



United States Department of the Interior



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EA Number: DOI-BLM-CA-C080-2022-0012-EA

Project Name: Georgetown Resource Conservation District (RCD) Fuels Reduction Project

Location: T. 11 N., R. 10 E., within portions of sections 12 and 24, MDM.
East of Highway 193, near the town of Kelsey; El Dorado County.

1.0 Background

The Georgetown RCD Fuels Reduction Project area consists of approximately 355 acres of Bureau of Land Management (BLM) land located between the South Fork of the American River and the vicinity of Meadow Brook in El Dorado County. Treatment areas were strategically placed within the Wildland- Urban Interface (WUI) to reduce fuels and the potential for catastrophic wildfires. While not analyzed under this EA, the Georgetown RCD Fuels Reduction Project would also include treatments on approximately 1,900 acres of private lands surrounding the BLM parcels. These private acres would be analyzed under a separate California Environmental Quality Act (CEQA) document.

BLM previously completed a Determination of NEPA Adequacy (DNA) for the Chili Bar to Georgetown – Phase I Project (DOI-BLM-CA-C080-2020-0010-DNA). This DNA authorized the initial phase of the project on BLM lands and included fuel treatments within 200 feet of Texas Canyon Road, Shoo Fly Road and Spanish Flat Road. These 200-foot zones fall within the BLM parcels analyzed under this EA and are shown on the project map. There were 132 acres of BLM land authorized for fuels reduction under the area covered by the DNA. Fuels reduction activities in portions of the area covered by the DNA were implemented in the spring/summer of 2021.

The project covered by this EA aims to expand the treatment areas beyond the areas authorized by the previous DNA to allow for additional acres to be treated while maintaining the design criteria which have been previously developed, namely the Spanish Flat Unit to the north and the Texas Canyon Unit to the south.

The Georgetown RCD Fuels Reduction Project was developed through a collaborative effort between the South Fork American River Cohesive Strategy – Chili Bar to Georgetown Working Group, the Georgetown Divide Fire Safe Council, the Georgetown Divide Resource Conservation District, the Amador-El Dorado CAL FIRE Unit, the El Dorado County Department of Transportation, the BLM, and the U.S. Forest Service. It has been identified as high priority due to heavy fuel loads, relatively dense rural populations, inadequacy of emergency access, and history of

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CALIFORNIA*, NEVADA*, OREGON*

* PARTIAL

catastrophic wildfire, the most recent of which was in 1994. The project area is entirely within the WUI and is classified as “very high severity fire zone” by CAL FIRE. CAL FIRE identifies Kelsey and Garden Valley as “communities at risk”.

1.1 Purpose of and Need for Action

There is an immediate need on BLM lands to reduce hazards to people and critical infrastructure associated with dead and dying trees and excess fuel loading. There is a long-term need to manage vegetation adjacent to critical infrastructure to reduce tree and shrub densities and fuel loads, and to protect the largest, healthiest trees to increase their resilience to mortality agents, including drought, insects, disease, and fire. Density management studies and principles of ecosystem restoration support the need for promoting a healthy forest and woodland structure that retains large trees, protects species diversity, returns the role of fire, and includes small and mid-sized trees for wildlife habitat (Oliver et al. 1996; North et al. 2009). This is accomplished by removing excess trees and shrubs that can carry high severity fire into the overstory.

The purpose of this action is to identify the appropriate tools to address this need in a way that is consistent with the principles of forest ecology and is compatible with the BLM’s requirement under the Federal Land Management and Policy Act (FLPMA) to manage public lands in a manner “that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use.” (43 U.S. Code [USC] 1701(a)(8)).

Management of these risks should meet the following criteria:

- Protect human health and safety;
- Maintain or enhance forest and woodland health and functionality;
- Comply with all applicable laws, regulations, and land use plans;
- Respond to the needs of neighboring land managers and owners; and
- Allow the BLM to partner with those neighbors when it is consistent with federal law and policy.

The goal of the Georgetown RCD Fuels Reduction Project is to reduce understory ladder and surface fuels to ameliorate wildfire behavior. Fuels reduction treatments would result in lower density stands with fewer small trees and a lesser concentration of surface fuels. Hardwoods, shrubs, ground cover and vigorous young conifers would be retained in canopy openings to the extent that there is minimal connectivity to overstory trees. In the event of a wildfire, flame lengths and fire intensity would be reduced; crown fire potential would be lessened; suppression effectiveness would be increased; and firefighter safety would be improved.

The purpose and need for the action is to achieve the desired conditions described above and thereby meet the following objectives:

1. Protect forest resources and infrastructure improvements within the Project area and beyond from potential severe wildfire effects.

Decades of fire suppression on vegetative conditions in the project area has resulted in an abundance of dense smaller trees, thick undergrowth, and a high density of surface fuels. These fuel conditions, together with periodic drought and a warming climate, create a higher

potential for uncharacteristically severe, stand-replacing wildland fire; higher mortality of vegetation; damage to soils, watershed, wildlife habitat, and recreational values; and destruction of homes and property. Action is needed to reduce surface and ladder fuels to lessen fire severity and to make the stands more resilient to wildfire. The project area is close to private property, homes, and important infrastructure which are at risk in the event of a large fire occurring in the area. Removing dense understory trees, shrubs, and surface vegetative debris reduces fuel loading, fuel continuity, and fuel ladders, and increases the ability to directly suppress fire in a safe and efficient manner.

2. Strategically place treatments which complement and extend continuity of existing forest and fuel treatments to create a fire resilient landscape.

There is a need to strategically place fuel reduction treatments that are effective, and complement planned and completed treatments on adjacent U.S. Forest Service and private lands. Neighboring landowners, including the Eldorado National Forest have completed—or plan to complete—work to reduce fuel loading and improve forest health on their lands. The activities included in this project will complement and extend the efficacy of this work on public and private land, particularly within the WUI surrounding portions of the community of Placerville, Kelsey, and Georgetown.

The proposed action to be analyzed in this EA would expand on, support and link past and current landscape projects in the Georgetown-Kelsey-Garden Valley areas to reduce hazardous fuels for local residents' safety. With this need in mind, the primary purpose of the proposed action is to reduce the fire danger on public lands within the El Dorado WUI through treatment of the lands on a landscape level.

1.2 Conformance with Applicable Land Use Plans

The proposed action - to reduce hazardous fuels on public land within the El Dorado County WUI - is consistent with the *Sierra Resource Management Plan and Record of Decision* (RMP ROD) (US Bureau of Land Management, 2008). Section 2.7, Wildland Fire Ecology and Management, gives BLM the goal of “Establishing a cost-efficient fire management program commensurate with threats to life, property, public safety, and environmental resources”. BLM’s fuels management objectives for meeting these goals are to:

- “Reduce the risk of wildfire in WUI communities”;
- “Reduce the risk of catastrophic wildfire through fuels management”; and
- “Use prescribed fire, mechanical, and biological treatments to reduce fuels and promote ecosystem diversity and resilience, control invasive species, reduce fuel hazard, improve wildlife habitat, increase water yield, and enhance watersheds.”

The Mother Lode Field Office *Fire Management Plan* gives BLM various fire and fuels treatment objectives and strategies for specific lands under BLM’s administration (US Bureau of Land Management, 2018). Specific objectives and strategies for this plan are the same as those listed above. The proposed action is consistent with these objectives and strategies.

2.0 Proposed Action and Alternative

2.1 Proposed Action

Vegetation Treatment Methods:

Vegetation management treatments may include brush removal and mastication to reduce shrub densities, tree pruning and limbing, and removal of ladder fuels. This includes the mastication of surface fuels, brush, and small trees. The Proposed Action consists of the treatment of up to 355 acres within the 487 acre project area consisting of the Spanish Flat Parcel (130 proposed treatment acres) and the Texas Canyon Parcel (225 proposed treatment acres). A combination of mechanical thinning, manual thinning, pile burning, post-treatment understory burning, and first entry prescribed fire may be utilized to achieve the desired ecological conditions.

In addition to the hazardous fuel's treatments listed, Prescribed Fire control lines would need to be constructed if understory burning occurs. These control lines may be constructed manually or mechanically. Specific control line locations would only be constructed after consultation with BLM resource specialists to avoid unnecessary resource damage.

Tree mortality mitigation work would include the cutting of trees, leaving trees in place, or removal of select trees, and the moving of slash and debris to the roadside for chipping and dispersing back away from the roadside. In locations where it does not pose a significant fuel hazard, slash may be lopped and scattered to a depth not to exceed 18 inches.

In all locations, vegetative material would either be chipped and left in place or masticated. Use of masticating machines with or without mechanical falling capabilities would be the preferred, most efficient method of treatment. Use of heavy equipment would be limited on slopes generally greater than 40 percent, within designated Watercourse and Lake Protection Zones, during designated "limited operating periods" associated with wildlife species of special concern, in or near cultural resource sites, or during periods when soils are saturated, and erosion and sedimentation may occur. In certain locations, crews using chainsaws and pruning saws may be used because of environmental or other constraints.

The probable treatment technique would be to change the arrangement of fuels by cutting and thinning select vegetation using one of two methods. The first method of implementation would be the utilization of a hand crew (e.g., BLM fuels crew, , Cal-Fire crew, Hotshot crew, private contracted crews, etc.). Hand treatment would be accomplished by crews using chainsaws and other hand tools. Material cut by hand would be piled for future burning.

In addition (or as an alternative) to hand treatments, mechanical treatments utilizing heavy equipment may be used in areas to either cut or chip onsite. The mechanical equipment would be either a rubber-tired/tracked or steel track mounted chipper or masticator. Mechanical treatments would only be used on slopes less than 40 percent unless approved by the BLM.. Methods would be chosen and used solely or jointly based on changing topography and site-specific features. The BLM fire staff in conjunction with the Georgetown Divide Resource Conservation District would determine the specific treatment to be used.

Due to hardwood species' tendency to stump sprout, efforts will be made to retain these species throughout the project area. Hardwood species such as Black Oak, Live Oak, Tan Oak, and Madrone would be retained regardless of canopy position unless they constitute a potential ladder fuel. In areas dominated by a conifer overstory, hardwood species would only be removed if they constitute a ladder fuel (meaning the foliage of the tree is within 6 feet of the surrounding surface fuels and

extends into the crown of adjacent conifer species). In these areas, hardwood species up to 6 inches diameter at breast height (DBH) would be masticated or hand cut and placed in burn piles. In areas dominated by a hardwood overstory, hardwoods' may be removed up to 6 inches DBH if they constitute a ladder fuel or to decrease stand density. Efforts should be made to prune low hanging limbs whenever possible in order to discourage stump sprout. Other broadleaf tree species such as dogwood, elderberry, hazelnut and mock orange would be left to create diversity. Dead and decadent stands of whiteleaf manzanita, buckbrush, deerbrush, and other shrubby vegetation would be cut and arranged in piles for future burning, chipped on site or masticated.

Much of the project area is dominated by decadent manzanita with sporadic small DBH conifer specimens that have overtopped the manzanita. For this reason, a small DBH removal threshold would be detrimental to the species and would leave large areas void of vegetation. Therefore, in areas dominated by decadent manzanita, conifer species would be retained regardless of minimum DBH unless determined to be a ladder fuel as outlined above.

In areas dominated by a conifer overstory, Douglas fir, ponderosa pine, incense-cedar, and other conifers less than 12 inches DBH would be mechanically processed or cut and placed in burn piles. Large conifers and groups of large conifers would be retained, with strategic clearing of potential ladder fuels around them to give them additional protection and to create some open gaps in the canopy. No live conifers or other trees greater than 12 inches DBH would be removed to decrease overall stand density, even if they are potential ladder fuels. They may be trimmed or pruned instead of removal to reduce the potential hazard.

A higher density of tree stems and canopy cover would be retained in moist drainages to prevent erosion. Defect trees (trees with flaws that reduce their structural strength), snags, and downed logs would be retained for wildlife to the extent feasible. In particular, snags greater than 24 inches DBH provide hiding, denning, nesting, and food storage sites for a variety of wildlife. These large snags would be retained unless to do so would create an unsafe concentration of fuels.

Piles from hand and/or mechanical cutting would be placed in the immediate area of the cutting. The number of piles per acre would vary based upon vegetation density. Pile burning would require a BLM specific burn plan with a qualified Burn Boss.

Potential impacts to cultural resources resulting from this undertaking are mitigated through the process of identification, evaluation, and avoidance. Archaeological monitors will be present for all project activities that have the potential to adversely affect cultural resources listed, or eligible for listing, on the National Register of Historic Places.

Maintenance

As vegetation re-occupies the treated areas in the future, the overall effectiveness of the fuels treatment would be diminished. There will be a need to address this future vegetation growth and to treat this vegetation by a variety of methods including: re-mastication, hand cut/pile and pile burning, grubbing of brush species, and/or the use of broadcast burning.

Project Design Features:

All treatment work would be subject to the following stipulations:

1. No equipment operation would be allowed on slopes generally greater than 40% unless approved by the BLM. A higher density of tree stems and canopy cover would be retained in moist drainages. Masticated brush and other vegetative material would be generally dispersed throughout the project area. This layer of mulch will help prevent surface erosion. Vehicle barriers such as cables, berms, and large boulders may be placed at strategic locations to prevent dirt bikes and other off-highway vehicles from driving within the treated areas and causing erosion problems.
2. Weed Control - To minimize the potential for introduction or spread of invasive weeds, equipment used for the proposed action would be cleaned prior to entering the area and, where possible, would avoid operating within weed-infested areas. When working in weed-infested areas is unavoidable, those areas will generally be treated last to avoid dispersing weed seeds into additional areas.
3. Cultural Resources –Prior to project implementation, all identified resources within the project area will be flagged for avoidance. Project activities near these identified cultural resources would be carried out in a manner that would avoid affecting the resource. A qualified archaeological monitor will assist work crews and ensure that the avoidance measures are successful. If previously unidentified resources are encountered during project implementation, then work in the vicinity will halt and the BLM Field Manager will be contacted. Project activities may continue after the resource is documented and evaluated.
4. Wildlife - BLM Biologist will be notified a minimum of 14 days prior to start of project.
5. Wildlife - Retain live trees with existing cavities when possible.
6. Leave an uncut patch (minimum of 0.25 acres) for every 10 acres treated, with patches totaling 5 percent of the area. Use “leave-trees” as the center for uncut patches. Riparian areas, rocky outcrops and other buffers can help to satisfy this goal.
7. Retain unique vegetation patches that contain species such as dogwood, elderberry, hazelnut, mock orange, and madrone. These species provide mast for wildlife and nectar for pollinators. These patches should be located within the units and away from perimeter.
8. To counter potential loss of habitat, bat boxes (i.e., a 24” x 18” box on a post) will be installed by the BLM wildlife biologist.
9. Wildlife - Retain large trees, defect trees, snags, and downed logs for wildlife to the extent feasible (minimum 2-3 snags per acre). Large snags (in particular) provide hiding, denning, nesting, and food storage sites for a variety of wildlife. Retain all snags 24inches and greater in diameter at breast height unless retaining these snags would create an unsafe concentration of fuels.
10. Wildlife - Avoid damaging existing large, downed woody debris, especially large (18+ inches) hollow or rotten logs and rotten stumps.
11. Wildlife - It is recommended that project implementation occur during a limited operating period of September 1 to February 15 as not to disrupt bird nests during the breeding season. Should work occur during breeding season a biologist, or an individual with knowledge of nesting bird species, will first survey the project area for nesting birds. These surveys will be

completed no more than 7 days prior to the start of project work. If birds protected under the Migratory Bird Treaty Act are found nesting, then appropriate construction buffers shall be established to avoid disturbance of the nests until such time that the young have fledged. The size of the nest buffer will be determined by the BLM wildlife biologist or qualified wildlife biologist and will be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. Typically, these buffers range from 75 to 100 feet for passerines and 250+ feet for raptors from the nest location. The biologist will mark sites to be avoided during vegetation removal or be onsite during work. Nesting activities shall be monitored periodically by a qualified wildlife biologist to determine when construction activities in the buffer area can resume. Once the qualified wildlife biologist has determined that young birds have successfully fledged, approval to initiate construction activities within the buffer shall be determined by the wildlife biologist.

12. Wildlife - California red-legged frog (CRLF) and Foothill yellow-legged frog (FYLF) restrictions. The following measures apply to the entirety of the project area within the range of CRLF and FYLF where verified presence of either species has been determined by way of surveys.

- All trees will be felled away from water features.
- If a California red-legged frog or foothill yellow-legged frog is encountered in the work area, workers will stop all work in the immediate area and the sighting will be reported to a BLM biologist, who will report the encounter to the USFWS to receive further guidance to ensure compliance with the ESA.
- When working within 1 mile of occupied California red-legged frog aquatic habitat, BLM will, to the maximum extent possible, ensure that dispersal barriers are not created (e.g., leaving large, felled logs in a pattern that restricts dispersal).
- For all activities with the potential to adversely affect California red-legged frogs (as determined by a BLM biologist), no work will occur within 24 hours of a 70 percent or greater forecasted rain event of 0.25-inch or greater. Work can resume when site conditions are dry enough to avoid potential direct impacts to frogs (as determined by a BLM biologist).
- During the wet season (after the first frontal rain of greater than ¼ inch after October 15th and ends April 15th), no cutting or equipment will occur within 300 feet of any water body inhabited by California red-legged frogs.
- During the dry season, no cutting or equipment will occur within 75 feet of any water body (seeps, springs, wet meadows) potentially inhabited by California red-legged frogs.
- Foothill yellow-legged frogs are generally aquatic and further impacts to this species will be avoided through riparian avoidance measures.

13. Wildlife - California spotted owl (CSO) restrictions

- Treatment activities are prohibited within 0.25 mile of the activity center¹ during the breeding season (March 1 through August 31), unless surveys confirm that California spotted owls are not nesting. Prior to implementing activities within or adjacent to a California spotted owl Protect Activity Center (PAC) and the location of the nest site or activity center is uncertain, conduct surveys to establish or confirm the location of the nest or activity center.
- All treatments within habitat will retain living trees (non-hazard) with DBH greater than 30 inches.

¹ No activity centers or California spotted owl nests have historically been located within the project area. In addition, the work area contains dense forest, which is not ideal nesting habitat for CSO, and CSO are not expected to be found nesting in the work area.

- Large diameter tree species that exhibit fire resilient characteristics such as thickened, furrowed bark and well-developed crowns will be retained, unless the tree poses a hazard to public safety.

14. Wildlife - Western Pond Turtle restrictions

- A no-disturbance buffer will be established around occupied water bodies, and the buffer size will be determined by biologists based on microsite conditions.
- Manual fuel treatment methods (chainsaws, hand tools) could be employed within these buffers, although no mastication or slash piling will be permitted.

15. Wildlife - Sensitive bat (Yuma myotis) restrictions.

Caves are present in the work area which could provide potential suitable maternity roosting habitat for sensitive bats including Yuma myotis (*Myotis yumanensis*). All caves will be protected during operations as part of cultural resource protection.

- When working within 50 feet of maternity roosting habitat (e.g., caves, adits, crevasses, other suitable cavities), mechanized project activities that may impact bats may not occur between February 2 to September 14. Work within 50 feet may be completed with hand tools.

16. Riparian Resources

Riparian buffers will be implemented according to the table below. Heavy equipment may not operate within these buffers, though manual treatments would be permitted to occur. The articulating arms of heavy equipment can reach into these buffers if the tracks or tires remain outside.

<i>Slope class (%)</i>	<i>Perennial Stream Buffer Width (ft.)</i>	<i>Intermittent Stream Buffer Width (ft.)</i>
<30	75	50
30-50	100	75

- Dead and dying tree felling and/or topping is the only action allowed within riparian areas for trees greater than 7 inches in diameter. As much as feasible, fell these trees onto the contour and leave to provide stability to the soil.

17. Sensitive Plants – Red Hills soaproot

- All Red Hills soaproot populations in the project area will be flagged and avoided with a 25-foot avoidance buffer during mechanical treatments (e.g., mastication). Hand thinning is approved within the 25' buffer as long as cut vegetation is piled outside of the buffered area.
- Red Hills soaproot: The three historic populations of Red Hills soaproot documented in CNDDDB from 1998 (in the Texas Canyon Unit), but not found during botanical surveys conducted in 2021, will be resurveyed for in 2022 prior to implementation.

18. Habitat Diversity - When possible, isolated groups of hardwood species such as madrone, tan oak, and dogwood would be left in scattered locations to create diversity unless they constitute a potential ladder fuel. Some conifers less than 6 inches DBH would be retained to ensure species diversity and a full range of size and age classes are represented. Large conifers and groups of large conifers would be retained, with strategic clearing of potential ladder fuels around them to give them additional protection and to create some open gaps in the canopy. No live conifers or other trees greater than 12 inches DBH would be removed to decrease overall stand density even if they are potential ladder fuels. They may be trimmed or pruned instead of removal to reduce the potential hazard.

2.0 Alternatives

2.1 No Action

Under the no action alternative, the fuels reduction activities as proposed under this project would not occur. Fuels would continue to accumulate increasing the severity of future fire. The dense ladder fuels would increase the chance that surface fire would climb into the canopy of larger conifers creating a crown fire with catastrophic consequences to the environment, property, and lives. These stand replacing wildfires often threaten ingress for emergency responders and egress for evacuees endangering the health and safety of the local communities within the WUI.

3.0 Affected Environment and Environmental Consequences

Air Quality

Affected Environment

The Federal government and the State of California's Air Resources Board (ARB) have each established ambient air quality standards for several criteria air pollutants. No monitoring data is available for pollutants in the County. Emission inventory data is estimated annually. El Dorado County has good air quality and does not exceed National standards for any criteria pollutants. El Dorado County is within the Mountain Counties Air Basin, which is responsible for air quality monitoring, regulation and enforcement in the Mountain Counties region. The El Dorado County Air Quality Management District (EDCAQMD) has jurisdiction over air quality in the county and has developed county-wide regulations for the purpose of minimizing adverse air quality impacts within the District's jurisdiction.

Environmental Consequences

Proposed Action

The potential direct, indirect, and cumulative effects on air quality of the Proposed Action are expected to be minor and would be minimized by conformity to established ARB protocols. The Proposed Action would result in a localized short-term effect on air quality in the project vicinity as a result of exhaust generated from equipment working on the project, and from fugitive dust from vehicles entering the project area and from actual fuels reduction operations.

Exhaust - The Proposed Action would have minor adverse effects on air quality through the generation of exhaust emissions from equipment and power tools, such as heavy equipment and

chainsaws. Emissions generated during implementation are individually and cumulatively minor and short term and would not result in adverse cumulative air quality effects.

Fugitive Dust - The Proposed Action would have minor adverse effects on air quality through the generation of dust from equipment, such as vehicles and heavy equipment. Equipment would be working infrequently on exposed soil and any dust generated would not remain airborne for any length of time. Operations will be ideally scheduled during later fall and winter months when soil moisture is higher and when the threat of wildfire is low. The development of fugitive dust from mechanical fuels reduction treatment during dry periods would be generated by equipment operations and by transport vehicles accessing the project area. However, these impacts would quickly dissipate upon the completion of operations.

El Dorado County Air Quality Management District (EDCAQMD) rules pertaining to Fugitive Dust were reviewed. After this review, it was determined that all project-related operations will follow EDCAQMD rules.

No Action

The No Action Alternative would result in no smoke, exhaust or dust emissions being generated in the short term. Without treatment of the current vegetation, the probability of a high-intensity crown fire would increase over time. In the event of a wildfire, emissions would exceed those associated with project implementation, potentially creating an adverse impact to the air quality in El Dorado County.

Cultural Resources

Affected Environment

The project area is within a region with a rich cultural history related to Native peoples' traditional practices to the historic mining era. The proposed treatments for this project seeks to achieve positive results to the ecosystem; while also being mindful to the cultural and archaeological resources. As such, compliance with Section 106 of the National Historic Preservation Act of 1966 must be considered to satisfy the NEPA and CEQA requirements to ensure the protection of cultural and archaeological resources. Section 106 ensures that cultural resources are managed according to their relative importance, and that the BLM works to protect these valuable resources against impairment, destruction, and inadvertent loss, while encouraging and accommodating the uses determined appropriate through planning and public participation.

Environmental Consequences

Proposed Action

All of the proposed project areas were subjected to BLM Class III, intensive pedestrian archaeological survey to identify potentially significant cultural resources. Additionally, background and historic research was conducted to assist in the identification and evaluation effort. It was determined that the proposed project could be implemented without affecting any of the identified resources. All potentially significant cultural resources will be avoided through flagging and archaeological monitoring.

No Action

Under the No Action Alternative, no treatments would occur. The heavy fuel loads and dead standing trees within the project area pose a substantial risk to many of the cultural resources in the project area. Reducing the fuel load and removing standing dead will benefit cultural resource protection. The threat of catastrophic wildfire or damage during emergency suppression efforts exceed any potential impact derived from the fuels reduction project.

Fire Management

Affected Environment

Fire plays a critical role in shaping vegetative characteristics. The BLM is responsible for fire management, including fuels management, on BLM-managed lands in El Dorado County. The weather and fuel structure in many BLM parcels within El Dorado County provide an opportunity for ignitions from human-caused starts and also from lightning ignited fires. Periodic large wildfires in this fire prone landscape are considered inevitable and El Dorado County has a history of large, intense, and sometimes destructive fires. Human-caused starts are most common in the foothills and the WUI. The combination of wildfire suppression and changing land use patterns has altered the natural cycle and role of fire. Suppression actions have resulted in large, unnatural fuel loads across the landscape. The intermixed landscape of public and private lands means catastrophic wildfires have a heightened potential to spread onto private property, destroying homes and valued landscapes. The BLM coordinates with other county state and federal agencies to identify communities and other WUI values at risk from wildfire and to set priorities on an interagency basis for the mitigation of those threats.

Environmental Consequences

Proposed Action

The overall effect of the Proposed Action would result in a reduction of fuel loading and of the risk of catastrophic wildfire, including potential adverse impacts to life, property, and natural resources. The structure, amount, and continuity of flammable vegetation within treatment areas would be altered, resulting in reduced fire intensity. Treated areas would be moved from high intensity wildfire fuel conditions to lower intensity wildfire fuels conditions. Tree and brush densities would be reduced, limiting opportunities for fire spread. Reducing ladder fuels would limit the tree torching and crowning potential. The trees which are left would be better protected from the adverse effects of wildfire, because fuel loads would be reduced and more natural breaks in fuels would enable better fire control and management. The shrub component would be dramatically reduced. Surface fuels would be masticated, resulting in rapid decay of fuels and an overall reduction in fire threat. There is a slight risk of the equipment conducting the treatments starting a wildland fire by hitting rocks and causing sparks. This risk can be minimized by scheduling the treatment outside periods of high to extreme fire danger.

No Action

Under the No Action Alternative, no treatments would occur. Without implementation of the Proposed Action, the likelihood of large-scale wildfire may be increased. The potential scale and severity of a wildfire would be increased, which would be an adverse effect.

Vegetation/Invasive Non-Native Weeds

Affected Environment

The primary California Wildlife Habitat Relationships (CWHR; CDFW 2014) types in the project area are ponderosa pine, mixed chaparral, montane hardwood, and montane hardwood-conifer (Sequoia 2021). Secondary CWHR types include Sierra mixed conifer and valley oak woodland. Urban, barren, montane riparian, and annual grassland also exist within the treatment units, but the area that these habitat types comprise is negligible. These habitat types will not be treated per the project design and thus are not discussed below.

The ponderosa pine habitat type describes stands where ponderosa pine comprises of at least 50% of the canopy. Common species in this habitat include Douglas fir, incense cedar, sugar pine, and California black oak (*Quercus kelloggii*). Canyon live oak (*Quercus chrysolepis*), Pacific madrone, tanoak, and white fir are also present. Dense brush is typical in younger open-canopy stands, as is seen throughout the work units. The majority of Spanish Flat N and Texas Canyon, as well as some of Spanish Flat S and a small portion of Chicken Flat Road, is comprised of ponderosa pine habitat type. These stands generally occur above coastal oak woodland, valley oak woodland, blue oak woodland, blue oak-foothill pine and below mixed conifer. Montane hardwood and mixed chaparral habitat types are typically seen below or interspersed in these ponderosa pine stands.

Mixed chaparral is the second-most common habitat type, occurring in portions of each unit. Approximately half of Texas Canyon is mixed chaparral. This habitat type is characterized by a structurally homogeneous land type dominated by manzanita and scrub oak. Other species that may be present in this habitat include chamise, poison oak, ceanothus, incense cedar, and foothill pine. Mixed chaparral generally occupies more mesic sites and often makes up the understory of ponderosa pine and other mixed conifer habitat types.

The montane hardwood habitat type is composed of a hardwood tree layer with an infrequent and limited shrub and herbaceous layer. Snags and downed woody material are generally sparse throughout this habitat. Common species at the project elevation include canyon live oak, ponderosa pine, Douglas fir, tanoak, Pacific madrone, California black oak, and foothill pine. Associated understory includes manzanita, poison oak, and ceanothus. This habitat type occurs in most of the Chicken Flat Road unit and through portions of Spanish Flat S. It is also present in small patches along the eastern edge of Texas Canyon. Montane hardwood often interfaces with mixed chaparral, montane hardwood-conifer, mixed conifer, and Douglas fir habitat types.

Montane hardwood-conifer habitat includes both hardwoods and conifers that form a multi-layered canopy. California black oak, bigleaf maple, white alder, dogwood, Douglas fir, incense-cedar and ponderosa pine are common species within this habitat type. This habitat type is generally transitional between dense coniferous forests and montane hardwood, mixed chaparral, or open woodlands and savannahs.

Sierra mixed conifer stands only occur in the eastern portion of Chicken Flat Road of this Project. This habitat type features multilayered canopy with usually well-developed mid and understory. Common species include white fir, Douglas fir, ponderosa pine, sugar pine, incense cedar, and California black oak. Deerbrush, manzanita, chinquapin, tanoak, bitter cherry, gooseberry, rose, and mountain misery are common shrub species.

Valley oak woodland occurs in a small portion of the southwestern corner of Chicken Flat Road treatment unit. This habitat type is dominated by valley oak (*Quercus lobata*), though canyon live oak also commonly occurs.

Introduced invasive noxious weeds are prevalent over much of the project area, especially along roads and previously treated areas. The majority of these noxious weeds are various species of brooms, but other noxious weeds, such as Klamath weed and Himalayan blackberry, can be found in isolated locations throughout the project area.

Environmental Consequences

Proposed Action

The potential exists for the introduction of weed species brought in on equipment and other vehicles used during project implementation. Many of the weeds were found along existing roads and trails. The Project Design Feature pertaining to “Weed Control” will help to reduce the spread of noxious weeds, and/or prevent the introduction of new noxious weeds into the project area.

No Action

Under the No Action alternative, the fuels work would not occur which may minimize weed spread potential by lessening soil disturbance. However, no treatment of the noxious weeds would take place either under the No Action alternative. Weeds already present in the project area would continue to propagate and spread, increasing the overall area and density of these noxious weeds.

Special Status Plants

Affected Environment

Sensitive plant species are found within the project area. Sequoia Ecological Consulting, Inc. (Sequoia 2021) assessed the proposed project for potential impacts to sensitive plant species. Sequoia assessed the proposed project area against available databases, including the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDDB; 2021), California Native Plant Society’s (CNPS) Electronic Inventory of Rare and Endangered Plants (2021), U.S. Fish and Wildlife Service’s (USFWS) National Wetlands Inventory (NWI; 2021), and the USFWS’ Critical Habitat Portal (2021).

Nineteen sensitive plants were examined during this desktop review, and only one is known to occur in the project area: Red Hills soaproot (*Chlorogalum grandiflorum*). Eighteen additional species were reviewed and assessed as having “moderate” or “low” quality habitat in the work area and are not known to occur in the project area.

A California Certified Consulting Botanist conducted a botanical survey over the project area on June 17-18, 2021, and a survey report was prepared. This survey focused on occurrences of Red Hills soaproot that were previously located in the Texas Canyon Road Unit in 1998. The botanist surveyed the entire area to look for these occurrences of the Red Hills soaproot, but the three populations could not be located. The lack of presence of these populations could be a result of changing conditions over time as overstory/understory vegetation became denser over time.

Botanical surveys conducted in June 2021 also mapped two new occurrences of Red Hills soaproot in the Spanish Flat Unit. No other special status plant species were discovered during the survey.

Environmental Consequences

Proposed Action

The Proposed Action has the potential to positively and negatively impact the Red Hills soaproot. Positive impacts would be the reduction of brush in the area, which could shade out the Red Hills soaproot. Potential negative impacts include disturbance of populations from heavy equipment. This disturbance would be avoided by the establishment of avoidance buffers around known populations. A Project Design Feature would be implemented for all Red Hills soaproot populations in the project area requiring populations be flagged and avoided with a 25-foot avoidance buffer.

No Action

Under the No Action alternative fuels reduction would not take place. The dense canopy of vegetation in the project would continue to shade-out the Red Hills soaproot plants. The lack of fuels treatment would also leave the area vulnerable to catastrophic wildfire. The potential of a catastrophic fire is likely to have a greater negative impact on the Red Hills soaproot than the mitigated actions permitted under the Proposed Action.

Visual Resources

Affected Environment

The visual resources associated with the project area include the viewscape which is visible from adjacent public and private road networks, from individuals walking and/or hiking on the BLM lands included in this project, and from neighboring private residences. The current viewscape is limited by dense brush—often 10 to 15 feet tall—which is often directly adjacent to road systems or neighboring private property, or by an overly-dense canopy of young-growth conifers.

Environmental Consequences

Proposed Action

The proposed project would not have a negative impact on visual resources. Vegetation would be removed from the understory of forested stands only. Some might consider this an improvement to the scenery, as general visibility would be increased. Additionally, the removal of dense brush understories will result in more open ground and an increase in young vegetative growth. This will generally have a positive effect on visual resources. Most importantly, the proposed action would be consistent with BLM's VRM class III management objective under the 2008 Sierra RMP, which is the level of change to the characteristic landscape should be Moderate

No Action

Under the no action alternative, no treatments would be performed, and the brush-dominated vegetation type that exists in the area would remain. This brush has little visual benefits. This brush may also increase the intensity of a large, catastrophic wildfire. In the event of a large, catastrophic

wildfire, virtually all the vegetation would be burnt, which would make the area unsightly for many years.

Water Quality

Affected Environment

The project area contains a number of watercourses. Some of these watercourses are ephemeral, that is, they flow generally only during or shortly after a rain event. Others are perennial, and flow for most of the year. No chemical or physical water quality tests have been conducted on the waters flowing through the project area.

The BLM is responsible for protecting water quality based on mandates in the Federal Land Policy and Management Act (FLPMA), the Clean Water Act, and other laws and regulations. The BLM cooperates with the Environmental Protection Agency (EPA), states, and tribes who establish water quality standards, conduct assessments, and identify water bodies that do not meet standards. BLM is dedicated to maintaining or improving water quality through its programs and policies.

Environmental Consequences

Proposed Action

The proposed action will have no adverse impacts to water quality, after the implementation of the Project Design Features to protect water quality. This includes the establishment of stream buffers around all streams. These buffers will exclude the use of heavy equipment. In addition, virtually all areas undergoing mechanical fuels treatment will be covered in a layer of treated vegetative material. This treated material will ameliorate any potential for sediment movement from treated hill slopes.

No Action

Under the no action alternative, no treatments would be performed, and heavy fuel loads may lead to a catastrophic wildfire in the future. A catastrophic wildfire would have serious adverse impacts to water quality. Runoff from burned areas contains ash, which may have significant effects on the chemistry of receiving waters such as lakes, wetlands, reservoirs, rivers and. Runoff from burned areas also produces higher nitrate, organic carbon, and sediment levels, warmer temperatures, and flashier stream flows. All these factors will significantly decrease water quality.

Wildlife

Affected Environment

Sequoia assessed the potential for this project to affect sensitive wildlife species by reviewing some of the same databases listed above, including the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB; 2021), U.S. Fish and Wildlife Service's (USFWS) National Wetlands Inventory (NWI; 2021), and the USFWS' Critical Habitat Portal (2021).

Additionally, a site visit was performed at Spanish Flat, and Texas Canyon treatment units on June 3rd, 2021, and a Survey Report was prepared. Based on the results of the field review, California spotted owl, California red-legged frog, and Yuma myotis were found to have a low to

moderate potential to occur in the project area. Western pond turtle was observed during the site visit in a pond adjacent to the Texas Canyon treatment area.

The Migratory Bird Treaty Act prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization (USFWS 2017). Nesting birds are also protected by the California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513. Nesting birds may utilize a variety of habitats in order to construct their nests. Nests may be constructed from sticks, grasses, moss, or mud; they may be placed on the ground, in shrubs, on buildings, within tree cavities, or on branches. Active nests are those containing at least one egg or young bird. For birds of prey, nests are considered active regardless of the presence of eggs or of young. The majority of birds nest between February 1 through September 15 in North America, however, variability in nesting season may occur.

Environmental Consequences

Proposed Action

Nesting birds have the potential to occur in all areas of this proposed project. To mitigate any potential impact to nesting birds, an additional Project Design Feature includes the possible restriction of operations during certain times of the year when active nests are likely to be absent and/or survey requirements for nesting birds. When implemented, this Project Design Feature will eliminate adverse impacts to migratory birds.

There is limited potential habitat for California red-legged frog and the closest known population is located over five miles from the project area. Therefore, no effects are expected following the Project Design Features listed in this EA. No riparian habitat would be impacted by the proposed activity. Potential impacts to the California spotted owl, Yuma myotis and Western pond turtle will be avoided with adoption of the Project Design Features of this project. When implemented, the Project Design Features for each of these respective species would result in no adverse impacts to the individual animals or to their habitat.

While fuel treatments can decrease the risk of catastrophic fire, they do not provide the ecosystem benefits of low intensity, low severity fire, and they may alter habitat needed by wildlife. In general, fire-dependent species, species preferring open habitats, and species that are associated with early successional vegetation or that consume seeds and fruit appear to benefit from mechanical fuel reduction activities. Increasing understory light for shrub patch development can increase habitat for some small mammals and birds. In contrast, species that prefer closed-canopy forests or dense understory, and species closely associated with those habitat elements that may be removed or consumed by fuel reductions, would likely be negatively affected by fuel reductions. Some habitat loss may persist for only a few months or a few years. Project Design Features previously listed will maintain vegetation diversity and closed-canopy forest areas in locations such as protected areas around perennial streams, ponds, and cultural sites. Additionally, vegetation treatments associated with this project will treat generally only ground fuels, brush, and lower-canopy trees. Upper canopy trees will be retained, and any closed-canopy forest areas will generally be maintained.

Vegetation treated as part of this project will often seed or sprout after treatment. Once it sprouts, new vegetation is highly palatable and nutritious. Grass and herbaceous species may germinate, providing additional vegetative matter. Populations of small mammals, as well as animals such as deer and quail, build up rapidly after the start of new growth. Herbaceous forage benefits for deer

last about seven years. The forage benefits translate into increased fawn production and survival (Ashcraft, 1979).

The proposed retention of several important wildlife habitat features such as large snags, large woody debris, riparian buffer zones, and live trees with cavities should mitigate for some of the potential impacts to wildlife.

Overall, direct mortality of wildlife owing to crushing from heavy equipment during fuel reduction is considered to be low, but this is mostly based on anecdotal information. It is believed that most species are able to find refuge microsites (e.g., inside burrows or under surface objects) or move away from approaching equipment. However, spring-season thinning during the breeding season may result in mortality of ground- and shrub-nesting bird nestlings and species living within litter such as small mammals, reptiles, amphibians, and invertebrates. The proposed limited operating period and/or Project Design Features related to migratory bird surveys, will reduce impacts to ground- and shrub-nesting birds, as well as species living within the litter layer.

Sequoia Ecological Consulting's Biologists analyzed the impacts of the proposed action on sensitive wildlife. Special status species documented within a three-mile buffer were examined through the use of Geographical Information Systems (GIS) databases. The biologist reviewed the California Natural Diversity Database/United States Fish and Wildlife - Environmental Conservation Online System (ECOS), as well as an internal BLM natural resources geodatabase and wildlife reports from several projects in the current project area. This analysis was designed to help BLM meet its obligations under the Endangered Species Act and other authorities and BLM policies. The BLM wildlife biologist determined that incorporating the Project Design Features will enable the project to be completed with no effects to threatened and endangered wildlife or other BLM special status species.

No Action

Under the no action alternative, no treatments would be performed, and the brush-dominated vegetation type in the area would remain. This brush-dominated vegetation type does not support a wide variety of wildlife species and provides lower browse and forage values for many wildlife species. The dominant brush in the area will also increase the likelihood of a large, catastrophic wildfire. In the event of a large, catastrophic wildfire, many wildlife species would be adversely impacted by direct mortality, displacement, or destruction of habitat.

4.0 Reasonably Close Causal Impacts

The proposed project under this EA covers 355 acres, which is a small portion of the entire watershed and a small portion of the brush-hardwood-conifer vegetation type that is typical throughout the region. Other known future projects include the additional fuels treatments on private parcels and the treatment of road-side vegetation treatments on adjacent private roads within proximity of the BLM parcels included in this EA. The roadside vegetation treatment would improve ingress/egress on roads accessing BLM parcels and will facilitate emergency access in the event of a large wildfire.

The additional acres treated as part of this private parcel treatment, in conjunction with the planned acres treated on BLM lands are not expected to have any significant adverse Reasonably Close Causal Impacts. The treatment of roadside vegetation on private roads is part of a larger proposed treatment of fuels on private parcels that has an approved California Environmental Quality Act

(CEQA) document authorizing this activity. The approved CEQA document covers an area of approximately 1,900 acres on the private lands. The CEQA document contains applicable biological, botanical, cultural, and watercourse protection measures which will avoid or mitigate any significant potential adverse impacts.

Potential adverse impacts to Cultural, Sensitive Plant Species, and Wildlife would be avoided through pre-operations scoping, identification, and flagging of known sensitive sites. Additional pre-operations surveys would be conducted to discover—and protect—new sensitive sites. All cultural sites, sensitive plant species, and sensitive wildlife sites will be flagged for avoidance during operations.

There would be no significant adverse Cumulative Effects to Water Quality. No debris will be allowed to enter any watercourse, which will prevent water degradation from direct deposition of vegetation or other material. All chipped or masticated material would be scattered over the treated areas. This will mitigate any potential impacts to water quality from sediment transport into watercourses.

There would be no significant adverse impacts to Air Quality. Because of the limited size and short duration of this project, there will be no significant overall impacts to Air Quality.

The treatment of fuels on private parcels and on roadside areas would have positive overall impacts on Fire Management and Vegetation, as these additional treatments would build upon similar fuel treatments on adjacent BLM lands. Additional positive overall impacts would occur with Visual Resources. The clearing of dense, overstocked vegetation along roads would result in an increase in visibility along the roads, which would provide for greater safety, and allow those individuals to see wooded and forested landscapes further away from the travelled road.

In summary, the proposed action would have negligible negative impacts on plants and wildlife and would have positive impacts on vegetation and future fuel conditions. The current condition of the vegetation has been influenced by decades of wildfire suppression. There is currently no better way to reduce dense understory vegetation than this proposed project. The proposed action is expected to have a beneficial impact on wildfire suppression in the area, as long as the treatment area is maintained.

4.1 Consultation and Coordination

The draft EA for this project was prepared and reviewed by Ed Struffenegger, Registered Professional Forester, and other staff from the Georgetown Divide Resource Conservation District. Supporting documentation was provided by biological consultants from Sequoia Ecological Consulting, Inc. who provided subsequent review, comments, and edits. Preliminary cultural/archaeological information was obtained from the North Central Information Center (NCIC), the state clearinghouse that provides detailed information on known cultural/archaeological sites to agencies and individuals.

Final review and edits to this EA were made by BLM Mother Lode Field Office resource staff. This included the following resource staff:

D. Lee Helgeson, Prescribed Fire/Fuels Technician
Jeff Jones, Wildlife Biologist
Ann-Sheree Brown, Archaeologist
Beth Brenneman, Botanist
Leana Weissberg, Forester

BLM initiated Native American consultation via certified letter on March 8, 2022. Letters were sent to Chicken Ranch Rancheria of Me-Wuk Indians, Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville Enterprise Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of Nevada and California, and Wilton Rancheria.

4.2 Availability of Document and Comment Procedures

This EA, posted on BLM ePlanning System website (<https://eplanning.blm.gov/eplanning-ui/home>) or available upon request, will be available for a 15-day public review period. Comments can be made online at the above e-planning website, or can be sent to the Mother Lode Field Office, 5152 Hillside Circle, El Dorado Hills, CA 95762 or emailed to bbrennem@blm.gov.

4.3 BLM Interdisciplinary Team/Reviewers:

/s/ Jeffrey Horn 2022.03.16

Outdoor Recreation Planner

/s/ Beth Brenneman 2022.03.16

Botanist/NEPA Coordinator

/s/ Jeffrey Jones 2022.03.17

Wildlife Biologist

/s/ David Helgeson 2022.03.21

Fire/Fuels

/s/ Ann Sheree Brown 2022.03.01

Archaeologist

/s/ Leana Weissberg 2022.03.16

Forester

/s/ Philip D'Amo 2022.03.21

Assistant Field Manager

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