\$	-
		0	Each	\$	-	0%	0%	0%	\$	-	\$	-	\$	-	\$	-
	Sub-Total Equipment:								\$	-	\$	-	\$	-	\$	-
G. Other O	Costs		E h	1 é		00/	00/	00/	Ċ.				Lć		ć	
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	Sub-Total Other Costs	0	Eacli	Ş	-	0%	0%	0%	ې د	-	<u>ې</u> د	-	\$	-	ې د	-
									Ŷ		Ŷ		<i>—</i>		<u> </u>	
Total Direct Costs									\$	539,888	\$	6,522	\$		\$	546,410
Indirect Costs (Exclude Equipment) 09								0%	\$	-					\$	-
Total Project Costs									\$	539,888	\$	6,522	\$	-	\$	546,410
Less Pro	gram Income								\$	-					\$	-
Total Grant Proposed Costs								\$	539,888	\$	6,522	\$; -	\$	546,410	