



— BUREAU OF —
RECLAMATION

Environmental Assessment

Five-Year Fuels Management for Auburn Project Lands: Goat Grazing on 176 acres Auburn Shaded Fuel Break

**California Great Basin - Interior Region 10
CGB-EA-2022-001**

October 2021

Mission Statements

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Acronyms and Abbreviations

Term	Definition
CCAO	Central California Area Office
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Data Base
EA	Environmental Assessment
GP/RMP	Auburn State Recreation Area General Plan/Auburn Project Lands Resources Management Plan Environmental Impact Statement
IPaC	U.S. Fish and Wildlife Service's Information, Planning, and Conservation System
ITA	Indian Trust Assets
NEPA	National Environmental Policy Act
National Register	National Register of Historic Places
NHPA	National Historic Preservation Act
Reclamation	U.S. Bureau of Reclamation
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service

Section 1 Introduction

1.1 Background

In conformance with the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality regulations (40 Code of Federal Regulations [CFR] 1500-1508), and Department of Interior Regulations (43 CFR Part 46), the Bureau of Reclamation (Reclamation) prepared this Environmental Assessment (EA) to evaluate and disclose potential environmental impacts associated with performing fuel reduction activities within the Auburn State Recreation Area (ASRA), or more specifically the Auburn Project Lands (APL) on the border of Placer and El Dorado Counties, California (Figure 1). Reclamation owns and manages approximately 23,648 acres of fee-title and withdrawn lands in the ASRA, which are managed by Reclamation's Central California Area Office (CCAO), located at Folsom Dam in coordination with the California Department of Parks and Recreation (State Parks).

Wildfires have become an increasing topic of concern for Californians, particularly for those who live in or near Wildland-Urban Interfaces (WUI)s, where houses intermingle with wildlands (State Parks and Reclamation 2019). The communities of Applegate, Auburn, Auburn Lake Trails, Cool, Foresthill, Georgetown-Greenwood, King Hill, Pilot Hill, Todd Valley along with other residential developments are located along the WUI with the APL. This interface between neighborhoods and the natural ecosystems can be highly combustible and vulnerable to a higher frequency of wildland fires which requires the construction of defensible landscapes and buffers such as Shaded Fuel Breaks¹ (SFB) to decrease the possibilities of its devastating effects.

In 2019, Reclamation along with its managing partner State Parks, and stakeholders California Department of Forestry and Fire Protection (CAL FIRE), City of Auburn Fire Department and the Placer County Resource Conservation District (Placer County RCD), started the process of updating a Shaded Fuel Break (SFB) prescription developed specifically to construct an SFB in Auburn. Once this SFB was constructed, it created a defensible area, an area where ladder fuels were removed (tree or brush canopies thinned) and contiguous fuels arrangement were interrupted providing an increased level of protection against wildfire. The creation of similar SFBs in more neighborhoods along the APL would provide a similar level of protection for those communities as well.

1.2 Need for the Proposed Action

In accordance with the Department of Interior and other agencies' Review and Update of the 1995 Federal Wildland Fire Management Policy, Reclamation is required to create Fire Management Plans (FMP)s and to take actions to reduce wildfire risks (DOI, et al., Review and Update of the 1995 Federal Wildland Fire Management Policy, 2001). This Proposed Action supports long-term efforts to meet this Federal policy and implements key segments of the Auburn State Recreation Area General Plan and the Auburn Project Lands Resources Management Plan Environmental Impact Statement (GP/RMP; State Parks and Reclamation, 2019). Fuels management efforts have recently

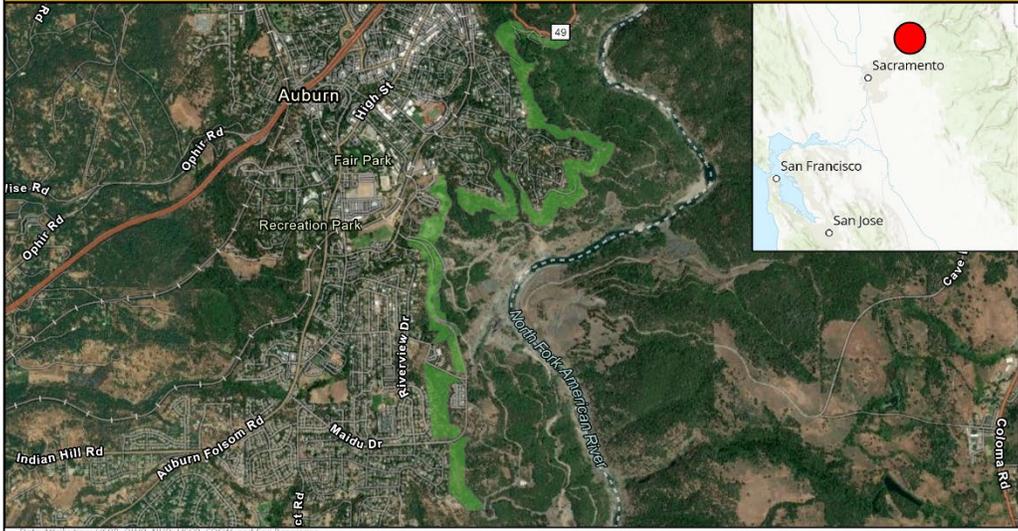
¹ A Shaded Fuel Break is "a strategically located wide block, or strip, on which a cover of dense, heavy, or flammable vegetation has been permanently changed to one of lower fuel volume or reduced flammability" (Green, 1977). They create a horizontal separation between residual trees and shrubs reducing the amount of combustible material in the WUI.

taken place in the APL with the creation of several SFBs, but the construction of additional SFBs in WUI locations along with continuous maintenance are needed in order to reduce fuel loads and wildfire risk to adjacent communities.

The Proposed Action would help reduce the risk of devastating wildfires in the APL and adjacent communities. The contracting for goat grazing is a fire-fuel reduction activity used to maintain a vegetative arrangement that would discourage wildfire spread and growth and reduce wildfire intensity to protect infrastructure and communities within and adjacent to the project area. Figure 1.



GOAT GRAZING PROJECT Auburn Shaded Fuel Break



Data Attribution: USGS, DWR, NHD, USCB, CDFW, and Esri BaseMaps

ASFB Goat Grazing



Map Notes: Sensitive Information, Only Major Facilities Included, etc.



Section 2 Alternatives Including the Proposed Action

2.1 No Action

Under the No Action Alternative, Reclamation would not authorize the use of goat grazing to maintain vegetation on the existing Auburn Shaded Fuel Break (ASFB). Work currently authorized for maintenance activities on the ASFB would continue under the No Action Alternative; however, use of goats to graze would not be permitted. In absence of the goats grazing on the project area, fuel loads would continue to grow (build up) along the Wildland Urban Interface (WUI), fire prevention and forest resiliency would be reduced to homeowners in this area and the risk and severity of wildfires in the area would increase. Furthermore, without authorizing the use of goat grazing for SFB maintenance, Reclamation would continue to rely solely on handcrews and herbicide treatments for long-term maintenance of SFB.

2.2 Proposed Action

Reclamation proposes to issue a land use authorization for goat grazing contract on approximately 176 acres of the existing shaded fuel break to control the annual grasses and invasive plants (scotch broom, ornamental plants) and maintain the existing fuel break for vegetation fuel load density on Auburn Project lands along the boundary of the City of Auburn (Figure 1). The previous NEPA documents completed for the ASFB project are Reclamation documents: CCAO-CEC-1910 and CGB-EA-2021-037.

The Proposed Action is expected to be implemented as needed due to fuel loading and vegetation conditions. The Proposed Action includes:

- Contracting for periodic grazing animals to help reduce fuels within at least 600 feet of fences along the adjacent private property line and residences in the Project Area. The operational definition of “periodic” could be defined as one to three grazing sessions per season; balancing the project’s goals while preventing overgrazing will be paramount.
- Removing or thinning vegetation including yearly vegetation growth and grasses within the recreation area.
- CCAO Natural Resources staff and the contractor will monitor the grazing animals, install electrified fencing where needed, and notification signs for residents and guests.
- Proper grazing techniques such as temporary fencing, rotation of goats, regular monitoring, and avoidance of overstocking or overgrazing would be implemented (Lovreglio 2014).
- Contractor use of existing roads and trails will be used to deploy goats onto the grazing sites.
- Contractor use of ATV may be used to drive on landscape no greater than 20% -30% slope to heard goats.

Animal Grazing to Remove Vegetation

Project activities will consist of using goat herds for grazing accumulated plant matter present on APLs to reduce the fire fuel loads. Vegetation to be grazed may include grasses, shrubs, brush, and other vegetative overgrowth within the project area to reduce the intensity and spread of potential wildfires. Proper grazing techniques such as temporary fencing, rotation of goats, regular monitoring, and avoidance of overstocking or overgrazing would be implemented. Activities do not include those which would be expected to create ground disturbances. Contracting for periodic grazing animals to help reduce fuels within at least 600 feet of fences along the adjacent private property line and residences in the Project Area. The operational definition of “periodic” could be defined as one to three grazing sessions per season; balancing the project’s goals while preventing over grazing will be paramount.

The goats will be monitored daily.

Access and Schedule

All vehicles and equipment used to transport goats, herders, hand crews, electric fencing equipment would utilize existing roads and trails. Contractor use of All Terrain Vehicles (ATV) may be used to drive on landscape not greater than 20%-30% slope to herd the goats. Work would commence in the Fall/Winter of 2021 and be completed in approximately three months. The SFBs would be maintained on an annual basis for five years, as funding and resources are available.

Conservation Measures

To minimize or avoid potential resource impacts, the following measures would be implemented:

- If work is to be done during the nesting season (March 1 – August 31), a qualified biologist

will survey the project area not more than five days ahead of the anticipated work commencement and flag nest sites for avoidance.

- All nests will be avoided at a distance consistent with the United States Fish and Wildlife Service (USFWS) protocols and left undisturbed.
- Maintenance of vegetation will not result in soil disturbance.
- Off-road traffic outside of designated project areas shall be prohibited.
- All food-related trash items, such as wrappers, cans, bottles, and food scraps, shall be removed daily from the project site.

Section 3 Affected Environment and Environmental Consequences

3.1 No Action Alternative

Under the No Action Alternative, Reclamation would not authorize the contracting of goat grazing on 176-acres of SFBs on APL, resulting in continued build-up of fuels, and creating greater wildfire risks for communities adjacent to APL in the WUI. SFBs currently authorized for construction on APL would continue under the No Action Alternative; however, goat grazing activities would not be authorized for use, and maintenance activities will continue to rely solely on handcrews and herbicide treatment.

3.2 Proposed Action

Under the Proposed Action, Reclamation would allow, within Fall/Winter 2021, contractors to graze goats on 176-acres of the ASFB and perform vegetation maintenance activities.

3.2.1 Required Resources Discussions

3.2.2 Cultural Resources

Cultural resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. Title 54 United States Code (U.S.C.) 300101 *et seq.*, formerly and commonly known as the National Historic Preservation Act (NHPA) is the primary legislation for Federal historic preservation. Section 106 of the NHPA (54 U.S.C. 306108) requires Federal agencies to take into consideration the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation an opportunity to comment. Historic properties are those cultural resources that are listed on or eligible for inclusion in the National Register of Historic Places (National Register). The implementing regulations at 36 CFR Part 800 for Section 106 describe the process that the Federal agency takes to identify historic properties within the area of potential effects and to assess the effects that the proposed undertaking will have on those historic properties, through consultations with the State Historic Preservation Officer, Indian tribes, and other identified consulting and interested parties.

Project Impacts to Cultural Resources

The proposed action is an undertaking as defined in 36 CFR § 800.16(y) and involves the type of activity that has the potential to cause effects to historic properties under 36 CFR § 800.3(a). Reclamation conducted an archaeological inventory of the proposed project area and identified nine historic era cultural resources within the project footprint. Of these nine resources, eight have been evaluated for inclusion in the National Register and determined not eligible. One resource, Flint Station/Camp Flint (P-31-003946), remains unevaluated but will be treated as a historic property for this undertaking under Criterion A for its association with multiple periods of significance.

Pursuant to 36 CFR Part 800.4(a)(4), Reclamation consulted with United Auburn Indian Community of the Auburn Rancheria and the Shingle Springs Band of Miwok and requested their assistance to identify sites of religious or cultural significance in the project area or that may be affected by the proposed undertaking. Through this effort no resources were identified, and no concerns were expressed.

Under the assumption of eligibility for Camp Flint to the National Register Reclamation applied the criteria of adverse effects pursuant to 36 CFR § 800.5(a)(1), for the proposed undertaking and found that it will result in no adverse effects to historic properties pursuant to 36 CFR § 800.5(b) as the

proposed project will have a limited and temporary impact on this resource and will not diminish the location, design, setting, materials, workmanship, feeling, or association of this resource.

Reclamation initiated consultation with the State Historic Preservation Officer (SHPO) with a finding of no adverse effect to historic properties, therefore the proposed action would have no significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places. However, pursuant to the regulations at 36 CFR §800.5(c), SHPO has 30 days from receipt to review an agency finding. Therefore, the proposed project will not be implemented until the Section 106 process is complete. Upon completion of the 106 process and implementation of the proposed action in the event of a post-review discovery, Reclamation will follow the procedures outlined at 36 CFR § 800.13.

3.2.3 Biological Resources

Affected Environment

The APL are located on the western slope of the Sierra Nevada mountains along more than 45 miles of the North and Middle Forks of the American River, starting just below the City of Auburn, CA and continuing north to Colfax, CA and northeast to Foresthill, CA. The characteristic soils of this area are loam of different types, most predominantly, Auburn very rocky silt loam, Boomer very rocky loam and Mariposa very rocky silt loam (NRCS, 2021). Other soils with predominance in the area are Maymen-Rock outcrop complex, Metamorphic rock land, Auburn-Sobrante-Rock outcrop complex and Mariposa-Rock outcrop complex (NRCS, 2021). The elevation of the project area is between 1,100 and 3,500 feet above sea level.

Wildlife

Wildlife observed in the general area of the project include black tailed deer (*Odocoileus hemionus*),

rabbits (*Sylvilagus bachmani*), raccoons (*Procyon lotor psora*), opossums (*Didelphis virginiana*), gray foxes (*Urocyon cinereoargenteus*), coyotes (*Canis latrans*), black bears (*Ursus americanus californiensis*), rattlesnakes (*Crotalus oreganus*), mountain lions (*Puma concolor*) and bobcats (*Lynx rufus*). Quails (*Callipepla californica*), canyon wrens (*Catherpes mexicanus*), red-tailed hawks (*Buteo jamaicensis*) and bald eagles (*Haliaeetus leucocephalus*) are among the bird species observed in the general vicinity of the project area.

The California Natural Diversity Database Rarefind (CNDDDB) and the U.S. Fish and Wildlife Service's Information, Planning, and Conservation System (IPaC) databases were reviewed on 02 April 2021 and 14 May 2021 to identify endangered, threatened and listed species, and designated critical habitat that have potential to occur in and around the project area. While the CNDDDB query did not result in any Federally listed threatened and/or endangered species, the IPaC query showed the potential for the following species to occur within the project area:

California red-legged frog (*Rana draytonii*), Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (VELB), El Dorado Bedstraw (*Galium californicum ssp. sierrae*), Layne's Butterweed (*Senecio layneae*), Pine Hill Ceanothus (*Ceanothus roderickii*) and Stebbins' Morning-glory (*Calystegia stebbinsii*).

A literature search further revealed that there is no potential for VELB and all of the plant species to occur within the Project Area. The Project Area is outside the range (above 500 feet in elevation) of the VELB habitat (USFWS, 2017). El Dorado Bedstraw, Layne's Butterweed, Pine Hill Ceanothus and Stebbins' Morning-glory are all plants associated with gabbro-derived soils and are almost exclusively found in the Pine Hill Formation, an area of approximately 25,700 acres, on the western side of El Dorado county (USFWS, 2002). The CNDDDB query did not result in any Federally listed threatened and/or endangered species.

California Red-Legged Frog (CRLF). CRLF's range occurs from sea level to elevations of 5,200 feet and CRLF occupy drainages (streams, creeks, associated natural and artificial ponds, etc.) and habitats through which frogs can move (e.g., riparian vegetation, uplands) (USFWS, 2002a). Typical dispersal potential for CRLF is at a maximum 2.5 miles from potential or known habitat (USFWS, 2002a). The Project Area ranges in elevation between approximately 500 and 2,700 feet and falls within the CRLF's Sierra Nevada Foothills and Central Valley Recovery Unit. There is no designated critical habitat for CRLF in the project area. The CNDDDB query resulted in no occurrences of CRLF within the project area. The nearest CRLF observation per CNDDDB (08 September 2019) is located 11.0 miles to the south of the project.

California Red-Legged Frog (CRLF)

CRLF's range occurs from sea level to elevations of 5,200 feet and CRLF occupy drainages (streams, creeks, associated natural and artificial ponds, etc.) and habitats through which frogs can move (e.g., riparian vegetation, uplands) (USFWS, 2002a). Typical dispersal potential for CRLF is at a maximum of 2.5 miles from potential or known habitat (USFWS, 2002a). The APL range in elevation between approximately 500 and 2,700 feet and falls within the CRLF's Sierra Nevada Foothills and Central Valley Recovery Unit. There is no designated critical habitat for CRLF in the project area. The CNDDDB query resulted in no occurrences of CRLF within the project area. The closest of the two CRLF observations per CNDDDB (08 September 2009) is located 7.6 miles to the southeast of the project area.

Aerial imagery does not show any ponds within the project area, however, there are perennial ponds located in the project's vicinity. One of those pond sites is located at China Bar. Reclamation surveyed the ponds at China Bar in August 2020 and found high population numbers of western toads (*Anaxyrus boreas*) and/or bullfrogs (*Lithobates catesbeianus*) which predate on CRLF; this, along with other factors observed, decrease the likelihood for the frogs, if present, to be affected by the project's activities.

As to the other pond sites in the project's vicinity, some overhanging vegetation, but no emergent vegetation was visible on the aerials. The maximum depth and substrate of the ponds could not be determined from aerial images. Based on this information, it is possible that these ponds could be used as breeding habitat.

Vegetation

The project area is comprised of seven habitat communities including riparian, oak woodlands, conifer forests, mixed-conifer oak, chaparral, grasslands and mixed hardwood/montane hardwood. Vegetation like live oak (*Quercus chrysolepis*), interior blue oak (*Quercus wislizeni*), gray pine (*Pinus sabiniana*), and some chaparral on south-facing slopes, intermixed with poison oak (*Toxicodendron diversilobum*), as well as buckeyes (*Aesculus californica*), manzanita (*Arctostaphylos* sp.), deer brush (*Ceanothus integerrimus*) and toyon (*Heteromeles arbutifolia*). In spring wildflowers such as monkey flowers (*Mimulus aurantiacus*), fiddleneck (*Amsinckia menziesii*), Indian paintbrush (*Castilleja tenuis*), larkspur (*Delphinium californicum*), lupine (*Lupinus hirsutissimus*) and brodiaea (*Brodiaea californica*) can be seen in bloom (State Parks, 2021)

The CNDDDB and IPaC databases were reviewed to identify endangered, threatened and special status species, and designated critical habitat within or near the project area. While the CNDDDB query did not result in any Federally listed threatened and/or endangered species, the IPaC query showed the potential for the following species to occur within the project area: El Dorado Bedstraw (*Galium californicum* ssp. *sierrae*), Layne's Butterweed (*Senecio layneae*), Pine Hill Ceanothus (*Ceanothus roderickii*) and Stebbins' Morning-glory (*Calystegia stebbinsii*).

El Dorado Bedstraw, Layne's Butterweed, Pine Hill Ceanothus and Stebbins' Morning-glory are all plants associated with gabbro-derived soils and are almost exclusively found in the Pine Hill Formation, an area of approximately 25,700 acres, on the western side of El Dorado county (USFWS, 2002) approximately 9 mile south of the APL. Therefore, there is no potential of them being present in the project area.

3.3 Cumulative Effects

Per Council on Environmental Quality regulations for implementing the procedural provisions of NEPA, a cumulative impact is defined as *the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time* (40 CFR 1508.7).

There are several shaded Fuel Brakes that have been constructed or are currently being constructed within the APL using the same manual removal of vegetation methods described in section 2.2. Construction of the 552-acre Auburn SRB (CGB-EA-2021-037) was started in 2019 while the construction of the 172-acre Cool and Pilot Hill SFB (CGB-EA-2021-031) and Auburn Lake Trails SFB (CGB-EA-2021-030) was started in the summer of 2021.

Reclamation determined that the Proposed Action would have little to no effect to environmental resources. As a result, there would be no adverse cumulative effects associated with implementation of the Proposed Action.

Section 4 Consultation & Coordination

4.1 Agencies and Persons Consulted

Reclamation consulted and coordinated with the Auburn Lake Trails Fire Safe Council, California State Parks, Auburn Fire District, and CAL FIRE, El Dorado Unit and Placer County RCD and USFWS.

Pursuant to Pursuant to 36 CFR § 800, Reclamation is required to initiated consultation with the California State Preservation Office (SHPO) regarding the undertakings finding of effect. Pursuant to the regulations at 36 CFR §800.5(c), SHPO then has 30 days from receipt to comment on that finding. This step in the Section 106 process has not been met. As such the project would not be authorized until Section 106 consultation is complete.

Reclamation intends to provide the public with an opportunity to comment on the Draft EA during a 14-day public review period.

4.2 Public Outreach

During public outreach meetings held to discuss the ASRA GP/RMP, residents were informed of a fuels reduction priority planning effort focusing on fuels reduction projects near the Auburn community. The use of goat grazing herbicides, mastication tools, and resources other than handcrews for vegetation removal was identified in the GP/RMP.

The discussion for maintaining the ASFBs and has been ongoing with State Parks, CAL FIRE, City of Auburn Fire Department, and the Placer County Resource Conservation District.

Section 5 References

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