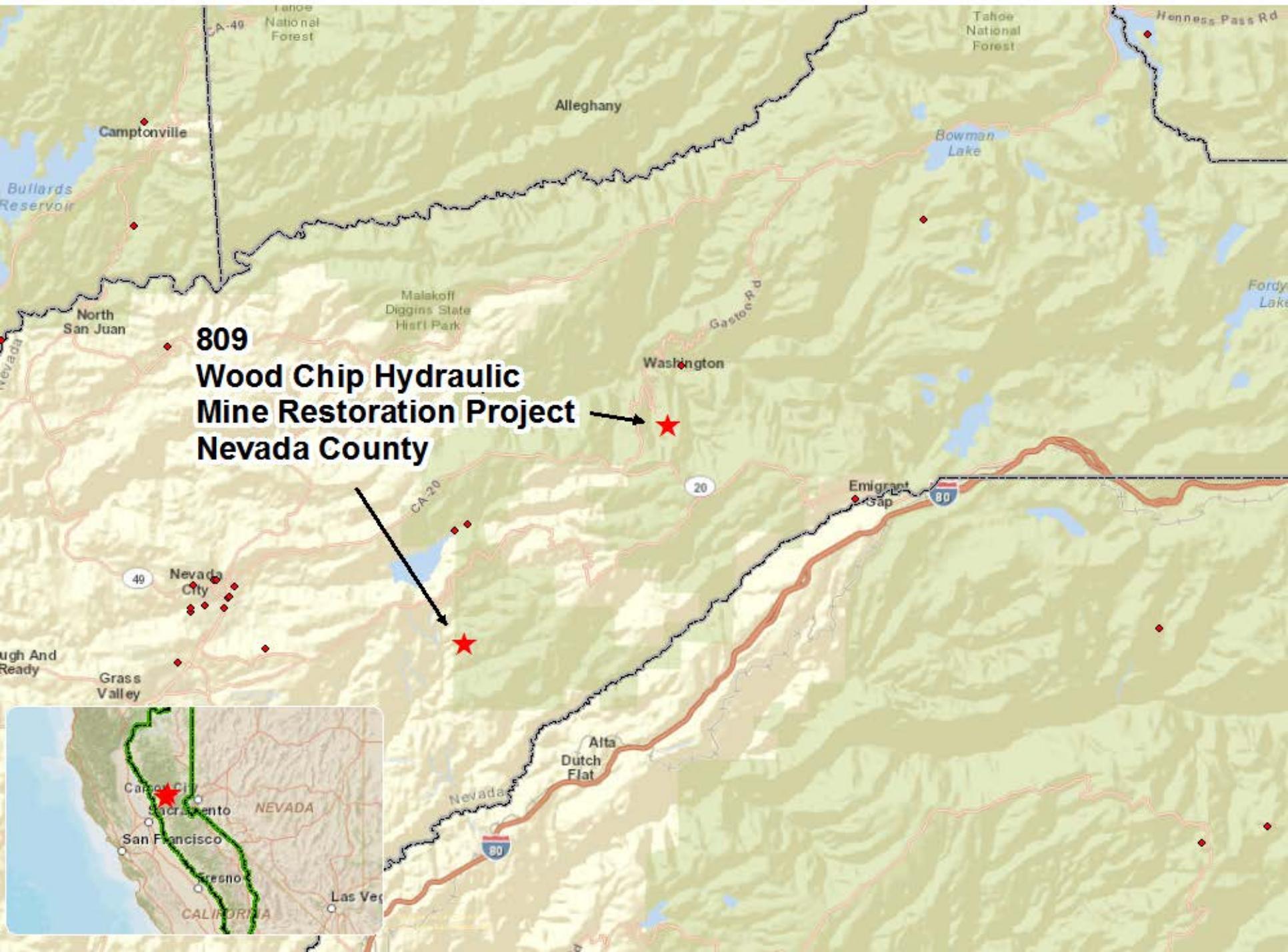


**809**  
**Wood Chip Hydraulic**  
**Mine Restoration Project**  
**Nevada County**



**STATE OF CALIFORNIA  
SIERRA NEVADA CONSERVANCY**

**Sierra Nevada Conservancy Grant Program  
Safe Drinking Water, Water Quality and Supply, Flood Control,  
River and Coastal Protection Bond Act of 2006 (Proposition 84)**

**Applicant:** USDA Forest Service - Tahoe National Forest

**Project Title:** Wood Chip Mine Site Reclamation Project

**Subregion:** Central

**County:** Nevada

**SNC Funding:** \$176,853.00

**Total Project Cost:** \$297,413.00

**Application Number:** 809

**Final Score:** 85

**PROJECT SCOPE**

The project will use wood chips to treat two abandoned mine land locations, the 20-acre Alpha Diggins Hydraulic Mine Site and 40-acre Buckeye Mine site located east of Nevada City, on the Tahoe National Forest (TNF).

The pilot project will use wood chips generated from the nearby “Western Nevada County Community Defense” project to improve water quality by immobilizing sediments and mercury-laden soils above nearby creeks and preventing contaminated materials from entering watersheds that feed the South Fork of the Yuba River. The wood chips, a byproduct of the forest health work being accomplished, will be used as soil amendment, soil stabilizer and substrate for native seedling establishment, to accomplish mine site reclamation. The proposed treatment sites are historic hydraulic mines with severely degraded soils, minimal vegetation, known mercury contamination and erosion issues.

The project sites will be monitored for a minimum of five years and will record changes in conditions of soil stability and health. The project results will inform the potential for the use of chips for subsequent Abandoned Mine Lands (AML) treatment prescriptions.

Matching investments in the project are being provided by the US Forest Service (USFS) through: pre-application monitoring and soil testing; consultation with U.S. Fish and Wildlife Service for habitat protection; and, wildlife surveys, contract preparation, mapping and posting, and preparing sites for chip placement.

## PROJECT SCHEDULE

DETAILED PROJECT DELIVERABLES	TIMELINE
Project Initiation- letter	January 2015
Pre-application monitoring of vegetation and soils - report/ photo points	June 2015
Procurement of wood chips	April 2016
Transport of wood chips	June 2016
Application of wood chips	July 2016
Seeding with approved native seed mix	January 2017
Post application monitoring and soil testing	February 2017
<b>FINAL PAYMENT/FINAL PAYMENT REQUEST</b>	March 1, 2017

## PROJECT COSTS

PROJECT BUDGET CATEGORIES	TOTAL SNC FUNDING
<b>Direct*</b>	
Project Implementation	\$157,453.00
Project Management	11,040.00
<b>Indirect**</b>	
Monitoring- frog surveys- reflag archeology sites	\$8,360.00
<b>Administrative***</b>	
	\$0
<b>GRAND TOTAL</b>	<b>\$176,853.00</b>

\* Direct: Direct costs are expenses necessary to acquire, construct, or to adapt property to a new or different use, or to improve property including land, buildings and equipment. The property/expense must have a useful life longer than one year.

\*\* Indirect: Expenses involve ongoing operations, repair or maintenance costs, regardless of whether the repair or maintenance may last more than one year.

\*\*\* Administrative: Expenses associated with the administration of a project and may not exceed 15 percent of the total SNC grant request for direct and indirect costs.

## PROJECT LETTERS SUPPORT/OPPOSITION

- Support
  - Steve Eubanks, Chair- Nevada County Biomass Task Force
  - Karen Hayden, District Ranger, Tahoe National Forest, Yuba River District

## PROJECT PERFORMANCE MEASURES

There are four Performance Measures common to all grants. In addition, grantees are required to include between one and three project-specific measures. Performance Measures listed here represent those proposed by applicants and may be modified through further discussion with SNC staff.

- Acres of Land Improved or Restored
- Number of Special Significance Sites Protected

## Notice of Exemption

Appendix E

**To:** Office of Planning and Research  
PO Box 3044, 1400 Tenth Street, Room 212  
Sacramento, CA 95812-3044

**From:** (Public Agency) Sierra Nevada Conservancy  
11521 Blocker Drive, Suite 205  
Auburn, CA 95603

**Project Title:** Wood Chip Mine Site Reclamation Project (SNC 809)

### **Project Location – Specific:**

The project is located on two abandoned mine sites, the Alpha Diggins Mine (Alpha) site and the Buckeye Mine (Buckeye) site, within the Tahoe National Forest, in Nevada County, California. The Alpha site is a 20-acre treatment area within the approximately 90-acre mine site, approximately 13 miles east of Nevada City, approximately 1.5 miles southeast of Washington, immediately east of Alpha Road. The Buckeye site is a 40-acre treatment area within the approximately 45-acre mine site, located in four separate pieces surrounding Assessor Parcel Number (APN) 38-320-11-000, approximately two miles southeast of Scotts Flat Lake, approximately 6.5 miles east of Nevada City, and immediately north and south of Buckeye Road.

The Alpha Site is in Township 17 North, Range 11 East, Section 18, with an approximate latitude/longitude of 39.336083 / -120.785121.

The Buckeye Site is in Township 16 North, Range 10 East, Sections 18, and 19, with an approximate latitude/longitude of 39.245150 / -120.892315.

**Project Location – City:** Nevada City

**Project Location – County:** Nevada

### **Description of Nature, Purpose and Beneficiaries of Project:**

The Tahoe National Forest, Yuba River Ranger District is requesting \$176,853 in funding from the Sierra Nevada Conservancy's Proposition 84 Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act Grant Program to design and implement a pilot project envisioned to provide a method of abandoned mine lands remediation that can be replicated throughout the Sierra Nevada region. The proposed project would use wood chips generated from nearby fuel reduction activities as a soil amendment and soil stabilizer to accomplish mine site reclamation at two abandoned mine sites, Alpha Diggins Mine (Alpha) and Buckeye Mine (Buckeye).

Wood chips from the Western Nevada County Community Defense Project would be transported to the Alpha and Buckeye sites. Approximately 5,445 cubic yards of wood chips would be available for use for the proposed project. The wood chips would be placed approximately two to three inches thick on unvegetated areas and either incorporated into the existing substrate or placed on the top of the growth media. The physical addition of the wood chips would aid in the prevention of off-site movement of contaminated sediments from the Alpha and Buckeye sites. The wood chips would intercept precipitation, slow infiltration, and prevent sheeting.

Any necessary clearing would be done to make sure staging areas are free of obstacles. Mastication of shrubs that are scattered across each site would also occur. This would improve operability of the spreading equipment. The wood chips from the Western Nevada County Community Defense Project would be loaded into dump trucks using a front-end loader and the Forest Service would transport the wood chips to the Alpha and Buckeye sites. The dump trucks would be covered with tarps if necessary to address air quality concerns and consultation with the local air quality management district would be completed to determine if load cover is required. The loads of wood chips would be dumped at designated staging areas within the proposed project boundaries. Once the wood chips are delivered to the Alpha and Buckeye sites, the material would be spread out across the soil surface using mechanical equipment and by hand,

depending on the topography and distance from the riparian areas. Where material is to be incorporated into the soil, this would generally be done with an excavator although a cultivator or subsoiler could also be used to incorporate chips. Material would be worked into the soil to an approximate depth of 8 to 12 inches.

Treatment area boundaries would be delineated on the ground and mapped for use in a Geographic Information System (GIS) database. For the Alpha site, riparian conservation areas (RCAs) would be marked to ensure riparian management guidelines are adhered to protect both hydrologic values and prevent impacts to the California red-legged frog (CRLF). For the Alpha site the proposed project would incorporate the following buffer requirements for water quality protection:

<b>Stream/Aquatic Feature</b>	<b>RCA Buffer<sup>1</sup></b>	<b>Riparian Buffer<sup>2</sup></b>
Perennial Stream (each side of the channel)	300 feet	100 feet
Intermittent Stream (each side of the channel)	300 feet	100 feet
Ephemeral Stream (each side of the channel)	30 feet	Only the channel itself
Wet Meadows, Seeps, and Ponds (from feature or riparian vegetation, whichever is greater)	300 feet	100 feet
Notes: <sup>1</sup> Requirements utilized for the U.S. Forest Service mandated requirements for Riparian Conservation Areas (RCAs) as contained in the Tahoe National Forest Land and Resources Management Plan (LRMP). <sup>2</sup> Areas restricted from all activities.		

If an area is within the RCA, but outside the riparian buffer, then hand treatments would be used. In addition, prior to treatment, protocol-level surveys for CRLF would be completed and the U.S. Fish and Wildlife Survey would be consulted in order to ensure that the project avoids CRLF. Therefore, no work would be done within 100 feet of a perennial or intermittent stream, and no mechanical work would be allowed within 300 feet of a stream or special aquatic feature, thus preventing impacts to the CRLF.

For the Buckeye site, streamside management zones and meadow protection areas are specified in the Tahoe National Forest LRMP (see Appendix F, standards and goals, 46, 47) and are incorporated in the project.

Similarly, coordination with the U.S. Forest Service archaeologist would occur in order to identify any cultural resources within the proposed project sites. If resources occur, they would be flagged and avoided.

As the wood chips decompose, they would provide food for beneficial microbes that aid in the availability of nitrogen and other nutrients needed for plant growth. A year after the woodchip application, the areas would be checked to determine if there is enough organic matter to support vegetation. If there is 0.5 to 1 inch, or more, of fine material or composted wood chips, seeding would commence in mid-October of that year. A native seed mix that has been approved by the Tahoe National Forest would be used. The origin of seeds would be from as close to western Nevada County as possible. If seeds cannot be located from the area, then seeds collected from the western slope of the Sierra Nevada, between the elevations of 3,000 to 6,000 feet would be used.

Both sediment and sediment containing mercury would be immobilized on each site. Thus preventing it from entering Greenhorn Creek at the Buckeye site or Scotchman Creek at the Alpha site. The wood chips would immobilize the mercury-laden sediment, and thus reduce the release

of mercury into the watershed. This then reduces the chances of the mercury entering into an area with anaerobic organisms, and thus reduces the chances of the mercury becoming methylmercury (a toxic substance). The application of wood chips would also increase organic matter in the depleted soils, resulting in higher water holding capacity, increased nutrient levels, increased beneficial microbial symbionts, and the establishment of vegetation.

The proposed project would then improve water quality by stabilizing the soils at the Alpha and Buckeye sites by reducing the offsite movement of sediments and by reclaiming degraded mined-lands to healthy and sustainable ecosystems.

**Name of Public Agency Approving Project:** Sierra Nevada Conservancy  
**Name of Person or Agency Carrying Out Project:** Tahoe National Forest, Yuba River Ranger District

**Exempt Status:** *(check one)*

- Ministerial (Sec. 21080(b)(1); 15285);
- Declared Emergency (Sec 21080(b)(3); 15269(2));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: Section 15330, "Minor Actions to Prevent, Minimize, Mitigate, or Eliminate the Release or Threat of Hazardous Waste or Hazardous Substances"
- Statutory Exemptions. State code number: \_\_\_\_\_

**Reasons why project is exempt:**

The proposed Wood Chip Mine Site Reclamation Project within the Tahoe National Forest is categorically exempt from the provisions of CEQA pursuant to CEQA Guidelines Section 15330, Class 30, which permits minor cleanup actions to prevent, minimize, stabilize, mitigate, or eliminate the release or threat of release of a hazardous waste or substance which are small or medium removal actions costing \$1 million or less. The project consists of applying wood chips as a soil amendment and soil stabilizer to accomplish mine site reclamation at two abandoned mine sites with prescribed limitations on activity in riparian conservation areas, streamside and meadow protection areas, and required erosion control measures. No significant adverse impacts to cultural or natural resources will occur as a result of the proposed project.

**Lead Agency Contact Person:** Matthew Daley  
Area Code/Telephone/Extension: (530) 823-4698

Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Title: Executive Officer  
Jim Branham

Date Received for Filing at OPR:

*Revised 2005*