

## Appendix B - Full Application Checklist

SNC Reference#: \_\_\_\_\_

Project Name: \_\_\_\_\_

Applicant: \_\_\_\_\_

Please mark each box if item is included in the application. Please consult with SNC staff prior to submission if you have any questions about the applicability to your project of any items on the checklist. All applications must include a CD including an electronic file of each checklist item, if applicable. The naming convention for each electronic file is listed after each item on the checklist. (Electronic File Name = EFN: "naming convention". file extension choices)

### Submission requirements for all Category One and Category Two Grant Applications

1.  Completed Application Checklist (EFN: *Checklist.doc,.docx,.or .pdf*)
2.  Table of Contents (EFN: *TOC.doc,.docx, or .pdf*)
3.  Full Application Project Information Form (EFN: *SIform.doc, .docx, or .pdf*)
4.  CCC/Local Conservation Corps Document (EFN: *CCC.pdf*)
5.  Authorization to Apply or Resolution (EFN: *authorization.doc, .docx, or .pdf*)
6.  Narrative Descriptions (EFN: *Narrative.doc or .docx*)
  - a.  Detailed Project Description (5,000 character maximum for section 6a only)  
Project Description including Goals/Results, Scope of Work, Location, Purpose, etc.
  - b.  Workplan and Schedule
  - c.  Restrictions, Technical/Environmental Documents and Agreements
    - Restrictions / Agreements (EFN: *RestAgree.pdf*)
    - Regulatory Requirements / Permits (EFN: *RegPermit.pdf*)
  - d.  Organizational Capacity
  - e.  Cooperation and Community Support
    - Letters of Support (EFN: *LOS.pdf*)
  - f.  Tribal Consultation Narrative (EFN: *tribal.doc, docx*)
  - g.  Long Term Management and Sustainability
    - Long-Term Management Plan (EFN: *LTMP.pdf*)
  - h.  Performance Measures
7. Budget documents
  - a.  Detailed Budget Form (EFN: *Budget.xls, .xlsx*)
8. Supplementary Documents
  - a. Environmental Documentation
    - California Environmental Quality Act (CEQA) documentation (EFN: *CEQA.pdf*)
    - National Environmental Policy Act (NEPA) documentation (EFN: *NEPA.pdf*)
  - b. Maps and Photos
    - Project Location Map (EFN: *LocMap.pdf*)
    - Parcel Map showing County Assessor's Parcel Number(s) (EFN: *ParcelMap.pdf*)

- Topographic Map (EFN: *Topo.pdf*)
- Photos of the Project Site (10 maximum) (EFN: *Photo.jpg, .gif*)
- c. Additional submission requirements for Fee Title Acquisition applications only
  - Acquisition Schedule (EFN: *acqSched.doc, .docx or .pdf*)
  - Willing Seller Letter (EFN: *WillSell.pdf*)
  - Real Estate Appraisal (EFN: *Appraisal.pdf*)
- d. Additional submission requirements for Site Improvement / Restoration Project applications only
  - Land Tenure Documents (EFN: *Tenure.pdf*)
  - Site Plan (EFN: *SitePlan.pdf*)
  - Leases or Agreements (EFN: *LeaseAgmnt.pdf*)

I certify that the information contained in the Application, including required attachments, is accurate, and that I have been authorized to apply for this grant.

\_\_\_\_\_  
Signed (Authorized Representative)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Title (print or type)

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<b>SIERRA NEVADA CONSERVANCY</b>	
<b>PROPOSITION 1 – Watershed Improvement Program Project Information Form</b>	
<b>SNC REFERENCE #</b>	
<b>PROJECT NAME</b>	
<b>APPLICANT NAME</b> <i>(Legal name, address, and zip code)</i>	
<b>AMOUNT OF GRANT REQUEST</b>	
<b>TOTAL PROJECT COST</b>	
<b>PROJECT LOCATION</b> <i>(County with approx. lat/long, center of project area)</i>	
<b>SENATE DISTRICT NUMBER</b>	<b>ASSEMBLY DISTRICT NUMBER</b>
<b>PERSON WITH MANAGEMENT RESPONSIBILITY FOR GRANT CONTRACT</b>	
<i>Name and title:</i> _____ <i>Phone:</i> _____ <i>Email Address:</i> _____	
<input type="checkbox"/> Mr.	
<input type="checkbox"/> Ms.	
<b>TRIBAL CONTACT(S) INFORMATION</b>	
<i>Name:</i> _____ <i>Phone Number:</i> _____	
<i>Email address:</i> _____	
<b>COUNTY ADMINISTRATOR OR PLANNING DIRECTOR CONTACT INFORMATION</b>	
<i>Name:</i> _____ <i>Phone Number:</i> _____	
<i>Email address:</i> _____	
<b>NEAREST PUBLIC WATER AGENCY CONTACT INFORMATION</b>	
<i>Name:</i> _____ <i>Phone Number:</i> _____	
<i>Email address:</i> _____	

**Please identify the appropriate project category below and provide the associated details** *(Choose One)*

Category One Site Improvement

Category Two Pre-Project Activities

Category One Acquisition

**Site Improvement/ Acquisition Project Area (for Category One Projects Only)**

Total Acres:

SNC Portion (if different):

**Acquisition Projects Only For Acquisitions Only**

Appraisal Included

**Select one deliverable (for Category Two Projects Only)**

Permit

CEQA/NEPA Compliance

Appraisal

Condition Assessment

Biological Survey

Environmental Site Assessment

Plan

On Thursday, February 25, 2016 2:24 PM, Prop1 Community Corps  
<[inquiry@prop1communitycorps.org](mailto:inquiry@prop1communitycorps.org)> wrote:  
Hello Jan,

Nicholas of the San Joaquin Regional Conservation Corps has responded that they are able to assist with the Bureau of Land Management (BLM) Mokelumne Community Forest project if it receives funding. Please include this email with your application as proof that you reached out to the Local Conservation Corps.

Additionally, please feel free to contact Nicholas Mueller ([nmueller@sjcoe.net](mailto:nmueller@sjcoe.net)) directly if your project receives funding.

Thank you,  
Dominique

**California Association of Local Conservation Corps  
Proposition 1 – Water Bond  
Consultation Review Document**

Applicant has submitted the required information by email to the Local Conservation Corps (CALCC):

✓ Yes (applicant has submitted all necessary information to CALCC)

After consulting with the project applicant, the CALCC has determined the following:

✓ It is feasible for CALCC to be used on the project (deemed compliant)

APPLICANT WILL INCLUDE THIS DOCUMENT AS PART OF THE PROJECT APPLICATION.

On Tue, Feb 23, 2016 at 11:15 PM, jan bray <[j57bray@yahoo.com](mailto:j57bray@yahoo.com)> wrote:

CCC Proposition 1 Coordinator and CALCC Representative/Crystal Muhlenkamp:

Division 26.7 of the Water Code, Chapter 6, Section 79734 requires that: “For restoration and ecosystem protection projects funded pursuant to this chapter, the services of the California Conservation Corps or a local conservation corps certified by the California Conservation Corps shall be used whenever feasible.”

As an applicant seeking funds from the SNC Watershed Improvement Program to complete a Category 1 project, I am consulting with you as representatives of the California Conservation Corps (CCC) AND CALCC (the entity representing the certified community conservation corps) (collectively, “the Corps”) to determine the feasibility of the Corps participation.

Please accept the attached letter per requirements and respond with your determination of participation feasibility for a project in Amador County near Pine Grove, CA.

In advance, I thank you for your time, effort and prompt response in this regard.

Should you have any questions, please do not hesitate to contact me at your earliest convenience.

Sincerely,

Jan Bray, CalAmTeam  
[209-256-7667](tel:209-256-7667) [j57bray@yahoo.com](mailto:j57bray@yahoo.com)



Calaveras healthy Impact Product Solutions  
P.O. Box 616, 291 A Main Street, West Point, CA 95255  
209-293-2333, [wp-chips@hotmail.com](mailto:wp-chips@hotmail.com)

February 23, 2016

To: Sierra Nevada Conservancy  
From: Steve Wilensky, CHIPS Board Chair  
Re: Category 1 Grant Application

A handwritten signature in black ink, appearing to read 'Steve Wilensky', is written over the 'Re:' line of the header.

This is to confirm that the CHIPS Board of Directors has authorized me to approve the submittal of the attached grant application to the Sierra Nevada Conservancy. We are pleased to participate in this effort, which will greatly benefit Amador County through important restoration efforts as well as advance our initiative to create and fund the Mokelumne Community Forest on 15,000 acres of BLM land in the Mokelumne Watershed. I hope you will give the application your highest consideration.

## **Sierra Nevada Conservancy**

### **Proposition 1- Watershed Improvement Program Pre-Application Form**

**Project Name:**

Bureau of Land Management (BLM) Mokelumne Community Forest  
Crestview/Mitchell Mine Parcels

**Amount of Grant Request:** \$189,145.00

**Estimated Total Project Cost:** \$236,395.00

**Description of Project (Limit 5,000 characters including spaces):**

The goal of this grant is to help BLM establish a shaded fuel break on lands that are critical to protect both adjacent communities from wildfire and, as a result, protect water quality and enhance water yield. The potential release of greenhouse gas will also be reduced.

The BLM owns over 15,000 acres in the mid-elevations of Amador and Calaveras Counties surrounding our Wildland-Urban Interface (WUI) communities. Most of this 15,000-acre land base has been neglected for decades and is densely stocked with highly-flammable surface and ladder fuels with an overstory of primarily Ponderosa Pine that is under heavy attack by the western pine beetle. The current forest condition is the recipe for catastrophic wildfire and a threat to water quality. In fairness to BLM, the Agency has been underfunded and understaffed for years and lacks the capacity to properly manage its lands for fire and insect resilience, watershed storage/yield and recreational purposes.

Irrespective of the past management transgressions, BLM now desires proactive management of the Crestview and Mitchell Mine parcels in Amador County. Treatments will reduce wildfire risks, improve forest conditions by addressing the western pine beetle epidemic, and ultimately improve watershed health. High severity wildfires place water supplies at risk, so reducing the risk of stand-leveling wildfires is an "avoided cost" of not only fire suppression, but also of direct costs of site preparation and reforestation and the indirect costs of impacts to residents (e.g., relocation of smoke sensitive individuals and replacement of damaged or destroyed infrastructure). Additionally, the avoidance of a catastrophic wildfire will protect soils from direct impacts of fire (hydrophobicity) and indirect impacts including exposure displacement, rilling and soil loss through erosion. These avoidances will assist in the maintenance of delivering a high level of water quality into the Upper Mokelumne River.

By reducing the density of brush and its laddering effect of carrying fire from the ground surface to the tree canopies, and by thinning trees for forest health (more sunlight, water and nutrients for the residual trees), water yield will increase. Although the project does not receive a significant amount of snowpack, the proposed project will

open the canopy, allowing for the snowpack received to persist longer on the ground and into the spring, a positive benefit for downstream water users. The proposed operation drains directly into Grass Valley Creek, which joins Sutter Creek a few miles below, which flows into Dry Creek, then the Mokelumne near Thornton, and ultimately the Delta. These watercourses are fish-bearing streams and a significant amount of the Delta water finds its way to Southern California for drinking water. As such, reducing the risk of wildfire in this proposed treatment area carries significant benefits to protecting water quality for multi-millions of people in the State.

The project addresses the WUI zones to protect residents and watersheds as defined in approved Community Wildfire Protection Plans (CWPPs); these Plans can be accessed via the Calaveras Foothills Fire Safe Council ([www.calaverasfiresafecouncil.org/](http://www.calaverasfiresafecouncil.org/)) and Amador Fire Safe Council ([www.amadorfiresafe.org/](http://www.amadorfiresafe.org/)).

Greenhouse Gas Emission Reduction analysis is a combination of: (1) the Carbon On Line Estimator (COLE) for the carbon effects of tree thinning and brush removal; (2) the analysis and findings contained in the Mokelumne Watershed Avoided Cost Analysis – Why Sierra Fuel Treatments Make Economic Sense (MACA); and (3) our knowledge of the 2004 Power Fire and 2015 Butte Fire in Amador County. We drew heavily on the 2014 Mokelumne Watershed Avoided Cost Analysis (MACA), the most recent and comprehensive analysis and modeling of the Mokelumne watershed. The model results support the hypothesis that fuels management will substantially reduce the likelihood and size of fires in the upper Mokelumne watershed and these reductions in burn area will substantially reduce the risk and scale of post fire surface erosion, debris flows, and other mass wasting events, as well as to natural and human resources.

This modeling was borne out by the Butte Fire where success stories were observed: the Pine Acres Fuel Break triumphantly rebuffed the advancing flames of the Butte Fire, saving hundreds of homes in the adjacent subdivision. On the Calaveras fire front, the town of Mokelumne Hill was essentially saved by a fuel break between the town proper and the river canyon (as well as favorable wind conditions and night-time humidities).

**Description of Workplan and Schedule:**

Project	Project Unit	Area	APN	Actions*
MitchellCrest	Crestview	18.1	30-140-009	EA/MC/FR
MitchellCrest	Mitchell Mine E.	46.2	30-140-007	EA/MC/FR
MitchellCrest	Mitchell Mine W.	29.1	30-140-007	EA/FRH

Actions\* are EA (NEPA Environmental Assessment/CEQA Environmental Analysis), MC (Mechanical Commercial Thinning/Mastication), FR (Fuels Reduction), FRH (Fuels Reduction through Hand Work)

Table 1. Distribution of BLM land by parcel:

Project Unit APN Treatment\* Area  
 MitchellCrest

Crestview-- parcel 30 140 009 EA/CT/FR 18.1

Treatments include modifying environmental analysis, commercial thinning and fuels reduction.

Mitchell Mine East -- parcel 30 140 007 EA/CT/FR 46.2

Mitchell Mine West – parcel 30 140 007 EA/CT/FR 29.1

Treatments include commercial thinning and fuels reduction.

This proposal is a Category 1 project. Since the property is federal BLM land - with the potential need to utilize private lands for operations - NEPA and CEQA analysis is required.

BLM staffing is slim; internal environmental assessment is possible for much of the Category 2 project (Environmental Analysis modification) but not all. Therefore, some aspects of the environmental assessment will likely be contracted to external consultants.

The parcels will be treated to reduce the currently-overcrowded basal area by half, from approximately 350 square feet/acre to 175 square feet/acre. Along with much of the brush, suppressed trees will be removed through mastication. Larger trees will be appropriately spaced to reduce the connection of crowns and to reduce the spread of wildfire. Insect-killed trees and heavily disease-infected trees will be removed. Understory ladder fuels will be removed. This will be accomplished by employing a combination of mechanical and hand treatment in the project area – refer to project maps for specificity. The result will be a shaded fuel break which will benefit adjacent communities as well as water quality and quantity.

To protect water quality and riparian resources, lands adjacent to watercourses will be treated by hand only – these will be equipment exclusion zones of 100 feet on both sides of the watercourse. To assure protection of soil and water resources, only rubber tired equipment will be used, and only when soil moisture is dry enough to avoid compaction. This will serve to mitigate impacts on a species of special concern – soap root – that has been identified in the area.

The Crestview/Mitchell Mine project includes 93 acres of BLM mixed conifer land at the 2400' elevation, located northeast of Pine Grove (Topographic Map). The project will amend an existing Environmental Assessment to reduce the understory fuel load and thin the trees to reduce the potential for wildfire and additional insect attack. Project implementation will extend existing fuels reduction projects which include lands of Jones (118 acres), lands of the Indian Grinding Rock State Historic Park (128 acres), and State lands of the Pine Grove Camp (Department of Corrections & Rehabilitation). Ultimately, this project will tie together these aforementioned lands with a large-scale fuelbreak currently underway by CAL FIRE from Tabeau Road north to Pine Grove. All

of this will result in protecting water quality and the biodiversity in the local watershed as well as the waters in the Delta.

The overall project is designed to protect the following:

- Communities of Pine Grove and Volcano in Amador;
- Mokelumne watershed – high quality and reliable supply of water for these local communities as well as over millions of downstream water users in Southern California;
- High site industrial timberlands in Amador County;
- BLM lands in and around the project areas and USFS lands to the east;
- State lands of Indian Grinding Rock State Historical Park and Pine Grove Camp.

Importantly, the project aligns with the California Water Action Plan; specifically “Managing Headwaters for Multiple Benefits.” By reducing forest density, it allows for more water to infiltrate into the forest floor and recharge the groundwater.

Slopes in the project areas range from flat to 35%. These areas have largely been left unmanaged in the past. Today, there are clumps of dog-thicket, poorly-formed pine saplings (whips) that are surrounded by competing whiteleaf manzanita, deer brush, coyote brush, toyon, live and black oaks and some open space with bear clover. There is significant mortality from the western pine beetle – there are old snags and active cluster infestations of insect attacks. In other areas of the stands, the brush component has dominated the site for many years with the exception of some scattered residual overstory Ponderosa pines. The result is an abundance of ladder fuels which pose a serious fire threat to the adjacent developed parcels around the various WUI zones. The silvicultural prescription of Commercial Thinning/Mastication (Mechanical) with an understory fuels reduction component is prescribed for this project to bring the lands back into a watershed and landscape-based state of health, with, fire-resilient/water-thrifty stands, consistent with the Federal GTR-220 ecosystem management strategy which emphasizes the importance of forest structure heterogeneity. The Thinning portion of the Mechanical prescription should serve to generate revenue to offset the cost for the fuels reduction treatment; however, given the recent volatility of the log market, this grant request does not make this presumption. The Mastication work will avoid all areas where the soap root plant has been identified.

This proposed treatment is a significant opportunity to reduce wildfire risk and, as a result, protect water quality, increase water runoff and consequent water quantity.

Table 2. Project Accomplishments/Deliverables:

Project Accomplishments	Due Date	Specific Responsibilities
Project Authorization	June 2016	SNC announces Prop 1 awards
Contract execution	July 2016	SNC, CHIPS sign documents
Project Description Developed	September 2016	BLM, CalAmTeam

Modify EA	November 2016	BLM Fuels Officer
Treatment bid contracts executed	December 2016	BLM, CalAmTeam
Project implementation commencement	May 2017	BLM, Contractor(s)
Project completion	September 2017	Contractor(s)

**Description of Community Support:**

There is an active Watershed and Forest Restoration program in Amador and Calaveras Counties that is orchestrated by the Amador Calaveras Consensus Group (ACCG). The success of the ACCG stems from its broad-based participation ranging from individual citizens, including the Mi-Wuk community, to resource professionals including County governmental departments, State agencies (CAL FIRE, CDFW), federal agencies (USFS, BLM, NRCS, NPS), utility districts (Calaveras County Public Utilities District, Calaveras County Water District, Amador Water District, Upper Mokelumne River Watershed Authority, EBMUD, PG&E and the water agency collaboration called the Upper Mokelumne River Watershed Authority - UMRWA), local fire districts, Amador Resource Conservation District and environmental nonprofits (Central Sierra Environmental Resource Center and Foothill Conservancy). The letters of support from the ACCG and the Amador Resource Conservation District for this project to kick start the larger BLM Mokelumne Community Forest is a clear expression of community support.

**Status of Tribal Involvement and Contact Information:**

During the last quarter of the 20th century, the lumber mills in the foothills of Amador and Calaveras Counties closed, causing widespread unemployment and poverty that persists today. This is particularly true in the Native American community which responded in 2007 by creating CHIPS to improve the welfare of this group as well as the community at large. About 40% of the CHIPS Board is comprised of Mi-Wuk Elders and they have worked closely with the California Indian Manpower Corporation for the last eight years on the recruitment, training, and the hiring process. Today, 25% of the workforce that now numbers over 25 employees comes from the Native American community. It should be noted that CHIPS is diversifying by serving as the fiscal agent on this and another forest restoration project.

As stated above, the Mi-Wuk Elders that serve on the CHIPS Board have agreed that this is a project worth supporting.

In Amador County, the Mi-Wuk Indians of the Jackson Rancheria have participated in and funded many local outdoor improvement projects, particularly public parks and ball fields. The Rancheria and CHIPS are an integral part of our community at large and will be involved in the Mokelumne Community Forest in the future.

Contact information for the local Mi-Wuk Indians is:

1. Briana Creekmore. Address: 5411 Old Gulch Rd., San Andreas, Ca 95249. Tribal Affiliation: Miwok – Mi-Wuk. Phone: 209-256-4150. Email: cvmt@live.com.

2. Silvia Burley, Chairperson, California Valley Miwok Tribe. Address: 10601 N. Escondido Place, Stockton, CA 95212. Tribal Affiliation: Miwok. Phone: (209) 487-9519 or (209) 770-4137.

**Description of Long-Term Management Plan:**

The land is under federal ownership by the USDI Bureau of Land Management. There are no short-term or long-term projected changes of land ownership. This project is in concert with BLM's 2007 Sierra Proposed Resource Management Plan and Final Environmental Impact Statement. Protecting or improving water quality is one of the key objectives of BLM. Per lessons learned from catastrophic large-scale wildfires that have burned in the Sierras during this decade – particularly the 2015 Butte Fire, BLM realizes a landscape approach to land management is necessary (versus stand-alone projects such as ridge-based fuelbreaks).

Current/known Butte Fire cost estimates:

- Suppression \$ 56,000,000+
- Insurance claims \$ 300,000,000+
- Uninsured losses \$ 500,000,000+
- Forest restoration \$ 4,000,000 BLM  
\$ 458,000,000 FEMA
- Other - many costs are indirect and difficult to quantify
- Total \$1,318,000,000+

As part of the Mokelumne Community Forest, these high-site lands will be an important part of BLMs ownership, providing resources and recreational opportunities for future generations. Maintenance of the currently-proposed project will be sought to assure WUI protection and continued forest resiliency.

**Description of Regulatory Requirements/Permits Needed**

A cross walk between the existing NEPA documents and CEQA requirements will need to be undertaken. Therefore, we are requesting that Sierra Nevada Conservancy conduct a crosswalk between the BLM NEPA documents and CEQA.

**Restrictions/Agreements Needed/In Place:**

This proposal is a Category 1 project. A project package needs to be constructed by BLM for bid and the project to be awarded and successfully completed.

**Description of Organizational Capacity:**

CHIPS is the fiscal agent on the current project. It has successfully bid on, managed and completed numerous fuels reduction contracts on USFS, BLM and private lands. It

has the financial and oversight expertise to ably execute proposed Category 1 project from inception to successful completion.

CHIPS Performance History: The original capital for CHIPS came from the National Forest Foundation, a \$500,000 Federal Earmark, a USDA Rural Business Enterprise Grant and a grant from the Sierra Nevada Conservancy.

CHIPS began field work in 2008. Early projects included 100 foot clearance around senior citizen's homes (78) for the Calaveras Foothills Fire Safe Council, restoration of six Mi-Wuk cultural sites in the Calaveras Ranger District of the Stanislaus National Forest, and numerous private contracts involving plantation thinning, chipping, 100' clearances for defensible space, and shaded fuel breaks on BLM variances. CHIPS also split and delivered 35 cords of firewood to 140 low income families in Calaveras County under contract. Beginning in 2010, CHIPS has operated its field and administrative operations using program income. The following represents a year by year account of our field work from 2010.

2010 BLM in Glencoe

Danielson, Norwich Mine and Banner fuel breaks and plantation thin- 59 acres

2011 BLM-Lilly Gap

Shaded fuel break, plantation thinning, mastication and chipping  
Private Lands

10 projects totaling 32 acres of forest thinning.

2012 Stanislaus National Forest

Alpine Fuel Break- 35 acres

Eldorado National Forest

Power Fire Sensitive Sites - 10 acres

Private Homeowners fire safe clearance- 30 acres.

2013 Stanislaus National Forest:

Skyline Fuel Break - 27 acres

Eldorado National Forest:

Silver Lake Fuel Reduction - 18 acres

Private homeowners - 41 acres

2014 Stanislaus National Forest

Skyline Fuel Break- 20 acres

Ramsey Fuel Break- 80 acres

Eldorado National Forest

View 88 Fuel Break -50 acres

Amador Fire Safe Council- 100 foot roadside clearance & chipping, 60 days

Private contracts -52 acres

2015 Stanislaus National Forest:

Skyline Fuel Break-11 acres  
Roadside clearing - 17 acres  
Eldorado National Forest  
View 88 Fuel Break- 30 acres  
PiPi Valley sensitive sites- 20 acres  
Amador Fire Safe Council  
15 days to complete and 45 more under contract  
Private contracts  
20 acres to date

2015/16 Stanislaus National Forest contracts under agreement #13-PA-11051600-032

Tamarack WUI Fuel Break- 188 acres  
Sky High WUI Fuel Break- 35 acres  
Roadside brushing 7N08, 7N36, 7937Y- 24.5 acres  
Coast to Crest Trail and OHV Maintenance - 27 acres  
Reroute and Maintenance of Ramsey Trail- 1.55 acres  
Candy Rock Trail Maintenance- 1.25 acres  
McCormick Meadow Cultural Site Restoration- 10 acres  
Segales Meadow- Conifer Removal- 10 acres  
Ganns Meadow WUI Fuel Break at Ramsey- 87 acres

To increase its capacity, the BLM Mother Lode Office is combining its holdings in both counties into the “Mokelumne Community Forest” or “MCF”. The MCF will be managed by BLM in collaboration with local stakeholders including special districts (water, fire and resource conservation (Amador Resource Conservation District)), CAL FIRE, county governments, non-profits (CSERC – Central Sierra Environmental Resource Center and the Foothill Conservancy), the ACCG (Amador-Calaveras Consensus Group), resource consultants, local contractors, and more. The MCF will be modeled after the Weaverville Community Forest where the combined capacity of stakeholders has enabled BLM to actively manage its land <http://tcrd.net/wcf/index.htm>

### **Project Location:**

The project is within the Pine Grove Community Wildfire Protection Plan. The project is within 1000 feet of Highway 88 and is surrounded by habitable structures and Indian Grinding Rock State Park. Mitchell Mine East is located to the east of Mitchell Mine Road. Mitchell Mine West is located to the west side of the road.

Project Unit APN Treatment\* Area

MitchellCrest

Crestview-parcel -- 30 140 009 EA/CT/FR 18.1

Mitchell Mine East -- parcel 30 140 007 EA/CT/FR 37.2

Mitchell Mine West – parcel 30 140 007 EA/CT/FR 29.1

**Senate District Number: 8<sup>th</sup> Assembly District Number: 5<sup>th</sup>**

**Person with Management Responsibility for Grant Contract:**

Steve Wilensky, CHIPS President; 209-293-7907 SteveDWilensky@gmail.com

**County Administrator or Planning Director Contact Information:**

Chuck Iley, Amador County CAO; 209-223-6470 ciley@amadorgov.org

**Nearest Public Water Agency Contact Information:**

Gene Mancebo, General Manager, Amador Water Agency; 209-223-3018

**Brief Description of the CEQA Status of the Project:**

The project is on –USDI Bureau of Land Management land with an approved NEPA Environmental Assessment (EA). The NEPA work will have to cross-walked with CEQA (refer to **Description of Regulatory Requirements/Permits Needed above**). This is included in the proposed budget. The existing EA (attached) will have to be modified slightly to include the Commercial Thinning silvicultural prescription on the eastern portion of the Mitchell Mine parcel.

**Brief Description of the NEPA Status of the Project:**

Attached is a copy of the NEPA EA.

**Please identify the appropriate project category below and provide the associated details:**

Category One Site Improvement. See above for details on the project.

**Site Improvement Area**

Total Acres: 93

**Items to be submitted with pre-application form**

See full application checklist and table of contents.

Date of Application: 3/1/16

Steve Wilensky

209/293-7907

Authorized Representative

Phone Number

# Amador Calaveras Consensus Group

c/o Blue Mountain GIS PO Box 216 Mokelumne Hill, CA 25245  
209-479-0868

TO: SIERRA NEVADA CONSERVANCY  
11521 Blocker Drive  
Suite 205  
Auburn, CA 95603

February 14, 2016

RE: PROPOSITION 1 GRANT APPLICATION, Funded by the  
Water Quality, Supply, and Infrastructure Improvement Act of 2014

Sierra Nevada Conservancy:

The Amador-Calaveras Consensus Group (ACCG) is a diverse, community-based collaborative that works to create fire-safe communities, healthy forests and watersheds, and sustainable local economies. The ACCG fully supports the CalAm Team's efforts for the Crestview/Mitchell Mine Mokelumne Community Forest/BLM lands project to protect water quality and improve forest health.

This funding will serve to implement a project on BLM lands in Amador County that will provide critical Wildland-Urban Interface (WUI) protection to the communities of Pine Grove and Volcano in Amador County. Moreover, the project will help protect water quality in adjacent fish bearing creeks and the Mokelumne River watershed in general. The project already has an approved environmental analysis which can be modified to construct a shaded fuel break.

The project concepts are drawn from existing Community Wildfire Protection Plans (CWPPs) which have prioritized projects within Amador and Calaveras counties. In addition, the MACA Study (Mokelumne Watershed Avoided Cost Analysis) concluded that it does indeed make economic and protection of water quality sense to increase investment in proactive forest management to reduce the risk of large, damaging wildfires. The proposal utilizes the findings of the MACA Study in justifying this grant application.

With this funding, the CalAm Team will work with BLM on the implementation of the project which will significantly reduce the fuel hazard in these vital WUI zones and protect water quality.

We urge your support in funding this proposal.

Sincerely,

/s/Kimberly Grissom  
Blue Mountain GIS  
Administrator, Amador Calaveras Consensus Group

Approved: February 17, 2016



**United States Department of the Interior**  
**BUREAU OF LAND MANAGEMENT**

Mother Lode Field Office  
5152 Hillside Circle  
El Dorado Hills, CA 95762  
[www.blm.gov/ca/motherlode](http://www.blm.gov/ca/motherlode)



February 26, 2016

SIERRA NEVADA CONSERVANCY  
11521 Blocker Drive, Suite 205  
Auburn, CA 95603

1700  
CA180.01

Re: PROPOSITION 1 GRANT APPLICATION, Funded by the Water Quality, Supply and Infrastructure Improvement Act of 2014

To Whom It May Concern:

I am writing to express my support for the CalAm Team's above-referenced grant application for the Crestview/Mitchell Mine and the South Fork Mokelumne River Watershed Restoration Projects.

These grants will allow the immediate implementation of the Crestview/Mitchell Mine project, a forest health initiative on BLM lands in Amador County, as well as NEPA and CEQA analysis of the South Fork Mokelumne River Watershed Restoration project on BLM-administered public lands within the Mokelumne River watershed in Calaveras County. Both projects are located entirely within the wildland-urban interface and will provide critical protection to the communities of Pine Grove and Volcano in Amador County as well as West Point, Glencoe and Wilseyville in Calaveras County.

The proposals are fully consistent with BLM's Sierra Resource Management Plan, and would enhance forest and watershed health within BLM's 15,000 acre Mokelumne Community Forest. Restoring the health of the Mokelumne River watershed is the primary purpose of the Community Forest, and both projects would significantly contribute to the achievement of this goal. Project concepts are drawn from existing Community Wildfire Protection Plans, which prioritize projects within the Mokelumne River watershed. In addition, the recently-completed Mokelumne Watershed Avoided Cost Analysis was utilized in the design of the projects and in the preparation of this grant application. This study concluded that it makes economic sense to increase investment in proactive forest management to reduce the risk of large wildfires, especially in the central and lower portions of the watershed where the projects are located.

Accordingly, I strongly support the CalAm Team's proposal.

Sincerely,

William S. Haigh  
Mother Lode Field Manager

AMADOR



Resource Conservation District

12200-B Airport Rd  
Jackson, CA 95642  
Phone: 209-223-65643  
Email: ARCD@amadorrccd.org  
Web: www.amadorrccd.org

Directors  
Steve Cannon, Bob Long, Carole Marz, Ed McCracken, Dan Port

TO: SIERRA NEVADA CONSERVANCY  
11521 Blocker Drive  
Suite 205  
Auburn, CA 95603

February 26, 2016

RE: PROPOSITION 1 GRANT APPLICATION, Funded by the  
Water Quality, Supply, and Infrastructure Improvement Act of 2014

The Amador Resource Conservation District (ARCD) is a Special District authorized under Division 9 of the California Public Resources Code. The ARCD is active in the conservation of all natural resources in Amador County and has administered three fuel hazard reduction projects in the recent past. The ARCD fully supports the CalAm Team's efforts for the Crestview/Mitchell Mine Mokelumne Community Forest/BLM lands project to protect water quality and improve forest health.

This funding will serve to implement a project on BLM lands in Amador County that will provide critical Wildland-Urban Interface (WUI) protection to the communities of Pine Grove and Volcano in Amador County. Moreover, the project will help protect water quality in adjacent fish bearing creeks and the Mokelumne River watershed in general. The project already has an approved environmental analysis which can be modified to construct a shaded fuel break.

The project concepts are drawn from existing Community Wildfire Protection Plans (CWPPs) which have prioritized projects within Amador and Calaveras counties. In addition, the MACA Study (Mokelumne Watershed Avoided Cost Analysis) concluded that it does indeed make economic and protection of water quality sense to increase investment in proactive forest management to reduce the risk of large, damaging wildfires. The proposal utilizes the findings of the MACA Study in justifying this grant application.

With this funding, the CalAm Team will work with BLM on the implementation of the project which will significantly reduce the fuel hazard in these vital WUI zones and protect water quality.

We urge your support in funding this proposal.

Sincerely,

  
Steve Q. Cannon  
Director, ARCD

Approved in Special Meeting 2/26/16, Yea  4 Nay  0 Abstain  ABSENT  1

## **Tribal Consultation Narrative**

### **Status of Tribal Involvement and Contact Information:**

During the last quarter of the 20th century, the lumber mills in the foothills of Amador and Calaveras Counties closed, causing widespread unemployment and poverty that persists today. This is particularly true in the Native American community which responded in 2007 by creating CHIPS to improve the welfare of this group as well as the community at large. About 40% of the CHIPS Board is comprised of Mi-Wuk Elders and they have worked closely with the California Indian Manpower Corporation for the last eight years on the recruitment, training, and the hiring process. Today, 25% of the workforce that now numbers over 25 employees comes from the Native American community. It should be noted that CHIPS is diversifying by serving as the fiscal agent on this and another forest restoration project.

As stated above, the Mi-Wuk Elders that serve on the CHIPS Board have agreed that this is a project worth supporting.

In Amador County, the Mi-Wuk Indians of the Jackson Rancheria have participated in and funded many local outdoor improvement projects, particularly public parks and ball fields. The Rancheria and CHIPS are an integral part of our community at large and will be involved in the Mokelumne Community Forest in the future.

Contact information for the local Mi-Wuk Indians is:

1. Briana Creekmore. Address: 5411 Old Gulch Rd., San Andreas, Ca 95249. Tribal Affiliation: Miwok – Mi-Wuk. Phone: 209-256-4150. Email: cvmt@live.com.
2. Silvia Burley, Chairperson, California Valley Miwok Tribe. Address: 10601 N. Escondido Place, Stockton, CA 95212. Tribal Affiliation: Miwok. Phone: (209) 487-9519 or (209) 770-4137.

## **LONG-TERM MANAGEMENT AND SUSTAINABILITY**

A goal of the Crestview/Mitchell Mine Project is to create a fire and disease resilient forest that maximizes water retention, clean water runoff and carbon sequestration using the management guidelines published in the following documents:

BLM's 2008 Sierra Resource Management Plan and Final Record of Decision  
([http://www.blm.gov/style/medialib/blm/ca/pdf/folsom/rmp.Par.86036.File.dat/Sierra\\_ROD\\_Final\\_web.pdf](http://www.blm.gov/style/medialib/blm/ca/pdf/folsom/rmp.Par.86036.File.dat/Sierra_ROD_Final_web.pdf))

North, Malcolm, ed. 2012. Managing Sierra Nevada forests. Gen. Tech. Rep. PSW-GTR-237. Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station. 184 p.

(<http://www.plantsciences.ucdavis.edu/affiliates/north/Publications/Managing%20Sierra%20Nevada%20Forest%20PSW%20GTR%20237.pdf>)

Recent experience in the Mokelumne Watershed indicates that 10-year treatment cycles are needed to suppress returning brush and saplings by various measures such as controlled burns, commercial and pre-commercial thinning, mastication and hand crews. Only commercial thinning has the potential to generate revenue. The Crestview/Mitchell Mine project will establish a shaded fuel break on 93 acres of forest. The project will create a healthier forest stand capable of generating more revenue to self-fund maintenance projects in the future.

Over the decades, BLM has missed these 10-year treatment cycles for lack of capacity, manpower and money. The basic principle behind the Mokelumne Community Forest is to augment BLM's management capacity with the diverse resources of local stakeholders to assure that future planning and maintenance gets done (LOS\_BLM.pdf). As a preview, consider the ad hoc group of local retired professionals, the 'Calaveras Amador Forestry Team, created this SNC application for Category 1 funding. Working under BLM's lead with advice from CAL FIRE, the CalAm Team identified forest needs, performed all scoping, created all of the maps, and wrote this application at their own expense. CHIPS offered to be the fiscal agent and provide administrative support while the Amador RCD volunteered to make the NEPA/CEQA crosswalk. This collaborative spirit will thrive in the future given the administrative structure of the Mokelumne Community Forest. This is the same collaborative spirit that has led to ACCG's success in the implementation of the Collaborative Forest Landscape Restoration Program.

**SIERRA NEVADA CONSERVANCY**  
**SNC Watershed Improvement Program - DETAILED BUDGET FORM**

**Cat. 1: Bureau of Land Management Mokelumne Community Forest -- Crestview/Mitchell Mine**  
**Applicant: Calaveras Healthy Impact Product Solutions (CHIPS)**

<b>SECTION ONE DIRECT COSTS</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>	<b>Year Four</b>	<b>Year Five</b>	<b>Total</b>
<i>Project Management Costs</i>		\$27,400.00				\$27,400.00
<i>Environmental Assessment Revision</i>	\$7,200.00					\$7,200.00
<i>Commercial Thinning (64 acres)</i>		\$0.00				\$0.00
<i>Hand fuel reduction (30 acres)</i>		\$81,000.00				\$81,000.00
<i>Mastication (40 acres)</i>		\$56,000.00				\$56,000.00
						\$0.00
<b>DIRECT COSTS SUBTOTAL:</b>	\$7,200.00	\$164,400.00	\$0.00	\$0.00	\$0.00	\$171,600.00

<b>SECTION TWO PARTIAL INDIRECT COSTS</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>	<b>Year Four</b>	<b>Year Five</b>	<b>Total</b>
						\$0.00
<i>Publications, Printing, Public Relations</i>	\$350.00					\$350.00
<i>Reporting, Perf Measures, Invoice Billings</i>						\$0.00
						\$0.00
<b>INDIRECT COSTS SUBTOTAL:</b>	\$350.00	\$0.00	\$0.00	\$0.00	\$0.00	\$350.00
<b>PROJECT TOTAL:</b>	\$7,550.00	\$164,400.00	\$0.00	\$0.00	\$0.00	\$171,950.00

<b>SECTION THREE</b>						<b>Total</b>
<b>Administrative Costs (Costs may not exceed 15% of the above listed Project costs) :</b>						
<i>CHIPS rate 10%</i>						\$17,195.00
						\$0.00
						\$0.00
						\$0.00
						\$0.00
<b>ADMINISTRATIVE TOTAL:</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$17,195.00
<b>SNC TOTAL GRANT REQUEST:</b>	\$7,550.00	\$164,400.00	\$0.00	\$0.00	\$0.00	\$189,145.00

<b>SECTION FOUR</b>	<b>Year One</b>	<b>Year Two</b>	<b>Year Three</b>	<b>Year Four</b>	<b>Year Five</b>	<b>Total</b>
<b>OTHER PROJECT CONTRIBUTIONS</b>						
<i>List other funding or in-kind contributors to project (i.e. Sierra Business Council, Department of Water Resources, etc.)</i>						
<i>BLM planning costs</i>						\$31,500.00
<i>Cal-Am Forestry Team</i>						\$15,750.00
						\$0.00
						\$0.00
						\$0.00
						\$0.00
<b>Total Other Contributions:</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$47,250.00

**NOTE:** The categories listed on this form are examples and may or may not be an expense related to the project. Rows may be added or deleted on the form as needed. Applicants should contact the SNC if questions arise.



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Mother Lode Field Office  
5152 Hillside Circle  
El Dorado Hills, California 95762  
[www.blm.gov/ca/motherlode](http://www.blm.gov/ca/motherlode)

**EA Number:** CA-180-15-24

**Project Name:** Pine Grove / Buckhorn Ridge Road Understory Thin Project

### **Location:**

Pine Grove project area: T. 7 N., R. 12 E., within sections 33 and 34, MDBM. Located on the BLM parcels along portions of Pine Grove Volcano Road, Crest View Drive, Moonlight Ridge Road and Mitchell Mine Road surrounding the community of Pine Grove within Amador County, CA (see attached project area map)

Buckhorn Ridge Road project area: T. 7 N., R. 13 E., within sections 20, 21 and 29, MDBM. Along Buckhorn Ridge Road and on the BLM parcel that is located north of Creekside Land and south of Sugar Pine Drive surrounding the community of Pioneer within Amador County, CA (see attached project area map)

### **1.0 Purpose of and Need for Action**

#### **1.1 Need for Action**

The Bureau of Land Management's Mother Lode Field Office (BLM) administers scattered public lands throughout Amador County. Both the Pine Grove and the Buckhorn Ridge Road project areas were identified in 2014 as areas in need of fuels reduction by local residents and the local Amador Fire Safe Council (FSC). Forest fuel loads in the area have been untreated in the past leaving a high density of fuels. Rural homeowners rely on urban fire organizations such as the volunteer fire departments, and Cal-Fire for fire protection.

Many of the lands identified for treatment are adjacent to BLM managed parcels. Neither Pine Grove nor the Buckhorn Ridge project areas have experienced a natural fire regime for 100 years or more, and have missed several fire return intervals. Due to this both project areas contain aged shrub stands and large proportions of dead fuels. In many forest stands understory fuels have increased markedly, creating unhealthy forest conditions and making the probability that the areas will experience a catastrophic wildfire more likely. At the same time, the local communities have grown. There are numerous private residences in the area, some of them located in close proximity to or adjacent to the BLM parcels containing dense fuels.

In areas of dense rural residential settlement, homes can actually add to the fuel load available to a wildfire, increasing the size and magnitude of the fire. The private developments in the Pine Grove and Pioneer communities are surrounded by a scattered urban interface where parcels

range from 2.5 to 20 acres in size, much of which contains residential and some light commercial development.

Both project areas are considered to be wildland-urban interface (WUI) communities. WUI refers to the zone of transition between unoccupied land and human development. Communities that are within 0.5 miles (0.80 km) of the zone are included. These lands and communities adjacent to and surrounded by wildlands are at an increased risk of wildfires. This mix creates a true WUI problem where even the smallest fires with the most prompt emergency response could be catastrophic and result in structure loss. The increase in the WUI threat has been steep because of continued development and exposure of the communities. Members of the local communities and local state and county agencies are concerned about this situation and have been working with the BLM and Cal-Fire to improve forest health and reduce hazardous fuels within Amador County.

The Pine Grove project area is also of special concern because the proposed lands surround Pine Grove Volcano Road. Pine Grove Volcano Road is the primary corridor connecting the communities of Pine Grove and Volcano to the north. The road also provides critical access and egress for numerous community residents within the WUI boundary. A fire occurrence on these lands could cut off access for emergency responders and evacuees should the road be compromised. Due to limited firefighting resources, especially during the early stages of an expanding wildfire incident, high home density, and/or long response times, individual firefighting resources may not be able to reach the community in a timely manner should the road and the areas around it become compromised with fire. Dense fuels on the lands surrounding the road increase the risk of fire igniting along the road which could potentially cut off essential community access and evacuation.

As with the Pine Grove project area, the Buckhorn Ridge Road area is also of special concern because these lands surround numerous private residences. Buckhorn Ridge Road provides critical access and egress for numerous Pioneer community residents within the WUI boundary. As in the Pine Grove project area a fire occurrence on these lands could cut off access for emergency responders and evacuees should the road be compromised. Due to limited firefighting resources, especially during the early stages of an expanding wildfire incident, high home density, and/or long response times, individual firefighting resources may not be able to reach the community in a timely manner should the road and the areas around it become compromised with fire.

The proposed action to be analyzed in this EA would expand on, support and link past and current landscape projects in the Pine Grove and Pioneer 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 the public lands within the Amador County 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 Amador County WUI—is consistent with the Sierra Resource Management Plan, approved in February 2008. The Sierra Resource Management Plan's Record of Decision (pages 15-16) 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 objectives for meeting these goals are to:

1. Reduce the risk of wildfire in WUI communities;
2. Reduce the risk of catastrophic wildfire through fuels management;
3. 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, approved in March 2011, gives the BLM various fire and fuels treatment objectives and strategies for specific lands under the BLM's administration. 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 Alternatives**

### **2.1 Proposed Action**

Implementation would be carried out by the BLM and its partners through consultation with the Amador – El Dorado Unit and the Amador County FSC. The proposed BLM action is part of an ongoing large-scale fuels reduction project focusing on lands previously treated. The proposed action to be analyzed in this EA is to expand on, support and link past and current landscape projects in the areas. Treatments would take place between 2015 and 2025 and would ideally be conducted every three to five years. However, treatment may occur in any given year through 2025, based on prioritization of values at risk (such as private and personal property) and the ability to secure funding.

The objective of the proposed project is to reduce vegetative fuels within the identified units. There will be a phased approach on each of the project areas but each area will be treated individually and phases may occur at different times. Each project area has been broken into two areas of probable treatment methods including hand clearing and the possible use of mastication equipment. Phase/area priorities would be based on risk factors and available funding for work. See the attached map for the breakdown of treatment areas. In total, there would be 105.3 BLM acres treated in the Pine Grove area and 177.3 acres of treated BLM acres in the Buckhorn Ridge Road/Pioneer area. The total acre treated for both projects is 282.6. The proposed action would be followed by continued maintenance through 2025.

The objective for the first phase of work in each area 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., a BLM fuels crew, a Cal-Fire crew, a Hotshot crew, a BLM-selected contractor, etc.). Hand treatment would be accomplished by crews using chainsaws and other hand tools. Hand treatment is the preferred method of clearing/thinning.

In addition (or as an alternative) to hand treatments, mechanical treatments may be used in areas that are 150 feet from the centerline of any existing roads and would involve the use of

mechanized equipment to either cut or chip onsite. The mechanical equipment would be either rubber tired/tracked or steel track mounted chipper or masticator. Mechanical treatments would only be used on slopes less than 40 percent and only in the following parcels: the large Buckhorn parcel off Buckhorn Ridge Road and in the small parcel along Pine Grove Volcano Road as shown on the attached maps. Methods would be chosen and used solely or jointly based on changing topography and site specific features. The BLM Fuels Management Specialist would determine the specific treatment to be used.

During the first phase, dead and decadent stands of whiteleaf manzanita, buckbrush, deerbrush, and other shrubby vegetation would be cut and placed in piles to dry. Black and live oaks would be retained regardless of canopy position unless they constitute a potential ladder fuel. In these areas, nearly all black oaks less than 8 inches diameter at breast height (DBH) would be cut and placed in burn piles or offered up as woody biomass. Other broadleaf tree species such as madrone, tan oak, and dogwood would be left to create diversity unless they constitute a potential ladder fuel.

Douglas fir, ponderosa pine, incense-cedar, and other conifers less than 12 inches DBH would be cut and placed in piles or removed for woody biomass. The USDA Forest Service (FS) defines woody biomass as “the trees and woody plants, including limbs, tops, needles, leaves, and other woody parts, grown in a forest, woodland, or rangeland environment, that are the by-products of forest management.” Some conifers less than 8 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 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. Moist drainages in the project include Pioneer Creek in the Buckhorn Ridge Road project area and the Grass Valley Creek in the Pine Grove project area. Defect trees (trees with flaws that reduce its 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 generally be small, up to 5 feet in diameter, and would be placed in the immediate area of the cutting. The number of piles per acre would vary based upon vegetation density but would be expected to be in the range of 10 to 30 piles per acre.

The second phase would involve the use of prescribed fire either to burn piles, or in areas where appropriate, to introduce a low intensity understory prescribed fire in accordance with a BLM-approved burn plan, other BLM policy, and state of California rules and regulations. Fire control lines would be constructed through the use of hand crews cutting with chainsaws around areas to

be burned. Fire lines would occur on the large parcel along Buckhorn Ridge Road as shown in the project area maps attached. Prescribed fire would aid in fuel load reduction.

Understory burning would be used where enough fuel exists to carry a fire, where a fire can be managed safely, and where conditions are suitable for achieving the objective of safely and efficiently reducing the fuel hazard. Pile burning would take place in areas where slash is generated from hand cutting with chainsaws or mechanized cutting. Piles would be burned in late fall through late spring when conditions are suitable to reduce the risk of burn piles igniting a wildfire. If conditions are favorable and necessary procedures can be maintained, the prescribed burn would be allowed to “creep” on the forest floor around the piles to emulate a low intensity surface fire. This would potentially reduce the one-hour fuels built up over time within the conifer stands and leave a “mosaic” pattern across the forest floor.

During the construction of piles, bark and branches around the basal area of the larger conifers would be reduced by 50 percent; this would be done in order to lower the likelihood that these trees would be killed during low-intensity, low-severity wildfire. All work would be done by a hand crew (e.g., contracted fuels crew, Cal-Fire crew, Hotshots, etc.) who would be under the close supervision of BLM’s fuel/fire management specialists. The location and extent of use of understory burning would be determined by community protection/safety requirements and other specifications outlined within approved agency burn plans. Vehicle barriers such as cables, berms, and large boulders may be placed at strategic locations to prevent dirt bikes and other off-highway motorized vehicles from driving within the treated areas.

The objective of the proposed project is to remove 50% of vegetative fuels within the identified units. This objective would be achieved through multiple understory burn treatments over a ten-year period. The method of implementation used and/or combination of methods used on a specific piece of forested landscape can change from acre to acre and often changes several times throughout a project area based on adaptive management. The quality and the end product of the treatment depend on where and how techniques are implemented. The BLM Fuels Management Specialist would pre determine the best treatment or combination of treatments to obtain the best ecological outcome during implementation.

## **2.2 Project Design Features**

All treatment work would be subject to the following stipulations:

1. Erosion and Sedimentation Control - Erosion and sedimentation are potential issues affecting drainages within the project area. To prevent potential degradation, streamside buffers (100 ft minimum from the centerline of creeks) would be established near all drainages. No equipment operation would be allowed on slopes greater than 40% as shown on the map. In areas greater than 40% only hand work would be allowed. A higher density of tree stems and canopy cover would be retained in moist drainages. Masticated brush and other fuels would be dispersed throughout the project area or piled for burning. This layer of mulch would help prevent 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. Rare Plants – No mechanical mastication would occur in the parcels which contain the BLM sensitive species, Red Hills soaproot (*Chlorogalum grandiflorum*). These parcels include the large Buckhorn parcel off Buckhorn Ridge Road and the larger Pine Grove parcel along Moonlight Ridge Road. The smaller BLM parcel in Pioneer south of Sugar Pine Road also contains Red Hills soaproot. In this parcel, it was mainly found along the old two-track road leading into the parcel from the northeast corner. No mechanical mastication would occur in this area (see maps).
3. 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.
4. Cultural Resources - Flagging-tape buffers would be established around identified cultural resources that could be affected by the proposed action.. These cultural resources would be avoided during project implementation.
5. Wildlife – Wood rat nests and large woody debris will be avoided when creating burn piles. If a potential nest cannot be avoided, the pile will be checked for signs of wildlife before lighting. If nests or dens are found, the pile will be avoided. If the pile must be burned, the nest will be restacked nearby or the animal will be given an escape route from the fire.
6. Wildlife - Leave an uncut patch (minimum of 0.25 acres) for every 10 acres harvested, with patches totaling 5 percent of the area. Use “leave-trees” as the center for uncut patches. Riparian and other buffers can help to satisfy this goal.
7. Wildlife - Retain live trees with existing cavities when possible.
8. Wildlife - Retain large trees, defect trees, snags and downed logs for wildlife to the extent feasible. Large snags in particular provide hiding, denning, nesting, and food storage sites for a variety of wildlife. Retain all snags 24 inches and greater in diameter at breast height unless to do so would create an unusual unsafe concentration of fuels.
9. Wildlife. Avoid damaging existing downed woody debris, especially large (18+ inches) hollow or rotten logs and rotten stumps. Leave all existing coarse woody material (more than 6 inches in diameter at the large end) as possible.
10. Wildlife. Retention of coarse woody debris in managed stands should more closely model coarse woody debris found in natural stands. Retain and scatter tops and limbs from 20 percent of the trees harvested.
11. Wildlife. Avoid treatment during the bird nesting season.

### **2.3 No Action**

Under the no action alternative, the BLM would not conduct the planned fuels reduction within the project area. Fuels would continue to build up, increasing the likelihood of a high severity

fire. Ladder fuels could carry wildfire into the tree canopy creating crown fire conditions. These conditions could be devastating to the environment, not to mention lives and property. Without the treatment, even a low intensity surface fire has the potential to move into the canopy of larger conifers, potentially killing these trees and causing a relatively small fire to intensify and grow into a catastrophic crown fire. The potential would remain for a catastrophic fire to cut off access for emergency responders and evacuees.

### **3.0 Affected Environment**

The Buckhorn Ridge Road project area is located within portions of BLM administered parcels surrounding the community of Pioneer. Pioneer is located 5 miles east-northeast of Pine Grove, at an elevation of 2986 feet, along State Route 88. The 2010 United States Census reported that Pioneer had a population of 1,094. The Pioneer area has a climate that can be classified as a dry-summer subtropical climate often referred to as "Mediterranean". Pioneer Creek runs through the northern portion of the BLM parcel located off of Buckhorn Ridge Road. Roads where mechanical treatments would occur are along Buckhorn Ridge Road, Peyus Road, Calypso Court, Sunny Drive and any other small existing residential roads located off the portions of Buckhorn Ridge Road that cross the BLM managed parcels.

The Pine Grove project area is located within portions of BLM administered parcels surrounding and adjacent to the community of Pine Grove. The current boundaries of Pine Grove include the former mining towns of Clinton and Irishtown. The BLM parcels in Pine Grove are adjacent to Indian Grinding Rock State Historic Park. Pine Grove lies at an elevation of 2513 feet (766 m). The population was 2,219 at the 2010 census. The Pine Grove area has a climate that can be classified as a dry-summer subtropical climate often referred to as "Mediterranean". Grass Valley Creek runs through the BLM parcels. Roads where mechanical treatments would occur are along the BLM portions of Pine Grove Volcano Road and Crest View Drive.

Vegetation - In April 2015, the BLM Botanist surveyed and inventoried the vegetation of the project area. Areas with potential plant habitat were surveyed in transects by methodically spacing out surveyors along the slope. The dominant vegetation type is mixed conifer forest. The mature over story canopy consists of Ponderosa pine (*Pinus ponderosa*), sugar pine (*Pinus lambertiana*), Douglas fir (*Pseudotsuga menziesii*), incense cedar (*Calocedrus decurrens*), madrone (*Arbutus menziesii*) and black oak (*Quercus kelloggii*). Understory tree species include canyon live oak (*Quercus chrysolepis*), dogwood (*Cornus nuttallii*) and hazelnut (*Corylus cornuta*). Shrubs consist of dense patches of whiteleaf manzanita (*Arctostaphylos viscida*), deerbrush (*Ceanothus integerrimus*) and mountain misery (*Chamaebatia foliolosa*).

A BLM sensitive plant, Red Hills soaproot (*Chlorogalum grandiflorum*), was found in the project area. The Pine Grove parcel along Moonlight Ridge Road contained numerous occurrences of the plant throughout the eastern side of the parcel and also along the northern edge of the west side of the parcel. The smaller BLM parcel in Pioneer south of Sugar Pine Road also contained Red Hills soaproot. In this parcel, it was mainly found along the old two-track road leading into the parcel from the northeast corner.

Wildlife - The vegetation in the project area provides habitat for a variety of wildlife. The project area is composed primarily of mixed conifer. The mixed conifer forest supports some 355

species of animals (Verner and Boss 1980), including sensitive species such as California spotted owl. Variety in plant species composition provides diversity in food and cover. Black oak acorns, berries from a variety of shrubs (e.g., deerbrush), and a great number of grasses and forbs provide the forage resource essential for wildlife (Kosco and Bartolome 1983). Several projects have occurred over the years in the areas including R.O.W.s, phone lines, mining, and fuels treatments. Based on review of the wildlife reports related to these projects and a site visit in April 2015, during which all the areas were observed, it was determined that no special status wildlife species or habitat to support special status wildlife species is present within the project area.

Recreation - The Pine Grove project area is near the boundary of the Indian Grinding Rock State Historic Park. Both project areas are surrounded by residences on private land in the general area and the parcels surround the towns of Pine Grove and Pioneer. The level of recreational use in the project area is quite high. The project areas are used by hunters, hikers and wildlife enthusiasts.

Visual Resources - The BLM manages this area in accordance with class III visual resource management (VRM) standards. The BLM's objective for class III is to retain the existing character of the landscape. The level of change to the characteristic landscape should be Moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Cultural – Both project areas, including the Pine Grove and Buckhorn Ridge Road areas, have been inventoried by BLM archaeologists. Intensive inventories specific to the proposed action were conducted by a BLM archaeologist in 2013-14 (Pine Grove) and 2015 (Buckhorn Ridge Road). Numerous cultural resources have been identified within the project areas (area of potential effects). These resources are typical for the west central Sierra Nevada, and include mining ditches, placer and hardrock mining areas (prospects and other topographic evidence of exploration and production), and other mining-related features.

#### **4.0 Environmental Effects**

The following critical elements have been considered in this environmental assessment and have been determined to be unaffected by the proposal: areas of critical environmental concern, prime/unique farmlands, floodplains, wilderness, and environmental justice.

#### **4.1 Impacts of the Proposed Action and Alternatives**

Air quality – The proposed action would produce smoke from prescribed fires and to a lesser degree particulate matter from mechanical treatments. Potential effects to air quality from prescribed fire and pile burning could range from reduced visibility to potential pneumonic irritation, as well as the smell of smoke affecting people in proximity to the project area when such treatments are underway. However, the duration of these effects is expected to be short with the greatest impact occurring during the actual ignition or active burning phase, and lasting from one to a few days depending on the size or number of actual burn units or number of piles to be ignited. Residual smoke produced from the burnout of large fuels, or slower burning fuel

concentrations could also occur, and may last between one to three days following the ignition phase. Effects to air quality from mechanical treatments and wood cutting would be dominated by airborne particulate matter generated during the operation of mechanical equipment and transport vehicles and could temporarily reduce visibility in the immediate project area; however, these impacts would quickly upon the completion of operations.

The short-term effects on air quality resulting from the smoke generated from prescribed fire would be temporary and should last less than five days. Potential air quality impacts would be monitored and controlled through existing regulatory processes. Potential adverse impacts would be eliminated using adaptive management and authorizations would not be issued for prescribed fires proposed under conditions conducive to adverse effects. Mechanical treatments causing temporary short-term impacts from dust and exhaust emissions would be very short-lived. No long-term air quality effects would result from implementation of the proposed action. The long-term beneficial effects from fire use and mechanical treatments would reduce the magnitude of smoke and other negative effects caused from potential large wildfires should these treatments not occur.

Water and soil resources – The proposed action would have negligible impacts on water and soil resources; however, proposed treatments could result in short-term adverse effects to soil resources, including compaction and decreased infiltration, erosion and sediment loss. In addition, removal of vegetation through prescribed burning could lead to erosion and sediment loss. However, under prescribed conditions and over relatively small areas during any one prescribed burning event, fire intensity and vegetation mortality are anticipated to be low to moderate. Some vegetation will remain to assist in reducing soil erosion after a prescribed burn treatment. A wildfire event would potentially burn at a greater intensity over a much larger area and produce severe vegetation mortality, leading to more extensive soil erosion as compared to a prescribed burn. Implementation of the Project Design Features for erosion and sedimentation would prevent negative impacts to water and soils. Erosion of sediments into local streams should not occur. Masticated brush and other fuels would be dispersed throughout the project area or piled for burning. This layer of mulch would help prevent erosion.

Vegetation – The BLM Botanist analyzed the impacts of the proposed action on vegetation, particularly special status plants. The analysis is designed to help the BLM meet its obligations under the Endangered Species Act and other BLM policies with respect to special status species. The analysis included a background records search through the California Natural Diversity Database as well as an internal BLM natural resources geodatabase. Information was also collected in the field during rare plant surveys conducted in April 2015.

Project area plant communities including riparian zones and mixed conifer forests are adapted to periodic wildfire. The proposed treatments of mechanical mastication and prescribed fire would mimic the effects of a low intensity wildfire. The project area has experienced natural wildfire events in the past (as well as broadcast burning) and has recovered after the removal of shrubs and other understory vegetation. Likewise, the common woody species (e.g., deerbrush, small black oak, whiteleaf manzanita, etc.) that would be cut in the course of the proposed action would reestablish within the project area over time.

Red Hills soaproot was found in two parcels of the project area. This species seems to prefer areas with less dense canopy cover. In the Pioneer parcel, the Red Hills soaproot is only found along the two-track road on BLM land where the canopy cover is more open. As the canopy gets thicker on each side of the road the Red Hills soaproot quickly disappears. Similarly in the Pine Grove parcel the soaproot is found in areas where the overstory cover is less dense. Using hand-thinning to open up the dense overstory canopy may provide more suitable habitat for this species. Because the Red Hills soaproot evolved in a fire adapted ecosystem, prescribed fire should not cause negative impacts but should remove accumulated understory litter to open up habitat for this species. Mastication would not be permitted in the two parcels where this species occurs because it could cause compaction and crushing of the plants.

Wildlife - The BLM wildlife biologist analyzed the impacts of the proposed action on wildlife, especially on special status wildlife with an on the ground survey on April 2015, and through the use of Geographical Information Systems (GIS) databases. She reviewed the California Natural Diversity Database, as well as an internal BLM natural resources geodatabase. She also reviewed wildlife reports from several projects over the years in the Pine Grove and Pioneer areas. Her analysis was designed to help BLM meet its obligations under the Endangered Species Act and other authorities and BLM policies. The biologist recommended that the proposed action would not affect threatened and endangered wildlife or other BLM special status wildlife.

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 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, such as the loss of shrubby understory vegetation which can recover quickly. 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 will reduce impacts to ground- and shrub-nesting birds, as well as species living within the litter layer.

Wildlife populations may be affected by fire either directly by heat and flames, or indirectly through modification of the habitat. Most animals can escape fire, particularly low-intensity fire under prescribed conditions. However, relatively immobile animals, such as salamanders, some small mammals, turtles, and snakes may be killed. Dusky-footed woodrat (*Neotoma fuscipes*) are

particularly vulnerable species because its houses are made of dry twigs. In addition, woodrats are reluctant to leave their homes even with approaching fire (Lawrence, 1966). Small animals and insects have also been observed being predated upon while attempting escape from a prescribed fire (Lawrence, 1966).

In addition, ground-nesting or shrub-nesting birds and young mammals (thus less mobile) may be directly impacted by prescribed burning during the spring season. Another short-term impact of spring and early summer burns is a temporary drop in food availability or cover because understory vegetation may not re-sprout until the following year. This could lead to a reduction in reproductive success. Reduced cover exposes animals to increased likelihood of predation. Prescribed burning outside of the breeding season would eliminate the impacts to nesting birds and young mammals.

Early successional wildlife species are favored by fire, while those associated with climax communities may be reduced in number or displaced. However, uneven burning which leaves a diversity of habitats and patches of unburned vegetation would mitigate for impacts to species preferring climax communities or species with narrow ecological niches. Prescribed burning commonly results in a mosaic of burned and unburned vegetation and therefore increases habitat diversity, which is reflected in the species composition and diversity of associated animal communities.

Once it sprouts, new vegetation is highly palatable and nutritious. Populations of small mammals, as well as animals such as deer and quail, build up rapidly after the start of new growth. During the first year after a fire, deer generally forage on the new sprouts that are within 300 feet of unburned cover. During the second post-year burn, vegetation growth meets and exceeds the cover needs for deer. Herbaceous forage benefits for deer last about seven years. The forage benefits translate into increased fawn production and survival (Ashcraft, 1979).

Prescribed burns can create small isolated islands of shrubs and trees which can lead to habitat fragmentation (National Wildfire Coordinating Group, 1994). Adequate linkage of habitat components (e.g., a stringer of cover connecting larger areas of escape cover) would most likely still be in place with the proposed prescribed burn. This unburned connector habitat would mitigate for the potential of habitat fragmentation.

Cultural Resources – A BLM archaeologist has conducted cultural resource studies for the project areas (the area of potential effects) to determine whether significant cultural resources could be affected by the proposed action. The study included a background records search, intensive field inventories, tribal consultation, and other efforts. The studies were designed to help BLM meet its obligations under Section 106 of the Historic Preservation Act and other authorities. Numerous cultural resources, almost all related to placer and hardrock gold mining, have been identified within the project areas. It is anticipated that the proposed actions would not affect significant cultural resources. All potentially significant cultural resources that could be affected by the proposed action would be flagged for avoidance. Consultation with Native Americans has been ongoing. All Native American input will be carefully considered. We do not anticipate that any places of traditional religious and cultural significance to Native Americans would be affected. If such places are identified we will work with the affected Native Americans

to modify the proposed action to avoid negative effects. Project design features address cultural resource protection.

Recreation - The proposed action could have negligible short-term negative impacts on recreational use. Hunters and motorists on designated routes might be inconvenienced temporarily during project implementation due to the noise and dust caused by cutting and chipping fuels, and the use of the roads in the area by project-related vehicles. Recreationists would continue to use the project area after the proposed action is implemented with no additional inconvenience.

Visual Resources - 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. 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.

#### **4.2 Impacts of the No Action Alternative**

Though highly variable and difficult to predict with certainty, not implementing the proposed action could lead to detrimental impacts to forest health, firefighting efforts, and adjacent private properties. If a fire were to occur within the project area during a high fire season it would likely move into the upper story, creating a crown fire and burning virtually all the trees and vegetation. A wildfire within the project area could cut off access for emergency responders and evacuees should the road be compromised. A catastrophic wildfire would remove large areas of vegetation, leading to increased erosion and very limited habitat and forage for wildlife. Implementing the proposed action would move this stand to a healthier, more resilient condition so if a fire were to occur, it would only kill the smaller trees and the shrub and forb understory which is what likely occurred historically.

#### **4.3 Cumulative Impacts**

Negative cumulative impacts on the larger watershed scale are not anticipated. The proposed action would have negligible negative impacts on plants and wildlife. The current condition of the vegetation has been influenced by decades of wildfire suppression. There is not at present a better way to reduce dense understory vegetation that would have been reduced by wildfire in the past, before fire suppression was practiced. The proposed action is expected to have a beneficial cumulative impact on wildfire suppression in the area, as long as the BLM maintains the treatment area.

## 5.0 Agencies and Persons Consulted

Amador County Unit Cal-Fire  
Amador County Safe Council

## 5.1 Authors

Heather Daniels, Realty Specialist

## 5.2 BLM Interdisciplinary Team/Reviewers:

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Heather Daniels NEPA Coordinator	Date
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James Barnes Archaeologist	Date
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Gerald Martinez Fire Management Officer	Date
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Peggy Cranston Wildlife Biologist	Date
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Beth Brenneman Botanist	Date
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Jeff Horn Outdoor Recreation Planner/VRM Specialist	Date
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## 5.3 Availability of Document and Comment Procedures

This EA will be posted on Mother Lode Field Office's website ([www.blm.gov/ca/motherlode](http://www.blm.gov/ca/motherlode)) under NEPA and will be available for a 15-day public review period. The EA is also available by mail upon request during this 15-day public review period. Comments should be sent to Heather Daniels, Bureau of Land Management, Mother Lode Field Office, 5152 Hillside Circle, El Dorado Hills, California 95762 or emailed to [hdaniels@blm.gov](mailto:hdaniels@blm.gov).

## 6.0 References

2010 Census Interactive Population Search: CA - Pioneer CDP. U.S. Census Bureau. Retrieved July 12, 2014.

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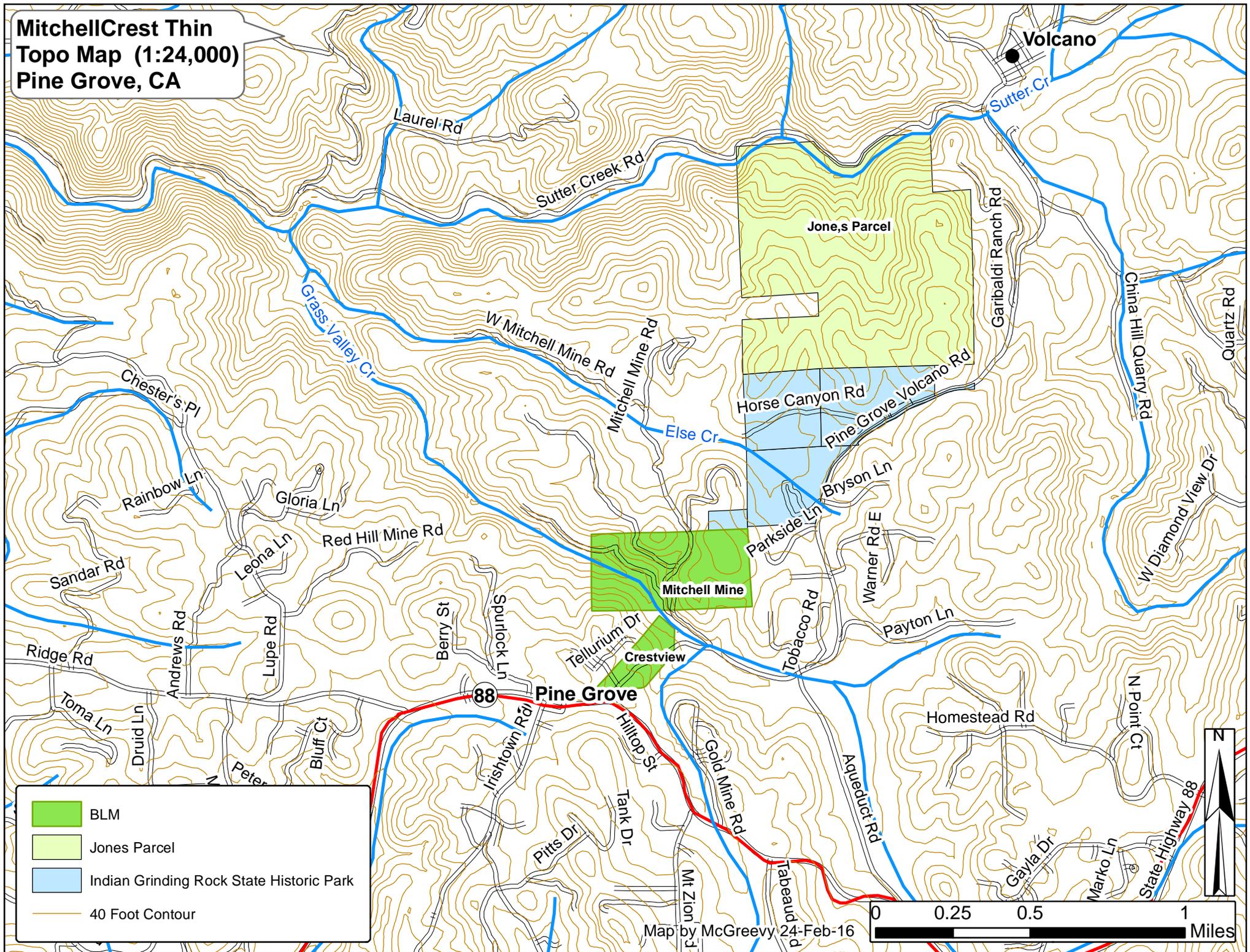
Verner, J., and A.S. Boss (Tech. Coords.). 1980. California wildlife and their habitats: western Sierra Nevada. U.S. Forest Service (Berkeley, California) Gen. Tech. Rep. PSW-37.

**APPENDIX: Photos of Red Hills Soaproot**



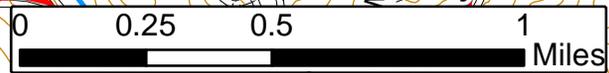


**MitchellCrest Thin  
Topo Map (1:24,000)  
Pine Grove, CA**

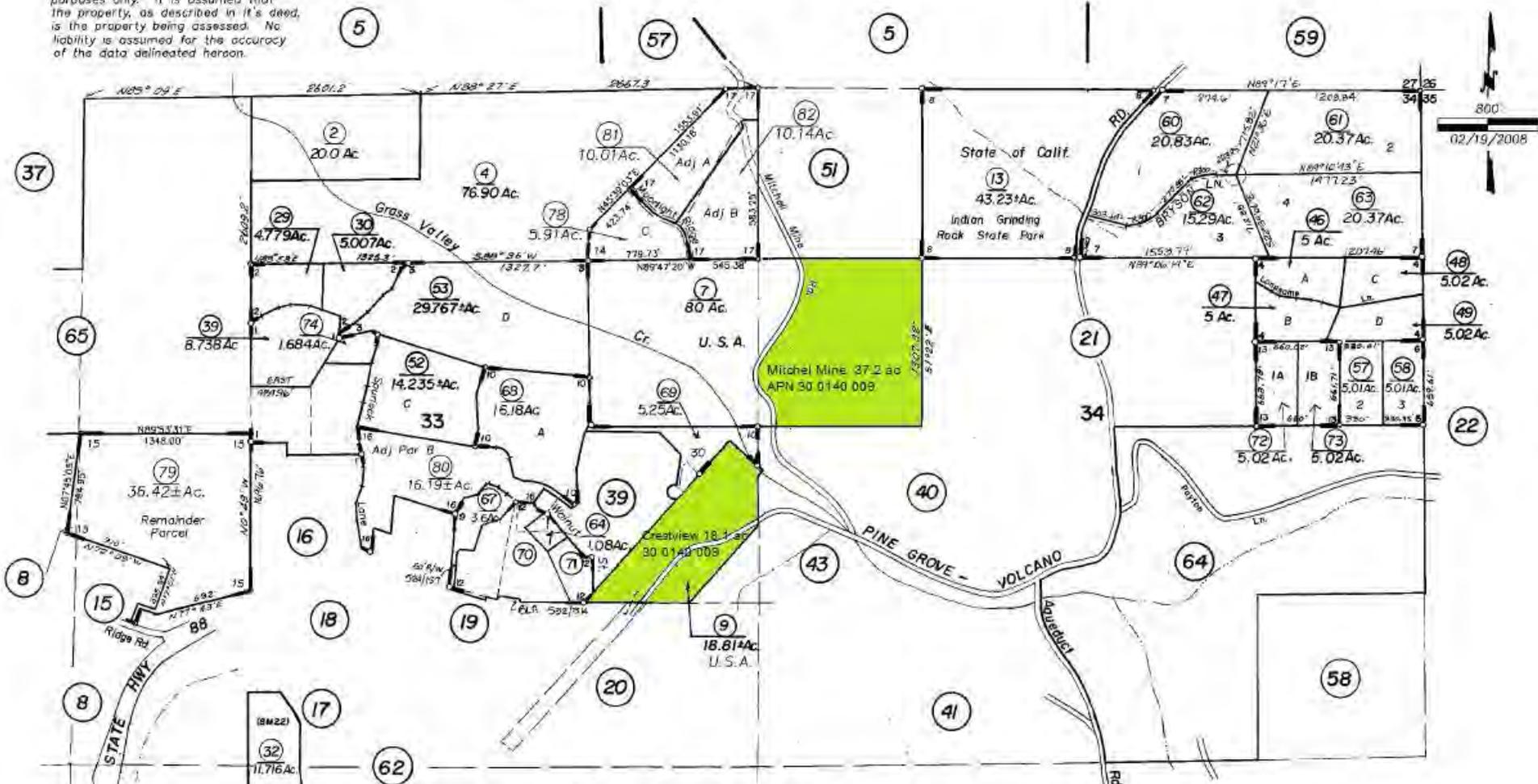


- BLM
- Jones Parcel
- Indian Grinding Rock State Historic Park
- 40 Foot Contour

Map by McGreevy 24-Feb-16



IMPORTANT NOTE: This map was prepared for property tax assessment purposes only. It is assumed that the property, as described in it's deed, is the property being assessed. No liability is assumed for the accuracy of the data delineated hereon.



Map changes become effective with the 2008-2009 roll year. Parcel numbers are subject to change prior to adoption of roll on each July 1.

(BM22)  
32  
11,716 Ac  
38  
15

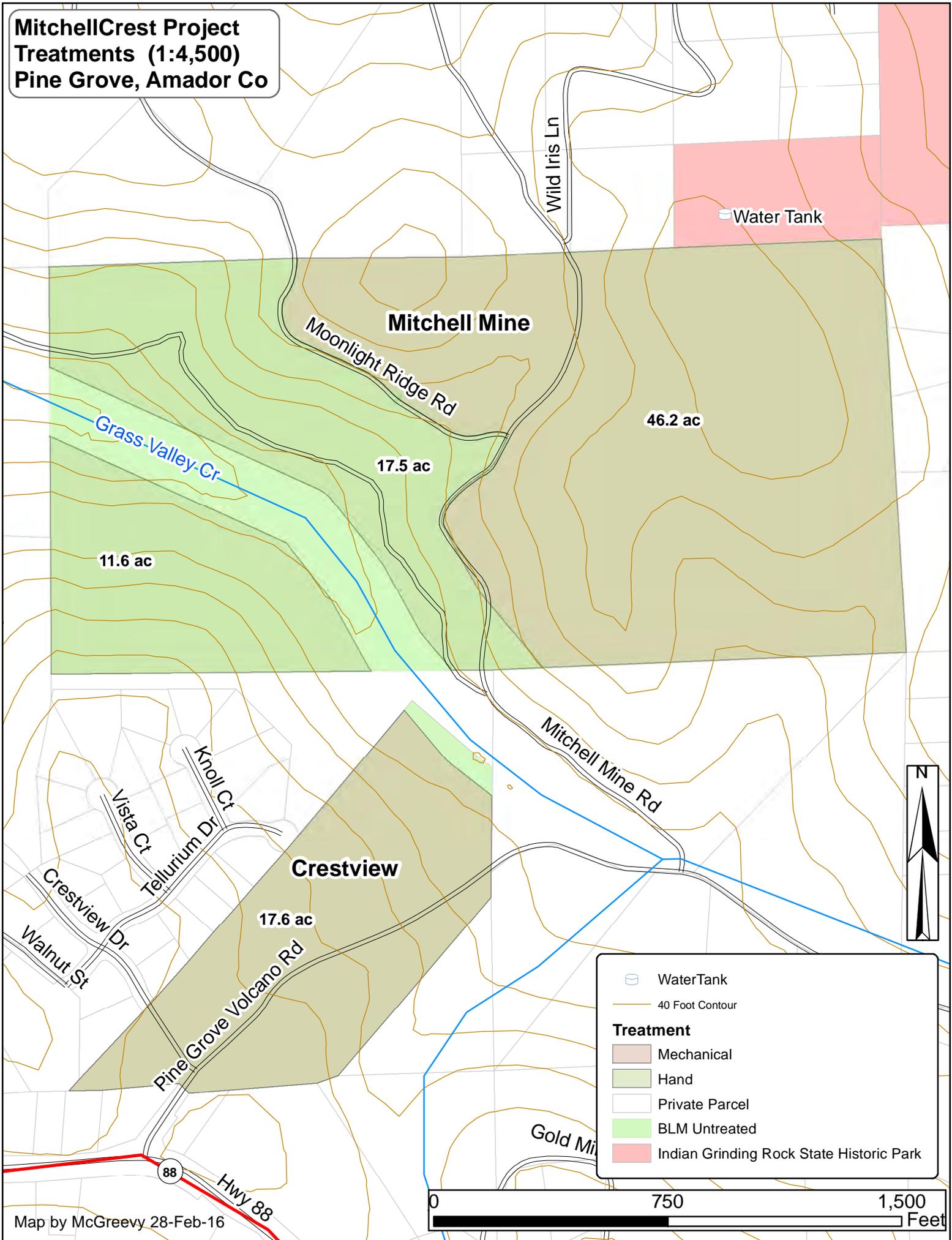
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- 1-R.M. Bk. 4, Pg. 75
- R.M. Bk. 8, Pg. 22
- 2-R.M. Bk. 8, Pg. 49
- 3-R.M. Bk. 15, Pg. 32
- R.M. Bk. 16, Pg. 5
- R.M. Bk. 21, Pg. 28
- 4-R.M. Bk. 22, Pg. 19

- 5-R.M. Bk. 23, Pg. 29
- 6-R.M. Bk. 32, Pg. 72
- 7-P.M. Bk. 40, Pg. 1
- P.M. Bk. 9, Pg. 13
- 8-R.M. Bk. 41, Pg. 27
- 9-R.M. Bk. 41, Pg. 58
- 10-R.M. Bk. 42, Pg. 8
- 11-R.M. Bk. 43, Pg. 18 (10/27/88)
- 12-R.M. Bk. 43, Pg. 20 (11/17/88)
- 13-P.M. Bk. 44, Pg. 38 (12/21/90)

- 14-R.M. Bk. 48, Pg. 65 (9/9/94)
- 15-R.M. Bk. 55, Pg. 99 (9/19/2003)
- 16-R.M. Bk. 60, Pg. 14 (10/16/2007)
- 17-R.M. Bk. 60, Pg. 28 (12/10/2007)

Assessor's Map Bk.30, Pg.14  
County of Amador, Calif.

**MitchellCrest Project  
Treatments (1:4,500)  
Pine Grove, Amador Co**



	Water Tank
	40 Foot Contour
<b>Treatment</b>	
	Mechanical
	Hand
	Private Parcel
	BLM Untreated
	Indian Grinding Rock State Historic Park

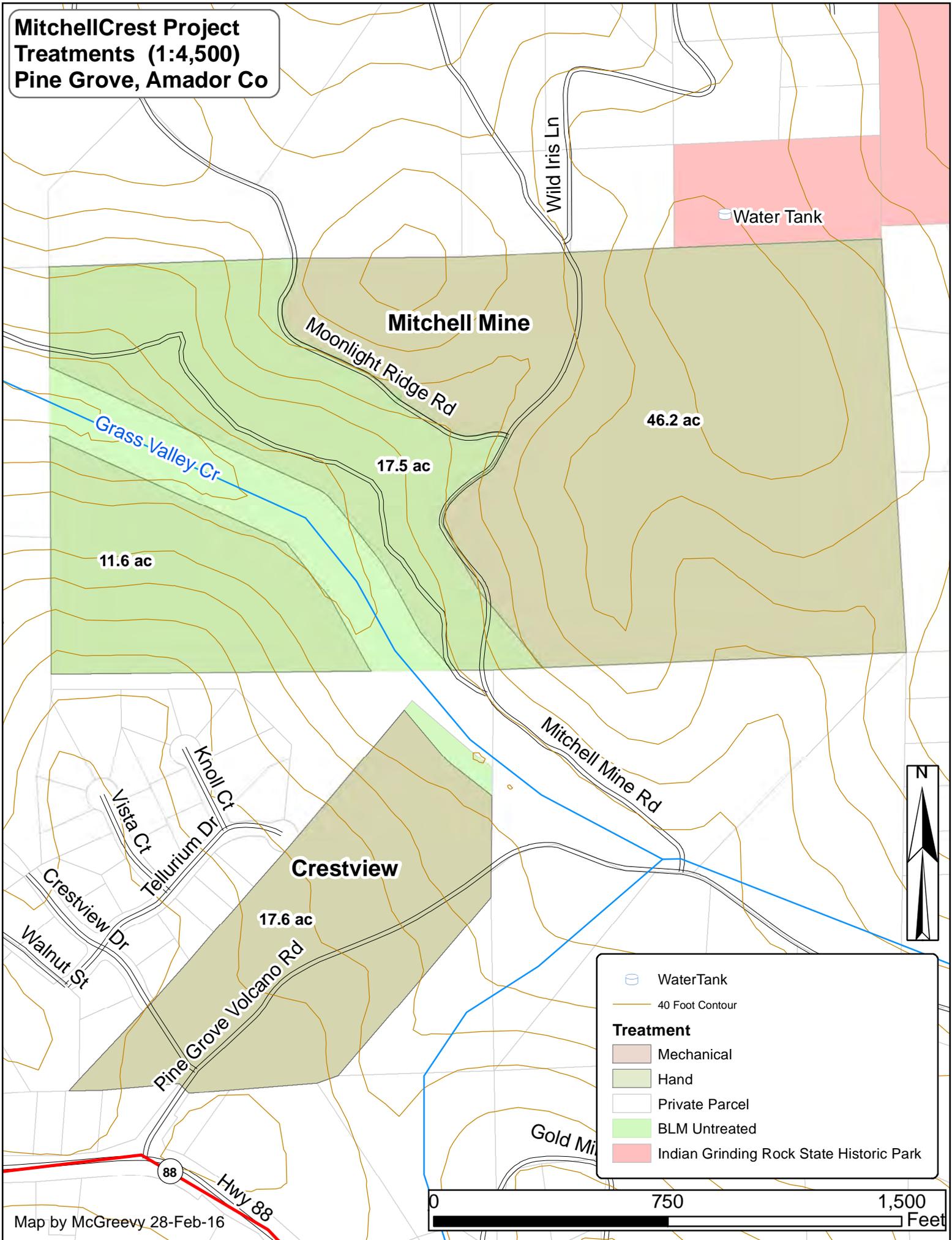






DOMESTIC WATER  
SUPPLY  
KEEP OUT

**MitchellCrest Project  
Treatments (1:4,500)  
Pine Grove, Amador Co**



	Water Tank
	40 Foot Contour
<b>Treatment</b>	
	Mechanical
	Hand
	Private Parcel
	BLM Untreated
	Indian Grinding Rock State Historic Park