

## Appendix B - Full Application Checklist

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

Project Name: Beaver Creek Watershed Improvement Project

Applicant: Save the Redwoods League

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)

2-26-16

Date

Samuel M. Hodder, President & CEO  
Name and Title (print or type)

**Beaver Creek Watershed Improvement Project  
Table of Contents**

**ITEMS**

**Project Application Checklist – *Preceding***

**Full Project Information Form**

**CCC/CALCC Consultation Forms**

**Authorization & IRS Letter**

**Project Narrative**

**Letters of Support**

**Long-term Management & Sustainability Documentation**

**Budget Form**

**Supplementary Documents**

**a. CEQA Environmental Documents – *NEPA is not applicable***

**b. Maps and Photos**

**c. Additional Requirements for Acquisition Projects – *Not applicable***

**d. Additional Requirements for Restoration Projects**

<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



Shelana deSilva <wordwallah@gmail.com>

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## Prop. 1 Project - CALCC Consultation

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**Prop1 Community Corps** <inquiry@prop1communitycorps.org>

Thu, Jan 21, 2016 at 2:27 PM

To: Shelana deSilva <wordwallah@gmail.com>, "Prop 1@CCC" <Prop1@ccc.ca.gov>

Cc: Anthony Castanos <acastanos@savetheredwoods.org>

Hello Shelana,

Nicholas of the San Joaquin Regional Conservation Corps has responded that they are able to assist with the Beaver Creek Watershed Improvement 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 Nick 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 Wed, Jan 20, 2016 at 1:05 PM, Shelana deSilva <[wordwallah@gmail.com](mailto:wordwallah@gmail.com)> wrote:

[Quoted text hidden]



Shelana deSilva <wordwallah@gmail.com>

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## Prop. 1 Project - CCC Consultation

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Prop 1@CCC <Prop1@ccc.ca.gov>

Thu, Jan 21, 2016 at 2:05 PM

To: Shelana deSilva <wordwallah@gmail.com>, "Prop 1@CCC" <Prop1@ccc.ca.gov>, "inquiry@prop1communitycorps.org" <inquiry@prop1communitycorps.org>

Cc: Anthony Castanos <acastanos@savetheredwoods.org>, "Hsieh, Wei@CCC" <Wei.Hsieh@ccc.ca.gov>, "Lussier, Brian@CCC" <Brian.Lussier@ccc.ca.gov>, "Mijares, Marie@CCC" <Marie.Mijares@ccc.ca.gov>

Hi Shelana,

Brian Lussier, the Conservation Supervisor at our CCC Greenwood location has responded to the partnership for your project: Beaver Creek Watershed Improvement Project. CCC can assist with the Fuel Reduction aspect of the project.

Please include the Consultation Review Document (simplified version) below with your project application as proof that you reached out to the CCC. Feel free to contact Brian Lussier [Brian.Lussier@ccc.ca.gov](mailto:Brian.Lussier@ccc.ca.gov) directly if you have project-specific questions and when your project receives funding.

### California Conservation Corps

#### Proposition 1 - Water Bond

#### Consultation Review Document



Applicant has submitted the required information by email to the California Conservation Corps (CCC):

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

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

✓ It is feasible for the CCC to be used on the project and the following aspects of the project can be accomplished (deemed compliant).

- CCC can assist with the Fuel Reduction aspect of the project.

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

Thank you,



Wei Hsieh, Manager

Programs & Operations Division

California Conservation Corps

1719 24<sup>th</sup> Street

Sacramento, CA 95816

(916) 341-3154

[Wei.Hsieh@ccc.ca.gov](mailto:Wei.Hsieh@ccc.ca.gov)

**From:** Shelana deSilva [mailto:[wordwallah@gmail.com](mailto:wordwallah@gmail.com)]

**Sent:** Wednesday, January 20, 2016 1:01 PM

**To:** Prop 1@CCC <[Prop1@CCC.CA.GOV](mailto:Prop1@CCC.CA.GOV)>

**Cc:** Anthony Castanos <[acastanos@savetheredwoods.org](mailto:acastanos@savetheredwoods.org)>

**Subject:** Prop. 1 Project - CCC Consultation

[Quoted text hidden]

In the matter of a RESOLUTION approving  
the application for grant funds for  
the Sierra Nevada Watershed Improvement Grant Program  
under the Water Quality, Supply, and Infrastructure Improvement Act of 2014

WHEREAS, the Legislature and Governor of the State of California have provided Funds for the program shown above; and

WHEREAS, the Sierra Nevada Conservancy (SNC) has been delegated the responsibility for the administration of a portion of these funds through a local assistance grants program, establishing necessary procedures; and

WHEREAS, said procedures established by the Sierra Nevada Conservancy require a resolution certifying the approval of application(s) by the Applicant's governing board before submission of said application(s) to the SNC; and

WHEREAS, the Applicant, if selected, will enter into an agreement with the SNC to carry out the project; and

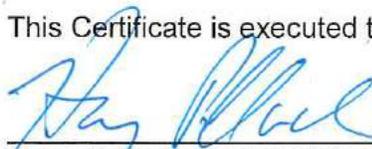
WHEREAS, **Save the Redwoods League** (the "League") has identified the **Beaver Creek Watershed Improvement Project** as valuable toward meeting its mission and goals.

PURSUANT TO AUTHORITY delegated by the Board of Directors of **Save the Redwoods League** acting by and through the Chief Executive Officer:

- Approves the submittal of an application for the **Beaver Creek Watershed Improvement Project**; and
- Certifies that Applicant understands the assurances and certification requirements in the application; and
- Certifies that Applicant or title holder will have sufficient funds to operate and maintain the resource(s) consistent with the long-term benefits described in support of the application; or will secure the resources to do so; and
- Certifies that Applicant will comply with all legal requirements as determined during the application process; and
- Appoints the Chief Executive Officer, or his duly authorized designees, as agent to conduct all negotiations, execute and submit all documents, including but not limited to: applications, agreements, payment requests, and so on, which may be necessary for the completion of the aforementioned project(s).

The undersigned Assistant Secretary of Save the Redwoods League, a California nonprofit corporation (the "League") hereby certifies that the Board Resolution authorizing the application and the certifications referenced above were authorized by Resolution duly adopted by the Board of Directors of Save the Redwoods League on June 3, 2015.

This Certificate is executed this 29<sup>th</sup> day of February, 2016 at San Francisco, California.

  
\_\_\_\_\_  
Harry Pollack, Assistant Secretary and  
General Counsel

INTERNAL REVENUE SERVICE  
EP/EO

Internal Revenue Service  
EP/EO Disclosure Desk  
P.O. Box 2350 Los Angeles, CA 90053

SAVE THE REDWOODS LEAGUE

114 SANSOME ST RM 605  
SAN FRANCISCO, CA 94104

Person to Contact:  
L. Barragan (A to K)  
F. Mirafior (L to Z)  
Telephone Number:  
(213)894-2336  
Refer Reply to:  
92-185  
Date: MAY 22 1992

RECEIVED  
MAY 28 1992  
SAVE THE REDWOODS LEAGUE

RE: 94-0843915  
SAVE THE REDWOODS LEAGUE

Gentlemen:

This is in response to your request for a determination letter of the above-named organization.

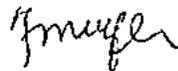
A review of our records indicates that the above-named organization was recognized to be exempt from Federal income tax in December 1921, as an organization described in Internal Revenue Code section 501(c)(3). It is further classified as an organization that is not a private foundation as defined in section 509(a) of the code, because it is an organization described in section 170(b)(1)(A)(vi).

This letter is to verify your exempt status and the fact that the determination letter issued in December 1921 continues to be in effect.

If you are in need of further assistance, please feel free to contact me at the above address.

We appreciate your cooperation in this regard.

Sincerely,



Disclosure Assistant

## **6. Narrative Descriptions**

### **a. Detailed Project Description** (*Limited to 5000 characters*)

The Beaver Creek Watershed Improvement Project (the Project) will increase forest resilience and enhance watershed protection and stewardship of this 336-acre property, which is surrounded on three sides by Calaveras Big Trees State Park in Tuolumne County. This beautiful forest sits above the snowline on a western slope of the Sierra Nevada mountains, approximately three miles from the Town of Arnold. The property is mostly comprised of ponderosa pine, Douglas fir, and cedar, and contains a 226-foot, 6.5-foot DBH giant sequoia—the largest remaining naturally grown, unprotected tree of its kind. Other species found on the property include black oak, bigleaf maple, and canyon live oak. Save the Redwoods League (the League) intends to gift the property to Calaveras Big Trees State Park (CBTSP), which the proposed activities will help facilitate, though the timing is as yet undetermined. (Please see California Department of Parks and Recreation letter of support.)

### ***Background and Need***

Once owned and commercially managed by Sierra Pacific Industries (SPI), the property has been harvested many times, including the use of silvicultural practices resembling clear-cuts, resulting in poor forest health and increased fuel loads that make the forest highly susceptible to catastrophic wildfire. Notably, regional water quality is primarily impacted by nonpoint source pollution, including legacy and current forestry practices.<sup>1</sup> The cumulative impacts of such practices with fire events such as the recent Butte Fire threaten habitat values, wildlife, and water quality and supply. Given the property's adjacency to the CBTSP and its location within the Upper Stanislaus watershed, which drains to important hydrological resources, the League has identified the proposed activities as important to the forest and watershed's long-term health, while dramatically reducing the likelihood of a fire event.

The property contains a 0.31-mile section of Beaver Creek, which meanders in a southwesterly direction from its headwaters to its confluence with the North Fork Stanislaus River. The 20,299-acre Beaver Creek subwatershed provides habitat linkages to nearby protected lands, including the CBTSP and Stanislaus National Forest.<sup>2</sup> The encompassing Upper Stanislaus watershed is critical to the operation of New Melones Lake, to which more than 90 percent of it drains.<sup>3</sup> The Bureau of Reclamation manages the New Melones Lake, appropriating water from the Stanislaus River for irrigation, municipal, and industrial purposes, as well as to release water for fish and wildlife enhancement and maintenance of water quality conditions on the Stanislaus and Lower San Joaquin Rivers.

### ***Goals and Activities***

The overall goals are to 1) improve watershed services such as infiltration, stormwater runoff reduction, and aquifer recharge by encouraging late seral growth characteristics and thus a healthier forest;<sup>4</sup> 2) reduce water quality threats posed by wildfires, such as sediment loading and higher water temperatures; 3) maintain treatment areas and use prescribed fire to ensure long-

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<sup>1</sup> Tuolumne County General Plan Update EIR, Section 4.9 Hydrology and Water Quality, 2015

<sup>2</sup> California Department of Parks and Recreation, Representative Keystone Watersheds Report, April 2007

<sup>3</sup> New Melones Resource Management Plan, Environmental Impact Statement, August 2007

<sup>4</sup> [http://www.fs.fed.us/ecosystemservices/pdf/Watershed\\_Services.pdf](http://www.fs.fed.us/ecosystemservices/pdf/Watershed_Services.pdf)

term benefits; and 4) to minimize the risk of high-intensity wildfire, as well as to promote the forest's carbon storage potential.

These goals will be achieved through the following active forest management practices: 1) nonindustrial understory thinning across approximately 150 acres, removing all trees below 12" DBH, with conifer release conducted in hardwood dominant areas; 2) pruning of approximately 200 trees per acre to improve wood quality and reduce ladder fuels; 3) slash will be treated through chipping/mastication, pile and burn, or lop/scatter; and 4) two fuel breaks will link to the property's open fields, buffering the CBTSP's South Grove.

### ***Multiple Benefits***

The Project will provide the following benefits: 1) protect the Beaver Creek subwatershed, which drains to the North Fork Stanislaus River and eventually to the New Melones Lake, to which the Stockton East Water District and Central San Joaquin Water Conservation District have rights; 2) reduce the risk of catastrophic fire to the adjacent CBTSP, the nearby Stanislaus National Forest, Big Tree National Forest, and surrounding private lands; 3) reduce the threat of wildfire-induced sediment loading, and thereby improve water quality within a watershed that is critical to irrigation and drinking water supply; 4) facilitate recovery of historic fish populations in the Stanislaus and San Joaquin Rivers by improving water storage capacity across the landscape (snowpack retention), increasing flows and improving downstream water quality; 5) ensure the forest's long-term health by increasing its resilience to climate change, while protecting nearby federal and state lands from multiple threats, including wildfire, disease, and pests; 6) support the California Department of Parks and Recreation (State Parks) North Grove Restoration Project, and thereby the Sierra Nevada Conservancy's previous investment in the area, while buffering the South Grove Natural Preserve; and 7) enable State Parks to eventually take ownership of the property, facilitating more cohesive land management and increased recreational opportunity for the extremely popular CBTSP.

The removal of biomass to accelerate the development of late seral characteristics and reduce fire hazard is central to the Project. As a result, greater amounts of snowpack will be accumulated and retained on the property, which is significant in the context of the ongoing drought. The Project will also create a more resilient forest by reducing competition for water and below ground nutrients, allowing greater water volume to flow into Beaver Creek and the downstream hydrological resources described above.

### **b. Workplan and Schedule Narrative**

Due to previous timber harvesting activity and years of fire suppression, the subject property has become an overcrowded forest filled with fuel, making it highly susceptible to a catastrophic wildfire incident. These conditions are exacerbated by the current drought, which not only makes the forest more likely to burn, but also imposes further strain on healthy trees that are competing for limited water resources. Given the adjacency of highly popular public lands to the property and its sloped topography, it is imperative that the League effectively manage the property to both maintain its ecological integrity and to facilitate its eventual transfer to State Parks.

A pilot restoration project on approximately 48 acres of the subject property was conducted in summer and fall 2010, shortly after the League acquired the property. Operations focused on the highest priority acres of the pilot project, maintaining a habitat retention area on the steepest slopes and avoiding Class II watercourses. The majority of the fuels were removed from the site, and the remainder was masticated. An Interim Forest Management Plan for the property was completed in 2010, and identified many of the proposed activities as vital to the property's stewardship.

The overall proposed scope of work includes conducting pre-project wildlife surveys, as well as coordination with State Parks on any other required surveys. The proposed activities would begin immediately upon execution of a grant agreement and would be complete by December 31, 2019. First steps would include retaining a contractor to manage restoration crews, which will work to reduce fuel loads on the property, thereby protecting the watershed from the threat of a catastrophic wildfire.

The initial objective will be to remove trees less than 12" in diameter, according to growth and species characteristics described below, in order to maintain and increase overall stand growth by redistributing resources to the remaining trees. Precommercial thinning and release plans will maintain a canopy with at least 65 percent canopy closure, which will facilitate the watershed services described above. Following U.S. Forest Service General Technical Report 220 recommendations, the Project will incorporate variable density structures where possible, with the additional goal of separating the ground-level fuels from the forest canopy. Done effectively, such management activities will result in larger stand volumes more quickly than natural stand dynamics would. The proposed precommercial thinning treatment, beyond fire protection, will improve tree growth, thereby facilitating increased carbon sequestration as a GHG emission reduction benefit, while also improving the forest's ability to capture and store water across the landscape through increased and prolonged snowpack retention and more effective infiltration to groundwater tables.

Labor crews will conduct forest restoration work using chainsaws, loppers, and other hand tools as required. The contractor will oversee the Project by obtaining necessary permits, conducting preparatory site visits to conduct sample mark of trees, overseeing subcontractor's timber operations, conducting final site inspections with the League and CALFIRE (permitting agency), and filing any paperwork to close out permits. Specific fuels reduction and restoration activities include the following:

#### ***Precommercial Thinning and Release***

To increase forest health and reduce fuel loading, precommercial thinning and release will be conducted simultaneously where both hardwoods and conifers are found. Stocking levels should approach approximately 200 trees per acre (TPA) total, including both conifers and hardwoods, in order to adjust age classes to ensure strong growth in a structurally diverse stand, maintain an uneven age condition, control density, and allow for effective regeneration.

#### ***Precommercial Thinning***

Within the conifer dominated treatment areas, precommercial thinning of conifers should be accomplished according to following guidelines:

- Conifer trees less than 12” in diameter can be fell to a spacing approximating 15’ x 15’ (194 TPA).
- Conifer saplings/seedlings should be removed adjacent to wildlife trees, such as larger true oaks (*Quercus* spp.) or madrone, to allow for additional growing space.
- Trees with the most desirable phenotypes will be retained, i.e. full crowns, fast growing, and disease free.
- Trees preferred for removal will be those that are ill-formed, exhibiting signs of poor growth or contain disease.
- In open areas, residual trees will be left for stocking (unless they are diseased/dying).

### ***Release***

Within the hardwood dominated treatment area, conifer release should be accomplished according to the following guidelines:

- Hardwood trees less than 12” in diameter can be removed to a spacing approximating 15’ x 15’ (194 TPA).
- Leave tree preference should be given to commercial tree species, such as true oaks (*Quercus* spp.), madrone, and laurel.
- In areas where there is minimal conifer stocking, as appropriate, hardwood saplings/seedlings should be removed adjacent to co-dominant and dominant conifers, to allow for additional growing space.
- Trees with the most desirable phenotypes will be retained, i.e. full crowns, fast growing, and disease free.
- Trees preferred for removed will be those that are ill-formed, exhibiting signs of poor growth or contain disease.
- In open areas, residual trees will be left for stocking (unless they are diseased/dying).

### ***Pruning***

Pruning will reduce ladder fuels and improve wood quality. Approximately 150-200 trees per acre will be pruned.

- Prune residual trees by lopping low branches up to a minimum height of 10’ (above the level of slash on the uphill side of the tree), or prune 50 percent of the live crown ratio, whichever is less.

### ***Slash Disposal***

Treat all slash produced (branches, limbs, and treatment debris less than four inches in diameter) using one of the following methods:

- Chip or masticate adjacent to roads and other accessible portions of the treatment areas.
- Pile and burn: slash piles for burning should be located away from residual trees and structures.
- Lop/scatter: lopping is the severing and spreading of slash so that no part of it remains more than 30 inches above the ground.

Detailed Project Deliverables	Timeline
<ul style="list-style-type: none"> <li>- Conduct initial site visit with contractors to assess property and work involved</li> <li>- Select photo point locations and take photos</li> </ul>	May 2016 – July 2016
<ul style="list-style-type: none"> <li>- Flag project boundaries and sensitive resource areas including snags, logs, and shrubs that will not be removed</li> <li>- Set up fixed area plots and take stand measurements</li> </ul>	July – August 2016
Conduct fuels treatment work	September – November 2016
<ul style="list-style-type: none"> <li>- Secure necessary burn permits</li> <li>- Burn piles when conditions are appropriate</li> </ul>	December, 2016 – March 2017
Complete 1 <sup>st</sup> six-month report	January 2017
<ul style="list-style-type: none"> <li>- Conduct raptor surveys</li> <li>- Resume fuels treatment work</li> </ul>	April – November 2017
Complete 2 <sup>nd</sup> six-month report	July 2017
Take photo point pictures during same period as prior year	July – August 2017
<ul style="list-style-type: none"> <li>- Secure necessary burn permits</li> <li>- Burn piles when conditions are appropriate</li> </ul>	December 2017 – March 2018
Complete 3 <sup>rd</sup> six-month report	January 2018
<ul style="list-style-type: none"> <li>- Conduct raptor surveys</li> <li>- Resume fuels treatment work</li> </ul>	April – November 2018
Complete 4 <sup>th</sup> six-month report	July 2018
Take photo point pictures during same period as prior year	July – August 2018
<ul style="list-style-type: none"> <li>- Secure necessary burn permits</li> <li>- Burn piles when conditions are appropriate</li> </ul>	December 2018 – March 2019
Complete 5 <sup>th</sup> six-month report	January 2019
Conduct quality control measures: assess completed work; conduct site inspections and take stand measurements; document post-Project conditions (photo points) for final report	March 2019 – June 2019
<ul style="list-style-type: none"> <li>- Complete final report including data related to the project performance measures</li> <li>- Submit final invoice to SNC</li> <li>- Close out Project</li> </ul>	December 2019

**c. Restrictions, Technical/Environmental Documents and Agreements Narrative**

Restrictions/Agreements

The League anticipates completing the Project on time, as no property restrictions or encumbrances exist. Given the Project’s adjacency to the CBTSP, coordination with State Parks staff will occur throughout the implementation phase. Please see the attached letter of support from the California Department of Parks and Recreation for further information on the League’s partnership.

### Regulatory Requirements/Permits

The following permits are required to complete the Project: 1) a CALFIRE burn permit and Smoke Management Plan, and 2) a Calaveras County Air Pollution Control District (APCD) Wildland Vegetation Management Burn Permit. Given that the permitting process will be initiated outside of the fire season during fall/early winter, the League anticipates securing the necessary permits within 7 – 10 business days. While permits with the California Department of Fish and Wildlife (CDFW) are not required given that the Project will not impact special or listed plants or animal species, the League will consult with CDFW on the Project as an appropriate management practice. A permit from the U.S. Fish and Wildlife Service is not required because the Project will not impact any federally threatened or endangered species. Permits with the State Historic Preservation Office are not applicable because there will not be significant impacts to historic or cultural resources.

CEQA: Under the California Forest Practice Rules, the proposed management activities such as precommercial thinning, which do not propose the sale of forest products, are not required to be permitted. The management goals for the property can be achieved through the application of Exemption Permit timber operations. It is anticipated that the Project would qualify for a Categorical Exemption under CEQA. Given that the League is working to determine the most appropriate regulatory structure for the subject property, a lead agency for CEQA has not yet been identified. The League will work to address CEQA requirements as necessary ahead of signing a grant agreement, should this request be funded.

NEPA: This project will not be funded by a federal entity and will not take place on federal public lands therefore no NEPA review is necessary.

### **d. Organizational Capacity Narrative**

The League is a highly qualified nonprofit organization that has been protecting natural resource lands and restoring forests for almost a century, and has successfully implemented dozens of publicly and privately-funded projects throughout California, including helping to conserve some of the state's most iconic forests such as Jedediah Smith Redwoods State Park and Humboldt Redwoods State Park. Since 1918, the League has conserved nearly 200,000 acres of forestland worth \$4 billion in today's dollars. The League has worked with agency partners including the National Park Service, the Bureau of Land Management, and State Parks to plan and implement forest management and stewardship goals, and has designed and implemented such practices on its own land. With a total annual operating budget of \$10.9 million (FY14-15), including a permanent stewardship endowment of nearly \$411,000, the League has the fiscal capacity and expertise to complete proposed Project according to the proposed timeline and budget.

### **e. Cooperation and Community Support Narrative**

While the timeline for the property's transfer to the CBTSP is yet to be determined, collaboration with State Parks is integral to the Project's design. The subject property was State Park's top priority for expanding park boundaries, as it buffers the CBTSP from industrial-scale timber activities, and protects the keystone Beaver Creek watershed and nearby documented northern spotted owl activity centers. In addition, the property also contains the northeastern-most isolated

giant sequoia tree of this grove, indicating the property's significance from a climate change perspective, as trees could likely migrate to this area if climate change becomes a limiting factor.

Appropriate stewardship of the property will facilitate its intended transfer to State Parks for natural resource protection and recreational use. The Project provides an important buffer for the park from nearby timber harvesting activity and potential fire hazard. The proposed activities, including the addition of fuel breaks and other fire prevention work, are an essential component of the League's partnership with State Parks on this overall Project. In addition, Sierra Pacific Industries (SPI) owns property along the northern boundary of the subject property. With SPI's support, the League has been able to facilitate increased habitat connectivity by pulling down fencing, which has also added to the property's scenic value.

In addition, the Project supports the goals of or helps to implement the recommendations of the following national, state, and regional plans:

- NOAA Central Valley Salmon and Steelhead Recovery Plan: the Project implements sustainable forest management practices within the subject Upper Stanislaus watershed, which according to the plan helps maintain the viability of self-sustaining populations of steelhead documented in the downstream San Joaquin River watershed.<sup>5</sup>
- California Water Action Plan (CWAP): the Project will help expand water storage capacity and improve groundwater management, which is an action proposed by the CWAP.<sup>6</sup>
- CDFW State Wildlife Action Plan (SWAP): the Project implements fuels management activities, including prescribed burns to restore forest ecology, as recommended by the SWAP.<sup>7</sup>
- California Coastal Non-point Source Pollution Control Plan: the Project implements appropriately designed fuels reduction regimes that suppress wildfires and reduce watercourse pollution, as recommended by the plan.<sup>8</sup>
- California AB32 Scoping Plan: the Project helps reduce the risk of wildfire, while maintaining healthy forestlands that efficiently sequester GHG emissions and are more resilient to climate change, as recommended by the plan.<sup>9</sup>
- CBTSP General Plan: the Project involves active collaboration with State Parks to manage upstream landscapes that impact hydrological values within park boundaries, as described in the General Plan.<sup>10</sup>
- Tuolumne Calaveras Unit Fire Plan: The Project builds on the plan's goals by 1) fostering new partnerships between California State Parks, the League, and other stakeholders to implement sound forest management principles; 2) identifying and utilizing cost-effective pre-fire management activities to reduce taxpayer losses from wildland fires; and 3) increasing overall fire protection effectiveness by supporting the stewardship efforts of private landowners with lands adjacent to public recreational and natural resources.<sup>11</sup>

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<sup>5</sup> NOAA Central Valley Salmon and Steelhead Recovery Plan, page 9, July 2014

<sup>6</sup> California Water Action Plan Update, page 17, 2016

<sup>7</sup> CDFW State Wildlife Action Plan, Central Valley and Sierra Nevada Chapter 5.4, 2015

<sup>8</sup> SWRCB Nonpoint Source Program Strategy and Implementation Plan, 1998-2013

<sup>9</sup> Climate Change Scoping Plan, Natural and Working Lands Chapter, May 2014

<sup>10</sup> Unit 306 Calaveras Big Trees State Park General Plan, 1989

<sup>11</sup> Strategic Fire Plan, Tuolumne Calaveras Unit, CALFIRE, April 2014

Finally, letters of support for this funding request are included with this application from the following entities:

- U.S. Forest Service, Calaveras District
- California Department of Parks and Recreation, Calaveras Sector
- Calaveras Big Trees Association
- Sierra Nevada Alliance
- Greater Arnold Business Association

#### **f. Tribal Consultation Narrative**

Staff has attempted to contact local Tribal representatives by phone to discuss the project and gain support, but has not yet received a response. The Tuolumne Band of Miwok can be reached at 209.928.5300.

#### **g. Long-Term Management and Sustainability Narrative**

The League will provide ongoing stewardship for the subject property, until its eventual transfer to the CBTSP. The prescriptions of the Interim Forest Management Plan will maintain biodiversity at both the landscape and stand level, supporting a broad range of seral stages. The League is committed to managing its lands sustainably, while conducting fuel reduction and restoration activities as necessary to improve the health of the forest, reduce the risk of catastrophic wildfire, and maintain or improve terrestrial and aquatic habitats. Maintenance of the subject property is planned through low intensity, controlled burns following a roughly 15-year return period, which will ensure lasting benefits as catalyzed by the proposed Project. A Vegetation Management Plan will be developed in collaboration with State Parks prior to implementing prescribed burns. Finally, the League will conduct ongoing monitoring of the site on an annual basis until the property is transferred to State Parks. The League's organizational budget includes operations and maintenance support for the subject property until it is conveyed.

The Project site is located on the opposite side of the North Fork Stanislaus River from Hwy 4. The property's roads are well maintained with seasonal access available to all portions of the property for management needs. Access to the subject property crosses U.S. Forest Service roads to Sierra Pacific Industry (SPI) roads. There are five roads across SPI land accessing the property from the north. These roads have been surveyed, and an access easement with SPI is in place. There is one road that accesses the property from the south across State Parks property. This road is currently for administrative access only.

The following goals describe the long-term vision for the property, as described within the Interim Forest Management Plan:

##### *Primary Goal:*

1. Facilitate integrating property into Calaveras Big Trees State Park by developing Forest Management Plan (completed) and implementing plan until property can be transferred; maintain property and keep secure until transfer can be completed.

##### *Secondary Goals:*

1. Ensure that Forest Management Plan is developed to guide forest management, identify priorities, and funding needs.
2. Facilitate moving of fencelines for cattle grazing with cattle ranchers to ensure good neighbor relations, work with State Parks and ranchers to install gates at all road property line intersections (completed).
3. Implement Forest Management Plan prescribed thinning fuel reduction at prioritized locations so that State Parks can follow up with prescribed burning on schedule.

## **h. Performance Measures**

### **Quantifiable Performance Measures**

- *Resources Leveraged for the Sierra Nevada:* The Project includes a major applicant match of more than 36 percent of the total cost, or more than \$180,000. This figure does not include the purchase price of the subject property, which the League acquired in 2010, nor ongoing costs for monitoring and maintenance. This substantial match includes due diligence, project management, and pilot restoration costs, which have together facilitated appropriate management of the subject property to date, thereby enabling the League to submit this request for funding to the Sierra Nevada Conservancy.
- *Number and Type of Jobs Created:* According to the U.S. Census Bureau, the median household income (MHI) in Tuolumne County is \$48,426, which is 20 percent below the state MHI. This grant would provide seasonal work for twenty of people for at least three years.
- *Number of People Reached:* Before fieldwork begins in September 2016, the League will coordinate with CBTSP staff and Calaveras Big Trees Association volunteers so that any visitor questions about the Project can be answered.
- *Number and Value of New, Improved or Preserved Economic Activities:* The Project will restore and enhance 336 acres of forestlands in the Sierra Nevada, directly adjacent to the CBTSP, which has an annual average of 180,000 visitors. The Project will improve forest conditions, enhance watershed services, protect the region from catastrophic wildfire, and eventually increase high quality recreational resources of statewide significance.

### **Project Specific Performance Measure**

- *Acres of Land Improved or Restored:* The 2014 Tuolumne-Calaveras Unit Fire Plan notes that the CBTSP is a “highly visited park that features magnificent groves of Sierra redwoods, cedar, sugar pine, and Douglas fir,” and designates the Project area with a Very High Fire Hazard Severity Zone rating. It has also been categorized as having a High Fire Hazard rating by the U.S. Forest Service. By reducing the risk of catastrophic wildfire in an ecologically significant region, as well as within a tourist area vital to the local economy, the Project helps preserve California’s important habitat values and economic generators. Use of fixed area plots will provide documentation of fuel loading and basal area to best address the approximately 150 acres proposed for fuels reduction activities and restoration.

February 16, 2016

Sierra Nevada Conservancy  
Proposition 1 Watershed Improvement Grant Program  
11521 Blocker Drive, Suite 205  
Auburn, CA 95603

**Re: Beaver Creek Watershed Improvement Project**

Dear Grant Program Manager,

I am writing to express my support for Save the Redwood League's Beaver Creek Watershed Improvement Project, which is being proposed to the Sierra Nevada Conservancy for funding support through the Proposition 1 Grant Program.

The Calaveras Big Trees Association (CBTA) was created in 1974 to support the delivery of high quality educational and interpretive programs for Calaveras Big Trees State Park. Through our programs and operation of the park's Visitor Center, CBTA works to foster people's appreciation for the natural, cultural, and recreational resources the park offers. The proposed project will help protect and enhance these resources through silvicultural prescriptions that will create a more resilient, fire-safe forest. Projects such as this help ensure the long-term sustainability of our treasured public lands in many ways, including preventing catastrophic wildfire, facilitating increased carbon sequestration, improving fish and wildlife habitat values, and protecting water quality and supply.

The Calaveras Big Trees State Park receives an astonishing 210,000 visitors annually. I urge your careful consideration of this request for funding, which would support activities that will benefit the park and its many visitors for years to come. Thank you.

Sincerely,



Paul Prescott  
President, Calaveras Big Trees Association

Calaveras Big Trees Association is a private, non-profit, charitable 501(c)(3) corporation whose mission is to support the delivery of high quality educational and interpretive programs at Calaveras Big Trees State Park through raising and managing funds and financially assisting the California State Parks in carrying out those activities.

---

**CALAVERAS BIG TREES ASSOCIATION**

P.O. Box 1196 - Arnold, CA 95223 (209) 795-1196 fax (209) 795-6680 [cbta@bigtrees.org](mailto:cbta@bigtrees.org)

# GREATER ARNOLD BUSINESS ASSOCIATION

Kevin Dye • Director  
Linda Payton • Director  
Maureen Dinnocenzo • Director  
Zoe Chiaramonte • Director  
Bob Doten



GABA Officers  
Mike Borean • Secretary  
Debbie Bertini • Treasurer  
Tami Rakstad-Schaner • Vice President  
Linda Baker • President

2/24/2016

Sierra Nevada Conservancy  
Proposition 1 Watershed Improvement Grant Program  
11521 Blocker Drive, Suite 205  
Auburn, CA 95603

## Re: Beaver Creek Watershed Improvement Project

Dear Grant Program Manager,

On behalf of the Greater Arnold Business Association, I am writing to respectfully urge your support for Save the Redwood League's Beaver Creek Watershed Improvement Project being proposed for funding to the Proposition 1 Grant Program. The proposed project will improve watershed and habitat values that are vital to the ongoing sustainability of our communities. Located adjacent to the Calaveras Big Trees State Park and approximately one mile from the Stanislaus National Forest boundary, the subject property can provide an excellent fire safety buffer to public lands, while improving water quality and supply in our watershed.

The project will undertake several important forest management activities, including the reduction of fuel loads on this 336-acre property. The Town of Arnold is located in the heart of the Sierra, within the Stanislaus National Forest. Our economy is dependent upon the natural and recreational resources of the area, including its forestlands, rivers, and parks. By protecting these resources from the threats of catastrophic wildfire, climate change, and degraded water quality, the project ensures the Town of Arnold's long-term economic and cultural vitality. Thank you for your consideration of this request.

Sincerely,

Mike Borean  
Directory/Secretary, Greater Arnold Business Association

February 27, 2016

Sierra Nevada Conservancy  
Proposition 1 Watershed Improvement Grant Program  
11521 Blocker Drive, Suite 205  
Auburn, CA 95603

**Re: Beaver Creek Watershed Improvement Project**

Dear Grant Program Manager,

On behalf of the more than 85-member Sierra Nevada Alliance, I urge your careful consideration of Save the Redwood League's application for the Beaver Creek Watershed Improvement Project. The proposed project will protect this 336-acre forested property from the impacts of catastrophic wildfire, while enhancing wildlife habitat values, water quality and supply, and carbon storage capacity. Our mission is to protect and restore the natural resources of the Sierra Nevada for future generations while promoting sustainable communities. Projects such as this help bring us closer to our long-term goals.

Specifically, the proposed project will increase forest health and reduce fuel loads on the property through a variety of silvicultural activities, thereby providing a fire-safe buffer to the extremely popular Calaveras Big Trees State Park. The property is strategically located adjacent to the South Grove Natural Preserve, which contains about 1,000 large Sierra redwoods. In addition, active forest management is critical in order to protect the keystone Beaver Creek watershed, which drains to the North Fork Stanislaus River and the New Melones Reservoir.

This project is exemplary of the highly impactful, multi-benefit restoration work that helps ensure the long-term sustainability of Sierra Nevada lands, water, wildlife, and communities. Thank you for consideration of this request.

Sincerely,

A handwritten signature in cursive script that reads "Jenny Hatch".

Jenny Hatch  
Executive Director, Sierra Nevada Alliance



DEPARTMENT OF PARKS AND RECREATION

Central Valley District • 22708 Broadway Street • Columbia, CA 95310  
(209) 536-5930

Lisa Ann L. Mangat, Director

February 11, 2016

Mr. Jim Branham  
Executive Officer  
Sierra Nevada Conservancy  
11521 Blocker Drive, Suite 205  
Auburn, CA 95603

Subject: Proposition 1 Watershed Improvement Grant Program  
Beaver Creek Watershed Improvement Project

Dear Mr. Branham,

The California State Parks (CSP), Central Valley District is supportive of Save the Redwood League's Beaver Creek Watershed Improvement Project, which is being proposed for funding by the Sierra Nevada Conservancy (SNC) Proposition 1 Grant Program.

Save the Redwoods League (SRL) is working to increase forest resilience and enhance watershed protection and stewardship of this 336-acre property, which is directly adjacent to Calaveras Big Trees State Park (CBTSP). SRL is a long standing partner of ours with shared vision and goals on which we have collaborated together for decades. The Central Valley District supports the SRL's goals of: 1) reducing the risk of catastrophic fire potentially impacting adjacent protected lands, including the CBTSP and the Stanislaus National Forest; 2) complimenting CSP's North Grove Restoration Project in the CBTSP while providing a buffer to the South Grove Natural Preserve; 3) protecting the integrity of the keystone Beaver Creek watershed, which drains to the North Fork Stanislaus River; and 4) readying the property for transfer of title to CSP at a future date.

Save the Redwoods League's planned restoration work on the subject property presents a unique opportunity to buffer the adjacent 6,498-acre CBTSP, which contains some of the oldest and tallest redwood trees remaining in the world. Active forest management through the proposed project will also make these forestlands more resilient in the face of climate change, while protecting water quality and supply within a sensitive watershed and for the New Melones Reservoir, which has public uses including providing irrigation water, drinking water, hydropower generation, and recreation.

We are appreciative that our partner organization, SRL, selected this mutually beneficial site with regional benefits and respectfully encourage SNC's support in the form of funding this ecologically significant project. If you have any questions, please do not hesitate to contact me at (209) 536-5930.

Sincerely,

Jess C. Cooper  
District Superintendent  
Central Valley District



United States  
Department of  
Agriculture

Forest  
Service

Pacific Southwest Region  
Stanislaus National Forest

19777 Greenley Road  
Sonora, CA 95370  
209-532-3671  
TDD: 209-533-0765  
FAX: 209-533-1890

**File Code:** 1560  
**Date:** February 3, 2016

Sierra Nevada Conservancy  
Proposition 1 Watershed Improvement Grant Program  
11521 Blocker Drive, Suite 205  
Auburn, CA 95603

Dear Grant Program Manager,

The Stanislaus National Forest strongly supports Save the Redwoods League's Beaver Creek Watershed Improvement Project, which is being proposed for funding to the Sierra Nevada Conservancy's Proposition 1 Grant Program.

The subject property is adjacent to the Calaveras Big Trees State Park and less than a mile from the nearly 900,000 acre Stanislaus National Forest. Through active forest management techniques, the proposed project will achieve the following benefits: 1) protect and enhance existing public lands; 2) protect water quality and supply in a sensitive watershed by reducing sediment loading into Beaver Creek, the North Fork Stanislaus River, and the downstream New Melones Reservoir; 3) increase carbon sequestration benefits provided by these forestlands; 4) reduce the likelihood of catastrophic wildfire that would not only impact the subject property, but potentially damage adjacent public lands; and 5) enhance habitat, including an important wildlife corridor along Beaver Creek. The project aligns with the Stanislaus National Forest Land Management Plan and its goals to work collaboratively with private landowners to reduce the risk of wildfire by conducting hazard fuel reduction projects contiguously across jurisdictional boundaries. This work is more important than ever given California's current drought conditions.

The project will help to address several urgent issues related to recreational and natural resources that are of statewide significance. Please contact me if you should have any questions about my support. Thank you for your consideration.

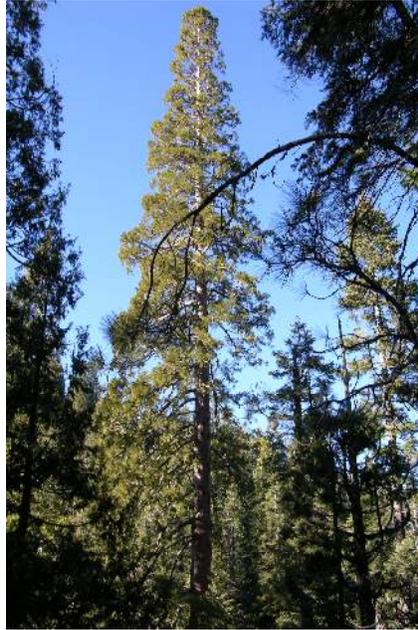
Sincerely,

  
for JEANNE M HIGGINS  
Forest Supervisor

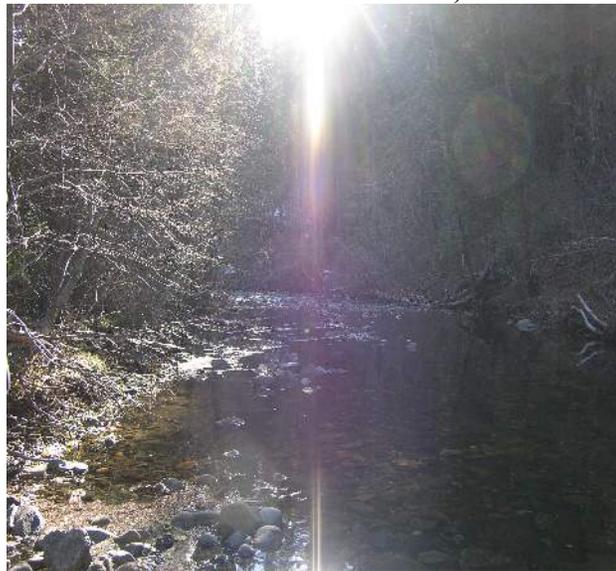
cc: Teresa McClung, Calaveras District Ranger



## **Beaver Creek 1 Property Interim Forest Management Plan**



**Prepared By:  
Charles W. Holthaus  
Western Timber Services, Inc.**



**Prepared For:  
Save-the-Redwoods League**

## **Preface**

Forest is defined as an ecosystem characterized by a more or less dense and extensive tree cover, often consisting of stands varying in characteristics such as species composition, structure, age class, and associated processes, and commonly including meadows, streams, fish and wildlife (SAF Dictionary of Forestry, 1998).

Forest management is defined as the practical application of biological, physical, quantitative, managerial, economic, social, and policy principals to the regeneration, management, utilization and conservation of forests to meet specific goals and objectives while maintaining the productivity of the forest (SAF Dictionary of Forestry, 1998).

Save-the-Redwoods League is a conservation organization dedicated to the preservation and restoration of redwood forests.

Save-the-Redwoods League recognizes and acknowledges that with ownership comes the responsibility and need for management of forests to protect, enhance and restore their natural processes.

The acquisition of the Beaver Creek 1 property is intended to further protect and buffer the Calaveras Big Trees State Park from forest fires and other natural calamities; as well as through time, move the subject forest towards old growth forest conditions (i.e. late seral forests). As the area surrounding Calaveras Big Tree State Park includes residential communities and other private and public forests and itself may by its nature have problems of fuel loading there is an element of apparent risk for catastrophic forest fires that could ultimately destroy these remaining important groves of primeval giant sequoia (*Sequoiadendron giganteum*), the connected forests and park facilities.

To this end the proposal for an interim forest management plan was borne and conceived by Save-the-Redwoods League to address these important forest management goals and policy issues. This forest management plan contemplates the dynamic approach of adaptive management to allow the ability to monitor conditions over time and be responsive to changes in forest and environmental conditions. This forest management plan should be utilized as a tool to assist in the decision making process for policies and goals of the Beaver Creek 1, and adjacent forests in the Calaveras Big Tree State Park to the extent this is jointly possible and practical. This interim forest management plan is not intended to make those important decisions. The plan is intended to provide scientific based information, data and alternatives or options for consideration by the decision makers in their deliberations for the future of these forests.

Nothing endures but change (Heraclitus 540BC-480BC)

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## **List of Abbreviations and Acronyms Used**

ARB-Air Resources Board  
BCAP-Biomass Crop Assistance Program  
BDT-Bone Dry Tons  
BMP-Best Management Practices  
CAA- Confidential Archaeological Addendum  
CAL FIRE -California Department of Forestry and Fire Protection  
CBTSP-Calaveras Big Trees State Park (The Park)  
CDF&G-California Department of Fish and Game  
CEPA-California Environmental Protection Agency  
CEQA-California Environmental Quality Act  
CFIP-California Forest Improvement Program  
CFPR-California Forest Practice Rules  
CGS-California Geological Survey  
CNDDDB-California Natural Diversity Database  
CSM-Central Sierra Miwok  
CVRWQCB-Central Valley Regional Water Quality Control Board  
DBH-Diameter Breast Height  
DPR-Department of Pesticide Regulation  
EQUIP-Environmental Quality Incentive Program  
FSA-Farm Service Agency  
MBF- One Thousand Board Feet (Scribner short log scale)  
MDB&M-Mount Diablo Base and Meridian  
NEPA-National Environmental Protection Agency  
NOAA-National Oceanic and Atmospheric Administration  
NRCS-Natural Resources Conservation Service  
NTMP-Non-Industrial Timber Management Plan  
OBT-On Board Truck  
PCT- Pre-Commercial Thinning  
QMD- Quadratic Mean Diameter  
SPI-Sierra Pacific Industries  
THP-Timber Harvesting Plan  
TPA-Trees Per Acre  
USDA-United States Department of Agriculture  
USFWS-United States Fish and Wildlife Service  
USDA-United States Department of Agriculture  
WTS-Western Timber Services, Inc.

## **Introduction**

### **General Purpose and Objectives of Forest Management Plan**

Calaveras Big Trees State Park (CBTSP) wishes to expand the current park boundaries through a series of land acquisitions of adjacent properties. This property is one of the acquisition parcels and is known as the Beaver Creek 1 property. To facilitate this transaction Save-the-Redwoods League will initially pursue the purchase of the Beaver Creek 1 property from Sierra Pacific Industries (SPI) with the intent of eventually transferring it to CBTSP ownership. During this transition period, Save-the-Redwoods League will be executing management activities needed to bring the forest stands to a condition that will be consistent with CBTSP goals. This Interim Forest Management Plan, which is being prepared by Western Timber Services, Inc. (WTS), is intended to guide the League as to possible management options that will best meet the CBTSP management goals. In addition, this Interim Forest Management Plan will present estimates of the various management treatment costs and estimated projections of values for removed materials which will further help the League in developing and employing the most cost effective treatment options.

### **Calaveras Big Trees State Park**

The mission of the California Department of Parks and Recreation is to provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation.

The 6500 acre Calaveras Big Trees State Park provides visitors with varied recreational opportunities including hiking, mountain biking, picnicking, sunbathing, camping, swimming, wading, bird and wildlife watching, nature photography, fishing, cross country skiing, evening ranger talks, numerous interpretive programs, environmental educational programs, junior ranger programs, activities for school children or general aesthetic enjoyment. The park receives between 140,000 to over 250,000 visitors per year with the long term average of about 180,000 visitors per year. The major attractions are the parks two large pristine stands of Sierra Redwoods also know as the Giant Sequoia (*Sequoiadendron Giganteum*). The Park was first created in 1931 with the acquisition of the North Grove, This grove includes the "Discovery Tree", the first Sierra redwood noted by Augustus T. Dowd in 1852. This area has been a major tourist attraction ever since, and is considered the longest continuously operated tourist facility in California. In 1954 with the help of Save-the-Redwoods League and others, the South Grove was acquired and included into the Park. The South Grove is one of the Parks premiere attractions and is the largest grove of Sierra Redwoods north of the Kings River watershed. CBTSP's most recent acquisition was of the Bigtree National Forest, which contains some of the last remaining Sierran forests dominated by old growth Sugar pine. Other attractions in the Park include the Stanislaus River, Beaver Creek, the Lava Bluff Trail and Bradley Trail. The Park houses two main campgrounds with a total of

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129 campsites, six picnic areas and several of miles of established trails. Calaveras Big Trees State Park can be contacted;

By Mail at: Calaveras Big Trees SP  
1170 EAST HWY 4  
Arnold CA 95223

By Phone at: (209)795-2334

### **CBTSP General Plan (1989)**

In 1989 the CBTSP developed a general plan that established management goals and is used as a guide in the development of all CBTSP management policies. As stated in the Calaveras Big Tree State Park General Plan (1989) under General Vegetation Management Policy section, “vegetation shall generally be managed toward a natural condition; that is, toward plant communities that result from normal successional trends which prevail in the presence of all natural factors normal to the region, and in the absence of interference from humankind.” And under The Sierra Redwood Groves Management Policy section, “The department shall manage the North and South Calaveras groves in such a manner as to restore, if necessary, and to maintain conditions in as nearly as possible the natural manner that would have occurred in the absence of all interference by Euro American people, including, in such interference, the exclusion of natural fires.....In applying prescribed fire in the natural environment, the department shall strive to simulate the effects of natural fires as they occurred in prehistoric times. Emphasis shall be given to duplicating the frequency and distribution of such fires”.

### **Long Term Management Goals**

CBTSP is especially interested in the Beaver Creek 1 Property because of it’s strategic location as a buffer to the South Grove Natural Preserve and the newly acquired 379 acre Bigtree National Forest, which are both located directly to the south and east of the Beaver Creek 1 property. Untouched by fire for decades, the Bigtree National Forest has fuel loading and stand structures that would lead to catastrophic wildfire even under moderate fire weather conditions. It is also a potential conduit for wildfires from the northwest entering the Calaveras South Grove Natural Preserve (CBTSP staff 2008). Since much, if not all of the old growth forest has been harvested on the Beaver Creek 1 property, the primary management goal is for increased fire protection of the Parks primeval forests with a secondary goal of encouraging the development of late seral stage forest conditions on the property.

## **Basic Information**

### **Landowner and Contact Information**

Since 1918, Save-the-Redwoods League has saved ancient redwood forests and redwood ecosystems to ensure that current and future generations can feel the awe and peace that these precious natural wonders inspire. They also save redwood forests because they are rare (their natural range is only in central and northern California and southern Oregon) and because they are Earth's tallest and some of the oldest and most massive living things. With support of members and partners, Save-the-Redwoods League has protected more than 181,000 acres and helped develop 59 redwood parks and reserves for everybody to enjoy. The primary objectives of Save-the-Redwoods League include; to rescue from destruction representative areas of our primeval forests, to cooperate with California State Parks, the National Park Service, and other agencies, in establishing redwood parks and other parks and reserves, to purchase redwood groves by private subscription, to foster and encourage a better and more general understanding of the value of primeval redwood or giant sequoia and other forests of America as natural objects of extraordinary interest to present and future generations and to support reforestation and conservation of our forest areas.

(<http://www.savetheredwoods.org/league/objectives.shtml>)

Save-the-Redwoods League can be contacted;

By Mail at: Save-the-Redwoods League  
114 Sansome Street, Suite 1200  
San Francisco, CA 94104-3823

By Phone at: (415) 362-2352

By Fax at: (415) 362-7017

By E-Mail at: [info@savetheredwoods.org](mailto:info@savetheredwoods.org)

## **Landowner Designee and Contact Information**

Western Timber Services, Inc. (WTS) is a privately owned consulting forestry firm that was established over 50 years ago and offers a wealth of experience in managing both Redwood and other forest types both in California and throughout the Pacific Northwest. Collectively WTS staff has well over 100 years of forest management experience with the successful completion of countless projects. WTS handles a wide array of forest management activities including timber cruising, land and timber valuations and/or appraisals and preparation and oversight of Timber Harvest Plans (THPs), Non Industrial Timber Management Plans (NTMPs) and other forest management type projects. WTS owner and president, William E. Kleiner is considered by many to be an expert in the forestry profession and is routinely called upon for advice. His reputation is derived from his extensive knowledge of the forest products industry and history of forest management excellence. Western Timber Services, Inc. can be contacted;

By Mail at: Western Timber Services, Inc.  
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Arcata, CA. 95521

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## Management History

The Beaver Creek 1 property is zoned for timber production as its highest and best use and has been managed as commercial timberland prior to the acquisition by Save-the-Redwoods League. The Beaver Creek 1 property has been harvested many times over the last 100 years. Past harvest entries have typically targeted the more valuable pine component of the forest; which has resulted in a shift of dominant stand occupancy toward more shade tolerant species such as White fir and Incense cedar. In addition, decades of fire suppression has also enabled these shade tolerant species to grow in an overstocked condition that leads to stagnation, poor forest health and increased fuel loads. More recently SPI has executed a series of harvest operations on the property including Single Tree Selection, the establishment of a Shaded Fuel Break and the creation of several plantations (THP 4-04-52TUO-8). In addition to timber production activities, the Beaver Creek 1 property has been subject to leases for cattle grazing, which has been occurring for an unspecified amount of time.

## Forest Types

The Beaver Creek 1 Property lies within the Lower Montane forest of the Sierran Floristic Province. The predominant forest cover on the property is Sierra Mixed Conifer dominated by white fir (*Abies concolor*) and incense cedar (*Calocedrus decurrens*) with ponderosa pine (*Pinus ponderosa*), sugar pine (*Pinus lambertiana*) and giant sequoia (*Sequoiadendron giganteum*) also present to a lesser degree. Other species that may be found on the property include black oak (*Quercus kelloggii*), bigleaf maple (*Acer macrophyllum*), Pacific dogwood (*Cornus nuttallii*), canyon live oak (*Quercus chrysolepis*), Greenleaf manzanita (*Arctostaphylos patula*), whitethorn ceanothus (*Ceanothus cordulanus*) and deer brush (*Ceanothus integerrimus*). The conifer species present can be categorized into two categories, shade tolerant species which includes white fir and incense cedar or shade intolerant species which included ponderosa pine, sugar pine and Giant sequoia. Tolerant is defined as; a plant capable of becoming established and growing beneath overtopping vegetation; the term is usually applied to shade (Helms 1998) which implies that a shade intolerant plant is not capable of becoming established and growing beneath overtopping vegetation.

The timber stands are made up of a wide range of age classes with the dominant overstory trees approximately 50 to 125+ years of age with younger trees found in the understory.

There is one large Giant Sequoia tree known to be on the property (pictured on the cover page), which is located near Beaver Creek in the southeast portion of the property.

## Tract Location and Description

The 314.64 acre Beaver Creek 1 property is located in the Beaver Creek (tributary to the North fork Stanislaus River) drainage about 5 air miles easterly of Arnold, a small rural community along State Highway 4 and approximately 21 air miles northeast of Sonora, the Tuolumne County seat. The tract is legally described as the NW ¼ of

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Section 29, and Lot 1, NE $\frac{1}{4}$ NW $\frac{1}{4}$ , and the N $\frac{1}{2}$ NE $\frac{1}{4}$  of Section 30, all Township 5 North, Range 16 East, Mt. Diablo Base and Meridian (MDB&M). It is further identified by the Tuolumne County Assessor as parcels 16-070-10 and 16-070-25. The western, southern and eastern edges of the property adjoin the CBTSP while the northern property boundary abuts other SPI timberland (Fleming appraisal, 2009). Slopes on the property are gentle (average about 30%) and range from flat on the ridge top areas to steep (approximately 50-70%) in areas adjacent to Beaver Creek which bisects the property. Elevations of the property range from about 4,500 feet at the bottom of the Beaver Creek Canyon to a little over 5,000 feet in the southeast corner of the property.

## **Legal Access, Roads and Transportation Systems**

The Beaver Creek 1 property is well roaded with seasonal road access to all portions of the property for management needs. All the roads on the property appear to be stable and well maintained. While there are several watercourse crossings on the property, the actual number, type and condition of these crossings are not known at this point in time. Typically either rocked ford crossings or culverted crossings are used for forest road watercourse crossings in the region.

To access the property from State Highway 4 near the community of Dorrington, take route 5N02, which is maintained by the United States Department of Agriculture (USDA) Forest Service Stanislaus National Forest, in an easterly direction for approximately 5 to 5.5 miles, make a right turn (southwesterly) at the intersection of 5N78 and continue on for approximately 1.5 miles to accesses areas of the property west of Beaver Creek or continue on route 5N02/5N03 across Beaver Creek (5N02 becomes 5N03 west of the Beaver Creek crossing) to the intersection of route 5N05X (approximately  $\frac{1}{2}$  mile further) where you again make a right turn (southwesterly) at the intersection of 5N78 and continue on for approximately 1.5 miles to access the eastern portion of the property (See Road Access Map in Appendix II). There are no other truck road crossings of the main stem Beaver Creek between route 5N02/5N03 and CBTSP property.

Vehicular access to the property will be subject to the constraints of an easement, limiting road use to State Park administrative and forest management purposes only. No Easement is granted for public use. Additionally in cooperation with Stanislaus National Forest, 5N02 is closed seasonally at a gate located on the Section line between Sections 8 & 17, T5N, R16E, MDB&M. This seasonal closure is generally between the first week of December through the last week of April. Other gates near Mckays Reservoir and Beardsley Reservoir likewise limit access to the 5N02/5N03 Road system during the winter season (Tim Tate E-Mail January 25, 2010). Public access to the Beaver Creek 1 property shall be through the State Park property from the south.

Several old historic era logging roads and/or railroad grades were built across the Beaver Creek 1 property that once connected to the State Park property. On the SPI ownership (including the Beaver Creek 1 property) these routes have been maintained or upgraded and currently serve as part of the functional logging road network. However, on the State Park side these access routes have been blocked to public vehicular traffic and are currently maintained for public use as hiking trails.

## **Weather Patterns**

The climate in this region of the Sierras is typically dry and mild during the summer months with temperatures in the 60's and very wet and cold during the winter months with temperatures frequently falling below 30 degrees Fahrenheit. The warmest month of the year is July with an average maximum temperature of 81.20 degrees Fahrenheit, while the coldest month of the year is January with an average minimum temperature of 28.00 degrees Fahrenheit. The annual average precipitation at Arnold is 55.42 inches. Winter months tend to be wetter than summer months with January being the wettest month of the year with an average precipitation of 10.77 Inches. Much of this precipitation falls in the form of snow which typically accumulates in the higher elevations through the winter months.

## **Neighborhood and Adjacent Properties**

The Beaver Creek 1 property is bordered by CBTSP to the south, east and west and SPI to the north. Since this property is essentially embedded within the current park boundaries (surrounded on 3 sides) it makes it an ideal parcel for acquisition by the park. In addition, since SPI and CBTSP currently maintain mutual property boundaries on this parcel and have coexisted peacefully, it is anticipated that this transaction will not create any new complications between either of these landowners. The property boundary line that separated CBTSP and the Beaver Creek 1 property (formerly SPI) is assumed to be identifiable on the ground. The newly created property boundary between SPI and the Beaver Creek 1 property (north property line) however is likely not identifiable on the ground (formerly all SPI property and bisects some plantation units). This newly created property boundary will need to be identified on the ground before any operations adjacent to the line are conducted by either SPI or Save-The-Redwoods League.

## **Management Goals**

During the transition period, Save-the-Redwoods League intends to execute various management techniques with the intent of encouraging the development of late serial condition on the property. Any management activities applied shall also be designed to improve the health of the forest, reduce the risk of catastrophic wildfire and maintain or improve terrestrial and aquatic habitats. Other goals that may be achieved during this transition period include increased public access to the property and increased recreational opportunities to CBTSP visitors. Due to high costs of forest management activities, the League may consider the commercial marketing of any merchantable material generated from these activities as a mechanism to keep management costs to a minimum.

## **Adaptive Management**

Adaptive management is a dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used along with research results, to modify management on a continuing basis to ensure that objectives

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are being met (Helms 1998). This management plan is designed to be a constantly evolving document that is updated periodically as more and better information becomes available. The monitoring of management activities as to their success or failure and impacts, if any, in regard to meeting the management goals is a vital ingredient for the development of further activities. Periodic reassessment of management goals will also be necessary to ensure that any and all management decisions will be based on the best available information.

## **Current Conditions**

### **Acreage**

There is some uncertainty as to the actual acreage of the Beaver Creek 1 Property. SPI foresters, using their state-of-art GIS mapping methods report the property to be 314.64 acres, while the local Assessor has assigned a total of 321.47 acres to the property for ad valorem tax purposes (Fleming appraisal 2009). Upon review of maps and current ortho photo imagery as supplied by SPI, WTS staff observed that some mapped property lines as shown on the SPI GIS did not seem to match with visible timber harvest boundary lines observed on the orthophoto. Without detailed survey records of the property lines or ground verification of survey monuments, WTS is unable to definitively remap the property boundary lines on their GIS mapping software. For the above stated reasons and to correlate with the Fleming appraisal, acreages as reported by the SPI GIS will be presented for the production of this management plan (Table 1).

Table 1, Beaver Creek 1 Acreage Summary as Reported by SPI GIS and as Found in the Fleming Appraisal.

Total Acres	Timbered Acres	Old Plantations	New Plantations
314.64	216.94	28.71	68.99

### **Forest Resources**

#### **Management History**

The Beaver Creek 1 property has been harvested many times over the last 100 years. Past harvest entries in the region have typically targeted the more valuable pine component of the forest which has resulted in a shift of dominant stand occupancy toward more shade tolerant species such as White fir and Incense cedar. In addition, decades of fire suppression has also enabled these shade tolerant species to grow in an overstocked condition that leads to stagnation, poor forest health and increased fuel loads. More recently SPI has executed a series of harvest operations on the property including Single Tree Selection, the establishment of a Shaded Fuel Break and the creation of several plantations (THP 4-04-52TUO-8). In addition to timber production activities, the Beaver Creek 1 property has been subject to leases for cattle grazing, which has been occurring for an unspecified amount of time.

#### **Plantations**

Several plantations have been established on the Beaver Creek 1 Property since the late 1990's. Two even aged clear cut blocks totaling 28.71 acres (Table 1, Old Plantations) were harvested in 1999 under the Big Tree THP#4-96-159/TUO. More recently four even aged regeneration units totaling 68.99 acres (Table 1, New Plantations) were harvested under the North Stanislaus THP#4-04-052/TUO. These newer harvest blocks were harvested under an Alternative Silvicultural prescription, which most closely resembles clearcutting, which is described as "visual retention" where a minimum of 6

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trees per acre (8” DBH or greater including hardwoods) were retained in groups or singularly within each harvest block. In addition, two of these newer harvest blocks were adjacent to the Park property and are inclusive of a 200 foot Special Treatment Zone buffer that was harvested under a Seed Tree/Seed Step Silvicultural prescription where at least 20 square feet per acre of basal area contained in “best phenotype” seed trees 18” diameter at breast height (DBH) or larger were retained (North Stanislaus THP# 4-04-52/TUO-8 page 6). As compared to the older plantations where all the trees were harvested under a traditional Clearcut Silviculture, the newer plantation areas have a varying degree of residual tree stocking. All the plantation units have had a series of post harvest treatments applied including site preparation, tree planting, herbicide applications and pre-commercial thinning (PCT). Each plantation unit has a specific treatment history with differing treatments and treatment dates, the actual treatment history of each plantation unit is listed in Appendix I. To simplify the identification and location of plantation units, for the purposes of this Management Plan, they have been re-named (See Plantation Map in the Appendix I)

Table 2. Beaver Creek Plantation Unit Identification Guide

THP#	THP Name	SPI Unit Number	Beaver Creek Management Plan Unit Identifier	SPI GIS Unit Acres*	Preliminary WTS GIS Unit Acres
4-96-159/TUO	Big Trees	01300D	Big Trees 1	13.3	11.5
4-96-159/TUO	Big Trees	01300E	Big Trees 2	17.5	17.0
4-04-052/TUO	North Stanislaus	01307B/#301	North Stanislaus 1	17.3	15.9
4-04-052/TUO	North Stanislaus	01207A/#302	North Stanislaus 2	24.0	22.5
4-04-052/TUO	North Stanislaus	01309D/#524	North Stanislaus 3	14.8	22.3
4-04-052/TUO	North Stanislaus	01309C/#525	North Stanislaus 4	13.8	15.0

\*SPI GIS Acres as found on 2009 Inventory Map.

### **Shaded Fuelbreak**

In addition to the above described harvesting, a shaded fuelbreak was created on the Beaver Creek 1 property. This shaded fuelbreak (approximately 8 acres) is part of the CAL FIRE Master Plan for Tuolumne County on Sierra Pacific Industries ownership and was permitted under the Foggie THP (THP#4-02-87/TUO-6). The shaded fuelbreak was created concurrently with the harvesting of the North Stanislaus THP. The Shaded fuelbreak is located on the ridgetop area that separates the Beaver Creek watershed from the North Stanislaus River watershed and is intended to create a defensible space that will aid in reducing the spread and intensity of wildfire. The silvicultural objective of the fuelbreak was to leave a shaded site condition with dominant vigorous trees. This objective was realized through the removal of fuel ladders by the harvesting of merchantable sized trees and the removal of sub-merchantable trees and material through biomass operations using mechanical harvesters (Foggie THP#4-02-87/TUO-6). A minimum of 50 square feet per acre of basal area was retained as required by the California Forest Practice Rules.

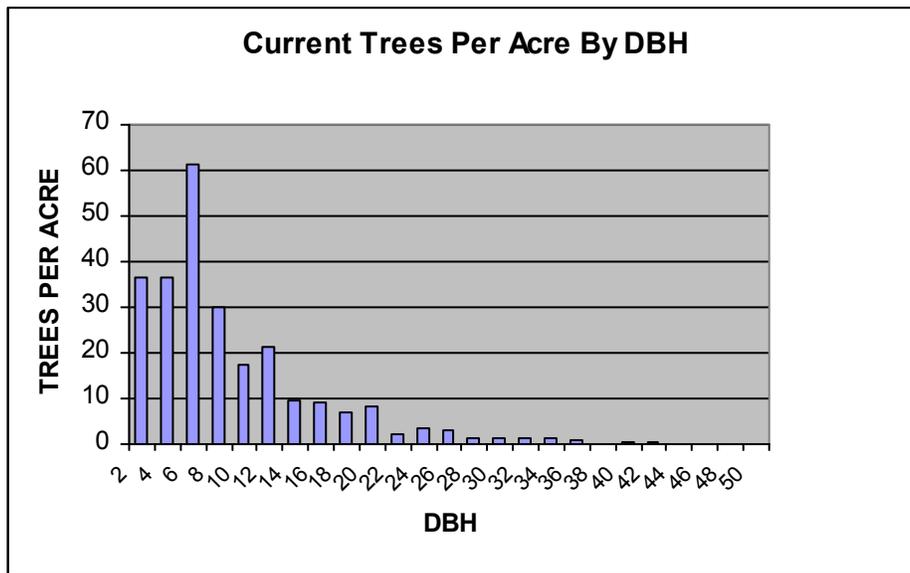
## **Single Tree Selection**

Single Tree Selection Silviculture has been applied several times to the entire Beaver Creek 1 property over the years. Most recently this silvicultural prescription was used on a portion of the Beaver Creek 1 property as part of the North Stanislaus THP. The acreage of this last Single Tree Selection harvesting area is unknown, however due to the high residual tree retention standards (100 square feet of basal area per acre) and the fact that all of the remaining timbered acres on the property have been harvested under this prescription in the past, the specific acreage is not relevant to this Management Plan.

## **Inventory**

To facilitate the appraisal, in 2009 SPI conducted a timber inventory of the property consisting of 50 variable radius cruise plots using a 40 Basal Area Factor (BAF) Prism. All the timbered acres including the Shaded Fuelbreak area were included, no sampling took place in any of the plantations and there were no efforts made to include any of the residual trees remaining in those plantations into the inventory analysis. This type of inventory protocol is effective at estimating the merchantable volume of saw log size timber, which is adequate for timberland appraisal purposes; however, it did not yield an adequate representation of stand attributes such as snags, down wood, defective live green trees, smaller diameter classes and presence of hardwood or brush species. At this time and due to cost and time constraints, conducting a new timber inventory, that would yield a more accurate representation of true stand characteristics, is not being considered for the production of this Management Plan. All that being said; the data generated from the 2009 inventory was generated from sample plots taken on the property, is generally representative of the timber stands present and is the best available data. As reported by the 2009 SPI inventory results there are currently 253 conifer trees per acre (TPA) ranging in size from 2" DBH to 72" DBH, with approximately 28% (71 TPA) representing diameter classes of 12" DBH and larger with the remaining 72% (182 TPA) occupying smaller diameter classes. Of these 253 TPA approximately 89% (225 TPA) are composed of White Fir and Incense Cedar which are considered shade tolerant species, the remaining 11% (28 TPA) are composed of Sugar Pine and Ponderosa Pine which are considered shade intolerant species. The timbered areas have an average of 175 square feet of basal area per acre and approximately 19 MBF per acre (whole tree net scribner) of merchantable volume.

**Graph 1, Current Trees Per Acre by Diameter Class (All Species)**



### Forest Density and Health

In the Sierran mixed conifer, pre-European forests probably consisted of a complex array of mostly small even-aged aggregations and/or stands representing a wide range of age and size classes. Compared to today’s forest conditions, stands would have been less dense and groups of different-sized trees would have been separated more horizontally into even-aged aggregations with less vertical diversity within groups (Weatherspoon et al 1992)

Forest health in western forests has become a significant concern as large-scale mortality has increased in the last several decades (Wickman 1992, Campbell and Liegel 1996). Although there are many definitions of forest health, most mention that unhealthy forests have mortality levels outside the historic range of variability. A number of studies have suggested that increases in stem density and reduction of tree species diversity with fire suppression increase the scale and severity of tree mortality (Kilgore 1973, Wickman 1992, Savage 1997, Campbell and Liegel 1996,). In the absence of fire, insects and pathogens are the principal cause of tree mortality (Smith, Rizzo, and North 2005).

Since thorough analysis of the stands on the Beaver Creek 1 property have not taken place, any assumptions as to mortality rates or general stand health are purely speculation. However in discussions with Adam Frese (Local unit, CAL FIRE Forest Practice Inspector) it was indicated that the primary disease or insect problems encountered in the area are Dwarf Mistletoe (*Arceuthobium* species), White Pine Blister Rust (*Cronartium ribicola*) and Fir Engraver Beetle (*Scolytus ventralis*). In addition, it was indicated that the recent heavy snowfall that occurred in January 2010 has caused a significant amount of snow damage in the region and it is likely that the Beaver Creek 1 property suffered similar damages.

The degree of damage that has resulted from the 2010 winter snow pack will be examined as soon as access to the property is available. In addition, the presence and/or

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infection level of disease and insect pathogens will be monitored and assessed so appropriate remedial management techniques can be developed and incorporated into any proposed stand treatment activities.

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Figure 1. (Top) The Confederate Group of giant sequoias in Mariposa Grove, Yosemite National Park, was nearly free of understory trees circa AD 1890. (Bottom) By 1970, in the absence of frequent surface fires, a dense thicket of white firs grew at the base of the sequoias. Not all areas in sequoia groves have experienced such dramatic changes. (Photos courtesy of B. M. Kilgore, National Park Service.) (Stevenson 1999)



## **Fire History and Management**

Prior to European settlement in the mid 1800's, Sierran mixed-conifer forests were characterized by a short-interval, low-to moderate-severity fire regime. As a result of human activities since the mid-1800's, the fire regime has been changed to one of less frequent but substantially more severe fires (Weatherspoon et al 1992)

Analysis of tree-ring scars from living trees and stumps in the Sierra Nevada indicate that prior to the mid-1800's there was a composite mean fire return interval of approximately five years in *S. Giganteum* stands of the mixed-conifer forest type (Swetnam 1993; Caprio and Swetnam 1995; Parsons 1995). However, experience at CBTSP has revealed that for up to 15 years following initial prescribed burning, the understory vegetation and overstory canopy condition will not support extensive surface fires. Maintaining a mean fire return interval of five years has not been possible because not enough fuel is available to adequately carry surface fire through *S. Giganteum* stands. (Evelt 2006).

It is not known when the property was last subject to a wildfire, however due to current stocking levels and age/species composition of the forests present; it is assumed that the property has not burned for 50+ years. SPI has most likely conducted pile burning activities in the past to dispose of unwanted logging slash; however the creation of the Shaded fuelbreak appears to be the first management activity applied on the property specifically designed to address wildfire risk management.

## **Landscape Features**

### **Soils**

According to United States Department of Agriculture (USDA) Forest Service Stanislaus National Forest Area Soil Survey, the primary soil families on the Beaver Creek 1 property are Gerle (116, 117) and Gerle/Wintoner Complex (120, 121) with minor inclusions of Holland/Wilder Complex (135), Windy (193) and MCarthy (176) soil families. The Gerle (116, 117) and Gerle/Wintoner Complex (120, 121) are both sandy loams originating from glacial deposits of granitic rock debris with a depth of 40"-60+". The Holland/Wilder Complex (135) is described as a loam soil developed from highly weathered granitic bedrock and has a depth of 40"-80+". The windy (193) and MCarthy (176) families are both described as gravelly sandy loams derived from Andesitic Tuff or volcanic rock and has a depth of 20"-60+". The weathering of granitic origin soils leads to deep well developed very productive soils while the weathering of volcanic origin soils generally results in shallower rockier soils; however all of these soils, with the exception of rock outcrop inclusions are well suited for timber production. All soil types found on the Beaver Creek 1 property are considered forest survey site class II or III for management purposes (USDA Forest Service Stanislaus National Forest Area Soil Survey).

## **Geology**

The Beaver Creek 1 property lies within the Sierra Nevada Geomorphic province, east of the Mother Load Gold Belt. Geological units found on the property include Cretaceous granitics and Tertiary volcanic flows (Andesitic Tuff). The granitics form the underlying bedrock material or the “basement” with the Andesitic Tuff or volcanic flows occurring as small roof pendants or “caps” overlaying the granitics and occurring on or near the ridge tops (CBTSP General Plan, 1989). Due to the easily erodible nature of the granitic soils, stream downcutting generally leads to deeply incised valleys with steep side slopes or cannon walls as evidenced by the steeper slopes located adjacent to Beaver Creek. This type of geology is generally stable and not known for high mass wasting risk. As determined from site visits, map and aerial photography analysis by WTS staff, no unstable features have been identified on the property.

## **Flora and Fauna and Habitat**

Compared to the more intensely developed regions of California, the terrestrial vertebrate fauna of the Sierra Nevada is relatively intact. Only three vertebrate species are known to have been lost from the Sierran fauna in historic times, the California grizzly bear, the Bell’s vireo and the California condor (Garber 1996). All of these species require forest openings for all or part of their habitat needs. The Principal predictor on the presence of a particular vertebrate is appropriate habitat. Wildlife habitats are largely equivalent to vegetation types or biological communities but may also require the presence of abiotic elements such as cliffs, caves, lakes and streams or sandy soils (Garber 1996). Most wildlife species also make significant use of biotic structural elements for important life functions: shrubs or trees at a particular seral state, size or density; snags; logs and hardwoods (Garber 1996). The amount and distribution of these abiotic and biotic structural elements often control population levels of wildlife species (SPI-CWHR 1999). Fire suppression in the Sierra Nevada has led to forest and chaparral stand conditions inimical to many Sierra land-birds because of loss of habitat elements, including forest openings with herbs and shrubs (grabber 1996). The high fuel loading resulting from fire suppression can lead to large, stand –destroying fires that eliminate large, old trees, snags and logs. Of the 246 wildlife and fish species that commonly utilize forested habitats in California, 29% are associated with early seral habitats, 14% are associated with dense, small tree forests, 22% are associated with open forests, 14% are associated with dense, large tree forests, 6% are associated with abiotic elements such as cliffs and caves, and 14% are accociated with water and riparian habitats (SPI-CWHR 1999). Of the 246 wildlife and fish species that commonly utilize forested habitats in California, 80 are associated with snags, 78 are associated with logs, 158 are associated with grass and shrub edges and/or layers, and 75 are associated with mast producing hardwoods (SPI-CWHR 1999).

Due to a lack of surveys and limited data available on the property, a thorough analysis of species and habitats present is not possible at this time.

## **Rare, Threatened or Endangered Wildlife and Vegetation**

As part of the scoping process in the development of the North Stanislaus THP (#4-04-052/TUO), to determine the presence of rare, threatened, endangered, or sensitive species of plants and animals within the THP area and the Lower Beaver Creek and Doud's Landing Planning watersheds, the following sources were consulted; the California Department of Fish and Game Natural Diversity Database (NDDDB or Rarefind), SPI Records, map databases of the Tuolumne County Community Development Department Planning Division (Contact Ms. Robin Wood), Mr. Wayne Harrison (District Ecologist for the California State Park System) and Ms. Patricia Raggio (Ecologist for the Calaveras Big Trees State Park).

The NDDDB reported several occurrences of California spotted owls within the Planning Watersheds, the Tuolumne County records also revealed several occurrences of California spotted owls and one Northern goshawk occurrence within or near the Planning Watersheds. The SPI meeting with Mr. Harrison revealed a single occurrence of an osprey nest in Section 25 on the CBTSP and the repeated nesting of a Northern goshawk in Section 31 on the CBTSP. Ms. Raggio reported spotted owl sightings in Section 25, T.5N., R.16E., and Section 30, T.5N., R.16E., and past nesting of a Northern goshawk in Section 28, T.5N., R.16E. (North Stanislaus THP#4-04-052/TUO). Ms Raggio supplied information indicating that there was an active Northern goshawk nest in Section 30, T.5N., R.16E. in the year 2000. This nest was within approximately 300 feet of a harvest unit as proposed in the North Stanislaus THP (#4-04-052/TUO) which is located on the Beaver Creek 1 Property. No goshawk sightings or nests within the THP area was noted by the RPF while preparing the THP. It is not indicated whether this nest was ever located.

Also as part of the scoping process between SPI and the California Department of Fish and Game it was indicated that there is the possibility of occurrences of the following SPI Group 1, 2 or 3 plant species within the THP area: *Allium Sanbornii var. sanbornii*, *Allium tribracteatum*, *Clarkia australis*, *Lomatium stebbinsii*, *Mimulus filicaulis*, *Mimulus grayi*, *Mimulus pulchellus*, and *Pipera colemanii*. In addition several plant species on the SPI Group 4 "Watch List", inclusive of *Ceanothus fresnensis*, *Clarkia virgata*, *mimulus grayi*, *mimulus inconspicuous* and *Piperia leptopetala*, may also have suitable habitat within the plan area. These species are not considered rare, threatened, or endangered (North Stanislaus THP#4-04-052/TUO).

Based on review of the North Stanislaus THP#4-04-052/TOU and the most current version (February 2010) of California Natural Diversity Database (CNDDDB), there are no known sites of Rare or Endangered plants or wildlife species reported to be present on the Beaver Creek 1 property; however, there are several occurrences in the near vicinity to the Beaver Creek 1 property which would likely have management implications.

## **Invasive Species**

Aside from Euro-American anthropologic influences and the introduction of cattle and/or sheep grazing, no specific data indicating the presence or absence of invasive species on the Beaver Creek 1 property was identified during the literature review as part of the production of this Management Plan. It is likely that invasive species could be found on the property; however, more research is needed to compile a comprehensive list of possible invasive species then, detailed surveys would have to be conducted to verify or deny their presence. If any invasive species are identified on the property then, management actions to mitigate their implications could then be developed; however, it is anticipated that the presence of invasive species would not affect the conduct of any management activities that are proposed as part of this Management Plan. Additionally, it is anticipated that many proposed treatments that are designed to manipulate the forest or plantation stands would also offer a considerable level of invasive species control.

## **State of Water Resources**

No specific information as to the state of water resources on the Beaver Creek 1 property was identified through the production of this Management Plan. The Lower 59 miles of the Stanislaus River is listed on the 2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS REQUIRING TMDLS as impaired due to the presence of Diazinon, Group A Pesticides, Mercury and other Unknown Toxicity. The causes of these pollutants are listed as resource extraction, agricultural activities and other unknown causes. Past timber harvesting, grazing and other management activities including the use of herbicides by SPI were not listed as pollutants. In addition the upper portions of the Stanislaus River, including Beaver Creek were not listed as a 303(d) impaired stream.

## **Cultural Resources**

Both pre-historical and historical resources are present in the vicinity of the Beaver Creek 1 property. Conducting archaeological surveys and the preparation of a Confidential Archaeological Addendum (CAA) are required prior to the submission of a THP, which means that much of the Beaver Creek 1 property has been subject to surveys for cultural resources by SPI staff.

Pre-historic cultural sites, while not yet discovered on the property, are prevalent in the area and have been discovered both on the CBTSP to the south and adjacent SPI ownership to the north. Even though no pre-historic cultural sites have been identified on the property, there is the possibility of their existence in the un-surveyed areas and/or the possibility that sites were missed on prior surveys in the area.

A historical cultural site has been identified on the property. The Standard Lumber Company railroad grade is considered a significant cultural feature and crosses the Beaver Creek 1 property. Due to the confidential nature of cultural resources the location of pre-historical and/or historical sites in the vicinity of the Beaver Creek 1 property will not be disclosed as part of this Management Plan (CAA for THP#1-04-52/TUO-8).

A survey and analysis of cultural resources will be conducted prior to any management activities that could potentially disturb a cultural site and proper mitigation measures shall be implemented for their protection.

### **Prehistoric Miwok People**

The Beaver Creek 1 property is located in an area of pre-historic occupation by the Central Sierra Miwok (CSM). Communities of the CSM were composed of anywhere from a dozen to several hundred individuals with a somewhat nomadic existence inasmuch as they exploited several elevational zones within a given year. The warmer summer months were spent at higher elevations in the Sierra Nevada Range, with winter habitation at lower elevations in the Sierra Foothills. The spring and fall seasons were spent in slow migration through mid elevations; the CSM subsistence was that of a rather sedentary “hunter/gatherer” in nature; in which acorns were the primary staple food, but in which venison, small game, fish, and many plants were also utilized. Advanced methods of agriculture and horticulture were not practiced. The CSM did, however, develop specialized tools to collect, process, and prepare acorns, seeds, game and other natural resources. They quarried obsidian, basalt and chert to make arrow and spear points and other tools used in basket production.

The CSM political organization was that of a “tribelet”, in which each tribelet was composed of a large central village and associated satellite communities. Leadership rested in a headman or headmen who lived in the central village, and who exercised authority over access to resources, resolution of disputes, and ceremonial or religious activities. The CSM spoke languages of the Penutian stock.

Current existing evidence of pre-historic Miwok culture and land use is found primarily in surviving features such as bedrock mortars, midden deposits, or housepit depressions; or artifacts such as arrow or spear points or other stone tools, which are usually found in lithic scatters (CAA for THP#1-04-52/TUO-8). Likely locations for cultural sites include but are not limited to; rock outcroppings, flat areas along main ridges, stream terraces or near food or water sources.

### **Standard Lumber Company Railroad Grade**

The Standard Lumber Company railroad grade was part of the company’s railroad logging system which began in the early 1900’s and was discontinued in 1965. The segment that crosses the Beaver Creek 1 property was constructed and used during the latter part of this era. Currently the grade has some scattered ties along its length; however, it does not appear to have any remnant rails. This section of the grade has been mostly converted and used as a truck road for the past 35+ years (CAA for THP#1-04-52/TUO-8).

### **Recreational Opportunities**

Prior to the Purchase of the Beaver Creek 1 property from SPI, all access was controlled by SPI and no recreational opportunities were offered to the public without specific permission granted by SPI. It is unknown at this point in time if Save-the-

Redwoods League intends to offer public access to the property during the transition period.

The transference of the Beaver Creek 1 property from private ownership to public ownership will increase recreational opportunities on the property. No public access to the property is granted through the adjacent SPI lands to the north, however public access to the property would be available from the south via the current CBTSP. Several historic era road systems connected between CBTSP and the Beaver Creek 1 property, these roads are now maintained as hiking trails which facilitate public use of the property. The increased recreational opportunities offered through the public use of the Beaver Creek 1 property includes but is not limited to hiking, picnicking, sunbathing, camping, swimming, wading, bird and wildlife watching, nature photography, fishing, cross country skiing and or general aesthetic enjoyment.

### **Management Implications/Limitations**

Many options are available to achieve the management goals set forth by Save the Redwood League for the Beaver Creek 1 Property. In the regulatory context forest management activities in California are primarily regulated under the California Forest Practice Rules (CFPR) which are administered by the California Department of Forestry and Fire Protection (CAL FIRE) with other agencies such as California Department of Fish and Game (CDF&G), Central Valley Regional Water Quality Control Board (CVRWQCB), National Environmental Protection Agency (NEPA), California Environmental Protection Agency (CEPA), California Geological Survey (CGS), Department of Pesticide Regulation (DPR), Air Resources Board (ARB), United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS) administered under National Oceanic and Atmospheric Administration (NOAA) Fisheries, National and State Parks along with countless other Local and County agencies having regulations affecting timber operations. However not all forest management activities are regulated, for instance management activities such as pre-commercial thinning (PCT) that do not propose the sale, trade or barter of forest products are not required to be permitted under the CFPRs. As far as conducting commercial timber operations there are several routes of permitting under CFPR, operating under a Timber Harvesting Plan (THP), Non Industrial Timber Management Plan (NTMP), or operating under an Exemption permit to name a few. THPs and NTMPs are large California Environmental Quality Act (CEQA) compliant documents that are often hundreds of pages long, take many months to prepare, are open to public comment and are usually very expensive. Several commercial timber operation options, which are exempt from the requirement to prepare a THP or NTMP, can be conducted as Exemption Timber Operations. These exemption options, which require substantially less effort to prepare, have strict guidelines that must be adhered to and only offer a limited number of forest management options. Stand treatments permitted under a THP or NTMP allows for a greater variety of management options; however, it appears that the management goals for this property could be achieved through the application of Exemption permit timber operations. For purposes of determining appropriate silvicultural prescriptions as contained in the CFPRs the Beaver Creek 1 Property is considered to be in the Southern Forest District.

## **Management Recommendations and Alternatives**

### **Re-Introduction of Natural (Prescribed) Fire**

The re-introduction of high-frequency low to moderate-intensity fire onto the Beaver Creek 1 property is the recommended method of achieving the stated management goals. By using prescribed fire as a management tool the risk of catastrophic high-intensity wild fire is kept to a minimum, as well as allowing the largest trees in the stands to continue growing which will aid in the development of late serial characteristics, it will also aid in a shift in species composition toward more dominance of shade intolerant species (Sugar and Ponderosa pines), while the overall health of the forest will be improved through increased nutrient cycling and a reduction in tree densities. It is recommended that a long term property wide fire return interval of approximately 15 years be established and maintained on this property based on the history of CBTSP prescribed burning program. The amount and rate of forest floor and ladder fuel accumulation on the Beaver Creek 1 property may surpass the amount and rate of accumulation as found in the primeval forests of CBTSP, hence a shorter return interval may be needed in the early years. The biggest challenge to the re-introduction of natural high-frequency low to moderate-intensity fire into the forested stands on this property will be in reversing the effects of many years of fire suppression and industrial timber harvesting activities. Due to the high fuel load conditions that have been allowed to develop on the property, manual stand manipulation activities are needed before the application of any prescribed fire management regimes occur. At this stage the primary focus of this management plan is to propose various management alternatives to the Beaver Creek 1 property that will allow fire to be introduced back into the forest without destroying it.

### **No Management**

If no management activities are pursued the present stand conditions will be allowed to develop by way of natural processes. Ramifications of this course include reduced stand vigor, increased chance of forest insects or disease infestations, increased stand mortality, shift in species composition to more shade tolerant species, and less diversity in wildlife habitat. With continued fire exclusion an unnatural accumulation of fuels will continue to develop which will ultimately lead to wildfires of unnatural intensities.

### **Forested Areas**

Approximately 217 acres of the Beaver Creek 1 property are reported as having mature forest stands. The goal for the forested areas on the property is to reduce the fire hazard while maintaining or improving all functional characteristics of a healthy forest. These goals can most easily be accomplished through thinning operations. Many different variations of forest thinning are allowed under the CFPR; however, only three potential thinning options will be presented that depict a range of alternatives. To help shift the species ratio to more shade intolerant species, throughout any proposed thinning

operation an emphasis will be placed on the removal of shade tolerant species and the retention of shade intolerant species. The intent of any proposed thinning operations on the forested areas would involve a one time entry that would leave the stands in a condition that will safely accommodate the re-introduction of natural (prescribed) fire and set the forest on a trajectory to a condition dominated by large, old, widely spaced shade intolerant tree species.

### **Shaded Fuelbreak Area**

The 8 acre Shaded Fuelbreak was created in 2007 on the ridgetop area that separates the Beaver Creek watershed from the NF Stanislaus watershed. Shaded Fuelbreaks are very effective at controlling the spread and intensity of wildfire due to the removal of almost all the forest fuels, however due to their low residual stocking level; a Shaded Fuelbreak of this type typically leads to an increase in conifer regeneration and brush or shrub species establishment in the understory. This abundant understory layer then leads to an increased fire hazard on the site which decreases the overall effectiveness of the fuelbreak over time. Many methods can be employed to maintain the effectiveness of a Shaded Fuelbreak including the use of herbicides, manual removal with chain saws, mechanical mastication, prescribed fire and even the use of browsing livestock such as goats have been used. Since the re-introduction of natural (prescribed) fire is the underlying goal for the entire Beaver Creek 1 property it is recommended that prescribed fire be employed for the maintenance of the Shaded Fuelbreak area.

### **Plantations**

Young conifer plantations (approximately 98 acres of the Beaver Creek 1 property) are particularly vulnerable to wildfire. For many years following plantation establishment all vegetative growth on the site is on or near the ground level and does not offer enough vertical separation to keep low-intensity ground fires from spreading to tree crowns. For this reason it is recommended that natural (prescribed) fire not be allowed into plantation areas until such a time as canopy closure has occurred with the pruning of lower limbs either through natural processes or through manual stand manipulations. Typically many more trees are planted in a plantation setting than what is found in a mature forest with the intended purpose of ensuring survival of enough trees to restock the area, then when too many trees become established, a pre-commercial thinning (PCT) is applied. A PCT is a manual stand treatment (removing vegetation with chainsaws) where forest managers can choose which trees or shrubs are removed or retained in young forest stands or in plantations. A PCT enables control of both stand density (number of stems per acre and crown closure) and species ratios, within the limits of what is present on the site at the time of application. A PCT treatment can also target competing vegetation and be used in place of herbicide applications. Timing of PCT application is very critical, the longer a plantation is allowed to grow in an overstocked state, the more competition between individual trees occurs which can stimulate increased height growth and more of the natural pruning effect needed for the safe re-introduction of fire. But if a stand is left to grow in this overstocked state for too long, without the application of a PCT, a decrease in growth rates and vitality in the dominant trees can occur which leads to poor forest health and stagnant trees that will not have a

growth response to thinning effects. Typically industrial forest managers conduct PCT activities at an early age (6-15 years) with the intent of maximizing growth on an individual tree basis to ensure each tree retained will achieve its maximum growth potential from an early age. This approach, while maximizing timber production, usually requires multiple herbicide applications and often leads to very homogenous timber stands in regards to structure and species diversity. By waiting and conducting PCT activities on slightly older stands (as compared to an industrial forest management regime), the residual resulting stands would likely be less flammable due to the natural thinning effect of the lower limbs and would also eliminate the need for an herbicide application by removing competing vegetation during the PCT application, however some growth potential may be sacrificed. A reasonable goal for the plantation areas on the Beaver Creek 1 property is to manipulate the stand structures of the plantations through the application of a single or multiple PCT applications that will allow natural (prescribed) fire to be safely re-introduced to the stands in the future. The plantations on the Beaver Creek 1 property are still relatively young (11 year old plantations that have already received a PCT treatment and 2-4 year old plantations) and should be allowed to develop for several more years before any stand management activity (PCT) is applied. A thorough analysis of stocking levels, species ratios and growth rates is needed before any specific PCT prescriptions can be developed for the plantations areas on the Beaver Creek 1 property. These plantation areas offer an opportunity to apply various PCT prescriptions to stands of similar compositions, which then could be monitored and studied to help guide future management applications in similar situations on other properties.

## **Reforestation**

Since no silvicultural practices or management activities that require reforestation are anticipated on the Beaver Creek 1 property at this time, no direct reforestation projects are proposed. When conducting natural (prescribed) fire activities, there may be an occasion when fire behavior exceeds projected intensities and some individual trees or groups of trees may be killed. In this scenario some reforestation activities may be considered. Large old Giant Sequoia trees are not abundant on the property and due to this lack of a localized seed source significant natural regeneration of Giant Sequoia is not anticipated. If introduction of Giant Sequoia is desired in areas currently dominated by other species, then the planting of Giant Sequoia seedlings may be necessary. It is anticipated that natural regeneration of shade intolerant pines will be encouraged through the introduction of fire management. Also where natural pine regeneration has occurred, individual trees or groups of trees can be targeted for retention during natural (prescribed) fire applications by treating or removing the fuels surrounding the desired specimens.

## **Treatment Options**

### **Silvicultural Prescriptions**

Three potential thinning treatment options for the forested areas of the property will be explored, all of which are designed to meet the management goals for the property. Each of these thinning treatment options will represent a different level of treatment intensity and degree of overstory stand disturbance. The Commercial Thinning and Selection stand treatment options are only permissible under a THP whereas the Exemption permit option, while still requiring a permit under the CFPR, are exempt from the more cumbersome THP process. It is anticipated that the final alternative selected for forest stand treatments likely will be some form or variation or combination of these options presented.

#### **Commercial Thinning**

As per the CFPR the Commercial Thinning Silvicultural treatment is defined as the removal of trees in a young-growth stand to maintain or increase average stand diameter of residual trees, promote timber growth, and/or improve forest health. The residual stand shall consist primarily of healthy and vigorous dominant and codominant trees from the preharvest stand. Trees from all diameter classes, healthy or not, are allowed to be harvested using the Commercial Thinning treatment as long as the residual average stand diameter is maintained or increased from pre-treatment levels and a minimum of 100 square feet of basal area per acre is retained.

#### **Selection**

As Per the CFPR the Selection Silvicultural treatment is defined as an uneven-aged management technique that is utilized to establish and maintain an uneven-aged stand structure. Uneven-aged management attributes include the establishment and/or maintenance of a multi-aged, balanced stand structure, promotion of growth on leave trees throughout a broad range of diameter classes, and encouragement of natural reproduction. Under the Selection regeneration method, the trees are removed individually (single tree selection) or in small groups sized from 0.25 acres to 2.5 acres (Group Selection). Trees from all diameter classes, healthy or not, are allowed to be harvested using the Selection treatment as long as a minimum of 75 square feet of basal area per acre is retained of which a minimum of 15 square feet of basal area per acre shall be composed of trees which are 18" DBH or larger. Using the Group Selection alternative allows for the creations of larger canopy gaps and encourages a higher degree of differentiation of canopy layers over time (structural diversity).

#### **Exemption Permits**

The use of the Exemption permitting option to facilitate needed thinning treatments would consist of a two tiered approach. First for fuel load reduction considerations, the Forest Fire Prevention Exemption can be used to remove a majority of the smaller diameter classes and other forest floor fuels that are contributing to high fuel

loading on the property. Then to help improve the overall health of the stands and to further reduce the fuel loads, the Dead, Dying or Diseased Exemption can be used to remove some of the larger diameter trees that are harboring tree pathogens and/or creating fire hazards. Operations permitted under either of these exemptions are not allowed in areas where slopes are over 50%, within any Watercourse or Lake Protection Zone (WLPZ), on any significant archaeological or historical site, and operations shall not disturb, threaten or damage any known sites of rare, threatened or endangered plants or animals. Due to these limitations some areas on the property cannot be treated under the Exemption permit process.

Thinning treatments allowed under the Forest Fire Prevention Exemption are limited to the removal of those trees that eliminate the vertical continuity of vegetative fuels and the horizontal continuity of tree crowns, for the purpose of reducing the rate of spread, duration and intensity, fuel ignitability, or ignition of tree crowns. Tree removal under this Exemption is limited to those trees less than 18" stump diameter and require a minimum of 100 square feet of basal area per acre be retained (same as Commercial Thinning). In addition, all logging slash created by thinning operations shall be treated to achieve a maximum post harvest depth of 9 inches or less above the ground. This permit is valid for 120 days from the date of acceptance by CAL FIRE and all slash treatments shall be accomplished within that time period unless burning is proposed for slash treatment which then must be completed no later than April 1, of the year following the operations. The provisions that allow this Exemption will expire on January 1, 2013 and no longer be available unless these provisions of the rules get extended prior to that date.

Tree removal allowed under the Dead, Dying or Diseased Exemption is limited to those trees that meet the definition of Dead, Dying or Diseased as defined in the CFPR. In addition, the volume that can be removed under this Exemption shall be in amounts less than 10% of the average volume per acre. This exemption is valid for one calendar year from the date of acceptance by CAL FIRE.

Concurrent operations under these exemptions would not be allowed by CAL FIRE due to enforceability issues; however, it is possible to operate an area under the Forest Fire Prevention Exemption, file the completion paperwork for those operations then immediately submit the Dead, Dying or Diseased exemption on the same area within the same operating season.

As mentioned above there are some areas of the property where Exemption operations will not be allowed due to slopes over 50% and the presence of watercourses. Within these areas other approaches to fuel management activities will need to be developed that may not require a permit under the CFPR. Since the rate of fire spread increases with an increase in slope, the treatment of fuels in areas with slopes over 50% will be essential to meet the fuel reduction goals for the property. Also we do not have any specific information about the composition and structure of riparian vegetation in areas adjacent to watercourses. Once an analysis of these areas has been conducted then, appropriate treatment prescriptions can be developed and implemented.

In addition, areas of dense stocking of large healthy trees may be encountered where the Exemption permit option would not allow for adequate thinning (i.e. trees over 18" stump diameter that do not meet the definition of Dead, Dying or Diseased). Activities such as girdling trees for snag creation and or simply cutting trees down and leaving them on the forest floor as large woody debris has been employed in other state

parks. These activities would also enhance the quality and quantity of wildlife habitat in addition to adding structural and species diversity to the forest areas. If these activities are in fact contemplated then, measures to mitigate fuel loading such as loping and scattering of limbs and heavy fuel concentrations would also need to be employed.

### **Differences in Results of the Various Silvicultural Options**

All of the options presented would allow for the same removal of the understory trees and shrubs needed to meet the goals of wildfire risk reduction in the stands. Also all of the options presented would leave the forest stands in a state that will allow the development of late seral stand characteristics by allowing the retained trees to continue to grow. A higher level of overstory disturbance would theoretically result in a greater reduction of shade tolerant species relative to shade intolerant species in the overstory stand. Additionally, the higher level of disturbance yields larger canopy gaps which leads to a higher likelihood of shade intolerant species naturally regenerating and becoming established in the understory. The Selection Silvicultural prescription allows for the greatest amount of overstory tree removal hence, will result in stands with a greater component of shade intolerant species in the long term. The Dead Dying and Diseased exemption offers the least amount of overstory tree removal hence, will result in stands with a greater component of shade tolerant species in the long term. In addition, the Selection Silvicultural prescription would result in more and larger canopy gaps that would lead to a higher level of regeneration and brush species establishment in the understory as compared to the other options. This higher level of regeneration and brush species establishment will likely lead to more differentiation in age classes in the long term; however, it may also increase the rate of understory fuel loading and require more frequent prescribed burns.

### **Pre-commercial Thinning (PCT)**

Pre-commercial Thinning (PCT) is defined as the removal of trees not for immediate financial return but to reduce stocking to concentrate growth on the more desirable trees (Helms, 1998). A PCT is a manual stand treatment (removing vegetation with chainsaws) where forest managers can choose which trees or shrubs are removed or retained in young forest stands or in plantations. A PCT enables control of both stand density (number of stems per acre and crown closure) and species ratios, within the limits of what is present on the site at the time of application. A PCT treatment can also target competing vegetation and be used in place of herbicide applications. Timing of PCT application is very critical, the longer a plantation is allowed to grow in an overstocked state, the more competition between individual trees occurs which can stimulate increased height growth and more of the natural pruning effect needed for the safe re-introduction of fire. But if a stand is left to grow in this overstocked state for too long, without the application of a PCT, a decrease in growth rates and vitality in the dominant trees can occur which leads to poor forest health and stagnant trees that will not have a growth response to thinning effects. Typically industrial forest managers conduct PCT activities at an early age (6-15 years) with the intent of maximizing growth on an

individual tree basis to ensure each tree retained will achieve its maximum growth potential from an early age. This approach, while maximizing timber production, usually requires multiple herbicide applications and often leads to very homogenous timber stands in regards to structure and species diversity. By waiting and conducting PCT activities on slightly older stands (as compared to an industrial forest management regime), the residual resulting stands would likely be less flammable due to the natural thinning effect of the lower limbs and would also eliminate the need for an herbicide application by removing competing vegetation during the PCT application; however, some growth potential may be sacrificed. Though these described applications of PCT tailored to your goals could be more costly than the typical industrial forest management applications due to the larger tree sizes found in older plantations, more intensive treatments (control of competing vegetation through PCT instead of herbicide applications), more frequent intervals and loss of some growth.

The vegetation complex that develops in plantation forests is extremely variable and needs to be closely monitored in the early stages of development to ensure proper timing of PCT applications. If the competing vegetation is out growing and overtopping the plantation crop trees in the early years then, it is likely that an early PCT application designed to remove the competing vegetation be needed, then a second PCT application will be needed at a later time when the crop trees become over crowded. If competing vegetation is not developing or is being overtopped by the crop trees then, a single PCT application at the time the crop trees become over crowded is anticipated.

When trees and shrubs are removed during a PCT application, they are traditionally left on the forest floor and slowly breakdown over time, this dead material will lead to an increase in forest floor fuel loading. It is recommended that upon completion of the final PCT application (assuming more that one PCT was needed) that all the removed plant material be piled and burned to remove any forest floor fuel loading. Manual pruning of the lower limbs of the residual crop trees may also be considered for additional fire hazard reduction at the time of final PCT application.

## **Treatments and Costs**

### **Biomass Operations and Costs**

The remaining thinned material that cannot be processed into logs including small trees, limbs, tree tops and defective or un-processable portions of larger logs can be sold to a Biomass Conversion Facility where it can be utilized for the production of electricity and or heat. Typically this material is fed into a chipper or tub grinder, and then loaded or directly deposited into a chip van which is then hauled to the nearest conversion facility. Typically in biomass operations it is not economically viable to gather all the left over woody material from trees, slash and brush that is 2 inches and less in diameter. This smaller material would not typically be skidded and left on site. Any presumption that all woody material could be removed from the site is incorrect and in fact there will still be material remaining after treatment to feed the processes of soil development.

Table 3. Estimated Biomass Material Production Costs

Treatment	Cost \$/BDT
Biomass chipping OBT	\$30-\$34

### **Thinning Operations and Costs**

The proposed thinning operations will consist of the cutting of trees designated for removal followed by skidding or yarding of the cut trees in whole tree form to a landing or road where they would get processed into logs then loaded onto log trucks. The cutting of designated trees is either done manually with chainsaws or mechanically with on ground based machines. Typically manual hand falling is employed when large sized trees (24+”DBH) are to be cut or when working on steep terrain. Mechanical cutting with ground based machines is typically used to cut smaller sized trees on areas with gentle slopes. Skidding usually involves the use of machines such as log loaders, caterpillar tractors or rubber tired skidders where trees are dragged to the nearest road or landing, while yarding is used on steeper slopes where the trees are suspended or drug to the nearest road or landing using a system of overhead cables. Once on the road or landing the trees are processed into logs that meet the standards of the mill or processing facility purchasing the logs. Typically most milling facilities will accept logs down to 6 inches in diameter at the small end that are 16 feet or longer, each mill facility has a desired log length and the logs are processed according to the requested specifications. These processed logs are then loaded onto log trucks to be shipped to the desired milling facility. Typically a contractor will charge a single rate per MBF for the combination of cutting, yarding, processing and loading of merchantable logs onto a log truck, this is commonly referred to as the on board truck (OBT) rate.

Table 4. Estimated Merchantable Log Production Costs

Yarding type	Cost \$/MBF
Ground Based OBT	\$100-\$150
Cable Yarding OBT	\$125-\$200

### **Slash Disposal and Costs**

Logging slash is usually quite flammable and both to meet the objectives of the management plan and to comply with the CFPR, any logging slash remaining on the site including un-harvested small trees and shrubs that are proposed for removal will have to be treated. As a requirement of the Forest Fire Prevention Exemption, all logging slash created by the timber operations shall be treated to achieve a maximum post harvest depth of 9 inches or less above the ground, treatments for fuels shall include chipping, removing, piling, burning or other methods necessary to achieve the standards (CFPR). Typical methods for treating these leftover fuels, since portions of the material has been removed and chipped already, includes mastication, hand piling and burning, mechanical piling and burning or loping and scattering. Mastication is a process where a ground based machine with a grinding head travels around the site and simply grinds up the slash and leaves it on the forest floor where it quickly breaks down. Piling and burning is a two part process where immediately after operations or during operations the slash is piled, preferably in forest openings away from overhanging tree crowns, either by hand or with ground based equipment then, is later burned when fuel moisture conditions prevent the spread of fire. Loping and scattering is a process where the slash is manually chopped up with chainsaws and scattered by hand, this slash treatment option should only be used when treating light slash accumulations because the scattered material remains on site increasing the fuel load. It should be noted that the treatment costs of any slash disposal activity can vary tremendously depending on the amount of slash that needs to be treated. The inclusion or exclusion of Biomass Operations will play the biggest role in determining the amount of slash that will need to be treated hence, it will have the biggest influence on slash treatment costs.

Mastication is the recommended slash treatment method. Mastication operations can be accomplished concurrently with other operations and all needed slash treatments will be done when the equipment leaves the site. Mastication leaves the material on the forest floor which facilitates rapid decomposition and aids in processes if soil development. Pile burning; requires an additional permitting process (burn permit), would have to be burned in the winter time (additional site visits), creates smoke impacts and can have damaging effects to the soil and surrounding trees or could potentially cause a wildfire.

Table 5. Estimated Slash Disposal Costs

Slash Treatment	\$/Acre With Biomassing	\$/Acre Without Biomassing
Mastication	\$300-\$400	\$700-\$800
Mechanical Pile and Burn	\$400-\$500	\$600-\$900
Hand Pile and Burn	\$600-\$700	\$800-\$1,200
Lop and Scatter	\$200-\$500	N/A

**Milling and Biomass Conversion Facilities and Delivery Costs**

The haul distance from the site of material removal to the lumber mill or biomass conversion facility is one of the greatest variables in calculating material delivery costs which means it is imperative that the haul distance is kept to a minimum. The nearest lumber mill and Biomass Conversion facility to the Beaver Creek 1 property are both located in Chinese Camp, which is approximately 51 highway miles from the property. Since, the lumber mill in Chinese Camp only mills Incense cedar, any pine or white fir logs generated from thinning treatments will have to be sold to the next nearest lumber mill located in Lincoln; which is approximately 118 highway miles from the property. There are many other mills throughout Northern California that could potentially purchase logs from the Beaver Creek 1 property but the increased haul costs would possibly not make sales to these other facilities economically viable.

Table 6. Estimated Log and Biomass Hauling Costs

Material Hauled	Destination	Cost \$/MBF	Cost \$/BDT
Log Haul	Chinese Camp	\$93	N/A
Log Haul	Lincoln	\$140	N/A
Chip Haul	Chinese Camp	N/A	\$30

**Permitting Costs**

The cost of obtaining timber operation permits in California has been increasing in recent years primarily due to constant additions to the CFPR and increased pressure applied to the review process and CAL FIRE from third party organizations. As mentioned above either a THP or an Exemption permit will need to be obtained to facilitate the needed thinning treatments that are being proposed. Many unknown variables complicate attempts at determining cost estimates of acquiring the needed permitting. If a THP were to be prepared to facilitate the Commercial Thinning or Selection thinning options, the entire 217 timbered acres would be included in a single permit that enables thinning operations to be conducted over a period of 3-5 years. Whereas if the Exemption Permit option is pursued, a new Exemption Permit would have to be produced each operating season. Because of these reasons it will be assumed, for the purpose of estimating per acre permitting costs, that all operations under either permit type would be conducted over three consecutive operating seasons and the exemption permits would have to be prepared three individual times. Areas of steep slopes and areas adjacent to watercourses can not be operated under an Exemption Permit hence those acres were removed from the permitting cost analysis.

Table 7. Estimated Permitting Costs

Permit Type	Estimated Permit Cost	Number of Permits	Total Permitting Costs	Acres Covered	Cost per Acre
Timber Harvest Plan	\$30,000-\$45,000	1	\$30,000-\$45,000	217	\$138-\$207
Exemption Permits	\$6,000-\$8,000	3	\$18,000-\$24,000	173	\$104-\$139

### **Non-Permit Treatments**

Several types of stand treatments do not need to be permitted under CAL FIRE such as a PCT, prescribed pile or broadcast burning (different type of permit is needed), vegetation management or invasive weed control. Additionally, under the Exemption Permit option the areas of steep ground and watercourse buffers (estimated to be 44 acres) would have to be treated outside of a permitting process, which means no permit would be necessary, but no sales of treated materials would be allowed. Essentially the only recommended treatments for these areas are hand pile and burning or lop and scatter treatments that would prevent unnecessary environmental impacts. It is also a possibility that no operations will be necessary on these areas of steeper slopes or within watercourse buffers, the watercourse buffers usually have a high relative humidity and are naturally less flammable than the surrounding upslope areas.

Estimates of non-permit treatment costs are not presented as part of this management plan at this point in time, treatment costs will be determined once a proper assessment of treatment areas has transpired and treatment types and prescriptions are developed.

## **Treated Material Values**

### **Log Values**

The prices paid for logs is market driven and is constantly changing. In line with the slowdown of the economy, log values have fallen over the past several years and current log markets continue to be depressed. We are cautiously optimistic that there will be a rebound in the log markets in the coming months and years. All log and biomass values as represented in this Management Plan are derived from quotes from the above mentioned processing facilities with an effective date of March 1, 2010. Logs are typically measured in Board Foot values where one board foot represents a segment of a board that is 1” thick by 12” wide and 12” long. The rate paid for logs is based on a unit equal to a thousand board feet (1 MBF). Since the 2009 inventory of the Beaver Creek 1 property was designed to yield volumes as measured in whole tree net Scribner board foot values, a reasonable estimate of removed board foot volumes can be made. Typically a fully loaded log truck will hold between 4 and 5 MBF.

Table 8. Estimated Log Values

Species	Destination	Price Paid \$/MBF Small Logs	Price Paid \$/MBF Large Logs
White fir	Lincoln	\$250	\$250
Ponderosa Pine	Lincoln	\$250	\$350
Sugar Pine	Lincoln	\$250	\$350
Incense Cedar	Chinese Camp	\$525	\$525

### **Biomass Values**

The prices paid for Biomass material is also market driven and is constantly changing. A new development in the form of a federal stimulus program offers Biomass product owners or producers an opportunity for profitable operations. The Biomass Crop Assistance Program (BCAP) is authorized by the Food, Conservation, and Energy Act of 2008 (the 2008 Farm Bill) and administered by the Farm Service Agency (FSA). BCAP is intended to assist agricultural and forest land owners and operators with the establishment and production of eligible crops including woody biomass in selected project areas for conversion to bioenergy, and the collection, harvest, storage, and transportation of eligible material for use in a qualified biomass conversion facility. The BCAP program provides matching payments to the material owner upon sale of woody biomass material to a qualified biomass conversion facility. The Biomass Conversion Facility located in Chinese Camp is a qualified facility and the sale of any biomass material that would be generated from operations on the Beaver Creek 1 property would be eligible under the BCAP program. Once enrolled in the program a material owner is eligible for matching payments for two calendar years. Biomass material is sold by weight and typical units of measure are in U.S. tons (2000 pounds). The BCAP program makes matching payments on the basis of Bone Dry Tons (BDT) and since most material cannot be fully dried in the field, the moisture content of delivered material will have to

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be determined before matching payments can be made, this is typically done by the qualified conversion facility. A cap of \$45/BDT is in place and BCAP matching payments will not exceed this rate. The BCAP program first became available in the summer of 2009 and recently due to feedback from participants has been temporarily terminated to facilitate a revision of the rules. The proposed revised rules were published on February 8, 2010 and are currently seeking public comment through April 9, 2010 (7 CFR part 1450). It is anticipated that the BCAP program will restart sometime in 2010 but the actual date and content of the revised rules are unknown at this point in time. The viability and applicability of the BCAP program going forward are currently in question and the outcome will have potential significant economic effects on forest Biomass operations going into the future.

Table 9. Estimated Biomass Values

Product	Price Paid \$/BDT	BCAP Matching Payment \$/BDT	Total \$/BDT Value
Biomass Chips With BCAP	\$30	\$30	\$60
Biomass Chips Without BCAP	\$40	\$0	\$40

Note: See BCAP 2010 Federal Register in Addendum

## **Treated Material Volume Estimates**

### **Volume Estimates**

Many assumptions are necessary for a determination of estimated harvest volumes from the Beaver Creek 1 Property. First the 2009 inventory was conducted by measuring tree diameters at breast height (DBH), which is the diameter of a tree at 4.5 feet above ground level. The Forest Fire Prevention Exemption however establishes a maximum diameter allowed for harvest of 18 inches “stump diameter” which is measured 8 inches above ground level. Currently we do not have any measurements from the subject trees to predict tree diameters at 8 inches height from the actual measurements made at 4.5 feet. For this reason a taper of 4 inches is assumed for the 3 feet 9 inches between the diameter measurements, in other words it is assumed that only trees 14” DBH and less are available for harvest under the Forest Fire Prevention Exemption. Another assumption is that the timber types and stocking levels as presented by the 2009 inventory are consistent on every acre of the property. Aerial photo analysis indicates considerable variability in both timber types and stocking levels across the property. A more thorough inventory analysis at the individual stand level would be needed to increase the accuracy of predicted harvest volumes within specific stands. Another assumption is the amount of timber that could be potentially be harvested under the Dead, Dying or Diseased Exemption, the CFPR allow up to 10 percent of the average volume per acre to be removed under this exemption; however, without more detailed inventory data any harvest volume estimates are purely speculation. For the purposes of this Management Plan, it will assumed that an average of 10 percent of trees larger than 14” DBH will meet the definition of Dead, Dying or Diseased. As for estimates of Biomass material that can be generated from the property, no attempts were made to calculate any Biomass volume estimates from the 2009 inventory data. Instead it is assumed that 20 BDT/acre can be generated from biomass operations, this number is a conservative estimate based on the reported average of 25 BDT/acre generated from Biomass operations done in similar stands in the area.

To produce an estimation of removed volumes from the 2009 inventory data we manipulated the stand table on a per acre basis. By applying a chosen thinning intensity percentage to groupings of diameter classes by species enabled the calculation of both removed and retained volumes (MBF) and Basal area (sq.ft./ac.) values. By monitoring the post treatment Basal area values we were able to adjust the treatment level percentages to fit each of the three proposed thinning options to the basal area retention standards as found in the CFPR. With the goal of increasing the stocking level of shade intolerant species and reducing the number of shade tolerant species, all tree removal was placed on the shade tolerant species and none on the shade intolerant. With fuel reduction as the primary goal for thinning treatments we assumed that the activities allowed under the Forest Fire Prevention Exemption would be applied to all three thinning options being explored hence, all three scenarios propose the same treatment to trees under 16” DBH. The following table reflects the thinning intensities that were developed which could meet the goals for the property and will be in compliance with the requirement of the CFPR. It should be realized that due to site variability the removal of some shade

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intolerant species is likely and the actual thinning intensity as applied to each specie present on each individual acre could be highly variable.

Table 10. Assumed Thinning Intensity Percentages

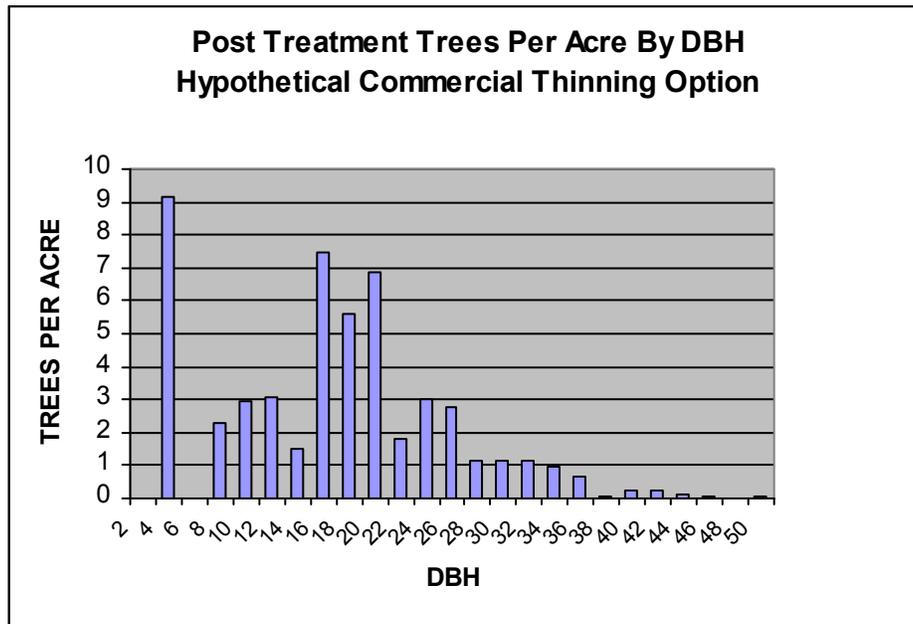
Species	Diameter Class	Assumed Thinning Intensity		
		Exemption Permit Option	Commercial Thinning Option	Selection Option
Poderosa Pine	<16" DBH	0%	0%	0%
Poderosa Pine	16"+ DBH	0%	0%	0%
Sugar Pine	<16" DBH	0%	0%	0%
Sugar Pine	16"+ DBH	0%	0%	0%
Incense Cedar	<16" DBH	100%	100%	100%
Incense Cedar	16"+ DBH	10%	20%	50%
White fir	<16" DBH	100%	100%	100%
White fir	16"+ DBH	10%	20%	50%

**Commercial Thinning Option**

The Commercial Thinning option assumes the removal of 100% of the shade tolerant species under 16" DBH and applies a thinning rate of 20% removal to the remaining diameter classes of the shade tolerant species. No thinning of shade intolerant species was assumed.

Table 11. Hypothetical Commercial Thinning Treatment Option

Species	Trees Per Acre			Basal Area (sq.ft./ac.)			Volume Per Acre (MBF-whole Tree Scribner)		
	Pre-Treatment	Treated	Retained	Pre-Treatment	Treated	Retained	Pre-Treatment	Treated	Retained
Ponderosa Pine	21	0	21	20	0	20	2.85	0.00	2.85
Sugar Pine	8	0	8	20	0	20	4.06	0.00	4.06
Incense Cedar	166	153	13	74	44	30	3.27	1.19	2.08
White fir	58	47	11	61	28	33	8.77	2.28	6.49
Total	253	200	53	175	72	103	18.95	3.47	15.48

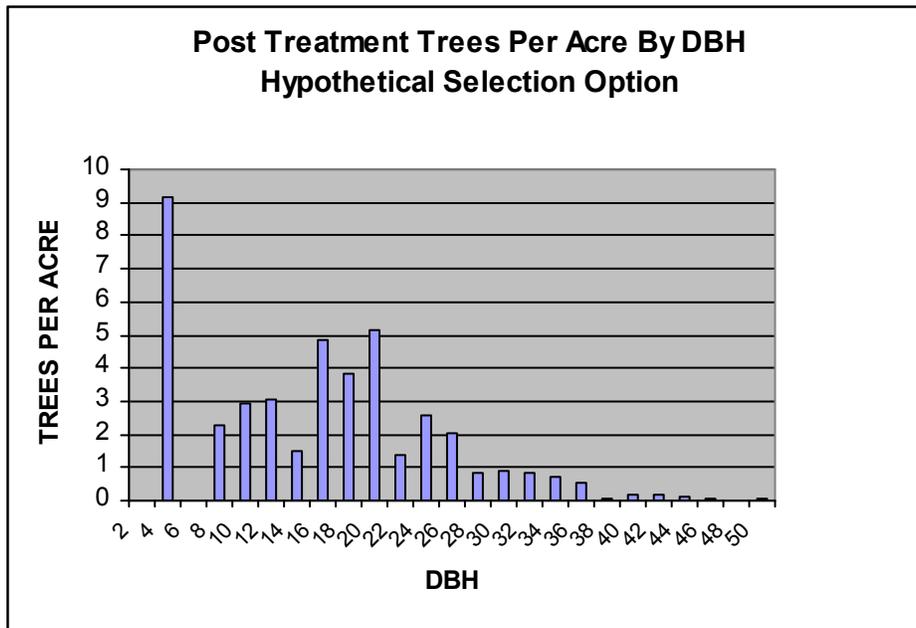


**Selection Option**

The Selection treatment option assumes the removal of 100% of the shade tolerant species under 16" and applies a thinning rate of 50% removal to the remaining diameter classes of the shade tolerant species. No thinning of shade intolerant species was assumed.

Table 12. Hypothetical Selection Treatment Option

	Trees Per Acre			Basal Area (sq.ft./ac.)			Volume Per Acre (MBF-Whole Tree Scribner)		
	Pre-Treatment	Treated	Retained	Pre-Treatment	Treated	Retained	Pre-Treatment	Treated	Retained
Ponderosa Pine	21	0	21	20	0	20	2.85	0.00	2.85
Sugar Pine	8	0	8	20	0	20	4.06	0.00	4.06
Incense Cedar	166	158	8	74	55	19	3.27	1.97	1.30
White fir	58	51	7	61	40	21	8.77	4.71	4.06
Total	253	209	44	175	95	80	18.95	6.68	12.27

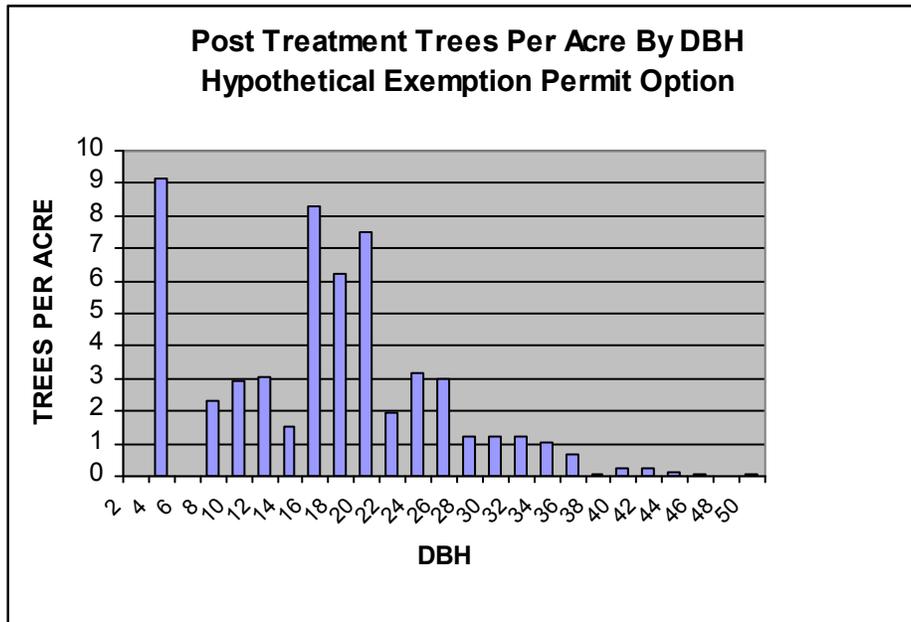


**Exemption Permit Option**

The Exemption permit option assumes the removal of 100% of the shade tolerant species under 16” and applies a thinning rate of 10 % removal to the remaining diameter classes of the shade tolerant species. No thinning of shade intolerant species was assumed.

**Hypothetical Exemption Permit Treatment Option**

	Trees Per Acre			Basal Area (sq.ft./ac.)			Volume Per Acre (MBF-Whole Tree Scribner)		
	Pre-Treatment	Treated	Retained	Pre-Treatment	Treated	Retained	Pre-Treatment	Treated	Retained
Ponderosa Pine	21	0	21	20	0	20	2.85	0.00	2.85
Sugar Pine	8	0	8	20	0	20	4.06	0.00	4.06
Incense Cedar	166	151	15	74	40	34	3.27	0.93	2.34
White fir	58	46	12	61	24	37	8.77	1.47	7.30
<b>Total</b>	<b>253</b>	<b>197</b>	<b>56</b>	<b>175</b>	<b>64</b>	<b>111</b>	<b>18.95</b>	<b>2.40</b>	<b>16.55</b>



## **Other Management Considerations**

### **Additional Funding**

Opportunities for additional funding to help offset treatment costs are available. Both Federal and State programs have monies available to help landowners with various management activities. Possible programs that could be utilized may include the Environmental Quality Incentive Program (EQUIP), The California Forest Improvement Program (CFIP) or CAL FIRE Proposition 40 Fuels Reduction Program among many others. More research is needed at this time to determine eligibility requirements, program details and requirements as they would apply to the management needs of the Beaver Creek 1 Property

The Environmental Quality Incentive Program (EQUIP) authorized by the 2008 Farm Bill, is a voluntary program designed to promote agricultural production, forest management, and environmental quality as compatible goals. Through EQUIP, the Natural Resources Conservation Service (NRCS) provides financial and technical assistance to eligible farmers and ranchers to address soil, water and air quality, wildlife habitat, surface and groundwater conservation, energy conservation, and related natural resource concerns.

The California Forest Improvement Program (CFIP) program is to encourage private and public investment in, and improved management of, California forest lands and resources. This focus is to ensure adequate high quality timber supplies, related employment and other economic benefits, and the protection, maintenance, and enhancement of a productive and stable forest resource system for the benefit of present and future generations.

CAL FIRE has begun implementation of a new fuels reduction program funded by Proposition 40, the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002. The goal of the CAL FIRE Proposition 40 Fuels Reduction Program is to reduce wildland fuel loadings that pose a threat to watershed resources and water quality.

### **Erosion Control**

Any operations permitted under the CFPR require the implementation of Best Management Practices (BMP) to reduce or prevent soil erosion. Since the entire property has been subject to repeated ground based timber operations in the past, it is anticipated that any proposed operations as part of this management plan would not create any additional erosion impacts. All truck roads and skid trails needed for management activities are pre-existing and will be reused; no additional road or skid trail construction is anticipated as part of this management plan. In addition opportunities to fix or repair failed drainage structures or active erosion sites are available and will be proposed when and if such sites are identified. For the above stated reasons it is anticipated that proper implementation of BMPs throughout the application of management treatments will actually reduce the erosion potential from the property. A thorough erosion site and stream crossing inventory is need before any corrective prescriptions can be developed.

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As part of the North Stanislaus THP (#4-04-052/TUO) a thorough road and erosion site analysis was conducted on the THP areas (as Per CFPRs) of the property which included a majority of the roads. Several erosion sites and/or failing crossings were identified and corrective actions were implemented. Due to these recent activities it is anticipated that most or all erosion sites on the property have already received mitigation treatments.

Water bars have been used for road drainage structures on the property in the past. Water bars are effective at reducing road related erosion; however, vehicular use of waterbarred roads can cause damage to the water bars which then requires increased inspection and maintenance efforts to ensure their functionality. Opportunities likely exist on the property to replace the use of water bars with drainage facilities such as out sloping of road surfaces and installation of rolling dips. These road drainage improvements would allow for reduced impacts from vehicular use of the roads which would then require less inspection and maintenance efforts in the long term.

### **Unwanted Vegetation and Invasive Species Control**

For the purposes of meeting the goals of this management plan any forest floor vegetation that could be considered a ladder fuel is unwanted and the proposed treatments will target this unwanted vegetation for removal. In addition, attempts to increase the relative stocking of shade intolerant species (Sugar and Ponderosa pines) will require the removal of significant numbers of small diameter (primarily) shade tolerant species (white Fir and Incense cedar). In the plantation areas any invasive species or unwanted competing vegetation could be targeted for removal during the application of PCT treatments. Once all manual stand manipulation activities are complete, the application of frequent low-intensity prescribed fire should keep unwanted vegetation or invasive species in check and any further manual treatments to control unwanted or invasive species would not be anticipated.

### **Develop or Improve Recreational Opportunities**

The transference of the Beaver Creek 1 property from private ownership to public ownership will increase recreational opportunities on the property. No public access to the property is granted through the adjacent SPI lands to the north; however, public access to the property would be available from the south via the current CBTSP. Several historic era road systems connected between CBTSP and the Beaver Creek 1 property, these roads are now maintained as hiking trails which facilitate public use of the property. The increased recreational opportunities offered through the public use of the Beaver Creek 1 property includes but is not limited to hiking, picnicking, sunbathing, camping, swimming, wading, bird and wildlife watching, nature photography, fishing, cross country skiing and or general aesthetic enjoyment.

CBTSP's goals for the acquisition of the Beaver Creek 1 Property are primarily for wildfire protection purposes. Although the transference of the Beaver Creek 1 property from private ownership to public ownership will increase recreational opportunities on the property, no specific actions for the development or improvements of recreational activities are proposed as part of this Management Plan.

## **Riparian and Stream Enhancement Projects and Protections**

No specific data is currently available for the riparian areas or the state of water resources hence, no management recommendations can be made for these areas. Once data becomes available and there is a need for enhancement projects then, treatment prescriptions can be developed.

Any treatment activity that is permitted under the CFPR requires the protection of streams and the associated riparian habitats. In the CFPR these protection zones are called Watercourse and Lake Protection Zones (WLPZ) and offer a varying degree of protection levels based on a stream classification system where presence of endangered salmonids, stream side slope steepness, adjacent silvicultural prescriptions and many other factors are considered. It is recommended that the WLPZ protection measures as would be implemented under the CFPR should be adhered to, at a minimum, in the application of any management activity proposed on the Beaver Creek 1 property regardless if a permit is necessary. Using the SPI THP's and orthophoto analysis WTS has created a map which approximates the acreage and location of WLPZ areas that would be required on the Beaver Creek Property under the CFPRs (See WLPZ Map in Appendix II). Proper ground verification of stream location and classification along with accurate mapping of property boundaries is necessary before a final determination of WLPZ acreage and location can be made. It should be noted that any operations in the near vicinity of the one large Giant Sequoia tree located in the southeast portion of the property will be designed to protect that tree from any damage.

## **Timeline for Treatments**

Many factors can influence the time frame of applying stand treatments as proposed in this Management Plan. Operations in the winter months are restricted as per the CFPR and weather patterns in the area. Prescribed burning of any sort will be restricted to small windows of opportunity when all environmental conditions as stated in a prescribed burn plan would be met. If a THP were to be prepared, it would have an effective life of 3 years with 2 one year extensions available and if it qualifies for the new THP Extension legislation contained in the recently adopted AB1066 (Mendoza) Bill then, it could potentially be eligible for an additional 2 years of extensions. Currently the Forest Fire Prevention Exemption is set to expire on January 1, 2013, weather it will be available after that date is unknown and is currently available for the 2010, 2011 and 2012 operating seasons. Once enrolled in the BCAP program, assuming it will be available, a Biomass product owner can only be enrolled for 2 calendar years from the initial date of enrollment; however, it is possible to arrange a contract such that another individual can pursue enrollment under the BCAP program, whom then purchases the material and sells it to the processing facility. Other factor such as market conditions, breakdowns at a milling or biomass conversion facility and availability of contractors and/or necessary equipment can influence the timing and conduct of thinning operations. If it is desired to pursue the option of obtaining a THP then, the timeline for treatment will correspond with the available life of the THP and any modifications to the proposed operations will have to be made through an amendment process that could potentially create lost time and additional costs. If the option to pursue the exemption permits is

desired then, the timeline for treatment would be three years; unless an extension of the Forest Fire Prevention Exemption is put in place. Under the Exemption permit option it would be recommended to conduct operations on a small 20-30 acre area in 2010, then modifications to the treatment prescriptions could be considered for operations on the remaining portions of the property over the following years. Any needed management activities that would not require a permit from CAL FIRE could be done at any time; however, it is not recommended to conduct these types of activities within the boundaries of any area covered under an active permit due to enforceability issues pertaining to the permit. For example if operating under a Forest Fire Prevention Exemption and a tree larger than 18" stump diameter is felled and left for terrestrial habitat (a not permitted activity) within the permit area it may be considered a violation of the forest practice rules because trees over 18" stump diameter cannot be harvested under the forest fire prevention exemption; additionally, a post treatment slash depth of 9 inches or less is unattainable when leaving an 18" diameter log on site. Treatments to the plantation areas will be proposed once assessment activities have occurred and proper treatments and time frames of treatments can be developed.

### **Assessment of Resources and Re-Assessment of Objectives**

Adaptive management is a dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used along with research results, to modify management on a continuing basis to ensure that objectives are being met (Helms 1998). This management plan is designed to be a constantly evolving document that is updated periodically as more and better information becomes available. The monitoring of management activities as to their success or failure and impacts, if any, in regard to meeting the management goals is a vital ingredient for the development of further activities. Periodic reassessment of management goals will also be necessary to ensure that any and all management decisions will be based on the best available information.

Because there are significant deficiencies in the available data for the Beaver Creek 1 property there is a need for assessment of all areas on the property. A thorough assessment is needed before any management activities can be developed in the riparian areas or in plantations. In addition to physical assessments of the property, it is also advised to re-asses the objectives and goals for the property to keep up with changing ideals as to what is the desired state of forest resources on the property should be.

### **Amendments to Management Plan**

Due to the adaptive nature of this management plan, revisions will be necessary whenever new information becomes available as a result off forest resource assessments or changes in management techniques in response to results of monitoring efforts. Adaptations to management strategies shall be either incorporated into revisions of this management plan or additional supplemental documents can be produced upon a request.

## **Appendices and Maps**

### **Appendix I**

#### Plantation Treatment Histories

##### **Big Trees Unit 1 (13.3 ac.)**

Date of Treatment	Treatment	Ponderosa Pine TPA	Sugar Pine TPA	Douglas -Fir TPA	White Fir TPA	Giant Sequoi a TPA	Total TPA
July, 1999	Tractor Pile & Deep Till						
November, 1999	Tree Planting	145	108	108	-	-	361
November, 1999	Herbicide Treatment-Site Prep Broadcast Spray- Aatrex 90 (Atrazine)						
June, 2000	Herbicide Treatment-Maintenance Weeding Direct Release- Roundup (Glyphosate)						
October, 2002	Herbicide Treatment-Maintenance Weeding Direct Release- Roundup (Glyphosate)						
October, 2005	Herbicide Treatment-Maintenance Weeding Direct Release- Velpar L (Hexazinone)						
October, 2006	Pre-Commercial Thinning						

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**Big Trees Unit 2 (17.5 ac.)**

Date of Treatment	Treatment	Ponderosa Pine TPA	Sugar Pine TPA	Douglas-Fir TPA	White Fir TPA	Giant Sequoia TPA	Total TPA
July, 1999	Tractor Pile & Deep Till						
November, 1999	Tree Planting	148	111	111	-	-	370
November, 1999	Herbicide Treatment-Site Prep Broadcast Spray- Aatrex 90 (Atrazine)						
June, 2000	Herbicide Treatment-Maintenance Weeding Direct Release- Roundup (Glyphosate)						
October, 2002	Herbicide Treatment-Maintenance Weeding Direct Release- Roundup (Glyphosate)						
October, 2005	Herbicide Treatment-Maintenance Weeding Direct Release- (2-4D)						
October, 2006	Pre-Commercial Thinning						

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**North Stanislaus Unit 1 (17.3 ac.)**

Date of Treatment	Treatment	Ponderosa Pine TPA	Sugar Pine TPA	Douglas-Fir TPA	White Fir TPA	Giant Sequoia TPA	Total TPA
July, 2005	Site Prep Herbicide Treatment-Pre-Harvest Broadcast Spray-Buccaneer (Glyphosate)						
October, 2006	Site Preparation-Deep Till						
November, 2006	Tree Planting	234	97	-	11		342
May, 2007	Herbicide Treatment-Maintenance Weeding Broadcast Spray-Buccaneer (Glyphosate)						
October, 2007	Site Prep-Slashing						

**North Stanislaus Unit 2 (24 ac.)**

Date of Treatment	Treatment	Ponderosa Pine TPA	Sugar Pine TPA	Douglas-Fir TPA	White Fir TPA	Giant Sequoia TPA	Total TPA
July, 2005	Site Prep Herbicide Treatment-Pre-Harvest Broadcast Spray-Buccaneer (Glyphosate)						
October 2006	Site Prep-Deep Till						
April, 2007	Tree Planting-(11 Acres Only)	206	-	-	-		206
May, 2007	Herbicide Treatment-Maintenance Weeding Broadcast Spray-Buccaneer (Glyphosate)						
October, 2007	Site Prep-Slashing						
November 2008	Tree Planting-(Remaining 12 Acres Only)	153	71	136	-	-	360

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**North Stanislaus Unit 3 (14.8 ac.)**

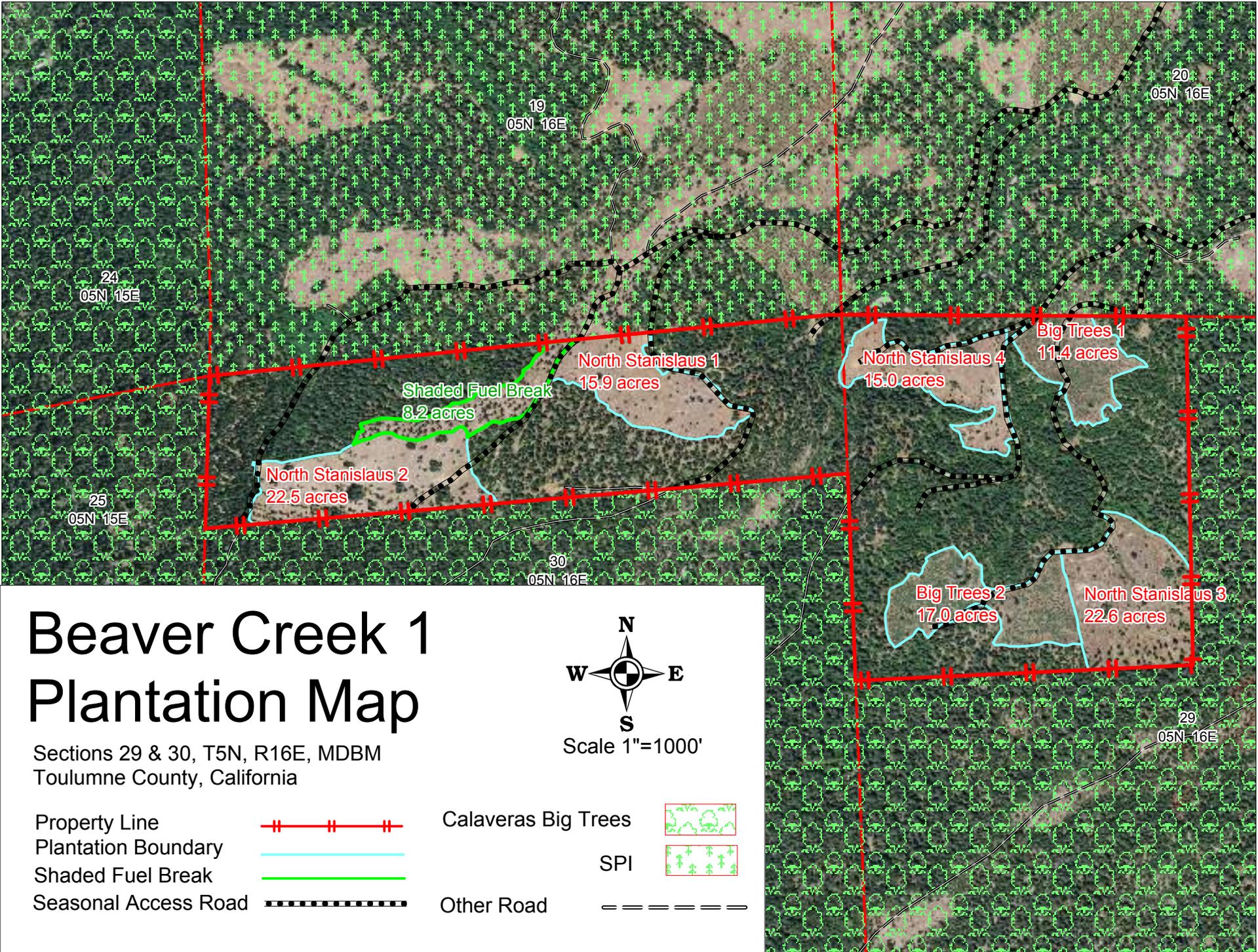
Date of Treatment	Treatment	Ponderosa Pine TPA	Sugar Pine TPA	Douglas-Fir TPA	White Fir TPA	Giant Sequoia TPA	Total TPA
July, 2005	Site Prep Herbicide Treatment-Pre-Harvest Broadcast Spray-Buccaneer (Glyphosate)						
October, 2007	Site Preparation-Deep Till						
October, 2007	Site Prep-Slashing						
November, 2008	Tree Planting	-	73	-	152	51	276

**North Stanislaus Unit4 (13.8 ac.)**

Date of Treatment	Treatment	Ponderosa Pine TPA	Sugar Pine TPA	Douglas-Fir TPA	White Fir TPA	Giant Sequoia TPA	Total TPA
July, 2005	Site Prep Herbicide Treatment-Pre-Harvest Broadcast Spray-Buccaneer (Glyphosate)						
October, 2007	Site Preparation-Deep Till						
October, 2007	Site Prep-Slashing						
November, 2008	Tree Planting	-	78	-	176	78	332

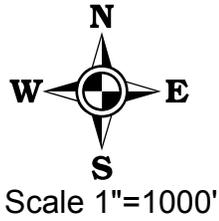
## **Appendix II-Maps**

### **Plantation Map**



# Beaver Creek 1 Plantation Map

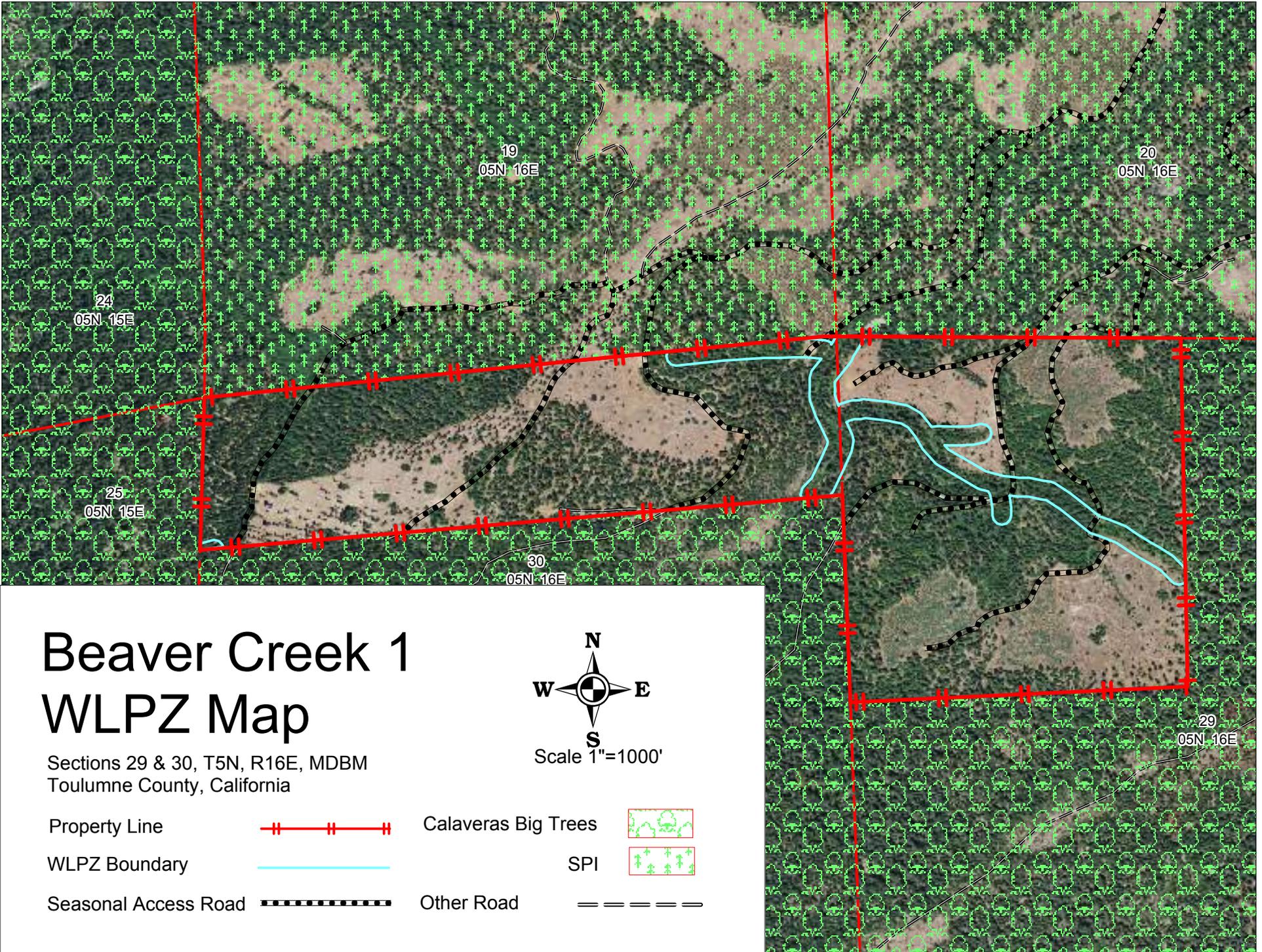
Sections 29 & 30, T5N, R16E, MDBM  
Toulumne County, California



- |                      |  |                     |  |
|----------------------|--|---------------------|--|
| Property Line        |  | Calaveras Big Trees |  |
| Plantation Boundary  |  | SPI                 |  |
| Shaded Fuel Break    |  | Other Road          |  |
| Seasonal Access Road |  |                     |  |

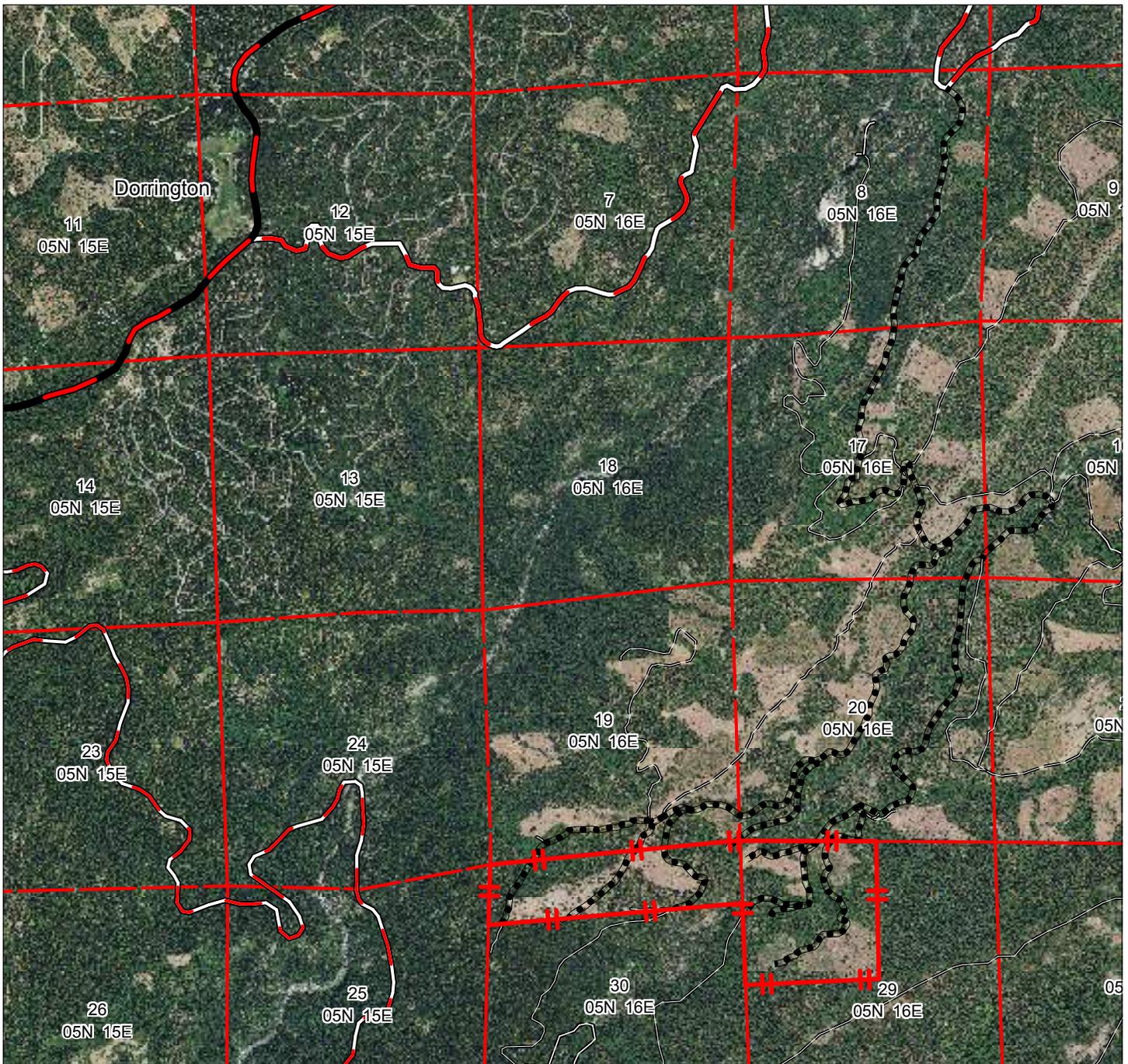
## **Appendix II-Maps**

### **WLPZ Map**



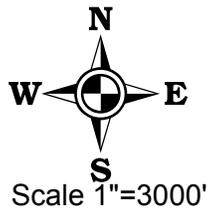
## **Appendix II-Maps**

### Road Access Map



# Beaver Creek 1 Road Access Map

Sections 29 & 30, T5N, R16E, MDBM  
Toulumne County, California



- |               |  |                      |  |
|---------------|--|----------------------|--|
| Property Line |  | Seasonal Access Road |  |
| Other Roads   |  | US Highway 4         |  |
| Paved Road    |  |                      |  |

## **Appendix III**

BCAP Program  
Federal Register Monday February 8, 2010

**[http://www.fsa.usda.gov/Internet/FSA\\_Federal\\_Notices/bcap  
prm 2 8 2010.pdf](http://www.fsa.usda.gov/Internet/FSA_Federal_Notices/bcap_prm_2_8_2010.pdf)**



# Federal Register

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**Monday,  
February 8, 2010**

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**Part II**

## **Department of Agriculture**

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**Commodity Credit Corporation**

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**7 CFR Part 1450**

**Biomass Crop Assistance Program;  
Proposed Rule**

**DEPARTMENT OF AGRICULTURE****Commodity Credit Corporation****7 CFR Part 1450**

RIN 0560-AH92

**Biomass Crop Assistance Program****AGENCY:** Commodity Credit Corporation and Farm Service Agency, USDA.**ACTION:** Proposed rule.

**SUMMARY:** The Commodity Credit Corporation (CCC) proposes regulations to implement the new Biomass Crop Assistance Program (BCAP) authorized by the Food, Conservation, and Energy Act of 2008 (the 2008 Farm Bill). BCAP is intended to assist agricultural and forest land owners and operators with the establishment and production of eligible crops including woody biomass in selected project areas for conversion to bioenergy, and the collection, harvest, storage, and transportation of eligible material for use in a biomass conversion facility. This rule specifies the requirements for eligible participants, biomass conversion facilities, and biomass crops and materials. It also provides notice of final termination of the existing Notice of Funds Availability.

**DATES:** We will consider comments that we receive by April 9, 2010.

**ADDRESSES:** We invite you to submit comments on this proposed rule. In your comment, include the volume, date, and page number of this issue of the **Federal Register**. You may submit comments by any of the following methods:

- *E-Mail:* [cepdmil@wdc.usda.gov](mailto:cepdmil@wdc.usda.gov).
- *Fax:* 202-720-4619.
- *Mail:* Director of CEPD, USDA FSA CEPD, Stop 0513, 1400 Independence Ave., SW., Washington, DC 20250-0513.
- *Hand Delivery or Courier:* Deliver comments to Director of CEPD, Room 4709-S, 1400 Independence Ave., SW., Washington, DC.
- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the online instructions for submitting comments.

Comments may be inspected at the mail address listed above between 8 a.m. and 4:30 p.m., Monday through Friday, except holidays. A copy of this rule is available through the Farm Service Agency (FSA) home page at <http://www.fsa.usda.gov/>.

**FOR FURTHER INFORMATION CONTACT:** Robert Stephenson at USDA, FSA, CEPD, STOP 0513, 1400 Independence Ave., SW., Washington, DC 20250-0513; telephone 202-720-6221; e-mail:

[cepdmil@wdc.usda.gov](mailto:cepdmil@wdc.usda.gov). Persons with disabilities who require alternative means for communication (Braille, large print, audiotape, etc.) should contact the USDA Target Center at 202-720-2600 (voice and TDD).

**SUPPLEMENTARY INFORMATION:****Background**

Section 9001 of the 2008 Farm Bill authorizes the Biomass Crop Assistance Program (BCAP) to assist agricultural and forest land owners and operators with the collection, harvest, storage, and transportation of eligible material for use in a biomass conversion facility and to support the establishment and production of eligible crops for conversion to bioenergy in selected project areas. The 2008 Farm Bill also authorizes such sums as are necessary to carry out BCAP.

On May 5, 2009, the President issued a Presidential directive establishing a Biofuels Interagency Working Group (chaired by the Secretaries of Agriculture and Energy and the Administrator of the Environmental Protection Agency). Among other programmatic specific goals, the Presidential directive laid the groundwork for a policy development process that would aggressively accelerate the development of advanced biofuels (published in the **Federal Register** on May 7, 2009 (74 FR 21531-21532)). One aspect of the larger effort outlined in the memorandum is the issuance of guidance and support related to the collection, harvest, storage, and transportation of eligible materials for use in biomass conversion facilities—a component of the BCAP.

On June 11, 2009 (74 FR 27767-27772), we published in the **Federal Register** a BCAP notice of funds availability (NOFA) for the collection, harvest, storage, and transportation of materials (CHST). This proposed rule terminates the NOFA effective on the date the proposed rule is on public display at the Office of the Federal Register. On that date, USDA will notify the public that the NOFA is terminated and that FSA will no longer accept applications for matching payments under the NOFA.

We also held a series of public meetings, as described in a different notice published on May 13, 2009 (74 FR 22510-22511), to collect public input needed to prepare an environmental impact statement (EIS) for BCAP. As outlined in the NOFA, comments from the public meetings, other public comments previously submitted in response to the NOFA, the full EIS and all comments and lessons learned from the three BCAP notices

will be incorporated into the rulemaking for the entire BCAP program, which will include CHST. As such, this proposed rule covers the whole BCAP program, including both the provisions that provide matching payments for collection, harvest, storage, and transportation of materials and the provisions that provide payment for the establishment and production of biomass crops in selected project areas. It reflects comments received on the NOFA. CCC believes that the full BCAP should be viewed in a broader policy context which promotes the Administration's priorities for increasing the production of advanced biofuels, renewable energy and biobased products. Within this context, this proposed rule, which would implement the full BCAP, terminates the NOFA and makes necessary changes to the program in a manner that is consistent with the 2008 Farm Bill and encourages the development of bioenergy, including advanced biofuels, renewable energy, and biobased products.

As defined in this rule, "advanced biofuel" means fuel derived from renewable biomass other than corn kernel starch, including biofuels derived from cellulose, hemicellulose, or lignin; biofuels derived from sugar and starch (other than ethanol derived from corn kernel starch); biofuel derived from waste material, including crop residue, other vegetative waste material, animal waste, food waste, and yard waste; diesel-equivalent fuel derived from renewable biomass including vegetable oil and animal fat; biogas (including landfill gas and sewage waste treatment gas) produced through the conversion of organic matter from renewable biomass; and butanol or other alcohols produced through the conversion of organic matter from renewable biomass and other fuel derived from cellulosic biomass.

**Discussion of Comments on NOFA**

Forty-seven comments were received in response to the NOFA. Commenters included a Tribe, State government agencies, an Embassy, individuals, non-profits, corporations, small businesses, entrepreneurs, public interest groups, Federal agencies and departments, academics, trade and industry associations, and cooperatives. Comments were received from all regions within the U.S. and from Canada and the United Kingdom.

Forty-six percent of the respondents were either a biomass conversion facility or represented biomass conversion facilities, the largest majority being from the wood pellet manufacturing industry.

Twenty-one percent of the respondents commented on the constraints that resulted from requiring an "arm's-length transaction." Most of those comments requested that the arm's-length transaction requirement either be removed or be reconstituted to enhance program flexibility and allow for a greater diversity of eligible material owner participation. CCC acknowledges the importance of ensuring a broad range of eligible materials in pursuing program goals, and is mindful of the constraints raised by the commenters. In order to provide appropriate safeguards to ensure transactions among disinterested parties, CCC proposes to replace the arm's length transaction language in the proposed rule with related-party transaction language.

Related-party transaction restrictions will not make ineligible stockholders of a privately or publicly held company who deliver eligible material to that company, nor make members of a cooperative who deliver eligible material to that cooperative ineligible. CCC requests additional comments on related-party transactions.

None of the parties in a related-party transaction for the purchase of eligible material are eligible for CHST matching payments as an eligible material owner.

Twenty percent of respondents opposed the requirement to measure biomass deliveries with real-time equipment that accurately records moisture levels to meet the dry-ton measurement standard. Most indicated that common industry practice is to measure in terms of green-tons with the general assumption of a moisture level of 45 to 50 percent. Based on these comments, CCC proposes to modify its requirement for moisture testing and adopt the industry-wide standard for measuring moisture. However, in all cases, the dry-ton equivalent remains.

Seventy-six percent of the comments concerned eligible materials, with 13 percent of those comments focused on conservation and forest stewardship plans related to eligible materials. These comments included commentary for and against the 20 percent cap on Title I crop agricultural residue. Most of those in favor of the cap remarked that it ought to be a complete ban to protect soils from wind and water erosion and that no agricultural residue should be removed without a conservation plan. Many of those in opposition to the cap stated that the cap of 20 percent only would drive up market prices on forest residue and allow forest residue to become the central supply for biomass conversion facilities. In this proposed rule, there is no 20-percent cap because it is inconsistent with the 2008 Farm

Bill. Regarding protecting land from wind and water, CCC proposes in this rule that BCAP contract participants will implement conservation plans, forest stewardship plans or equivalent plans that take into account site-level conservation needs. With regard to matching payment eligibility for agricultural and forest landowners and operators removing eligible material for use in a biomass conversion facility, such removal to receive matching payments must be done in compliance with any new, updated or existing conservation plans, forest stewardship plans or equivalent plans, as well as any existing environmental laws and regulations.

Other comments concerning the conservation plans included a desire to expand the requirement for conservation plans. Suggestions for elements of conservation plans included: target erosion rates far below "T" (soil loss tolerance) and compliance with new State ordinances on items such as buffers. This standard exceeds the level for highly erodible land, which is defined in 7 CFR part 12. Therefore, CCC did not adopt this comment and requests public comment on appropriate conservation standards for land enrolled in BCAP.

Comments concerning Forest Stewardship Plans offered alternative "equivalent plans" prescribed in the 2008 Farm Bill, such as plans under the American Tree Farm Program, the Sustainable Forestry Initiatives Program or State Best Management Programs. This comment is consistent with the 2008 Farm Bill and was accepted and reflected in this proposed rule.

Less than 10 percent of the comments urged FSA and CCC to consider miscanthus as an eligible material. Miscanthus is an eligible material; however, because some States may consider miscanthus a noxious weed, it may not be considered an eligible crop in those States.

Nearly 50 percent of the comments expressed a need for the eligibility time period for matching payments to be extended beyond two years. Rationale for these requests included the fact that certain contracts, such as a timber sale contract, have task orders and options that are not necessarily executed within a two-year time period and the need for equipment acquisitions or repairs sometimes interrupt harvesting. Two suggestions were given to tie the two-year limit to land tract instead of the eligible material owner.

The 2008 Farm Bill specified the two-year period for matching payments. However, CCC modified the beginning of the time period from the date of pre-

delivery approval to the date the first payment is issued. From that first date, matching payment obligations may occur for two years to an eligible material owner. CCC did not adopt the comment to change the two-year period from "eligible material owner" to "tract" because to do so would have been an extraordinary administrative burden on FSA that would have required extensive geographic-information-system-based software to monitor and control payments.

Nearly 20 percent of the commenting respondents were concerned with the economic market impact of BCAP. Comments included concerns that the introduction of the matching payment could impact the supply of commercial timber. Commenters did not agree on the impact; concerns were expressed that the impact would be negative, reducing supply, and positive, increasing supply. Similarly, commenters expressed concern that supply impacts would result in both favorable and unfavorable pricing impacts. Several respondents noted that the drop in the housing market has depressed the current supply of biomass and the matching payment, from their perspective, might help improve waste wood supply levels. Because these comments are of a general nature, CCC took no action on these comments.

Nearly 25 percent of the comments opposed the requirement to present scale tickets or a check to qualify the delivery and validate eligibility for a matching payment. The commenting parties indicated that the burden and cost of recording on each scale ticket was too high. CCC generally agrees with the comment and modified the requirement in § 1450.104(f) so the required information that must be submitted includes total actual tonnage delivered, total dry-weight tonnage-equivalent using standard moisture determinations, total payment including per ton payment rate(s) matched with actual tonnage, and the qualified biomass conversion facility's certification as to the authenticity of the information.

Comments on wildlife and plant life came from 15 percent of the respondents. Several comments indicated concern about ensuring standards for invasive and noxious species where eligible material was concerned. These comments suggested that CCC consult with USDA's Animal and Plant Health Inspection Service and the National Council for Invasive Species to address geographic-specific issues. "Eligible material" is a subset of renewable biomass and is specifically defined in the 2008 Farm Bill as the

material that is eligible for a matching payment. The 2008 Farm Bill does not restrict invasive and noxious species from eligibility, however, as discussed below, CCC will require that existing measures be taken and standing guidelines followed for any harvesting, collecting, storing or transporting of such material from such species.

“Eligible crops,” however, are another subset of renewable biomass that refers to the kind and types of crops that may qualify for establishment and annual payments on land enrolled in BCAP. According to the 2008 Farm Bill, invasive and noxious species are not “eligible crops” and CCC will collaborate with other appropriate agencies and entities to ensure current listings are available.

Finally, in issuing the NOFA, we pledged to consider all public comments and incorporate relevant evidence from the full EIS as well as all lessons learned into the proposed rule that sets forth requirements for the overall BCAP. Based upon the Department’s experience in implementing the component of the program authorized by the NOFA, certain changes are necessary to implement the program in a manner that is consistent with the 2008 Farm Bill, while also supporting the Administration’s overall policy objective to encourage the development of advanced biofuels, renewable energy, and biobased products within the 2008 Farm Bill authority. The proposed rule will specifically seek public comment on how to best incentivize the development of advanced biofuels, renewable energy and biobased products from renewable biomass.

#### BCAP Overview

BCAP supports two main types of activities. First, it provides funding for agricultural and forest land owners and operators to receive matching payments for eligible material that is sold to qualified biomass conversion facilities for the production of heat, power, biobased products, or advanced biofuels. In this rule, these payments are referred to as “matching payments.” The matching payment is intended to assist producers with the cost of collection, harvest, storage, and transportation of eligible material to the facility. Such payments to a particular participant may continue for up to two years after the first payment is issued. Second, BCAP provides funding for producers of eligible crops of renewable biomass within specified project areas to receive establishment payments of not more than 75 percent of the cost of establishment of eligible woody and

non-woody perennial crops, and annual payments for up to 15 years for the production of those crops. In this rule, these are referred to as “establishment and annual payments.” To be eligible for payment, the establishment and production activities must take place in designated project areas, which may be proposed to CCC by biomass conversion facilities or by groups of producers. Production activities may include, but are not limited to, annual payments for producers who are unable to sell crop due to a reduction in the size or scope of a biomass conversion facility’s operation or if a producer experiences crop failure caused by no fault of the producer but by a natural event such as drought, flooding or hail, as determined by CCC. Producers in project areas can be eligible for both types of payments; producers outside the project areas can be eligible for matching payments only. A table summarizing the major eligibility requirements for both types of payments is provided later in this rule.

#### Terms Used in This Rule

This rule uses the term “eligible material” for the renewable biomass that is eligible for the matching payment component of BCAP and “eligible crop” for renewable biomass that may be eligible for the establishment and annual payments component of BCAP. The 2008 Farm Bill uses these two terms in this way and defines them as including different kinds of renewable biomass. The use of the terms in this rule is consistent with the way the terms are used in the 2008 Farm Bill. With this rule, CCC intends to achieve better consistency between the requirements for eligible materials collected and harvested from public and private lands. In addition, CCC seeks to avoid diverting any materials potentially eligible for BCAP matching payments from existing value added production processes already occurring in the marketplace. Therefore, CCC proposes that vegetative wastes, such as wood waste and wood residues, collected or harvested from both public and private lands should be limited to only those that would not otherwise be used for a higher-value product. More specifically, for materials collected from both public and private lands, CCC is proposing to exclude from matching payment eligibility wood wastes and residues derived from mill residues (*i.e.* tailings, *etc.*) or other production processes that create residual byproducts that are typically used as inputs for higher value-added production (*i.e.* particle board, fiberboard, plywood, or other wood product markets). However, CCC is proposing to allow as eligible for

matching payments wood waste and residue derived from slash, pre-commercial operations, wet cordwood *etc.*) that is altered to chipped or similar form solely for the purposes of transport and delivery to eligible biomass conversion facilities. As specified in the 2008 Farm Bill and the regulations in 7 CFR part 1450, the eligible material owner may be a person or legal entity who is (1) a producer of an eligible crop or (2) has the right to collect or harvest eligible material and (3) a qualified biomass conversion facility that meets those requirements and the definition. As discussed in this rule, the matching payments will be made for the delivery of the eligible material.

The term “conservation district” is used as defined in 7 CFR part 1410.

This proposed rule uses the term “participant” for the matching payments component of BCAP and the terms “producer” and “participant” for the establishment and annual payments component of BCAP. The distinction is, an eligible participant for matching payments is not necessarily the person or legal entity who produced the material, but may be the person who owns it or has the authority to sell it to the biomass conversion facility. In other words, all BCAP producers are participants, but not all BCAP participants are producers. Participants are those individuals or entities who have been approved and are bound to perform under a contract for matching payments, establishment, or annual payments.

This proposed rule uses the term “contract” and “agreement.” A contract is between CCC and the participant for BCAP payments. The contract is legally binding and specifies what the producer must do and the resulting payments that CCC will make to the producer. An agreement is with a qualified biomass conversion facility or a project area sponsor. As fully described later in this proposed rule, the agreement specifies what the qualified biomass conversion facility or the project area sponsor plans to do and how it will support the establishment and production of eligible crops for conversion to bioenergy in the BCAP project areas, for example, the type of renewable biomass that will be used, the planned use of renewable biomass, and the new uses for the renewable biomass. In addition, there may be agreements between CCC and a qualified biomass conversion facility for the matching payments, which include items such as obligations of the facility to provide a purchase list, receipts and scale tickets for the eligible material owners and agreement to provide

facility address and contact information to the general public.

### Matching Payments

As proposed in this rule, matching payments would be available for the delivery of eligible material to qualified biomass conversion facilities to a producer of an eligible crop or a person with the right to collect or harvest eligible material.

The 2008 Farm Bill provides for matching payments at a rate of \$1 for each \$1 per dry ton paid by the qualified biomass conversion facility, in an amount up to \$45 per dry ton, for a period of two years. The 2008 Farm Bill also provides that biomass conversion facilities are those that convert, or propose to convert renewable biomass into heat, power biobased products, or advanced biofuels.

For the matching payments to eligible material owners delivering to a biomass conversion facility, CCC seeks comments on the following three options.

One option is to provide the matching payments as provided in the Notice of Funds Availability. Under this option, CCC would provide matching payments at the rate of \$1 for each \$1 per dry ton paid by the CHST-qualified biomass conversion facility to the owner for delivery of eligible material to the facility in an amount not to exceed \$45 per dry ton. Under this option, a limit would be placed on those biomass facilities that convert wood wastes or wood residues into heat or power for the facility. In those cases, a historical baseline of heat or power the facility produces from these materials will be established by the Deputy Administrator and payments will be made only for materials delivered to those facilities for conversion to heat or power above that baseline.

A second option is to tailor the matching payments through a "tiered approach" designed to encourage advanced biofuels production. In this option, CCC would provide matching payments at the rate of \$1 for each \$1 per dry ton paid by the CHST-qualified biomass conversion facility; however, biomass conversion facilities converting eligible material to advanced biofuels would be able to receive matching payments at the maximum rate of \$45 per ton. Biomass conversion facilities converting eligible material to any use other than advanced biofuel—such as heat, power, renewable energy or biobased products—would be able to receive payments at some point below the maximum rate. USDA requests comments on how to assess a tiered

approach and how such an approach might be structured.

One possible approach would be based on USDA's tentative finding, in Regulatory Impact Analysis, that a \$9 per green ton subsidy would render biomass feedstock broadly appealing to farm operators and competitive as an input to the energy sector. This \$9 per green ton rate equates to approximately \$15 to \$16 per dry ton. If so, a \$16 per dry ton payment rate would be sufficient to incentivize the production of new biofuel feedstock development and associated production processes that would not otherwise occur absent this financial support.

Another approach would be to develop a payment rate based directly on the value of lowering carbon emissions. Such an approach would take account of the greenhouse gas benefits associated with the substitution of biofuels for other more carbon intensive fuel sources, such as coal. USDA has proposed a particular minimum subsidy of \$16 per dry ton, and it believes that value may "internalize" some of the societal benefit of the use of biofuel feedstock as an energy sector input, leading to significant environmental improvements. USDA specifically requests comment on how to better capture this concept and whether a higher or lower minimum payment may best reflect the greenhouse gas and other environmental benefits of biofuel feedstock energy use.

USDA specifically requests comment on whether this or another similar payment structure might be best, and on how USDA may reflect the economic and environmental goals that can be achieved through this kind of tiered payment structure.

Finally, a third option is to vary the matching payments to encourage additional biomass production beyond a historical baseline. Under this option, CCC would calculate the matching payment at the rate of \$1 for each \$1 per dry ton paid by the CHST-qualified biomass conversion facility and then reduce the actual amount paid based on the difference from the baseline. For example, full payment could be provided for delivery of eligible material to new facilities, certain public buildings, facilities, or property (such as schools, universities, military facilities or Federal and State buildings) that convert from fossil fuel consumption to renewable biomass feedstocks; for eligible material showing exceptional promise for producing innovative advanced biofuels, renewable energy, or biobased products; or for every ton of renewable biomass consumption above

a facility's established baseline.

Payments would be reduced for those facilities that do not increase renewable biomass consumption over a historical baseline.

While CCC has not formally considered all of these options, CCC seeks comments and suggestions on all three of these options for the final rule so as to achieve an expansion and strengthening of the production of advanced biofuels, renewable energy, and biobased products from non-feed renewable biomass.

### Qualified Biomass Conversion Facility

CCC proposes that in order for a delivery of eligible materials to a biomass conversion facility to be eligible for payment, the receiving biomass conversion facility would first have to become qualified for BCAP. To become qualified, the eligible biomass conversion facility would enter into an agreement with CCC, through the FSA State office in the State where the facility is physically located.

A biomass conversion facility, as specified in the 2008 Farm Bill and in this proposed rule, would be a facility that converts or proposes to convert renewable biomass into heat, power, biobased products, advanced biodiesel, or advanced biofuels such as wood pellets, grass pellets, wood chips, or briquettes. For the purposes of BCAP, advanced biofuels do not include ethanol derived from corn kernel starch, because the 2008 Farm Bill specifically excludes it in the definition.

A biomass conversion facility would not have to be a project sponsor for the establishment and annual payments component of BCAP or be in operation to submit a successful application for qualification. If the facility is not yet in operation, CCC proposes that the person requesting that a facility become qualified must provide proof of all applicable Federal, State, local, and Tribal permits and licenses required for operation or proof of application completions or letters of renewal submissions from the applicable governmental entity. Applicable permits and licenses may include, but are not limited to, business licenses, air quality permits, water discharge permits, storm water permits, or Bureau of Alcohol, Tobacco, Firearms and Explosives registrations.

CCC proposes that each biomass conversion facility enter into a separate agreement with CCC regardless of whether a single owner has multiple facilities. CCC would issue unique facility identification numbers to each qualifying biomass conversion facility.

The proposed agreement between CCC and a qualified facility would require the biomass conversion facility to make information about the facility available to CCC and institutions of higher education. The 2008 Farm Bill requires that the information be made available to the Secretary or to institutions of higher education so that the information can be used to promote the production of biomass crops and the development of biomass conversion technology. The 2008 Farm Bill also requires a report to Congress on best practice data and other information no later than four years after the enactment of the 2008 Farm Bill, so the agreement would require that such information be disclosed, with the understanding that such information would be used in the report to Congress. In addition, when a biomass conversion facility agrees to become "qualified" it will be helpful for CCC to make information available to the public that a particular facility has become qualified because it is a precursor to being eligible for a matching payment.

#### **Eligible Material Owners, Application for Matching Payments**

To be eligible for matching payments, the eligible material owners need to visit a county FSA office to sign up for payment approval as an eligible material owner. The qualified biomass conversion facility would issue a receipt or invoice upon the date of delivery to eligible material owners.

The material owner would be eligible for the payment if the owner had the legal title to the material for collection or harvest, such as the operator or producer conducting farming operations on private land, or any other person designated by the owner of the private land. Consistent with the 2008 Farm Bill, the eligible material owner could be a person(s) with the right to harvest or collect eligible material on certain Federal lands pursuant to a contract or permit with the United States Forest Service or Bureau of Land Management, such as a timber sale contract.

Eligible material owners would take the receipts from the qualified biomass conversion facility and submit them to the county FSA office for matching payments. In accordance with the 2008 Farm Bill, CCC proposes that the measure for the eligible material weight would be a "dry ton," the weight at zero percent moisture content. The facility would be required to have the necessary equipment (such as a moisture meter) to calculate the equivalent dry ton weight of the delivered material.

In addition to weight scaling for roundwood and forest residues that

have not been chipped, CCC proposes in consultation with the U.S. Forest Service to require qualified biomass conversion facilities to use a random sampling methodology and historical statistical data to determine conversion factors for eligible material. Conversion factors would need to be developed quarterly and be based on type of material such as hardwood and softwood.

For wood chips, chipped forest residuals, shavings, sawdust, bark or any other eligible intermediate forestry residuals, CCC in consultation with the U.S. Forest Service proposes the requirement of sampling for individual loads or using rapid electronic meters. Quarterly correction factors would be required and be based on monthly random samples of the eligible materials.

CCC proposes that woody biomass sampling methodologies follow standard probability sampling of materials and proposes that moisture analysis follow standard test methods for wood fuels.

An eligible owner is able to receive matching payments for a period of two years. The two-year period for matching payment eligibility would begin on the date of issue of the first matching payment. This provision differs from what was provided in the NOFA, which indicated that the 2-year time period would begin immediately after initial approval by the FSA county office for the CHST matching payment and would end 24 months later. Having the "start date" coincide with the payment date, rather than the approval date, ensures that participants would not be unnecessarily penalized if, through no fault of their own, for example, adverse weather or other conditions could delay delivery of eligible material to a qualified biomass conversion facility.

Eligible material owners may also be eligible to participate under the "Establishment and Annual Payments" component of BCAP; however, the annual payment that is received by a participant in that component would be reduced when a matching payment was issued. The "Establishment and Annual Payments" component is discussed later in this rule. If an eligible material owner or producer wishes to avoid the reduction in annual payment(s), CCC proposes that the owner or producer do so by declining the matching payment(s).

The NOFA imposed an "arm's length transaction" requirement to be eligible for a matching payment. CCC acknowledges the importance of maintaining flexibility in this new program, as well as ensuring a broad

range of eligible materials in pursuing program goals, and is mindful of the constraints raised by the comments. In order to provide appropriate safeguards to ensure transactions among disinterested parties, CCC proposes to replace the "arm's length transaction" language with related-party transaction language. Related-party transaction restrictions will not render stockholders of a privately or publicly held company who deliver eligible material to that company ineligible; nor will members of a cooperative who deliver eligible material to that cooperative be considered ineligible. CCC proposes that related-party transaction be defined as a transaction between two or more ready, willing, and able organizations, trades, or business (whether or not incorporated, whether or not organized in the United States, and whether or not affiliated) substantially owned or controlled, directly or indirectly by the same interests, as determined by the Deputy Administrator.

As otherwise explained throughout this proposed rule, CCC proposes that an eligible material owner needs to meet the following to be eligible for a matching payment:

An eligible material owner may be:

- A producer within a project area;
- A biomass conversion facility;
- A person or entity with the legal title to an intermediate ingredient or feedstock; or
- A person or a non-Federal entity that has legal title to an eligible material, including Indian Tribes and Tribal members.

An eligible material owner may apply for a matching payment at the FSA county office after delivery of eligible material to a qualified biomass conversion facility.

The eligible material must be harvested or collected from certain:

- U.S. National Forest System and BLM lands,
- Non-Federal lands, including State- and locally-held government lands, or
- Tribal land held in trust by the Federal government.

The eligible material must be harvested or collected from certain:

- Materials, pre-commercial thinnings, or invasive species from National Forest System land and U.S. Bureau of Land Management System land that:
  - Are byproducts of preventive treatments that are removed to reduce hazardous fuels, to reduce or contain disease or insect infestation, or to restore ecosystem health;
  - Would not otherwise be used for higher-value products; and
  - Are harvested in accordance with applicable law and land management

plans and the requirements for old-growth maintenance, restoration, and management direction of section 102(e)(2), (3), and (4) of the Healthy Forests Restoration Act of 2003 (16 U.S.C. 6512) and large-tree retention of subsection (f).

- Any organic matter that is available on a renewable or recurring basis from non-Federal land or land belonging to an Indian or Indian Tribe that is held in trust by the United States or subject to a restriction against alienation imposed by the United States, including:

- Renewable plant materials such as feed grains, other agricultural commodities, and other plants and trees; and

- Waste materials including vegetative waste comprised of crop residues such as corn stover or wood wastes and wood residues that would not otherwise be used as inputs for existing value-added production.

CCC also proposes that eligible material owner(s) would not be eligible for a matching payment if:

- Payment is received before the biomass conversion facility is qualified by CCC;

- The eligible material owner did not receive approval for matching payment from the county FSA office before receiving payment;

- The delivery did not consist of eligible material (For deliveries of commingled eligible and ineligible material, only the eligible material will be eligible for payment);

- The eligible material owner knowingly supplied false information;

- The eligible material owner violated the associated conservation or forestry plan related to the land that produced the eligible material for which a matching payment is requested; or

- The formerly qualified biomass conversion facility failed to comply with the agreement it entered into with CCC and, accordingly, the agreement was terminated by CCC prior to delivery.

Comments received on the CHST NOFA encourage CCC to ensure that conservation or forest stewardship plans appropriately address soil, water, wildlife and other natural resource concerns, so that biomass production is balanced with natural resource conservation. For matching payments, CCC intends to apply existing conservation plan requirements as required by Title XII of the Food Security Act of 1985 and is requesting additional comments in this proposed rule to ensure that adequate guidance is received to determine the scope of these requirements. CCC invites further comment on specific, additional conservation and stewardship measures

that could be included or that could be contained within the matching payment options discussed previously.

### Eligible Materials

For guidance to potential eligible material owners and biomass conversion facilities, CCC proposes to provide a list of eligible materials deemed acceptable to receive a matching payment in accordance with the 2008 Farm Bill's definitions of renewable biomass and eligible material. The list of eligible material would be provided to the public via the FSA Web site at <http://www.fsa.usda.gov/energy>. CCC proposes the list of materials be utilized for guidance with the understanding that the list is not exhaustive and would be amendable and periodically updated by the CCC—in accordance with the parameters established by the 2008 Farm Bill—as biomass energy technology evolves. When there is recommendation for an addition to the list of eligible material, CCC will review the material to make determinations—the review could include a site visit and comparison to related materials or uses. CCC will review the recommendation to ensure that the new material meets the requirements of the 2008 Farm Bill and the regulations. CCC requests comments for additional suggestions on considerations in the process to amend the list of eligible materials. As described later in this rule, a list of eligible crops for the establishment and annual payment provisions would include some additional crops not eligible for matching payments.

Renewable biomass, as specified in the 2008 Farm Bill and in this rule, includes materials, pre-commercial thinnings, or invasive species from U.S. National Forest System land and U.S. Bureau of Land Management (BLM) land that:

- Are byproducts of preventive treatments that are removed to reduce hazardous fuels, to reduce or contain disease or insect infestation, or to restore ecosystem health;

- Would not otherwise be used for higher-value products; and

- Are harvested in accordance with applicable law and land management plans and the requirements for old-growth maintenance, restoration, and management direction of subsections 102(e)(2), (3), and (4) of the Healthy Forests Restoration Act of 2003 (16 U.S.C. 6512) and large-tree retention provisions of subsection (f).

In other words, renewable biomass harvested on National Forest System and BLM land would typically be trees and brush removed for fire prevention

purposes, trees unsuitable for commercial timber harvest, invasive plant removal for treatment and control purposes, and diseased, damaged, or immature trees culled in accordance with appropriate forest management practices. Additionally, CCC seeks comment on additional conservation or stewardship measures that should be considered for inclusion in the final rule for the eligible materials described above.

As specified in the 2008 Farm Bill, renewable biomass also includes any organic matter that is available on a renewable or recurring basis from non-Federal land or land belonging to an Indian or Indian Tribe that is held in trust by the United States including:

- Renewable plant materials such as feed grains, other agricultural commodities, other plants and trees, and algae;

- Waste materials including vegetative waste comprised of crop residues such as corn stover, wood wastes, and wood residues;

- Animal waste and byproducts; and

- Food waste and yard waste.

However, that definition of renewable biomass from the 2008 Farm Bill applies to more than one program in Title IX. For BCAP specifically, the 2008 Farm Bill defines “eligible material” more narrowly, so that renewable biomass excludes the whole grain derived from any crop that is eligible to receive payments under Title I of the 2008 Farm Bill.

Those crops that are subject to the provisions of Title I of the 2008 Farm Bill would therefore not be included as eligible materials or crops for either component of BCAP. These crops include the whole grain derived from a crop of barley, corn, grain sorghum, oats, rice, and wheat; oilseeds such as canola, crambe, flaxseed, mustard seed, rapeseed, safflower seed, soybeans, sesame seed, and sunflower seeds; peanuts, pulse crops such as small chickpeas, lentils, and dry peas; dairy products; sugar; wool; and, cotton boll fiber.

In accordance with the 2008 Farm Bill, CCC proposes that crop residue or other similar byproducts of crop production and harvesting, such as corn stover, corn silage, straw, hulls, or sugar bagasse, remain eligible materials for matching payments without further limitation or restriction. CCC proposes that for such eligible material conservation plans should be updated or initiated to address the removal of the material as needed. Additionally, CCC invites comments and suggestions with regard to specific, additional conservation and stewardship measures

that should be considered for the collection, harvest, transportation or storage of these eligible materials.

The 2008 Farm Bill is silent as to whether, for the purposes of BCAP matching payment eligible material requirements, vegetative waste materials, such as wood waste and wood residue, available from non-Federal land should be limited only to those that would not otherwise be used for higher-value products. Based on its experience with the NOFA, CCC proposes in this rule to apply that limitation to vegetative waste materials such as wood wastes and residues so that those materials are excluded if they would otherwise be used for higher-value products. CCC invites comments and suggestions with regard to the addition of this provision.

The 2008 Farm Bill does not specifically exclude invasive or noxious species in the definition of "eligible material." Renewable biomass derived from invasive or noxious species must be handled in accordance with Executive Order (E.O.) 13112 of February 3, 1999. E.O. 13122 requires that Federal agencies "not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions."

CCC consulted with APHIS and the National Invasive Species Council experts to determine the feasible and prudent measures necessary to minimize the risk of harm related to the inclusion of invasive or noxious species for the purposes of BCAP matching payments. Based on the consultation, CCC proposes to include invasive and noxious species as eligible materials for BCAP matching payment purposes; however, such eligible materials must not be collected, harvested, or transported during reproductive or other phases that may propagate the spread or establishment of those species. Eligible material owners should contact State and local weed boards or authorities and their local USDA Service Center staff about collecting, harvesting, or transporting invasive or noxious species to ensure compliance with E.O. 13112, USDA guidelines, and other requirements.

The likely benefits of including invasive and noxious species as eligible materials, which would incentivize their removal, significantly outweighs the potential negative impacts that may result from not including them as eligible materials, specifically scenarios where removing native species from a tract of land would occur and not removing the invasive or noxious species would encourage invasive and noxious species propagation.

CCC requests comment on whether or not eligible material owners violating E.O. 13112 should be financially responsible for any or all removal costs associated with the spread or establishment of invasive or noxious species if it determined that an eligible material owner contributed to the spread or establishment of an invasive or noxious species while carrying out activities related to receiving a matching payment.

As required by the 2008 Farm Bill, the following renewable biomass materials would also be excluded from BCAP matching payments, although they would be eligible crops for BCAP establishment and annual payments:

- Animal waste and byproducts (including fats, oils, greases, and manure);
- Food waste such as food processing scraps and yard waste such as debris removal originating from municipal or commercial yard, lawns, landscaped areas or related sites; and
- Algae.

Additionally, CCC proposes that materials that are wastes or by-products of industrial or similar processes that contain inorganic materials, such as black or pulp liquor that is a by-product of the pulp and kraft paper manufacturing process, remain excluded from the definition eligible materials. While such products may have historically been used to generate heat, power, steam and electricity to operate facilities, these products are not within the parameters set by the 2008 Farm Bill because they are, among other things, not organic materials collected or harvested from land. As such, these materials, as well as otherwise eligible materials delivered and used for the generation or production of these materials, would continue to not be eligible for matching payments under this program.

Consistent with the 2008 Farm Bill, CCC proposes that eligible materials, for a matching payment, would be collected and harvested from eligible lands that would include:

- (1) U.S. National Forest System lands;
- (2) BLM lands;

(3) All Non-Federal lands in the United States; and

(4) Land belonging to an Indian or Indian Tribe that is held in trust by the United States or subject to a restriction against alienation imposed by the United States. In other words, most publicly- and privately-held land is eligible for the BCAP matching payments program, except for some Federal lands.

In accordance with the 2008 Farm Bill, CCC proposes that matching payments would be made for all eligible materials, including those derived outside BCAP project areas. CCC invites comments pertaining to the previously discussed options for structuring matching payments to provide incentives for the collection, harvest, storage and transportation of eligible materials near project areas.

Eligible materials that are considered an advanced biofuel or an intermediate ingredient or feedstock of a biobased product must be derived from an otherwise eligible material.

CCC recognizes that the production of some advanced biofuels and biobased products requires intermediate ingredients and intermediate feedstocks, such as chopped grasses or wood chips. CCC proposes that the source material and the intermediate ingredient or feedstock be considered separate eligible materials; however, only one matching payment will be issued for either the source material or the intermediate ingredient or feedstock, but not both.

#### **Eligibility for Establishment and Annual Payments**

Establishment and annual payments are proposed to be available for persons and legal entities with eligible land that is located within a project area designated by CCC. CCC proposes to accept project area proposals from a project sponsor on a continuous basis. Unlike the matching payments component of BCAP, where any owner of eligible materials can be eligible for the program, for the establishment and annual payments component, only producers in a designated project area will be eligible for payment. The payments will cover not more than 75 percent of costs of eligible practices to establish non-woody and woody perennial biomass crops, and annual payments to support up to 15 years of crop production. By designating project areas, the BCAP program can support the development of renewable biomass production near biomass production facilities.

### Proposing Project Areas

Project areas would be proposed by project sponsors, which could be either groups of producers or biomass conversion facilities.

There is no restriction in this proposed rule on who can own or operate an eligible facility, or sponsor a project area. Various parties could own a biomass conversion facility such as Federal entities, private entities, State or local government agencies, schools, or non-government organizations, provided that these parties have legal title to the facility.

CCC proposes to accept project area proposals on a continuous basis. In accordance with the 2008 Farm Bill, a complete proposal would include, at a minimum:

- (1) A description of the eligible land and eligible crops of each producer that will participate in the proposed project area;
- (2) A letter of commitment from a biomass conversion facility stating that the facility will use eligible crops intended to be produced in the proposed project area; and
- (3) Evidence that the biomass conversion facility has sufficient equity available to operate in the future if the facility is not operational at the time the project area proposal is submitted.

While the 2008 Farm Bill does not require conservation plans or forest stewardship plans to be an acceptable proposal, it does require that all contracts within a project area provide for the implementation of a conservation plan, forest stewardship plan or equivalent plan. As such, project area proposals will also include a description of the general conservation and forest stewardship measures that will be implemented in plans under contracts within the area. CCC seeks specific comment as to further conservation or stewardship requirements that should be included in a proposal for a project area.

For item 1 above, the project sponsor would submit a narrative of the proposed project and submit maps of the project area delineating the location of the current or proposed biomass conversion facility. The maps would show: (1) Current land use, (2) roads, (3) railroad, (4) rivers and barge access, (5) proposed land use change, and (6) resource inventory maps including soils and vegetation.

For item 3 above, evidence of sufficient equity will document the projected construction, start-up, operation, and maintenance costs over the projected life-span of the project. The project sponsors would document

the estimated cash-flow of the project during its life-span (including assumptions on the production outputs and expected market prices for the products produced). In addition, the project sponsor would document its existing resources and short term and long term financing. The information provided to CCC will be confidential and CCC will use it to determine if sufficient equity is available for the facility and the project.

The project sponsor will also submit the economic impacts of the proposed project area. At a minimum the proposal will address the anticipated timing and number for job creation and retention and likelihood of attracting additional private sector investment.

At a minimum, projects must demonstrate the ability to support the development and production of heat, power, biobased product, or advanced biofuels from renewable biomass production. The facility must demonstrate long-term economic viability and ability to comply with all environmental and regulatory requirements for the production of heat, power, biobased product, or advanced biofuels from renewable biomass. In addition, the project must demonstrate that sufficient quantity of eligible crops will be grown within an economically viable distance from the facility and that the crops can be grown in an environmentally acceptable manner as determined by CCC.

CCC requests comments on other types of information that should be required from project sponsors, including, but not limited, to a draft proposal. Proposed project area information that a sponsor considers appropriate or sufficient, may be included in a comment to this rule. We will review the information and use the analysis to make any required changes in the final rule. Information submitted as a proposal for a project area cannot be approved until implementation of the final rule. As with any comment, proposed project area information will become part of the public record and the public will be able to review it and comment on it. Because BCAP is a new program, information based on specific examples, projects, and situations will help improve the implementation and effectiveness of the program.

CCC proposes that a project area have specific geographic boundaries and be described in definite terms such as acres, watershed boundaries, mapped longitude and latitude coordinates, or counties. The project area would be physically located near a biomass conversion facility or facilities. Whether a project area is within an economically

viable distance from a biomass conversion facility will depend upon the eligible crops being established and produced, as well as other transportation and logistics matters, and thus must necessarily be determined on a case-by-case basis. The biomass conversion facility can be within the geographic boundary of the project area, or near it. The project area must also include potential or established producers that would supply either a portion or all of the renewable biomass needed by the biomass conversion facility.

### Project Area Selection Criteria

Consistent with the 2008 Farm Bill, CCC proposes to evaluate project area proposals that are submitted, according to these criteria:

- (1) The volume of the eligible crops proposed to be produced in the proposed project area and the probability that such crops will be used for BCAP purposes;
- (2) The volume of renewable biomass projected to be available from sources other than the eligible crops grown on contract acres;
- (3) The anticipated economic impact in the proposed project area, such as the number of jobs created and retained;
- (4) The opportunity for producers and local investors to participate in the ownership of the biomass conversion facility in the proposed project area;
- (5) The participation rate by beginning or socially disadvantaged farmers or ranchers;
- (6) The impact on soil, water, and related resources, such as effect on nutrient loads, or soil erosion;
- (7) The variety in biomass production approaches within a project area, including agronomic conditions, harvest and postharvest practices; and monoculture and polyculture crop mixes; and
- (8) The range of eligible crops among project areas.

CCC proposes that all project proposals meeting these criteria would be considered acceptable for BCAP. The 2008 Farm Bill provides discretion for the Secretary to consider other information in evaluating project proposals. Given this discretion, CCC proposes that, in addition to the above criteria, proposals will also be evaluated based upon their ability to promote the cultivation of perennial bioenergy crops and annual bioenergy crops that show exceptional promise for producing highly energy-efficient renewable energy, advanced biofuels or biobased products, that preserve natural resources, and that are not primarily grown for food or animal feed. CCC

requests comments on whether additional criteria should be included for evaluating the capacity of the land in a project area to sustainably produce the proposed quantity of biomass. CCC requests comments on what other criteria or information we should use to evaluate project proposals.

Project sponsors that are biomass conversion facilities could be any size of operation including pilot facilities, research units, experimental or demonstration operations, or commercial operations. As proposed in this rule, a biomass conversion facility not yet in operation could be a project sponsor. In that case, the biomass conversion facility would have to provide evidence that it has sufficient equity available.

### Project Area Eligible Crops

As proposed in this rule, after CCC approves a project area, persons and legal entities within the specific geographic boundaries of that area could be eligible for payment for the establishment and production of eligible crops. To be eligible for payment, participants would need to enroll the land under BCAP contracts.

The 2008 Farm Bill defines an eligible crop as a crop of renewable biomass. The 2008 Farm Bill also includes a list of certain types of renewable biomass that are ineligible. Animal wastes, food and yard wastes, and algae are included in the definition of eligible crop in the 2008 Farm Bill and are therefore included in the definition in this proposed rule.

CCC proposes that biomass conversion facilities may suggest the exact species and varieties of eligible crops allowable in a BCAP project area, provided that the crops are included in the BCAP definition of eligible crop. Project area proposals may limit the nature and types of eligible crops to be planted within a project area.

The 2008 Farm Bill specifically excludes Title 1 crops and noxious or invasive plants as eligible crops. FSA State Committees will consult with the State Technical Committees for recommendations concerning the invasive and noxious status for otherwise eligible crops for the purposes of BCAP.

As specified in the 2008 Farm Bill, Federal or State-owned lands are not considered to be eligible lands for establishment and annual payments; therefore, CCC proposes to exclude all Federal and State-owned land from the establishment and annual payments component of BCAP.

### Project Area Eligible Producers

CCC proposes that within the project area, producers would enter into BCAP contracts and be eligible to receive establishment payments, as a form of cost-share, to convert agricultural lands or nonindustrial private forest lands to the production of eligible crops. In addition, producers could also be eligible for annual payments for the production of eligible crops used for conversion to renewable energy, advanced biofuels or biobased products. The details for what is required to qualify for the annual payments would be specified in the individual contract between CCC and a producer, as discussed further below, and would include provisions for the implementation of a conservation plan, forest stewardship plan, or equivalent plan, where required. The producer will demonstrate compliance with the conservation or forest stewardship plan through required self certification and FSA will ensure that normal spot check rules and methods are followed to ensure compliance with the plans. Producers that already have established BCAP eligible crops when this program starts may enter into a contract for annual payments to continue growing those crops; however, establishment payments would not be authorized.

CCC also proposes that project sponsors, regardless of whether they are a biomass conversion facility or a group of producers, could also be considered as a producer and be eligible to receive establishment and annual payments. However, the sponsor would have to own or operate eligible land to be eligible to enroll as a producer under a BCAP contract and be eligible to receive establishment and annual payments. State-owned biomass conversion facilities would not be eligible to be considered a producer for a BCAP contract because the 2008 Farm Bill specifies that State-owned land is ineligible for establishment and annual payments.

The agreement between the project sponsor and CCC is not a contract. A successful project sponsor is not paid by CCC for being a sponsor; the producers in the project area, who may also be the sponsor, are eligible for payment for the establishment and production of eligible crops. Therefore, biomass conversion facilities that act as project sponsors would not be subject to general Federal contracting requirements as a condition of a project area approval.

### Project Area Contract Acreage and Terms

CCC proposes that a producer within the project area would enter into a contract with CCC to commit acres, which would then be called contract acreage, to establish or produce eligible crops.

In accordance with the 2008 Farm Bill, CCC proposes that contract terms include:

(1) Compliance with highly erodible and wetland conservation requirements contained in the 2008 Farm Bill and in 7 CFR part 12;

(2) The implementation of conservation plan as defined in 7 CFR 1410.2, a forest stewardship plan as defined in 16 U.S.C. 2103(a), or an equivalent plan as determined by the Deputy Administrator;

(3) A commitment to provide information to promote the production of eligible crops and the development of biomass conversion technology; and

(4) Other information deemed appropriate by CCC, such as the preservation of cropland bases and yield history.

CCC invites comments on additional conservation or stewardship measures that could be included in a contract to provide incentives or otherwise encourage conservation, stewardship wildlife habitat or sustainability practices above the statutory requirements.

Contract durations may be up to 5 years for annual and non-woody perennial crops, and up to 15 years for woody perennial crops. CCC proposes flexibility to adjust the terms of the contract length on a per project basis in order to ensure the most efficient use of government funding. The establishment time period may vary due to: type of crop, agronomic conditions (establishment time frame, winter hardness, *etc*), and other factors. CCC would establish the time frame based on the recommendations received from the State Technical Committee.

CCC proposes that the contracts would take into account an establishment period appropriate for an existing crop's harvest or for the planting of a planned crop. BCAP contracts and conservation plans would be designed in an effort to promote the production of a long-term source of biomass feedstock that can be harvested and collected in a reasonable period of time. The expectation, which will be reflected in the contract, is that eligible crops funded under BCAP will produce at least one harvest for biomass within the period of the contract.

Contracts would be subject to modification and payment reductions if

any of the contract terms are violated. Participants that choose to voluntarily withdraw from BCAP before the duration of their contract has ended would be subject to early contract termination penalties and payment refunds.

In exchange for signing BCAP contracts, CCC will share not more than 75 percent of the cost with participants of establishing non-woody and woody perennial crops, pay an annual payment for enrolled land, and provide for the preservation of cropland base and yield history applicable to the land enrolled in the BCAP contract.

#### Eligible and Ineligible Land

The contract acreage would consist of only the eligible lands that are covered under the producer's contract with the CCC. The 2008 Farm Bill defines eligible land for project areas as agricultural land and nonindustrial private forest land, subject to certain exclusions.

CCC proposes, in accordance with exclusions in the 2008 Farm Bill, that land considered ineligible to be enrolled under a BCAP contract includes:

- (1) Federal lands;
- (2) State-owned, municipal, or other locally-owned lands;
- (3) Native sod; and
- (4) Land that is already enrolled in CCC's Conservation Reserve Program, Wetlands Reserve Program, or Grassland Reserve Program.

CCC proposes that eligible agricultural land includes:

- (1) Cropland;
- (2) Grassland;
- (3) Pastureland;
- (4) Rangeland;
- (5) Hayland; and
- (6) Other lands on which food, fiber, or other agricultural products are produced or capable of being produced for which a valid conservation plan exists or is implemented.

CCC proposes that agricultural lands with already established energy crops or already contracted for energy crops or planned energy crops would be eligible lands for contract acreage. In other words, as noted earlier, producers who started growing renewable biomass before BCAP was implemented may enter into a contract with CCC for annual payments. We do not intend to exclude "early adopters" of biomass crops.

Nonindustrial private forest land is defined in this rule, in accordance with the 2008 Farm Bill, as rural land with existing tree cover, or suitable for growing trees, owned by any private individual, group, association, corporation, Indian Tribe, or other

private legal entity. CCC proposes that this definition allows for the inclusion of properties such as a privately held tree farm or a private forest landowners' cooperative. This is consistent with the definitions of "landowner" and "nonindustrial private forest land" in 36 CFR 230.2 (the relevant Forest Service regulation), which includes private legal entities as landowners of such forest land but excludes corporations whose stocks are publicly traded or legal entities principally engaged in the production of wood products. CCC proposes that existing nonindustrial private forest land with existing tree cover can enter into contract acreage with an approved biomass conversion facility and be eligible for annual payments, subject to a forest stewardship plan. Establishment payments will only be made for woody perennial crops with a projected initial harvest time occurring within the length of the contract period.

As discussed earlier, contract acreage will be subject to minimum contract terms which include, but are not limited to, the implementation of a required conservation plan or forest stewardship plan (or the equivalent); and compliance with highly erodible and wetland conservation requirements of 7 CFR part 12. While land enrolled in other USDA programs could be eligible lands for contract acreage, the contracting producer could not receive multiple program benefits for purposes that are the same or substantially similar to the purposes of BCAP. A contracting producer must choose whether to receive BCAP payments or other USDA or Federal program benefits where those benefits are designed to achieve the same purposes as BCAP.

Land use restrictions would not apply to contract acreage provided that CCC determines that the land uses would be consistent with the conservation plans or forest stewardship plans (or the equivalent) and any other BCAP conservation requirements. CCC requests comments on other applicable contract terms concerning conservation requirements along with a justification for the contract term. For example, contracts may also contain biomass delivery or sale expectations or requirements to ensure the crops are not sold off into hay markets, or other non-BCAP uses.

#### Making Establishment Payments

Consistent with the 2008 Farm Bill, establishment payments of not more than 75 percent of the cost for establishing a perennial crop, which could include woody biomass, would include:

- (1) The costs of seed and stock for perennials;
- (2) The cost of planting the perennial crop;
- (3) For non-industrial forest land, the costs of site preparation and tree planting;
- (4) Other proposed establishment activities that could include, but would not be limited to, site preparation for non-tree planting and supplemental or temporary irrigation.

In addition, partial payments could be authorized when identifiable components of the contract are completed; and supplemental establishment payments may be authorized if necessary.

Consistent with the 2008 Farm Bill, CCC proposes that establishment payments would not be authorized for annual crops. In addition, prior to receiving establishment payments, producers must have planted their crops and must provide their FSA county office with copies of receipts and invoices related to the cost of establishing their crops.

#### Making Annual Payments

CCC proposes to calculate annual payments on a per acre basis and would use market-based rental rates, as determined by CCC. The payments are intended to support production of eligible crops. Annual payment rates will be established at levels required to ensure sufficient participation in a project area.

As specified in the regulations in 7 CFR 1410.42 and as determined by CCC, annual payments will include a payment based on:

- (1) A weighted average soil rental rate for cropland;
- (2) The applicable marginal pastureland rental rate for all other land except for non-industrial private forest land; and
- (3) For forest land, the average county rental rate for cropland as adjusted for forestland productivity for non-industrial private forest land.

This rate information is being posted at FSA county offices (as FSA posts information for CRP). There are site-specific factors including type of soil and land use. There is too much information to post it all on the Web. FSA can provide general information about rates.

CCC will post in FSA county offices the county specific base-line rental rates for cropland, marginal pastureland and forestland. In addition, the applicable additional incentive rates (premiums) will be posted for specific project area or specific crop mixes within the project area.

In determining the applicability of incentive payments (premiums) to the annual base-line soil rental rates the Deputy Administrator will consider the costs of establishing the crop, and the potential to establish perennial biomass crops that show exceptional promise to produce highly energy efficient bioenergy or biofuels, that preserve natural resources and are not primarily grown for food or animal feed or that also address specific resource conservation needs.

Annual payments would be reduced if:

- (1) An eligible crop is used for purposes other than the production of energy, then a dollar-for-dollar reduction would apply, not to exceed the total payment amount;
- (2) An eligible crop is delivered to the biomass conversion facility that is not within the project area;
- (3) The producer receives a matching payment;
- (4) The producer violates a term of the contract; or
- (5) Other circumstances as determined by CCC.

We must reduce payments to avoid duplicate benefits, but as described below, the annual payment reduction for delivery to a biomass facility or for matching payments will likely be less than a full, dollar-for-dollar reduction, because the purpose of BCAP is to encourage biomass energy production.

The 2008 Farm Bill authorizes agricultural land and non-industrial

private forest land for annual payments. Agricultural land consists of cropland, pastureland, rangeland, and grassland. CCC proposes to calculate market-based rental rates for cropland, consistent with the CRP regulations in 7 CFR part 1410; and for all other agricultural land at the rate that would be paid for pastureland, consistent with CRP.

CCC proposes to calculate the market-based payment rate for non-industrial forest land using the average county rental rate for cropland developed for CRP and adjusting that rate by comparing the average productivity of cropland compared to the average productivity of forestland.

If the crop is delivered to a biomass conversion facility, payment reductions would be applied in an amount equal to at least 25 percent of the authorized annual payment, but not a full dollar-for-dollar reduction, for each contract acre. If the harvested production is sold for any other reason, a dollar-for-dollar reduction would apply, not to exceed the total annual payment.

CCC proposes that half of the first year's annual payment would be made within 30 days of the date of contract approval and the balance paid on the annual contract enrollment anniversary. Subsequent annual payments would be made every year within 30 days after the contract anniversary date. Under the proposed rule, payments may cease and producers may be subject to contract termination for failure to plant eligible crops.

To be considered a biomass conversion facility, one of the criteria that may be met is whether the facility converts or proposes to convert a biobased product. The 2008 Farm Bill defined biobased products as a product determined by the Secretary to be a commercial or industrial product (other than food or feed) that is—“(A) composed, in whole or in significant part, of biological products, including renewable domestic agricultural materials and forestry materials; or (B) an intermediate ingredient or feedstock.” The NOFA excluded commercially-produced timber, lumber, wood pulp, or other finished wood products that otherwise could be used for higher-value products. CCC proposes to continue the exclusion of commercially-produced timber, lumber, wood or other finished products that otherwise would be used for higher value products. Additionally, CCC proposes to clarify that industrial or other process wastes or by-products, such as black liquor or pulp liquor that is a waste by-product of the pulp and kraft paper manufacturing process, are not included within the definition of biobased products because they are not significantly composed of organic or biological products collected or harvested from land.

**Key Provisions Comparison**

This table compares key provisions of matching payments versus establishment and annual payments:

	Matching payments	Establishment and annual payments
Geographic Eligibility ..... Project Sponsor .....	Not limited geographically ..... Not applicable .....	Limited to designated project area. A project sponsor proposes project areas and may be a: <ul style="list-style-type: none"> <li>• Biomass conversion facility, including facilities owned by Federal entities, State entities, local government entities, or privately or publicly held entities; or</li> <li>• Group of producers.</li> </ul>
Eligible Material Owner or Eligible Producer.	An eligible material owner may be: ..... <ul style="list-style-type: none"> <li>• A producer within a project area;</li> <li>• A biomass conversion facility;</li> <li>• A person or entity with the legal title to an intermediate ingredient or feedstock; or</li> <li>• A person or a non-Federal entity that has legal title to an eligible material, including Indian Tribes and Tribal members</li> </ul> An Eligible Material Owner cannot be a Federal government entity.	An eligible producer may be a: <ul style="list-style-type: none"> <li>• Biomass conversion facility that owns or operates eligible land or</li> <li>• Person or entity with the legal title to privately held lands or land held in trust by the Federal government.</li> </ul> An eligible producer cannot be a: <ul style="list-style-type: none"> <li>• Federal government entity, or</li> <li>• State or local government entity.</li> </ul>

	Matching payments	Establishment and annual payments
<p>Land Limitations or Eligible Land.</p>	<p>Eligible material must be harvested or collected from certain:</p> <ul style="list-style-type: none"> <li>• U.S. National Forest System and BLM lands,</li> <li>• Non-Federal lands, including State- and locally-held government lands, or</li> <li>• Tribal land held in trust by the Federal government</li> </ul>	<p>Eligible land is certain:</p> <ul style="list-style-type: none"> <li>• Agricultural land, such as cropland, pastureland, rangeland, grassland, or other lands on which food, fiber, or other agricultural products are produced or capable of being produced; or</li> <li>• Nonindustrial private forest lands that are:                             <ul style="list-style-type: none"> <li>○ Rural lands with existing tree cover, or are suitable for growing trees; and</li> <li>○ Owned by any private individual, group, or association.</li> </ul> </li> </ul> <p>Eligible land cannot be:</p> <ul style="list-style-type: none"> <li>• Federal- or State-owned land;</li> <li>• Land that is native sod; or</li> <li>• Land enrolled in the:                             <ul style="list-style-type: none"> <li>○ CRP;</li> <li>○ Wetlands Reserve Program; or</li> <li>○ Grassland Reserve Program.</li> </ul> </li> </ul>
<p>Eligible Crop or Material .....</p>	<p>Eligible material is certain:</p> <ul style="list-style-type: none"> <li>• Materials, pre-commercial thinnings, or invasive species from National Forest System land and U.S. Bureau System land that:                             <ul style="list-style-type: none"> <li>○ Are byproducts of preventive treatments that are removed to reduce hazardous fuels, to reduce or contain disease or insect infestation, or to restore ecosystem health;</li> <li>○ Would not otherwise be used for higher-value products; and</li> <li>○ Are harvested in accordance with applicable law and land management plans and the requirements for old-growth maintenance, restoration, and management direction of section 102 (e)(2), (3), and (4) of the Healthy Forests Restoration Act of 2003 (16 U.S.C. 6512) and large-tree retention of subsection (f)</li> </ul> </li> <li>• Any organic matter that is available on a renewable or recurring basis from non-Federal land or land belonging to an Indian or Indian Tribe that is held in trust by the United States or subject to a restriction against alienation imposed by the United States, including:                             <ul style="list-style-type: none"> <li>○ Renewable plant materials such as feed grains, other agricultural commodities, and other plants and trees; and</li> <li>○ Waste materials including vegetative waste comprised of crop residues such as corn stover or wood wastes and wood residues that would not otherwise be used for higher-value products</li> </ul> </li> </ul> <p>Eligible material does not include:</p> <ul style="list-style-type: none"> <li>• Whole grain derived from any crop that is eligible to receive payments under Title I of the 2008 Farm Bill</li> <li>• Animal waste and byproducts (including fats, oils, greases, and manure);</li> <li>• Food waste and yard waste;</li> <li>• Algae.</li> </ul>	<p>Eligible crop is:</p> <ul style="list-style-type: none"> <li>• Renewable plant materials such as feed grains, other agricultural commodities, other plants and trees, and algae;</li> <li>• Waste materials including vegetative waste comprised of crop residues such as corn stover, woods wastes, and wood residues;</li> <li>• Animal waste and byproducts,</li> <li>• Food Waste; and</li> <li>• Yard waste.</li> </ul> <p>Ineligible crops include:</p> <ul style="list-style-type: none"> <li>• Any crops that is eligible to receive payments under Title I of the 2008 Farm Bill.</li> <li>• Any plant that is invasive or noxious or has the potential to become invasive or noxious.</li> </ul>
<p>Authorized Payments .....</p>	<p>A matching Payment at a rate of \$1 for each \$1 per dry ton equivalent paid by the qualified biomass conversion facility:</p> <ul style="list-style-type: none"> <li>• In an amount up to \$45 per dry ton but only for on-site heat or power production from wood wastes and residues above an historical baseline;</li> <li>• In an amount up to \$45 per dry ton for materials used to produce advanced biofuels and in an amount up to \$16 per dry ton for material used for renewable energy or biobased products; or</li> <li>• In an amount to be reduced in relation to increases in biofuel, renewable energy or biobased product production above a historical baseline</li> </ul>	<p>Establishment payments at a rate of not more than 75 percent of establishment costs based on:</p> <ul style="list-style-type: none"> <li>• The costs of seed and stock for perennials;</li> <li>• The cost of planting the perennial crop; and</li> <li>• For non-industrial forest land, the costs of site preparation and tree planting(s).</li> </ul> <p>Annual payments equal to the market rate plus any incentive as provided for in a specific project area.</p>

	Matching payments	Establishment and annual payments
Payment Reductions .....	There are no comparable payment reductions ..... If eligible and ineligible materials are comingled in the load, payment will only be made for eligible materials	Annual payments will be reduced if: <ul style="list-style-type: none"> <li>• An eligible crop is used for a purpose other than the production of energy at the biomass conversion facility;</li> <li>• An eligible crop is delivered to the biomass conversion facility outside of the project area;</li> <li>• The producer receives a payment for collection, harvest, storage, or transportation; or</li> <li>• The producer violates a term of the contract.</li> <li>• Under the proposed rule, payments may cease and producers may be subject to contract terminations for failure to establish eligible crops.</li> </ul>
Payment Timing .....	Matching payments are paid within 30 days after submission of sales invoice(s) from the qualified biomass conversion facility and completion of application for payment.	Establishment payments are paid when the perennial or tree crop practice or identifiable portion of the practice has been completed according to the BCAP conservation or forestry plan. Annual payments are paid: <ul style="list-style-type: none"> <li>• As an advance payment in an amount equal to 50 percent within 30 days of contract approval with the remaining 50 percent within 30 days of the first-year contract anniversary date, and</li> <li>• Within 30 days of the contract anniversary beginning with the second-year contract anniversary.</li> </ul>
Duration .....	Payment duration is two years from the date on which the first matching payment is issued to an eligible person or entity.	Contract duration is up to: <ul style="list-style-type: none"> <li>• Five years for annual and non-woody perennial crops, and</li> <li>• 15 years for woody perennial crops.</li> </ul>
Project Area Proposals or Matching Payment Applications.	An eligible material owner must apply for a matching payment at the FSA county office after delivery of eligible material to a qualified biomass conversion facility.	Project area proposals may be submitted under a continuous signup. After a project area has been approved, eligible persons and legal entities within that project area may enroll in a BCAP contract on a continuous basis at the FSA county office.

**Discussion of Transition From BCAP NOFA to BCAP Final Rule**

Under the NOFA, FSA is making CHST matching payments for eligible material delivered to qualified biomass conversion facilities.

When the final rule is published, conforming changes will be made to the matching payment component based on the proposed rule, public comments received, and input from the Programmatic Environmental Impact Statement and other sources. FSA will also implement the establishment and annual payments component by receiving project area proposals and entering into BCAP contracts with producers for the production of appropriate renewable biomass.

**Final Determination**

The Notice of Funds Notice of Funds Availability (NOFA) for the Collection, Harvest, Storage, and Transportation of Eligible Material published on June 11, 2009 (74 FR 27767–27772), is hereby terminated and rescinded, effective February 8, 2010. No additional payments will be made pursuant to the NOFA except as specifically approved

by the Executive Vice President, Commodity Credit Corporation.

**Notice and Comment**

The Administrative Procedures Act (5 U.S.C. 553) provides generally that before rules are issued by Government agencies, a proposed rule must be published in the **Federal Register**, and interested persons must be given an opportunity to participate in the rulemaking through submission of data, views, or arguments. The law exempts from this requirement rules, such as this one, relating to public property, loans, grants, benefits, and contracts. However, the Secretary of Agriculture published in the **Federal Register** on July 24, 1971 (36 FR 13804), a Statement of Policy that USDA would publish a notice of proposed rulemaking for such rules. USDA is committed to providing the public reasonable opportunity to participate in rulemaking. Therefore, this rule has a 60-day comment period.

**Executive Order 12866**

This rule has been determined to be economically significant and was reviewed by the Office of Management and Budget (OMB) under Executive Order 12866. The Cost Benefit Analysis

is summarized below and is available from the contact information listed above.

**Cost Benefit Analysis Summary**

BCAP is intended to assist agricultural and forest land owners and operators with the collection, harvest, storage, and transportation (CHST) of eligible material for use in a biomass conversion facility and to support the establishment and production of eligible crops including woody biomass for conversion to bioenergy in selected project areas.

Establishment and Annual Payments are provided for eligible crops on eligible land within project areas that satisfy selection criteria. The strongest project proposals will be those associated with biomass conversion facilities already in operation or that are economically viable before the creation of BCAP. While early projects are not dependent solely on BCAP support, certainly BCAP may hasten early projects.

Matching payments will tend to go to eligible material owners experienced in the collection, harvest, storage and delivery of biomass feedstock. While matching payments are provided for

eligible materials delivered to qualifying biomass conversion facilities, opportunities to stimulate additional demand in this Farm Bill cycle, either in terms of increasing the construction of qualifying biomass conversion facilities or increasing the planting of biomass feedstock that qualifying biomass conversion facilities demand.

Qualifying biomass conversion facilities are expected to be those in operation by 2012 because it would be difficult for a biomass conversion facility to get on line by 2012 that is not already in the pipeline. Given the substantial capital costs associated with energy generation and fuel production, qualifying biomass conversion facilities in operation by

2012 are assumed to operate at capacity with or without BCAP.

Annual costs for the two parts of the program are presented in the following table. Establishment and annual payments total \$536 million, including technical assistance (TA),<sup>1</sup> and matching payments amount to \$2.1 billion.

TABLE 1—BCAP COSTS BY YEAR  
[2009 \$ millions]

Year	Establishment cost share	Annual payments	Technical assistance	Matching payments	Annual total
2010 .....	78	4	3	392	435
2011 .....	107	11	4	783	822
2012 .....	121	17	5	783	844
2013 .....	.....	17	.....	392	367
2014 .....	.....	17	.....	.....	.....
2015 .....	.....	16	.....	.....	.....
2016 .....	.....	16	.....	.....	.....
2017 .....	.....	15	.....	.....	.....
2018 .....	.....	14	.....	.....	.....
2019 .....	.....	13	.....	.....	.....
2020 .....	.....	13	.....	.....	.....
2021 .....	.....	12	.....	.....	.....
2022 .....	.....	13	.....	.....	.....
2023 .....	.....	13	.....	.....	.....
2024 .....	.....	13	.....	.....	.....
2025 .....	.....	9	.....	.....	.....
2026 .....	.....	5	.....	.....	.....
Subtotals .....	306	219	11	.....	.....
.....	.....	.....	536	2,100	.....
Total .....	.....	.....	.....	2,636	.....

**Note:** Due to rounding, the subtotals may not exactly match calculated estimates shown later in the CBA.

As explained in the analysis, the majority of BCAP matching payments are expected to go those eligible material owners who are delivering material predominantly to existing biomass conversion facilities that use woody biomass.

**Regulatory Flexibility Act**

In accordance with the Regulatory Flexibility Act, 5 U.S.C. 601, CCC has determined that there will not be a significant economic impact on a substantial number of small entities. Entities affected by this rule are producers of eligible crops, eligible biomass material owners, and biomass conversion facilities. The small business size standards for them are no more than:

- \$750,000 per year gross revenue for crop production (producers of eligible crops);

- \$7 million per year gross revenue for post harvest crop activities (eligible material owners); and
- 4 million megawatt hours per year for other electric power generation (biomass conversion facilities).

Given these size standards, it is reasonable to assume that many of businesses involved in BCAP will be small businesses.

We expect that approximately 7,500 producers of eligible crops and 50 biomass conversion facilities may receive establishment and annual payments and approximately 9,936 eligible material owners (that are not affiliated with a biomass conversion facility) and 701 biomass conversion facilities may be affected (which includes the 50, above) may receive matching payments.

However, in light of the ability of biomass conversion facilities to determine prices and receive program payments, producers of eligible crops and eligible biomass material owners are not expected to be significantly

impacted. And given the scale of BCF output, as well as the limited duration of the BCAP, biomass conversion facilities are also not expected to be significantly impacted by the program.

**Environmental Review**

Under the National Environmental Policy Act (NEPA), the Environmental Impact Statement (EIS) process provides a means for the public to provide input on program implementation, alternatives, and environmental concerns. CCC provided an amended notice of intent to prepare a programmatic EIS on BCAP in the **Federal Register** on May 13, 2009 (74 FR 22510–22511) and solicited public comment on the proposed alternatives to be examined in the programmatic EIS for BCAP. Six public scoping meetings were held in May and June 2009 to solicit comments for the development of alternatives and identify possible environmental concerns.

On August 10, 2009, a Notice of Availability was published in the

<sup>1</sup> All NPV calculations assume a 3% discount rate.

**Federal Register** (74 FR 39915) announcing the availability of a Draft Programmatic EIS (PEIS) for the administration and implementation of the BCAP. Comments on the Draft Programmatic EIS may be submitted until September 24, 2009.

The Draft PEIS has taken into consideration comments gathered during the scoping meetings to develop the alternatives proposed for the administration and implementation of BCAP. The Draft PEIS assesses the potential environmental impacts associated with the following three alternatives:

(1) *No Action Alternative*—Addresses the potential effects from not implementing BCAP. (This is considered the environmental baseline by which to compare the other alternatives against and is required by law.)

(2) *Action Alternative 1*—Addresses a targeted implementation of BCAP to specific areas or regions of the United States.

(3) *Action Alternative 2*—Addresses a broad national implementation of BCAP.

#### **Executive Order 12372**

This program is not subject to Executive Order 12372, which requires consultation with State and local officials. See the notice related to 7 CFR part 3015, subpart V, published in the **Federal Register** on June 24, 1983 (48 FR 29115).

#### **Executive Order 12988**

This proposed rule has been reviewed under Executive Order 12988, Civil Justice Reform. This final rule is not retroactive and it does not preempt State or local laws, regulations, or policies unless they present an irreconcilable conflict with this rule. Before any judicial action may be brought regarding the provisions of this rule the administrative appeal provisions of 7 CFR parts 11 and 780 must be exhausted.

#### **Executive Order 13132**

The policies contained in this rule do not have any substantial direct effect on States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Nor does this rule impose substantial direct compliance costs on State and local governments. Therefore, consultation with the States is not required.

#### **Executive Order 13175**

The policies contained in this rule do not impose substantial unreimbursed direct compliance costs on Indian Tribal governments or have Tribal implications that preempt Tribal law.

#### **Unfunded Mandates**

Title II of the Unfunded Mandate Reform Act of 1995 (UMRA) (Pub. L. 104–4) establishes requirements for Federal agencies to assess the effects of their regulatory actions that impose “Federal Mandates” that may result in expenditures to State, local, or Tribal governments, in the aggregate, or the private sector, of \$100 million or more in any one year. This rule contains no Federal mandates as defined by Title II of UMRA for State, local, or Tribal governments or for the private sector. Therefore, this rule is not subject to the requirements of sections 202 and 205 of UMRA.

#### **Federal Assistance Programs**

The title and number of the Federal assistance program in the Catalog of Federal Domestic Assistance to which this proposed rule would apply is 10.087—Biomass Crop Assistance Program.

#### **Paperwork Reduction Act**

In accordance with the Paperwork Reduction Act of 1995, FSA is requesting comments from all interested individuals and organizations on a revision of new information collection activities associated with BCAP. FSA also included additional burden for the Emergency Conservation Program (ECP) in this proposed rule as described further below.

The approved burden hours will be eventually incorporated into the existing approval under OMB control number 0560–0082, which includes much of the same information for other conservation programs.

BCAP continues to provide financial assistance for collection, harvest, storage, and transportation of eligible material nationwide. BCAP also provides financial assistance establishment payments for perennial crops and annual production payments for perennial and annual crops in approved BCAP project areas. Support for both eligible material and eligible crops are intended to establish a long term feedstock for use in a biomass conversion facility in accordance with the 2008 Farm Bill.

Copies of all forms, regulations, and instructions referenced in this rule may be obtained from FSA. Data furnished by the applicants will be used to determine eligibility for program

benefits. Furnishing the data is voluntary; however, the failure to provide data could result in program benefits being withheld or denied.

Additionally, the information collection request for the matching payment funds available for the collection, harvest, storage, and transportation of eligible material was approved under the OMB control number 0560–0263 under the emergency procedure in accordance with the Paperwork Reduction Act of 1995. That information collection was incorporated into the existing OMB control number 0560–0082. The 60-day comment period was also published in the **NOFA Federal Register** on June 11, 2009 (74 FR 27767–27772) to solicit public comments. The comment period ended on August 10, 2009. One comment was received on requesting to extend comment period on the information collection to implement BCAP. This proposed rule provides a 60-day comment period.

*Title:* BCAP.

*OMB Control Number:* 0560–NEW.

*Type of Request:* New.

*Abstract:* This information collection is needed to comply with section 9011 (b)(2) of Title IX of the Farm Security and Rural Investment Act of 2002 (U.S.C. 8101–8113), which was added by the 2008 Farm Bill.

For the administration of matching payments to be continued and expanded to more respondents in this information collection, FSA employees will enter the application information from completed paper forms into a Web based system that collects information categories similar to the electronic AD–245 application for cost-share form, which is currently approved under OMB control number 0560–0082 for other conservation programs. The Web based matching payment form, BCAP–5 form, will collect information about the owners of eligible material and estimated and actual biomass material sold and delivered to a qualified biomass conversion facility in order to approve applications for BCAP matching payments and to calculate matching payments after sale and delivery. BCAP will also have eligible material owners complete the CCC–901 form concerning members’ information or ownership. This form will enable the adherence to the arm’s length transaction requirement and the two year limit for eligibility to receive matching payments. BCAP will also use the existing AD–1047 certification regarding debarment, suspension, and other responsibility matters (primary covered transactions form). The AD–1047 form will help ensure that only

those owners and managers of qualified biomass conversion facilities and those owners of eligible material who have not been disbarred, suspended, or otherwise made ineligible for Federal transactions are qualified or determined eligible for BCAP. The AD-1047 form will require the owners to certify that they are in compliance and not subject to disbarment or suspension. The information collection activities for matching payments will include the following:

(1) Applicants will request to become a qualified biomass conversion facility or

(2) Applicants will register as an eligible material owner and then, after delivery of eligible material, request matching payments for the collection, harvest, storage, and transportation of eligible material for use in a biomass conversion facility.

Specific descriptions of the information requirements were discussed in the NOFA under the application sections. Matching payments applicants submit estimates to register as eligible material owners and actual delivery information to request matching payments and biomass conversion facilities enter into an agreement giving a conversion facility overview. If the Deputy Administrator determines that additional information is necessary from an eligible material owner or a biomass conversion facility, it will be related information required to determine eligibility, ensure the ability to make proper payments, or to otherwise legally provide benefits to an eligible material owner, such as the FSA-211 form which provides power of attorney assignment.

For the administration of project areas, FSA employees will enter proposal information from project sponsors into an electronic format. The BCAP-4 form will be used to provide a summary of the project area proposal. The BCAP-4 form will provide project sponsors the ability to provide information overview for a variety of application factors which include: Documentation of sufficient equity for start-up biomass conversion facilities committed to the project area, land description in GIS shape file coordinates, transportation modes, distance of the biomass conversion facility in relation to eligible lands, job development and retention factors, and biomass conversion facility's production potentials or history. The information collection will be used to review project area criteria outlined by the 2008 Farm Bill. Categories expected on the proposals, consistent with the 2008 Farm Bill will include, but not be

limited to, volume of eligible crops, volume of renewable biomass, job creation projections, number of producers, number of biomass conversion facilities, projected participation rates for beginning and socially disadvantaged farmers or ranchers, projected environmental impacts, agronomic conditions, and range of crops. A BCAP worksheet will be required for environmental screening, similar to the existing FSA-850 form. This information will help facilitate the selection of BCAP project areas and allow producers in those BCAP project areas the opportunity to apply for establishment and annual production payments.

For the administration of BCAP project area establishment and annual production payments, FSA employees will first enter producer information into a Web based BCAP-2 producer worksheet and then, if eligible, may enter into a contract for annual production payments using the BCAP-3 form with appendix and continuation sheet for annual production payments. The BCAP producer forms and worksheets will be used for sign up, determining the offer soil rental rate, and contracting. The BCAP producer forms will capture the terms and conditions of the contract into electronic form, as well as be used to determine eligibility of the producer and the producer's contract acreage. The BCAP producer contract will also use the existing AD-1026 and BCAP-817U form. The AD-1026 form ensures that before producers clear, plow, or otherwise prepare areas not presently under crop production for planting, they certify that production will not violate either Highly Erodible Land Compliance (HELIC) or wetland conservation provisions. Most producers will already have existing AD-1026 forms. In addition we will also require producers to complete and submit the BCAP-817U form annually for the certification of compliance with BCAP. Annual payments to producers will be administered using a BCAP-3 contract, which is Web based and provides a payment calculation method that is similar to the existing AD-245 form. Other forms will be used as needed to facilitate payments for special circumstances, such as assignment of payment (CCC-36 form), joint payment authority (CCC-37 form), applicant's agreement to complete an uncompleted practice (FSA-18 form), application for payment of amounts due to persons who have died or disappeared (FSA-325 form), power of attorney (FSA-211); member's information (CCC-901); report

of acreage (FSA-578); and voluntary permanent direct and counter-cyclical program base reduction (CCC-505 form).

For establishment payments, FSA employees in addition to the BCAP producer form and worksheet and AD-1026 form, will use the new Web based conservation cost share forms (FSA-848, FSA-848A, FSA-848B, FSA-848-1, FSA-848A-1, and FSA-848B-1 forms). The FSA-848 form is a cost-share application used to document the producer's request for conservation cost share and the needs determination, which is completed to determine the actual amount of cost share that is needed, and to estimate and calculate the establishment costs for agricultural and nonindustrial private forest landowners that enter into BCAP and propose to convert land to renewable crops or establish renewable crops. The FSA-848A form is used to record the approval of a conservation cost share agreement (which when approved is a contract), the amount of cost share approved, and the producer's acknowledgement of the approval. FSA-848B form is used to record performance of conservation practices agreed to in the conservation cost share contract and cost share payments associated with that performance. The FSA-848, FSA-848A, and FSA-848B forms each include a continuation form (FSA-848-1, FSA-848A-1, and FSA-848B-1, respectively). Producers will be required to provide an annual report of acreage using the existing Web based FSA-578 form.

FSA is also adding burden for the use of some of the same forms for ECP into this proposed rule for public comment. ECP is one of the other conservation programs covered under OMB control number 0560-0082. ECP provides cost-share assistance to farmers and ranchers to rehabilitate farmland damaged by wind erosion, floods, hurricanes, or other natural disasters, and for carrying out emergency water conservation measures during periods of severe drought. ECP will use the FSA-848, FSA-848A, FSA-848B, FSA-848-1, FSA-848A-1 and FSA-848B-1 forms. These forms will be used to more efficiently collect information when Web-based conservation cost share software is fully implemented. The ECP burden in this proposed rule will also be rolled into the existing approval under the OMB control number 0560-0082.

*Estimate of Burden:* Public reporting burden for the collection of information is estimated to average 1 hour. The average travel time, which is included

below in the total burden, is estimated to be 1 hour per respondent.

*Respondents:* Individuals, Indian Tribes, units of State or local government, partnerships, corporations, farm cooperatives, farmer cooperative organizations, associations of agricultural producers, national laboratories, institutions of higher education, rural electric cooperatives, public power entities, consortia of any of these entities, biomass conversion facilities that own or operate eligible land, and any other legal entities.

*Estimated Number of Respondents:* 336,900.

*Estimated Number of Responses per Respondent:* 1.

*Estimated Total Annual Responses:* 681,900.

*Estimated Total Annual Burden on Respondents:* 265,233.

We are requesting comments on all aspects of the information collection to help us to:

(1) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

#### E-Government Act Compliance

CCC is committed to complying with the E-Government Act, to promote the use of the Internet and other information technologies to provide increased opportunities for citizen access to Government information and services, and for other purposes.

#### List of Subjects in 7 CFR Part 1450

Administrative practice and procedure, Agriculture, Energy, Environmental protection, Grant programs—agriculture, Natural resources, Reporting and recordkeeping requirements, Technical assistance.

For the reasons discussed in the preamble, the Commodity Credit Corporation (USDA) proposes to add 7 CFR part 1450 to read as follows:

### PART 1450—BIOMASS CROP ASSISTANCE PROGRAM (BCAP)

#### Subpart A—Common Provisions

Sec.

- 1450.1 Administration.
- 1450.2 Definitions.
- 1450.3 General description.
- 1450.4 Violations.
- 1450.5 Performance based on advice or action of USDA.
- 1450.6 Access to land.
- 1450.7 Division of payments and provisions about tenants and sharecroppers.
- 1450.8 Payments not subject to claims.
- 1450.9 Assignments.
- 1450.10 Appeals.
- 1450.11 Scheme or device.
- 1450.12 Filing of false claims.
- 1450.13 Miscellaneous.

#### Subpart B—Matching Payments

- 1450.101 Qualified biomass conversion facility.
- 1450.102 Eligible material owner.
- 1450.103 Eligible material.
- 1450.104 Signup.
- 1450.105 Obligations of participant.
- 1450.106 Payments.
- 1450.107–1450.199 [Reserved]

#### Subpart C—Establishment and Annual Payments

- 1450.200 General description.
- 1450.201 Project area submission requirements.
- 1450.202 Project area selection criteria.
- 1450.203 Eligible persons and legal entities.
- 1450.204 Eligible land.
- 1450.205 Duration of contracts.
- 1450.206 Obligations of participant.
- 1450.207 Conservation plans and forest stewardship plans.
- 1450.208 Eligible practices.
- 1450.209 Signup.
- 1450.210 Acceptability of offers.
- 1450.211 BCAP contract.
- 1450.212 Establishment payments.
- 1450.213 Levels and rates for cost-share payments.
- 1450.214 Annual payments.
- 1450.215 Transfer of land.

**Authority:** 7 U.S.C. 8111; 15 U.S.C. 714b and 714c.

#### Subpart A—Common Provisions

##### § 1450.1 Administration.

(a) The regulations in this part are administered under the general supervision and direction of the Executive Vice President, Commodity Credit Corporation (CCC), or a designee, or the Deputy Administrator, Farm Programs, Farm Service Agency (FSA), (Deputy Administrator). In the field, the regulations in this part will be implemented by the FSA State and county committees ("State committees" and "county committees," respectively).

(b) State executive directors, county executive directors, and State and county committees do not have the authority to modify or waive any of the

provisions in this part unless specifically authorized by the Deputy Administrator.

(c) The State committee may take any action authorized or required by this part to be taken by the county committee, but which has not been taken by such committee, such as:

(1) Correct or require a county committee to correct any action taken by such county committee that is not in accordance with this part; or

(2) Require a county committee to withhold taking any action that is not in accordance with this part.

(d) No delegation of authority herein to a State or county committee will preclude the Executive Vice President, CCC, or a designee, or the Deputy Administrator from determining any question arising under this part or from reversing or modifying any determination made by a State or county committee.

(e) Data furnished by participants will be used to determine eligibility for program benefits. Furnishing the data is voluntary; however, the failure to provide data could result in program benefits being withheld or denied.

##### § 1450.2 Definitions.

(a) The definitions in part 718 of this chapter apply to this part and all documents issued in accordance with this part, except as otherwise provided in this section.

(b) The following definitions will apply to this part:

*Advanced biofuel* means fuel derived from renewable biomass other than corn kernel starch, including biofuels derived from cellulose, hemicellulose, or lignin; biofuels derived from sugar and starch (other than ethanol derived from corn kernel starch); biofuel derived from waste material, including crop residue, other vegetative waste material, animal waste, food waste, and yard waste; diesel-equivalent fuel derived from renewable biomass including vegetable oil and animal fat; biogas (including landfill gas and sewage waste treatment gas) produced through the conversion of organic matter from renewable biomass; and butanol or other alcohols produced through the conversion of organic matter from renewable biomass and other fuel derived from cellulosic biomass.

*Agricultural land* means cropland, grassland, pastureland, rangeland, hayland, and other land on which food, fiber, or other agricultural products are produced or capable of being produced.

*Animal waste* means waste associated with animal operations such as confined beef or dairy, poultry, or swine operations including manure,

contaminated runoff, milking house waste, dead poultry, bedding, and spilled feed. Depending on the poultry system, animal waste can also include litter, wash-flush water, and waste feed.

*Annual payment* means the annual payment specified in the BCAP contract that is made to a participant to compensate a participant for placing eligible land in BCAP.

*Beginning farmer or rancher* means, as determined by CCC, an individual or entity who:

(1) Has not operated a farm or ranch for more than 10 years,

(2) Materially and substantially participates in the operation of the farm or ranch, and

(3) If an entity, is an entity in which all members or stockholders of the entity meet the provisions in paragraphs (1) and (2) of this definition.

*Biobased product* means a product determined by CCC to be a commercial or industrial product (other than food or feed) that is:

(1) Composed, in whole or in significant part, of biological products, including renewable domestic agricultural materials and forestry materials; or

(2) An intermediate ingredient or feedstock.

*Bioenergy* means renewable energy produced from organic matter. Organic matter may be used directly as a fuel, be processed into liquids and gases, or be a residual of processing and conversion.

*Biomass conversion facility* means a facility that converts or proposes to convert eligible material into heat, power, biobased products, or advanced biofuels.

*Conservation district* is as defined in part 1410 of this chapter.

*Conservation plan* means a record of the participant's decisions and supporting information for treatment of a unit of land or water, and includes a schedule of operations, activities, and estimated expenditures needed to solve identified natural resource problems by devoting eligible land to permanent vegetative cover, trees, water, or other comparable measures.

*Contract acreage* means eligible land that is covered by a BCAP contract between the producer and CCC.

*Deputy Administrator* means the Deputy Administrator for Farm Programs, FSA, or a designee.

*Dry ton* means one U.S. ton measuring 2,000 pounds. One dry ton (ODT, sometimes termed as oven- or bone-dry ton) is the amount of renewable biomass that would weigh one U.S. ton at zero percent moisture content.

*Eligible crop* means a crop of renewable biomass as defined in this section excluding:

(1) Whole grain derived from a crop of barley, corn, grain sorghum, oats, rice, or wheat; honey; mohair; oilseeds such as canola, crambe, flaxseed, mustard seed, rapeseed, safflower seed, soybeans, sesame seed, and sunflower seeds; peanuts; pulse crops such as small chickpeas, lentils, and dry peas; dairy products; sugar; wool; and cotton boll fiber; and

(2) Any plant that CCC has determined to be either a noxious weed or an invasive species. With respect to noxious weeds and invasive species, a list of such plants will be available in the FSA county office.

*Eligible material* is renewable biomass as defined in this section excluding:

(1) Whole grain derived from a crop of barley, corn, grain sorghum, oats, rice, and wheat; oilseeds such as canola, crambe, flaxseed, mustard seed, rapeseed, safflower seed, soybeans, sesame seed, and sunflower seeds; peanuts, pulse crops such as small chickpeas, lentils, and dry peas; dairy products; sugar; wool; and, cotton boll fiber;

(2) Animal waste and byproducts of animal waste including fats, oils, greases, and manure;

(3) Food waste and yard waste; and

(4) Algae.

*Eligible material owner*, for purposes of the matching payment, means a person or entity having the right to collect or harvest eligible material and who has delivered or intends to deliver the eligible material to a qualified biomass conversion facility, including:

(1) For eligible material harvested or collected from private lands, including cropland, the owner of the land, the operator or producer conducting farming operations on the land, or any other person designated by the owner of the land; and

(2) For eligible material harvested or collected from public lands, a person having the right to harvest or collect eligible material pursuant to a contract or permit with the Forest Service or other appropriate Federal agency, such as a timber sale contract, stewardship contract or agreement, service contract or permit, or related applicable Federal land permit or contract, and who has submitted a copy of the permit or contract authorizing such collection to CCC.

*Establishment payment* means the payment made by CCC to assist program participants in establishing the practices required for non-woody perennial crops and woody perennial crops, as specified in a producer contract.

*Food waste* means a material composed primarily of food items, or originating from food items, or

compounds from domestic, municipal, food service operations, or commercial sources, including food processing wastes, residues, or scraps.

*Forest stewardship plan* means a long-term, comprehensive, multi-resource forest management plan that is prepared by a professional resource manager and approved by the State Forester or equivalent State official. Forest Stewardship Plans address the following resource elements wherever present, in a manner that is compatible with landowner objectives concerning:

- (1) Soil and water;
- (2) Biological diversity;
- (3) Range;
- (4) Aesthetic quality;
- (5) Recreation;
- (6) Timber;
- (7) Fish and wildlife;
- (8) Threatened and endangered species;
- (9) Forest health;
- (10) Archeological, cultural and historic sites;
- (11) Wetlands;
- (12) Fire; and
- (13) Carbon cycle.

*Highly erodible land* means land determined as specified in part 12 of this title.

*Indian Tribe* has the same meaning as in 25 U.S.C. 450b (section 4 of the Indian Self-Determination and Education Assistance Act).

*Intermediate ingredient or feedstock* means an ingredient or compound made in whole or in significant part from biological products, including renewable agricultural material (including plant, animal, and marine material), or forestry material that is subsequently used to make a more complex compound or product.

*Institution of higher education* has the same meaning as in section 102(a) of the Higher Education Act of 1965 (20 U.S.C. 1002(a)).

*Matching payments* means those CCC payments provided to the owner of eligible material delivered to a qualified biomass conversion facility.

*Native sod* means land:

(1) On which the plant cover is composed principally of native grasses, grasslike plants, forbs, or shrubs suitable for grazing and browsing; and

(2) That has never been tilled for the production of an annual crop as of [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

*Nonindustrial private forest land* means rural lands with existing tree cover, or that are suitable for growing trees, which are owned by any private individual, group, association, corporation, Indian Tribe, or other

private legal entity, consistent with the definitions of nonindustrial private forest land and landowner in 36 CFR 230.2, and the regulations in 36 CFR 230.31.

*Offer* means, unless otherwise indicated, the per-acre rental payment requested by the owner or operator in such owner's or operator's request to participate in the establishment and annual payment component of BCAP.

*Operator* means a person who is in general control of the land enrolled in BCAP, as determined by CCC.

*Payment period* means a contract period of either up to 5-years for annual and non-woody perennial crops, or up to 15 years for woody perennial crops during which the participant receives an annual payment under the establishment and annual payment component of BCAP.

*Producer* means an owner or operator of contract acreage that is physically located within a project area under the establishment and annual payment component of BCAP.

*Project area* means a geographic area with specified boundaries submitted by a project sponsor and approved by CCC under the establishment and annual payment component of BCAP.

*Project sponsor* means a group of producers or a biomass conversion facility who proposes a project area.

*Qualified biomass conversion facility* means a biomass conversion facility that meets all the requirements for BCAP qualification, and whose facility representatives enter into a BCAP agreement with CCC.

*Related-party transaction* means a transaction between two or more ready, willing, and able organizations, trades, or business (whether or not incorporated, whether or not organized in the United States, and whether or not affiliated) substantially owned or controlled directly or indirectly by the same interests, as determined by the Deputy Administrator.

*Renewable biomass* means the following:

(1) Materials, pre-commercial thinnings, or invasive species from National Forest System land and U.S. Department of the Interior Bureau of Land Management land that:

(i) Are byproducts of preventive treatments that are removed to reduce hazardous fuels, to reduce or contain disease or insect infestation, or to restore ecosystem health;

(ii) Would not otherwise be used for higher-value products; and

(iii) Are harvested in accordance with applicable law and land management plans and the requirements for old-growth maintenance, restoration, and

management direction of sections 102(e)(2), (3), and (4) of the Healthy Forests Restoration Act of 2003 (16 U.S.C. 6512) and large-tree retention provisions of subsection (f); or

(2) Any organic matter that is available on a renewable or recurring basis from non-Federal land or land belonging to an Indian or Indian Tribe that is held in trust by the United States or subject to a restriction against alienation imposed by the United States, including:

(i) Renewable plant material (including feed grains, other agricultural commodities, other plants and trees, or algae);

(ii) Waste material, including

(A) Crop residue;

(B) Other vegetative waste material (including wood waste and wood residues that would not otherwise be used for higher-value products);

(C) Animal waste and byproducts (including fats, oils, greases, and manure); and

(D) Food waste and yard waste.

*Socially disadvantaged farmer or rancher* means, unless other classes of persons are approved by the Deputy Administrator in writing, persons who are:

(1) American Indians or Alaska Natives (that is, persons who are members of that class of persons who originally settled Alaska);

(2) Asian-Americans;

(3) African-Americans; or

(4) Hispanic-Americans.

*Technical assistance* means assistance in determining the eligibility of land and practices for BCAP, implementing and certifying practices, ensuring contract performance, and providing annual rental rate surveys. The technical assistance provided in connection with BCAP to owners or operators, as approved by CCC, includes, but is not limited to: Technical expertise, information, and tools necessary for the conservation of natural resources on land; technical services provided directly to farmers, ranchers, and other eligible entities, such as conservation planning, technical consultation, and assistance with design and implementation of conservation practices; and technical infrastructure, including activities, processes, tools, and functions needed to support delivery of technical services, such as technical standards, resource inventories, training, data, technology, monitoring, and effects analyses.

*Tribal government* means any Indian Tribe, band, nation, or other organized group, or community, including pueblos, rancherias, colonies and any Alaska Native Village, or regional or

village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601–1629h), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

*United States* means all fifty States of the United States, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and the District of Columbia.

*Violation* means an act by the participant, either intentional or unintentional, that would cause the participant to no longer be eligible to receive or retain all or a portion of BCAP payments.

*Yard waste* means a waste material derived from the urban environment including construction and demolition debris and municipal solid waste.

#### § 1450.3 General description.

(a) The objectives of BCAP are to:

(1) Support the establishment and production of eligible crops for conversion to bioenergy in selected project areas; and

(2) Assist agricultural and forest landowners and operators with matching payments to support the collection, harvest, storage, and transportation costs of eligible material for use in a biomass conversion facility.

(b) A participant must implement and adhere to a conservation plan prepared in accordance with BCAP guidelines, as established and determined by CCC. A conservation plan for contract acreage must be implemented by a participant and must be approved by the conservation district in which the lands are located. If the conservation district declines to review the plan, the provider of technical assistance may take such further action as is needed to account for lack of such review.

(c) Agricultural and forest landowners and operators must comply with any existing conservation plans, forest stewardship plans and any other applicable laws for any removal of eligible material for use in a biomass conversion facility to receive matching payments.

(d) Except as otherwise provided, a participant may receive, in addition to any payments under this part, cost-share assistance, rental or easement payments, tax benefits, or other payments from a State or a private organization in return for enrolling lands in BCAP, without any commensurate reduction in BCAP payments.

#### § 1450.4 Violations.

(a)(1) If a participant fails to carry out the terms and conditions of a BCAP

contract, CCC may terminate the BCAP contract.

(2) If the BCAP contract is terminated by CCC in accordance with this paragraph:

(i) The participant will forfeit all rights to further payments under such contract and must refund all payments previously received, plus interest; and

(ii) The participant must pay liquidated damages to CCC in an amount as specified in the contract.

(b) CCC may reduce a demand for a refund under this section to the extent CCC determines that such relief would be appropriate and would not deter the accomplishment of the goals of the program.

**§ 1450.5 Performance based on advice or action of USDA.**

(a) The provisions of § 718.303 of this title relating to performance based on the action or advice of an authorized representative of USDA applies to this part, and may be considered as a basis to provide relief to persons subject to sanctions under this part to the extent that relief is otherwise required by this part.

(b) [Reserved]

**§ 1450.6 Access to land.**

(a) For purposes related to this program, any representative of the U.S. Department of Agriculture, or designee thereof, must be provided with access to land that is:

(1) The subject of an application for a contract under this part; or

(2) Under contract or otherwise subject to this part.

(b) For land identified in paragraph (a) of this section, the participant must provide such representatives or designees with access to examine records for the land to determine land classification, eligibility, or for other purposes, and to determine whether the participant is in compliance with the terms and conditions of the BCAP contract.

**§ 1450.7 Division of payments and provisions about tenants and sharecroppers.**

(a) Payments received under this part will be divided as specified in the applicable contract. CCC may refuse to enter into a contract when there is a disagreement among persons or legal entities seeking enrollment as to a person's or legal entity's eligibility to participate in the contract as a tenant or sharecropper, and there is insufficient evidence, as determined by CCC, to indicate whether the person or legal entity seeking participation as a tenant or sharecropper has an interest in the

acreage offered for enrollment in the BCAP.

(b) CCC may remove an operator or tenant from a BCAP contract when:

(1) The operator or tenant requests in writing to be removed from the BCAP contract;

(2) The operator or tenant files for bankruptcy and the trustee or debtor in possession fails to affirm the contract, to the extent permitted by applicable bankruptcy laws;

(3) The operator or tenant dies during the contract period and the administrator of the estate fails to succeed to the contract within a period of time determined appropriate by the Deputy Administrator; or

(4) A court of competent jurisdiction orders the removal of the operator or tenant from the BCAP contract and such order is received by CCC.

(c) Tenants who fail to maintain tenancy on the acreage under contract for any reason may be removed from a contract by CCC.

**§ 1450.8 Payments not subject to claims.**

(a) Subject to part 1403 of this chapter, any cost-share or annual payment or portion of the payment due any person or legal entity under this part will be allowed without regard to questions of title under State law, and without regard to any claim or lien in favor of any creditor, except agencies of the U.S. Government.

(b) [Reserved]

**§ 1450.9 Assignments.**

(a) Participants may assign the right to receive such cash payments, in whole or in part, as provided in part 1404 of this chapter.

(b) [Reserved]

**§ 1450.10 Appeals.**

(a) Except as provided in paragraph (b) of this section, a person or legal entity applying for participation may appeal or request reconsideration of an adverse determination in accordance with the administrative appeal regulations at parts 11 and 780 of this title.

(b) Determinations by the Natural Resources Conservation Service may be appealed in accordance with procedures established under part 614 of this title or otherwise established by the Natural Resources Conservation Service.

**§ 1450.11 Scheme or device.**

(a) If CCC determines that a person or legal entity has employed a scheme or device to defeat the purposes of this part, or any part, of any USDA program, payment otherwise due or paid such person or legal entity during the

applicable period may be required to be refunded with interest, as determined appropriate by CCC.

(b) A scheme or device includes, but is not limited to, coercion, fraud, misrepresentation, depriving any other person or legal entity of cost-share assistance or annual payments, or obtaining a payment that otherwise would not be payable.

(c) A new owner or operator or tenant of land subject to this part who succeeds to the contract responsibilities must report in writing to CCC any interest of any kind in the land subject to this part that is retained by a previous participant. Such interest may include a present, future, or conditional interest, reversionary interest, or any option, future or present, on such land, and any interest of any lender in such land where the lender has, will, or can legally obtain, a right of occupancy to such land or an interest in the equity in such land other than an interest in the appreciation in the value of such land occurring after the loan was made. Failure to fully disclose such interest will be considered a scheme or device under this section.

**§ 1450.12 Filing of false claims.**

(a) If CCC determines that any participant has knowingly supplied false information or has knowingly filed a false claim, such participant will be ineligible for payments under this part with respect to the fiscal year in which the false information or claim was filed and the contract may be terminated, in which case CCC may demand a full refund of all prior payments.

(b) False information or false claims include, but are not limited to, claims for payment for practices that do not comply with the conservation plan. Any amounts paid under these circumstances must be refunded to CCC, together with interest as determined by CCC, and any amounts otherwise due the participant will be withheld.

(c) The remedies provided for in this section will be in addition to any other remedy available to CCC and in addition to any criminal penalty.

**§ 1450.13 Miscellaneous.**

(a) Except as otherwise provided in this part, in the case of death, incompetency, or disappearance of any participant, any payments due under this part will be paid to the participant's successor(s) in accordance with part 707 of this title.

(b) Unless otherwise specified in this part, payments under this part will be subject to the compliance requirements of part 12 of this title concerning highly

erodible land and wetland conservation and payments.

(c) Any remedies permitted CCC under this part will be in addition to any other remedy, including, but not limited to, criminal remedies or actions for damages in favor of CCC, or the United States, as may be permitted by law. The Deputy Administrator may add to the contract such additional terms as are needed to enforce these regulations, which will be binding on the parties and may be enforced to the same degree as the other provisions of these regulations.

(d) Absent a scheme or device to defeat the purposes of the program, when an owner loses control of BCAP acreage enrolled under Subpart C of this part due to foreclosure and the new owner chooses not to continue the contract in accordance with § 1450.215 refunds will not be required from any participant on the contract to the extent that the Deputy Administrator determines that forgiving such repayment is appropriate in order to provide fair and equitable treatment.

#### Subpart B—Matching Payments

##### § 1450.101 Qualified biomass conversion facility.

(a) To be considered a qualified biomass conversion facility, a biomass conversion facility must enter into an agreement with CCC and must:

(1) Meet all applicable regulatory and permitting requirements by applicable Federal, State, or local authorities;

(2) Agree in writing to:

(i) Maintain accurate records of all eligible material purchases and related documents regardless of whether matching payments will be sought; and

(ii) Make available at one place and at all reasonable times for examination by representatives of USDA, all books, papers, records, contracts, scale tickets, settlement sheets, invoices, written price quotations, or other documents related to the program for not less than 3 years from the date of application as a qualified biomass conversion facility;

(iii) Make information available to USDA and institutes of higher education and to allow general information about the facility and its eligible material to be made public by USDA and other entities after qualification is determined;

(iv) Clearly indicate on the scale ticket or equivalent the actual tonnage delivered, provide a copy of the scale ticket(s) or equivalent, and provide it to the eligible material owner;

(v) Calculate a total dry ton weight equivalent to the actual tonnage delivered and provide that measurement to the eligible material owner;

(vi) Use commercial weight scales that are certified for accuracy by applicable State or local authorities and accurate moisture measurement equipment to determine the dry ton weight equivalent of actual tonnage delivered; and

(vii) For those facilities that convert vegetative waste materials such as wood wastes and wood residues into heat or power for consumption at the facility, provide the Deputy Administrator with such information as needed to establish the historical baseline for heat or power production from wood wastes or residues.

(b) For a qualified biomass conversion facility, CCC will periodically inform the public that matching payments may be available for deliveries of eligible material to such qualified biomass conversion facility. CCC will maintain a listing of qualified biomass conversion facilities for general public access and distribution that may include general information about the facility and its eligible material needs.

##### § 1450.102 Eligible material owner.

(a) In order to be eligible for a BCAP matching payment, a person or legal entity must:

(1) Be a producer of an eligible crop that is produced on BCAP contract acreage authorized by this subpart.

(2) Have the right to collect or harvest eligible material.

(3) Not be a party to a related-party transaction.

(b) A qualified biomass conversion facility that meets the requirements of paragraph (a) of this section may be considered an eligible material owner if it otherwise meets the definition in this part.

##### § 1450.103 Eligible material.

(a) In order to be eligible for a matching payment, an eligible material owner must have harvested or collected eligible material that was delivered to a qualified biomass conversion facility.

(b) Eligible material must be a renewable biomass that, at a minimum, meets the definition in § 1450.3 or is listed as an eligible material on <http://www.fsa.usda.gov/energy>.

(c) Matching payments are not authorized for:

(1) Any eligible material delivered before [DATE OF PUBLICATION OF THE FINAL RULE IN THE *FEDERAL REGISTER*].

(2) Any eligible material for which payment is received before the application for payment is received and approved by the county FSA office, in accordance with § 1450.104 of this part.

(3) Eligible material delivered to a qualified Biomass Conversion facility

used to produce black liquor, an industrial waste by-product of the pulp and kraft paper manufacturing process which consists primarily of inorganic chemicals used in the pulping process, lignin, hemicellulose, and cellulose. In addition, black liquor is not an eligible material.

##### § 1450.104 Signup.

(a) Applications for matching payments will be accepted on a continuous basis.

(b) An eligible material owner must apply for matching payments at the FSA county office before payment for the eligible material from a qualified biomass conversion facility is received. "The request must be submitted and approved by CCC before any payment is made by the facility for the eligible material."

(c) Applications must include the following estimates based on information obtained from contracts, agreements, or letters of intent:

(1) An estimate of the total dry tons of eligible material expected to be sold to a qualified biomass conversion facility;

(2) The type(s) of eligible material that is expected to be sold;

(3) The name of the qualified biomass conversion facility that will purchase the eligible material;

(4) The expected per dry ton price the owner plans to receive for the delivery of the eligible material; and

(5) The date or dates the eligible material is expected to be delivered to the facility.

(d) Eligible material owners who deliver eligible material to more than one qualified biomass conversion facility must submit separate applications for each facility to which eligible material will be delivered.

(e) After delivery, eligible material owners must notify CCC and request the matching payment. Matching payments will be disbursed only after delivery is verified by FSA.

(f) Other information that must be submitted to FSA in order to receive matching payments includes settlement, summary, or other acceptable data that provide the:

(1) Total actual tonnage delivered and a total dry weight tonnage equivalent amount determined by the qualified biomass conversion facility using standard moisture determinations applicable to the eligible material;

(2) Total payment received, including the per-ton payment rate(s) matched with actual and dry weight tonnage delivered; and

(3) Qualified biomass conversion facility's certification as to the authenticity of the information.

**§ 1450.105 Obligations of participant.**

(a) All participants whose BCAP matching payment application was approved must agree to:

(1) Carry out the terms and conditions of such BCAP matching payment application; and

(2) Be jointly and severally responsible, if the participant has a share of the payment greater than zero, with the other contract participants for compliance with the provisions of such contract and the provisions of this part, and for any refunds or payment adjustments that may be required for violations of any of the terms and conditions of the BCAP contract and this part.

(b) [Reserved]

**§ 1450.106 Payments.****Option 1 for § 1450.106**

(a) Payments under this subpart will be for a term not to exceed two years beginning the date that the first matching payment to a person or entity is issued by CCC.

(b) Payments under this subpart will be paid at a rate of \$1 for each \$1 per ton received from a qualified biomass conversion facility for the commercial sale of eligible materials used to produce anything other than cellulosic ethanol (heat, power, or biobased products) in an amount up to \$16 per ton.

(c) Payments under this subpart will be paid at a rate of \$1 for each \$1 per ton received from a qualified biomass conversion facility for the commercial sale of materials used to produce cellulosic ethanol in an amount up to \$45 per ton.

**Option 2 for § 1450.106**

(a) Payments under this subpart will be for a term not to exceed two years beginning the date that the first matching payment to a person or entity is issued by CCC.

(b) Payments under this subpart will be paid at a rate of \$1 for each \$1 per ton received from a qualified biomass conversion facility for the commercial sale of eligible material in an amount up to \$45 per ton.

(c) For those biomass conversion facilities converting vegetative waste materials, such as wood waste and wood residues, to heat or power consumed by the facility, no payments may be made under this subpart for material unless the material is converted to heat or power above that facility's historical baseline for heat or power production from renewable biomass as established by the Deputy Administrator.

**Option 3 for § 1450.106**

(a) Payments under this subpart will be for a term not to exceed two years beginning the date that the first matching payment to a person or entity is issued by CCC.

(b) Payments under this subpart will be paid at a rate of \$1 for each \$1 per ton received from a qualified biomass conversion facility for the commercial sale of eligible material in an amount up to \$45 per ton to facilities that:

(1) Fully convert from fossil fuel consumption to renewable biomass feedstocks;

(2) For eligible material showing exceptional promise for producing innovative advanced biofuels, renewable energy, or biobased products; or

(3) For every ton of renewable biomass consumption above a facility's established historical baseline.

(c) Payments under this subpart will be paid at a rate of \$1 for each \$1 per ton received from a qualified biomass conversion facility for the commercial sale of eligible material in an amount up to \$16 per ton for those facilities that do not increase renewable biomass consumption over a historical baseline.

**§§ 1450.107–1450.199 [Reserved]****Subpart C—Establishment and Annual Payments****§ 1450.200 General description.**

As provided in this subpart, “establishment and annual payments” may be provided by CCC to producers of eligible crops in a project area.

**§ 1450.201 Project area submission requirements.**

(a) To be considered for selection as a project area, a project sponsor must submit a proposal to CCC that includes, at a minimum:

(1) A description of the eligible land and eligible crops of each producer that will participate in the proposed project area;

(2) A letter of commitment from a biomass conversion facility stating that the facility will use, for BCAP purposes, eligible crops intended to be produced in the proposed project area;

(3) Evidence that the biomass conversion facility has sufficient equity available to operate if the facility is not operational at the time the project area proposal is submitted; and

(4) Other information that gives CCC a reasonable assurance that the biomass conversion facility will be in operation by the time that the eligible crops are ready for harvest.

(b) The project area description required in paragraph (a) of this section

needs to specify geographic boundaries and be described in definite terms such as acres, watershed boundaries, mapped longitude and latitude coordinates, or counties.

(c) The project area needs to be physically located near a biomass conversion facility or facilities.

(d) Project area proposals may limit the nature and types of eligible crops to be planted within a project area.

**§ 1450.202 Project area selection criteria.**

In selecting project areas, CCC will consider:

(a) The dry tons of the eligible crops proposed to be produced in the proposed project area and the probability that such crops will be used for BCAP purposes;

(b) The dry tons of renewable biomass projected to be available from sources other than the eligible crops grown on contract acres;

(c) The anticipated economic impact in the proposed project area;

(d) The opportunity for producers and local investors to participate in the ownership of the biomass conversion facility in the proposed project area;

(e) The participation rate by beginning or socially disadvantaged farmers or ranchers;

(f) The impact on soil, water, and related resources;

(g) The variety in biomass production approaches within a project area, including agronomic conditions, harvest and postharvest practices, and monoculture and polyculture crop mixes;

(h) The range of eligible crops among project areas; and

(i) Any other additional criteria, as determined by CCC.

**§ 1450.203 Eligible persons and legal entities.**

(a) In order to be eligible to enter into a BCAP contract in accordance with this subpart, a person or legal entity must be an owner, operator, or tenant of eligible land, as defined in § 1450.204.

(b) [Reserved]

**§ 1450.204 Eligible land.**

(a) For the purposes of this subpart, eligible land means agricultural land including cropland, grassland, pastureland, rangeland, hayland, or other lands on which food, fiber, or other agricultural products are produced or capable of being produced, or nonindustrial private forest lands.

(b) For the purposes of this subpart, eligible land is not:

(1) Federal- or State-owned land;

(2) Land that is native sod as of

[DATE OF PUBLICATION OF THE

FINAL RULE IN THE *FEDERAL REGISTER*;

(3) Land enrolled in the conservation reserve program authorized under the regulations at part 1410 of this chapter;

(4) Land enrolled in the wetlands reserve program authorized under the regulations at part 1467 of this chapter; or

(5) Land enrolled in the grassland reserve program authorized under the regulations at part 1415 of this chapter.

**§ 1450.205 Duration of contracts.**

(a) Contracts under this subpart will be for a term of up to:

(1) 5 years for annual and non-woody perennial crops; and

(2) 15 years for woody perennial crops.

(b) The establishment time period may vary due to: Type of crop, agronomic conditions (establishment time frame, winter hardiness, *etc*), and other factors.

**§ 1450.206 Obligations of participant.**

(a) All participants subject to a BCAP contract must:

(1) Carry out the terms and conditions of such BCAP contract;

(2) Make available to CCC or to an institution of higher education or other entity designated by CCC, such information as CCC determines to be appropriate to promote the production of eligible crops and the development of biomass conversion technology;

(3) Comply with the highly erodible land and wetland conservation requirements of part 12 of this chapter;

(4) Implement a:

(i) Conservation plan or

(ii) Forest stewardship plan or an equivalent plan.

(5) Implement the conservation plan, which is part of such contract, in accordance with the schedule of dates included in such conservation plan, unless both:

(i) The Deputy Administrator determines that the participant cannot fully implement the conservation plan for reasons beyond the producer's control, and

(ii) CCC agrees to a modified plan.

(6) The producer will demonstrate compliance with the conservation or forest stewardship plan through required self certification and FSA will spot check compliance with the plans.

(7) Establish temporary vegetative cover either within the timeframes required by the conservation plan or as determined by the Deputy Administrator, if the permanent vegetative cover cannot be timely established; and

(8) If the participant has a share of the payment greater than zero, be jointly

and severally responsible with the other contract participants for compliance with the provisions of such contract and the provisions of this part, and for any refunds or payment adjustments that may be required for violations of any of the terms and conditions of the BCAP contract and this part.

(b) Under the proposed rule, payments may cease and producers may be subject to contract termination for failure to plant eligible crops.

(c) A contract will not be terminated for failure by the participant to establish an approved cover on the land if, as determined by the Deputy Administrator:

(1) The failure to plant or establish such cover was due to excessive rainfall, flooding, or drought; and

(2) The land on which the participant was unable to plant or establish such cover is planted or established to such cover as soon as practicable after the wet or drought conditions that prevented the planting or establishment subside.

**§ 1450.207 Conservation plans and forest stewardship plans.**

(a) The producer must implement a conservation plan, forest stewardship plan or equivalent plan that complies with CCC guidelines and is approved by the appropriate conservation district for the land to be entered in BCAP. If the conservation district declines to review the conservation plan, or disapproves the conservation plan, such approval may be waived by CCC.

(b) The practices and management activities included in a conservation plan, forest stewardship plan or equivalent plan, and agreed to by the producer, must be implemented in a cost-effective manner that meets BCAP goals and purposes.

(c) If applicable, a tree planting plan must be developed and included in the conservation plan, forest stewardship plan or equivalent plan. Such tree planting plan may allow a reasonable time to complete plantings, as determined by CCC.

(d) All conservation plans, forest stewardship plans or equivalent plans, and revisions of such plans, will be subject to approval by CCC.

**§ 1450.208 Eligible practices.**

Eligible practices are those practices specified in the conservation or forestry plan that meet all standards needed to cost-effectively establish:

(a) Annual crops;

(b) Non-woody perennial crops; and

(c) Woody perennial crops.

**§ 1450.209 Signup.**

(a) Offers for contracts may be submitted on a continuous basis to FSA as determined by the Deputy Administrator.

(b) [Reserved]

**§ 1450.210 Acceptability of offers.**

(a) Acceptance or rejection of any contract offered will be at the sole discretion of CCC, and offers may be rejected for any reason as determined to accomplish the goals of the program.

(b) An offer to enroll land in BCAP will be irrevocable for such period as is determined and announced by CCC. The producer will be liable to CCC for liquidated damages if the applicant revokes an offer during the period in which the offer is irrevocable as determined by the Deputy Administrator. CCC may waive payment of such liquidated damages if CCC determines that the assessment of such damages, in a particular case, is not in the best interest of CCC and the program.

**§ 1450.211 BCAP contract.**

(a) In order to enroll land in BCAP, the participant must enter into a contract with CCC.

(b) The BCAP contract is comprised of:

(1) The terms and conditions for participation in BCAP;

(2) The conservation plan, forest stewardship plan or equivalent plan; and

(3) Any other materials or agreements determined necessary by CCC.

(c) In order to enter into a BCAP contract, the producer must submit an offer to participate as specified in § 1450.209;

(d) The BCAP contract must, within the dates established by CCC, be signed by:

(1) The producer; and

(2) The owners of the eligible land to be placed in the BCAP and other eligible participants, if applicable.

(e) The Deputy Administrator is authorized to approve BCAP contracts on behalf of CCC.

(f) CCC will honor BCAP contracts even in the event that a project area biomass conversion facility does not become fully or partially operational.

(g) BCAP contracts may be terminated by CCC before the full term of the contract has expired if:

(1) The owner loses control of or transfers all or part of the acreage under contract and the new owner does not wish to continue the contract;

(2) The participant voluntarily requests in writing to terminate the contract and obtains the approval of

CCC according to terms and conditions as determined by CCC;

(3) The participant is not in compliance with the terms and conditions of the contract;

(4) The BCAP practice fails or is not established after a certain time period, as determined by the Deputy Administrator, and the cost of restoring the practice outweighs the benefits received from the restoration;

(5) The BCAP contract was approved based on erroneous eligibility determinations; or

(6) CCC determines that such a termination is needed in the public interest.

(h) Except as allowed and approved by CCC where the new owner of land enrolled in BCAP is a Federal agency that agrees to abide by the terms and conditions of the terminated contract, the participant in a contract that has been terminated must refund all or part of the payments made with respect to the contract plus interest, as determined by CCC, and must pay liquidated damages as provided for in the contract and this part. CCC may permit the amount(s) to be repaid to be reduced to the extent that such a reduction will not impair the purposes of the program. Further, a refund of all payments need not be required from a participant who is otherwise in full compliance with the BCAP contract when the land is purchased by or for the United States, as determined appropriate by CCC.

**§ 1450.212 Establishment payments.**

(a) Establishment payments will be made available upon a determination by CCC that an eligible practice, or an identifiable portion of a practice, has been established in compliance with the appropriate standards and specifications.

(b) Except as otherwise provided for in this part, such payments will be made only for the cost-effective establishment or installation of an eligible practice, as determined by CCC.

(c) Except as provided in paragraph (d) of this section, such payments will not be made to the same owner or operator on the same acreage for any eligible practices that have been previously established, or for which such owner or operator has received cost-share assistance from any Federal agency.

(d) Establishment payments may be authorized for the replacement or restoration of practices on land for which assistance has been previously allowed under BCAP, only if:

(1) Replacement or restoration of the practice is needed to achieve adequate erosion control, enhance water quality,

wildlife habitat, or increase protection of public wellheads; and

(2) The failure of the original practice was due to reasons beyond the control of the participant, as determined by the CCC.

(e) In addition, CCC may make partial payments when the producer completes identifiable components of the contract. CCC may make supplemental establishment payments, if necessary.

**§ 1450.213 Levels and rates for cost-share payments.**

(a) CCC will pay not more than 75 percent of the actual or average cost (whichever is lower) of establishing non-woody perennial crops and woody perennial crops specified in the BCAP conservation or forestry plan.

(b) The average cost of performing a practice may be determined by CCC based on recommendations from the State Technical Committee. Such cost may be the average cost in a State, a county, or a part of a State or county, as determined by the Deputy Administrator. The calculated 75 percent of the average cost may represent less than 75 percent of the actual cost for an individual participant.

(c) Except as otherwise provided for in this part, a participant may receive, in addition to any payment under this part, cost-share assistance, rental payments, or tax benefits from a State or a private organization in return for enrolling lands in BCAP without a commensurate reduction in BCAP payments.

**§ 1450.214 Annual payments.**

(a) Annual payments will be made in such amount and in accordance with such time schedule as may be agreed upon and specified in the BCAP contract.

(b) Based on the regulations at § 1410.42 of this chapter and as determined by CCC, annual payments include a payment based on:

(i) A weighted average soil rental rate for cropland;

(ii) The applicable marginal pastureland rental rate for all other land except for non-industrial private forest land; and

(iii) For forest land, the average county rental rate for cropland as adjusted for forestland productivity for non-industrial private forest land.

(c) The annual payment will be divided among the participants on a single contract as agreed to in such contract, as determined by CCC.

(d) A participant that has an established eligible crop and is therefore not eligible for establishment payments under § 1450.213 may be eligible for

annual payments under the provisions of this section.

(e) In the case of a contract succession, annual payments will be divided between the predecessor and the successor participants as agreed to among the participants and approved by CCC. If there is no agreement among the participants, annual payments will be divided in such manner deemed appropriate by the Deputy Administrator and such distribution may be prorated based on the actual days of ownership of the property by each party.

(f) Annual payments will be reduced:

(1) By 25 percent if an eligible crop is delivered to the biomass conversion facility; or

(2) On a dollar-for-dollar basis if:

(i) An eligible crop is used for a purpose other than the production of energy at the biomass conversion facility;

(ii) The producer receives a matching payment under subpart B of this part;

(iii) The producer violates a term of the contract; or

(iv) Other circumstances necessary to carry out BCAP, as determined by CCC.

**§ 1450.215 Transfer of land.**

(a)(1) If a new owner or operator purchases or obtains the right and interest in, or right to occupancy of, the land subject to a BCAP contract, such new owner or operator, upon the approval of CCC, may become a participant to a new BCAP contract with CCC for the transferred land.

(2) For the transferred land, if the new owner or operator becomes a successor to the existing BCAP contract, the new owner or operator will assume all obligations of the BCAP contract of the previous participant.

(3) If the new owner or operator is approved as a successor to a BCAP contract with CCC, then, except as otherwise determined by the Deputy Administrator:

(i) Cost-share payments will be made to the past or present participant who established the practice; and

(ii) Annual payments to be paid during the fiscal year when the land was transferred will be divided between the new participant and the previous participant in the manner specified in § 1450.214(c).

(b) If a participant transfers all or part of the right and interest in, or right to occupancy of, land subject to a BCAP contract and the new owner or operator does not become a successor to such contract within 60 days of such transfer, or such other time as the Deputy Administrator determines to be appropriate, such contract will be

terminated with respect to the affected portion of such land, and the original participant:

(1) Forfeits all rights to any future payments for that acreage;

(2) Must refund all previous payments received under the contract by the participant or prior participants, plus interest, except as otherwise specified by the Deputy Administrator. The provisions of § 1450.211(g) will apply.

(c) Federal agencies acquiring property, by foreclosure or otherwise,

that contains BCAP contract acreage cannot be a party to the contract by succession. However, through an addendum to the BCAP contract, if the current operator of the property is one of the contract participants, the contract may remain in effect and, as permitted by CCC, such operator may continue to receive payments under such contract if:

(1) The property is maintained in accordance with the terms of the contract;

(2) Such operator continues to be the operator of the property; and

(3) Ownership of the property remains with such Federal agency.

Signed at Washington, DC, on February 2, 2010.

**Jonathan W. Coppess,**

*Executive Vice President, Commodity Credit Corporation, and Administrator, Farm Service Agency.*

[FR Doc. 2010-2556 Filed 2-3-10; 4:15 pm]

**BILLING CODE 3410-05-P**

## **References**

### **Contacts**

Adam Frese (Local unit, CAL FIRE Forest Practice Inspector)

Dan Maw (SPI Inventory Forester)

Ms. Patricia Raggio (Ecologist for the Calaveras Big Trees State Park)

Tim Tate (SPI Area Forester)

Tim Tate E-Mail January 25, 2010

### **Literature Cited**

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Weatherspoon, C.P., S.J. Husari and J.W. van Wagtendonk. 1992. Fire and Fuels Management in Relation to Owl Habitat in Forests of the Sierra Nevada and Southern California. Chp. 12 in Verner et al. 1992.

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

**Project Name: Beaver Creek Watershed Improvement Project**

**Applicant: Save the Redwoods League**

<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>Initial Project Planning Costs</i>	\$640.30					\$640.30
<i>Project Management Costs</i>	\$8,150.00	\$8,150.00	\$8,150.00	\$3,811.90		\$28,261.90
<i>Site Restoration Work Costs</i>	\$130,200.00	\$130,200.00	\$130,200.00	\$32,550.00		\$423,150.00
<i>Project Oversight Costs</i>	\$12,297.60	\$12,297.60	\$12,297.60	\$3,074.40		\$39,967.20
<i>Prop. 1 Bond Signage</i>	\$1,500.00					\$1,500.00
						\$0.00
						\$0.00
<b>DIRECT COSTS SUBTOTAL:</b>	\$152,787.90	\$150,647.60	\$150,647.60	\$39,436.30	\$0.00	\$493,519.40

<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>
<i>Monitoring</i>	\$1,560.00	\$1,560.00	\$1,560.00	\$520.00		\$5,200.00
<i>Reporting</i>	\$256.12	\$256.12	\$256.12	\$512.24		\$1,280.60
						\$0.00
						\$0.00
<b>INDIRECT COSTS SUBTOTAL:</b>	\$1,816.12	\$1,816.12	\$1,816.12	\$1,032.24	\$0.00	\$6,480.60
<b>PROJECT TOTAL:</b>	\$154,604.02	\$152,463.72	\$152,463.72	\$40,468.54	\$0.00	\$500,000.00

<b>SECTION THREE Administrative Costs (Costs may not exceed 15% of the above listed Project costs) :</b>						<b>Total</b>
<i>Organization operating/overhead</i>	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00
						\$0.00
						\$0.00
						\$0.00
						\$0.00
<b>ADMINISTRATIVE TOTAL:</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>SNC TOTAL GRANT REQUEST:</b>	\$154,604.02	\$152,463.72	\$152,463.72	\$40,468.54	\$0.00	\$500,000.00

<b>SECTION FOUR OTHER PROJECT CONTRIBUTIONS</b>	<b>Year Zero</b>					<b>Total</b>
Acquisition and project activities to date						
<i>Due diligence: appraisal, EA, surveys, et</i>	\$57,871.24					\$57,871.24
<i>Closing costs</i>	\$1,826.65					\$1,826.65
<i>Site improvements, fuels reduction</i>	\$117,568.46					\$117,568.46
<i>Project Mgmt: travel, supplies, etc.</i>	\$3,618.99					\$3,618.99
<i>(no meetings, meals included)</i>						\$0.00
						\$0.00
<b>Total Other Contributions:</b>	\$180,885.34	\$0.00	\$0.00	\$0.00	\$0.00	\$180,885.34

**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.

## Appendix F - CEQA/NEPA Compliance Form

(California Environmental Quality Act & National Environmental Policy Act)

*Instructions: All applicants must complete the CEQA compliance section. Check the box that describes the CEQA status of the proposed project. You must also complete the documentation component and submit any surveys, and/or reports that support the checked CEQA status.*

*If NEPA is applicable to your project, you must complete the NEPA section in addition to the CEQA section. Check the box that describes the NEPA status of the proposed project. Submit any surveys, and/or reports that support the NEPA status. For both CEQA and NEPA, submittal of permits is only necessary if they contain conditions providing information regarding potential environmental impacts.*

*NOTE: Effective July 1, 2015, AB52 compliance is required.*

### **CEQA STATUS**

#### **(All applicants must complete this section)**

*Check the box that corresponds with the CEQA compliance for your project. The proposed action is either Categorical Exempt from CEQA, requires a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report per CEQA.*

---

#### **Categorical Exemption or Statutory Exemption**

*If a project is exempt from CEQA, all applicants, including public agencies that provide a filed Notice of Exemption, are required to provide a clear and comprehensive description of the physical attributes of the project site, including potential and known special-status species and habitat, in order for the SNC to make a determination that the project is exempt. A particular project that ordinarily would fall under a specific category of exemption may require further CEQA review due to individual circumstances, i.e., it is within a sensitive location, has a cumulative impact, has a significant effect on the environment, is within a scenic highway, impacts an historical resource, or is on a hazardous waste site. Potential cultural/archaeological resources must be noted, but do not need to be specifically listed or mapped at the time of application submittal. Backup data informing the exemption decision, such as biological surveys, Cultural Information Center requests, research papers, etc. should accompany the full application. Applicants anticipating the SNC to file an exemption should conduct the appropriate surveys and submit an information request to an office of the California Historical Resources Information System (CHRIS).*

1. Describe how your project complies with the requirements for claiming a Categorical or Statutory Exemption per CEQA:

2. If your organization is a state or local governmental agency, submit a signed, approved Notice of Exemption (NOE) documenting the use of the Categorical Exemption or Statutory Exemption, along with any permits, surveys, and/or reports that have been completed to support this CEQA status. The Notice of Exemption must bear a date stamp to show that it has been filed with the State Clearinghouse and/or County Clerk, as required by CEQA.
3. If your organization is a nonprofit, there is no other California public agency having discretionary authority over your project, and you would like the SNC to prepare a NOE for your project, let us know that and list any permits, surveys, and/or reports that have been completed to support the CEQA status. All supplementary documentation must be provided to the SNC before the NOE can be prepared.

- 
- Negative Declaration OR**  
 **Mitigated Negative Declaration**

*If a project requires a Negative Declaration or Mitigated Negative Declaration, then applicants must work with a qualified public agency, i.e., one that has discretionary authority over project approval or permitting, to complete the CEQA process.*

1. Describe how your project complies with the requirements for the use of a Negative Declaration or a Mitigated Negative Declaration per CEQA:

2. Submit the approved Initial Study and Negative Declaration/Mitigated Negative Declaration along with any Mitigation Monitoring or Reporting Plans, permits, surveys, and/or reports that have been completed to support this CEQA status. The IS/ND/MND must be accompanied by a signed, approved Notice of Determination, which must bear a date stamp to show that it has been filed with the State Clearinghouse and/or County Clerk, as required by CEQA.

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**Environmental Impact Report**

*If a project requires an Environmental Impact Report, then applicants must work with a qualified public agency, i.e., one that has discretionary authority over project approval or permitting, to complete the CEQA process.*

1. Describe how your project complies with the requirements for the use of an Environmental Impact Report per CEQA:

2. Submit the Draft and Final Environmental Impact Report along with any Mitigation Monitoring or Reporting Plans, permits, surveys, and/or reports that have been completed to support this CEQA status. The EIR documentation must be accompanied by a signed, approved Notice of Determination, which must bear a date stamp to show that it has been filed with the State Clearinghouse and/or County Clerk, as required by CEQA.
-

## **NEPA STATUS**

*Check the box that corresponds with the NEPA compliance for your project.*

**Categorical Exclusion**

Submit the signed, approved Decision Memo and Categorical Exclusion, as well as documentation to support the Categorical Exclusion, including any permits, surveys, and/or reports that have been completed to support this NEPA status.

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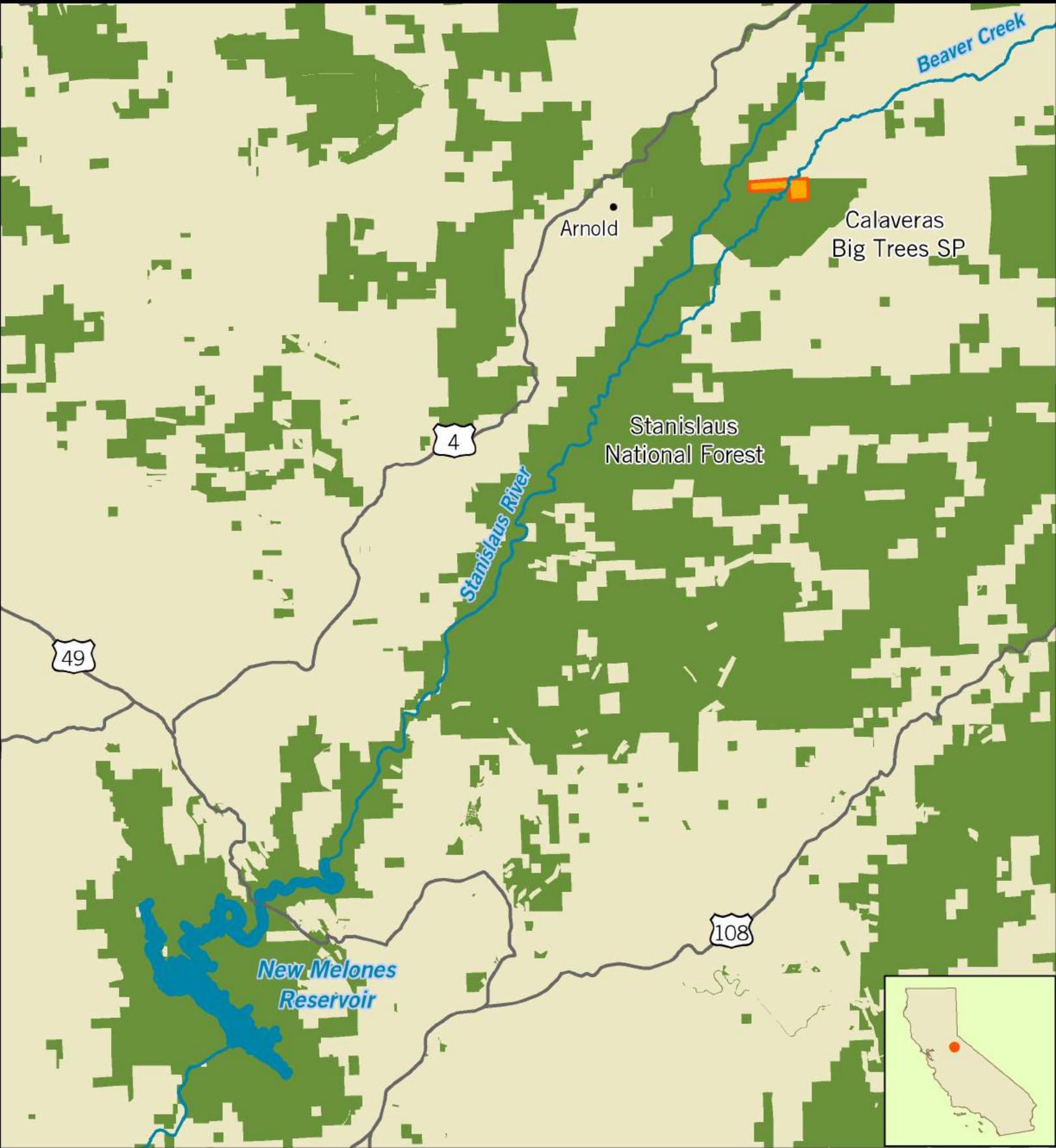
**Environmental Assessment & Finding of No Significant Impact**

Submit the signed, approved Environmental Assessment and Finding of No Significant Impact along with any permits, surveys, and/or reports that have been completed to support this NEPA status.

---

**Environmental Impact Statement**

Submit the Draft and approved, Final Environmental Impact Statement, along with the Record of Decision and any permits, surveys, and/or reports that have been completed to support this NEPA status.



- Beaver Creek
- Protected Lands
- New Melones Reservoir
- Streams & Rivers
- Roads

0 2.5 5 Miles



016-070-010

016-070-025

T 5 N., R 16 E., M. D. B. & M.

120° 12' 30"

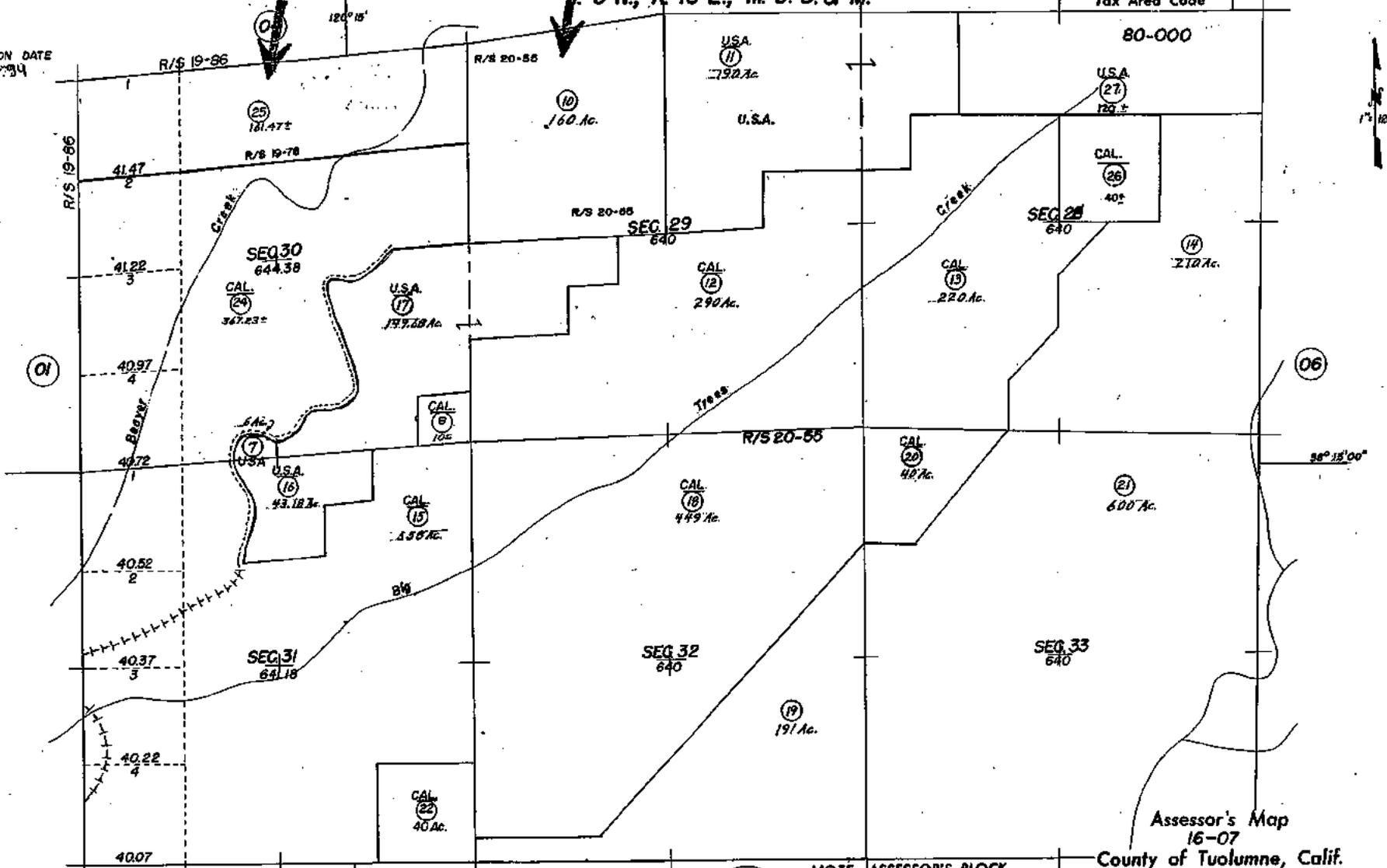
16-07

27

REVISION DATE  
12-23-94

Tax Area Code

80-000



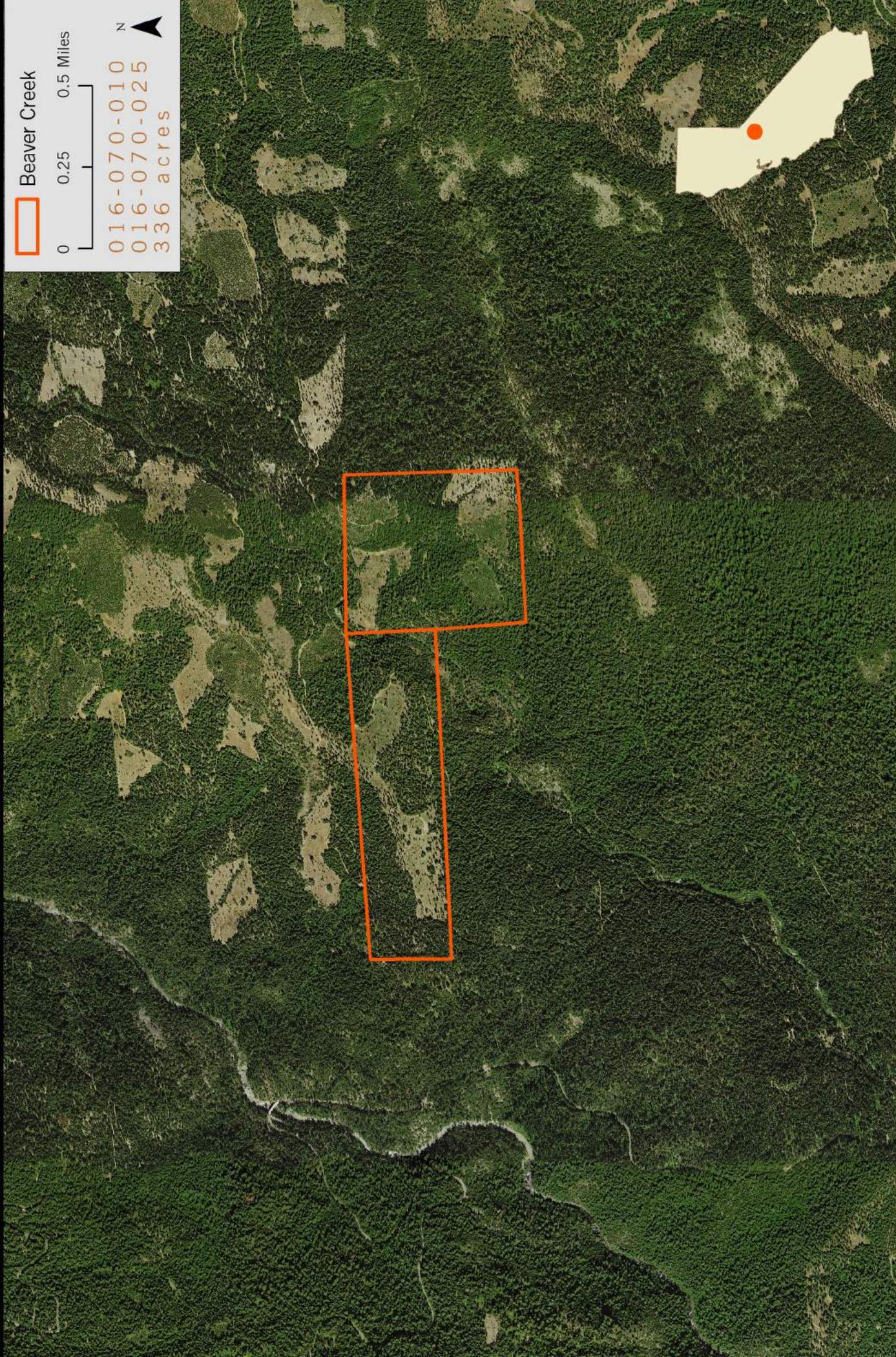
Note: This Plot Is For Assessment Purposes Only And Not An Official Map

Bk. 23

NOTE - ASSESSOR'S BLOCK & LOT NUMBERS SHOWN IN CIRCLES

Assessor's Map  
16-07  
County of Tuolumne, Calif.  
1949





Beaver Creek

0

0.25

0.5 Miles

016-070-010

016-070-025

336 acres

N



**Beaver Creek Watershed Improvement Project  
Sierra Nevada Conservancy  
February 2016**

**PROJECT PHOTOS**



Giant sequoias, such as the towering example seen here, can be found on the subject property. Trees like these are increasingly rare, and are capable of sequestering more carbon than any other tree species on Earth.

**Beaver Creek Watershed Improvement Project  
Sierra Nevada Conservancy  
February 2016**

**PROJECT PHOTOS**



Beaver Creek, a tributary of the North Fork Stanislaus River, provides an important wildlife corridor, linking adjacent public and private lands. In addition, Beaver Creek and the encompassing Upper Stanislaus watershed are important to numerous downstream hydrological resources, such as the New Melones Lake.

**Beaver Creek Watershed Improvement Project  
Sierra Nevada Conservancy  
February 2016**

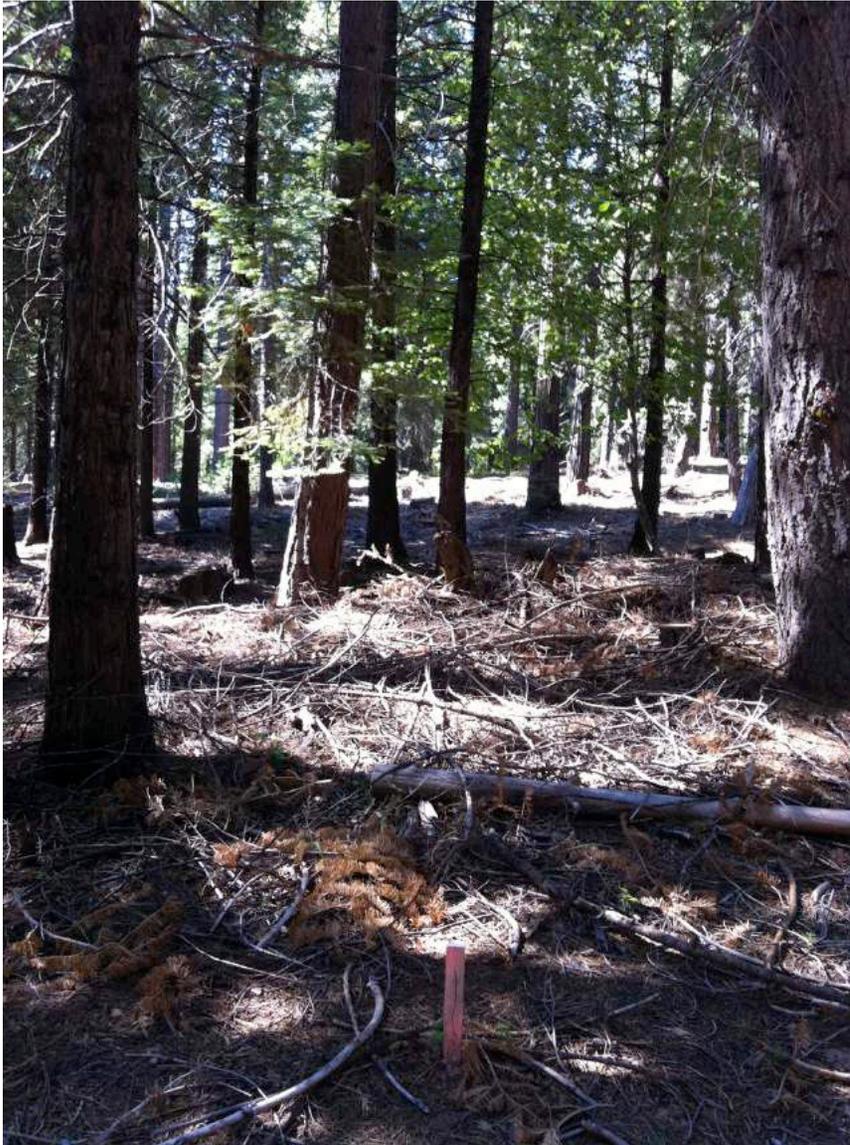
**PROJECT PHOTOS**



Project activities will help ensure the forest's long-term health by increasing its resilience to climate change, while protecting nearby federal and state lands (the Calaveras Big Trees State Park and Stanislaus National Forest) from multiple threats, such as wildfire, disease, and pests.

**Beaver Creek Watershed Improvement Project  
Sierra Nevada Conservancy  
February 2016**

**PROJECT PHOTOS**



Formerly owned and managed as commercial timberlands by Sierra Pacific Industries (SPI), the subject property has been harvested many times over the last 100 years. Commercial timber harvest practices have resulted in shade tolerant species-dominance and overstocked conditions, which led to stagnation and poor forest health. Additionally, SPI utilized plantations and seed tree step silvicultural practices resembling even aged or clear-cut timber harvests. Due to these previous harvest prescriptions and years of fire suppression, the property has become an overcrowded forest filled with fuel, making it highly susceptible to a catastrophic wildfire incident. Importantly, surface water quality in this region is primarily impacted by nonpoint source pollution, including legacy and current forestry practices. The Project proposes to restore the forest by promoting late seral characteristics, protecting it from wildfire and improving watershed functionality.

**Beaver Creek Watershed Improvement Project  
Sierra Nevada Conservancy  
February 2016**

**PROJECT PHOTOS**



By restoring the subject forest, the Project will provide multiple benefits: 1) protect the integrity of the keystone Beaver Creek subwatershed, which drains to the North Fork Stanislaus River and eventually to New Melones Lake; 2) reduce the risk of catastrophic fire potentially impacting the adjacent Calaveras Big Trees State Park and the Stanislaus National Forest, less than one mile north of the property; 3) improve water quality within a watershed that is critical to irrigation and drinking water supply; 4) support the California Department of Parks and Recreation North Grove Restoration Project, and thereby the Sierra Nevada Conservancy's previous investment in the area; and 5) facilitate more cohesive management of the landscape, thereby protecting recreational and habitat values for the extremely popular Calaveras Big Trees State Park, which sees an annual average of more than 180,000 visitors.

**RECORDING REQUESTED BY:**

PLACER TITLE COMPANY  
Escrow Number: 1415-11849-NLC

**AND WHEN RECORDED MAIL TO:**

SAVE THE REDWOODS LEAGUE  
114 SANSOME STREET #1200  
SAN FRANCISCO, CA 94104



Doc # 2010004464

Page 1 of 3

Date: 4/15/2010 01:24P

Recording Requested By:

PLACER TITLE COMPANY

Filed & Recorded in Official Records  
of COUNTY OF TUOLUMNE

KEN CAETANO

COUNTY RECORDER

Fees \$10.00

A.P.N.: 16-070-10 & 25

SPACE ABOVE THIS LINE FOR RECORDER'S USE

**GRANT DEED**

The undersigned grantor(s) declare(s):

Documentary transfer tax is Tax Paid; Section 11932 R & T Code City Transfer Tax:

(X) Unincorporated Area ( ) City of UNINCORPORATED AREA

(X) computed on full value of property conveyed, or

( ) computed on full value less value of liens and encumbrances remaining at time of sale.

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, **SIERRA PACIFIC INDUSTRIES, A CALIFORNIA CORPORATION**

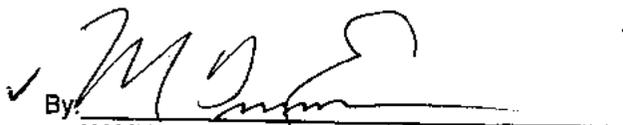
Hereby GRANT(S) to **SAVE THE REDWOODS LEAGUE, A CALIFORNIA NON PROFIT CORPORATION**

THE LAND DESCRIBED HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF TUOLUMNE, UNINCORPORATED AREA, AND IS DESCRIBED AS FOLLOWS:

**SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF FOR FULL LEGAL DESCRIPTION**

Dated: April 06, 2010

SIERRA PACIFIC INDUSTRIES, A CALIFORNIA CORPORATION

By: 

NAME: M. D. Emerson  
TITLE: Vice President

MAIL TAX STATEMENTS TO PARTY SHOWN ON FOLLOWING LINE; IF NO PARTY SHOWN, MAIL AS DIRECTED ABOVE

SAME AS ABOVE

Name

Street Address

City & State

STATE OF CALIFORNIA  
COUNTY OF Shasta

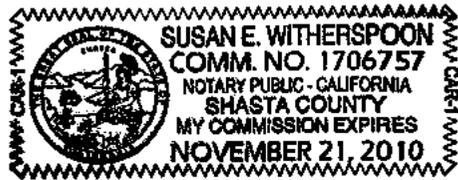
On April 13, 2010 before me, Susan E. Witherspoon, Notary Public,  
personally appeared M. D. Emerson

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she~~/~~they~~ executed the same in his/~~her~~/~~their~~ authorized capacity(ies), and that by his/~~her~~/~~their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Susan E. Witherspoon  
Commission Expiration Date: 11-21-10



MAIL TAX STATEMENTS TO PARTY SHOWN ON FOLLOWING LINE; IF NO PARTY SHOWN, MAIL AS DIRECTED ABOVE

Name SAME AS ABOVE Street Address SAME AS ABOVE City & State SAME AS ABOVE

1415-11849-NLC

**EXHIBIT "A"**  
**LEGAL DESCRIPTION**

THE LAND DESCRIBED HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF TUOLUMNE, UNINCORPORATED AREA, AND IS DESCRIBED AS FOLLOWS:

TOWNSHIP 5 NORTH, RANGE 16 EAST, M.D.B.&M.

SECTION 29:

NORTHEAST QUARTER OF NORTHWEST QUARTER  
SOUTHEAST QUARTER OF NORTHWEST QUARTER  
SOUTHWEST QUARTER OF NORTHWEST QUARTER  
NORTHWEST QUARTER OF NORTHWEST QUARTER  
A.P.N. 16-070-10

SECTION 30:

NORTHEAST QUARTER OF NORTHEAST QUARTER  
NORTHWEST QUARTER OF NORTHEAST QUARTER  
NORTHEAST QUARTER OF NORTHWEST QUARTER  
AND LOT 1 (FRACTIONAL NORTHWEST QUARTER OF NORTHWEST QUARTER)  
A.P.N. 16-070-25



DATE: \_\_\_\_\_

DOCUMENT NO: \_\_\_\_\_

RECORDED: \_\_\_\_\_

Doc # 201604464  
Page 1 of 3  
Date: 4/15/2016 61:24P  
Recording Requested By:  
PLACER TITLE COMPANY  
Filed & Recorded in Official Records  
of COUNTY OF TUOLUMNE  
KEN CAETANO  
COUNTY RECORDER

**STATEMENT OF TAX DUE AND REQUEST THAT AMOUNT PAID NOT BE MADE A PART OF THE PERMANENT RECORD IN THE OFFICE OF THE COUNTY RECORDER  
(Pursuant to Section 11932 R & T Code and County Ordinance)**

TO: County Recorder

Request is hereby made in accordance with the provisions of the Documentary Transfer Tax Act that amount of tax paid be entered upon this form for later affixing to the accompanying document which names:

**SIERRA PACIFIC INDUSTRIES, A CALIFORNIA CORPORATION**

AND

**SAVE THE REDWOODS LEAGUE, A CALIFORNIA NON PROFIT CORPORATION**

PROPERTY

DESCRIBED IN THE ACCOMPANYING DOCUMENT IS LOCATED IN

**State of California, City of UNINCORPORATED AREA, TUOLUMNE County**

THE AMOUNT OF DOCUMENTARY TRANSFER TAX DUE ON THE ACCOMPANYING DOCUMENT IS:

**\$605.00**

DOCUMENTARY TRANSFER TAX HAS BEEN PAID

\_\_\_\_\_  
(Party or Agent)

\_\_\_\_\_  
County Recorder

NOTE: After the permanent record is made, this form will be affixed to the conveying document and returned with it.

Doc # 201604464  
Page 1 of 3  
Date: 4/15/2016 61:24P  
Recording Requested By:  
PLACER TITLE COMPANY  
Filed & Recorded in Official Records  
of COUNTY OF TUOLUMNE  
KEN CAETANO  
COUNTY RECORDER  
Fee: \$8.00



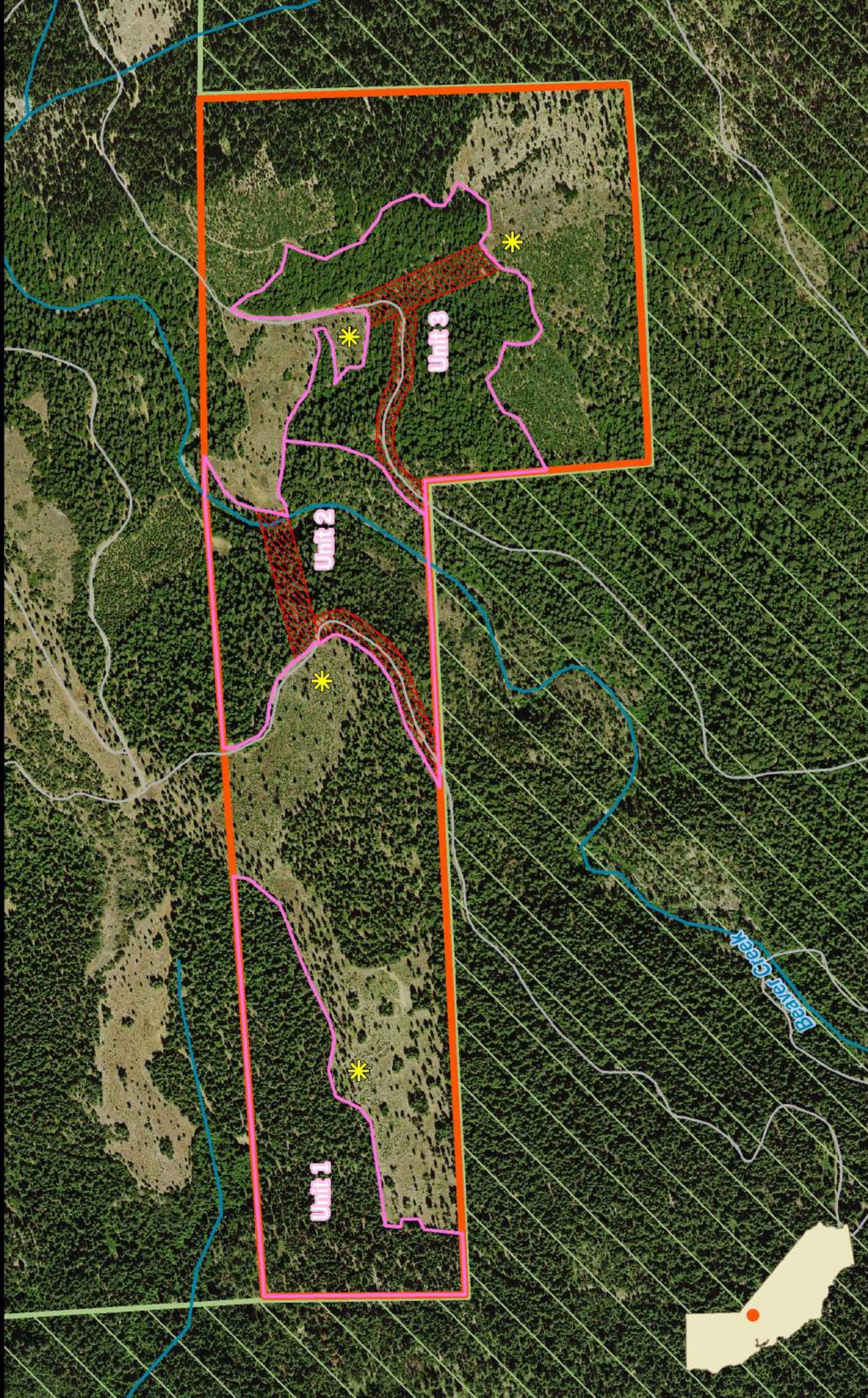
**SNC Prop. 1 Grant Application**  
**Site Plan**  
**Beaver Creek Watershed Protection Project**

The project area is separated into three Units for the fuels reduction work. One Unit will be worked on each year for the three-year term of the project. The fuels reduction work will consist of precommercial thinning, release, pruning, and slash disposal.

- Within the conifer dominated treatment areas, conduct precommercial thinning.
- Within the hardwood dominated treatment area, conduct conifer release.
- Prune trees to reduce ladder fuels and improve wood quality.
- Treat all slash produced by method of chipping/mastication, pile and burn, or lop and scatter.

Units 2 and 3 will also include fuel break paths to connect to the open field areas of the property. This will create a fuel break line across the property to help serve as a protective barrier to the South Grove of Calaveras Big Trees State Park.

Each Unit identified in the Site Plan map is roughly 47 acres. Two dirt roads go through the property, which run through Calaveras Big Trees State Park to the south, a private ownership (SPI) to the north, and connect to Highway 4 from both ends. The League already has an access easement, filed in 2010, that secures the right to use these roads and drive to the property. Access to Unit 1 is available via the west road and a quarter mile hike west through an open field. Access to Unit 2 is available on the west side of Beaver Creek via the west road and the east side of Beaver Creek via the east road. Access to Unit 3 is available via the east road.



Beaver Creek

Fuels Reduction Units

Roads

Burn Locations

0 0.1 0.2 0.4 Miles

Streams & Rivers

Fuel Break Paths

Calaveras Big Trees SP

N



RECORDING REQUESTED BY:  
PLACER TITLE COMPANY  
Order No: 1415-11849-NLC

2010 APR 22 PM 12: 39

Doc # 2010044465  
Page 1 of 18  
Date: 4/15/2010 01:24P  
Recording Requested By:  
PLACER TITLE COMPANY  
Filed & Recorded in Official Records  
of COUNTY OF TULUANE  
KEN CAETANO  
COUNTY RECORDER  
Fee: \$41.00

Recording Requested by and  
When Recorded mail to:  
Save the Redwoods League  
114 Sansome Street, Suite 1200  
San Francisco, CA 94104  
Attn: General Counsel

**ACCESS EASEMENT**

Sierra Pacific Industries, a California non profit corporation (the "Grantor") is the owner of certain real property and Save the Redwoods League ("Grantee") is the purchaser of certain real property from Grantor described in Schedule A attached hereto and incorporated herein by this reference (the "Grantee's Parcel").

Grantor desires to grant to Grantee an easement ("Access Easement") over the existing roads on the Grantor's Parcel (s) as more particularly described in Schedule B attached hereto and incorporated herein by this reference (collectively, the "Easement Parcel") for purposes of access, all as more particularly described herein. The Easement Parcels are shown on the map in Schedule C set forth for informational purposes. The easements set forth in Schedule B and Schedule C shall contain such surveyed metes and bounds or points as reasonably necessary to provide sufficient certainty as to the location of such roads. It is the intent of Grantor and Grantee that the roads over the Easement Parcel that are intended to comprise the Access Easement shall be surveyed and a record of survey recorded when feasible and that this Access Easement shall be amended to include the surveyed descriptions of the roads deemed necessary for this Access Easement.

NOW THEREFORE, for good and valuable consideration receipt of which is hereby acknowledged, Grantor does hereby grant to Grantee, its successors and assigns, the Access Easement over the Easement Parcel on the following terms and conditions:

1. Grant of Easement. The Grantor hereby grants, and conveys to Grantee, its successors and assigns, forever, a continuous and perpetual NON-EXCLUSIVE Access Easement through, over, across and along the Easement Parcel (as an easement appurtenant to the Grantee's Parcel) for use and benefit of Grantee, its successors, assigns, heirs, executors or personal representatives, and of (the following are collectively called "Permitted Others") Grantee's guests, invitees, agents, contractors, and employees of Grantee.
2. Easement Purpose. The purpose of the Access Easement hereby conveyed shall be for access by the Grantee (and Permitted Others) over the Easement Parcel to the Grantee's Parcel

only for purposes of ingress and egress from and to Grantee's Parcel and for no other purpose except administration and management of Grantee's Parcel by Grantee. No grant of access is intended for members of the general public.

3. Division or Addition to the Dominant Estate. If fee simple ownership of the Grantee's Parcel is hereafter divided into two or more undivided interests or if the Grantee's Parcel is split into two or more parts, or if Grantee or its successors or assigns acquire additional lands contiguous to Grantee's Parcel, then all such undivided owners, all such divided parts, and all such additional lands shall enjoy the benefit of the Access Easement subject to the terms hereof, and such additional parts shall for all purposes hereunder be deemed part of the Grantee's Parcel; provided however, that the collective use of the Easement Parcel by all such owners shall not result in any actual and material increase or change in the use of or burden upon the Grantor's Parcel over the level of use and burden specified and permitted herein.

4. Maintenance of the Easement. Grantor shall have no duty to construct, replace, protect, maintain or improve any roadway or any other improvements on the Easement Parcel. Grantor is not responsible for the condition of the roads and makes no representation or undertaking with respect to the condition or maintenance of the roads. Any realignment, reconstruction or maintenance of roads by Grantee is subject to the prior approval of Grantor.

5. Operating Requirements. Use by the Grantee of the Access Easement shall also be subject to such other reasonable operating restrictions and requirements as Grantor may from time-to-time reasonably impose so long as such restrictions and requirements do not render the Access Easement unusable. Any use of Grantor's roads for forest management and related activities including commercial timber harvest are subject to the requirement of the grant by Grantor of a limited time "Road Use Agreement" prior to harvesting activities. Grantor has advised Grantee that in cooperation with Stanislaus National Forest, Road 5N02 may be closed on a seasonal basis during certain winter months. Other roads such as 5N02/5N03 may also be affected in certain areas.

6. Running of Benefits and Burdens. All provisions of this instrument, including the benefits and burdens, run with the land and are binding upon and inure to the assigns and successors of the parties hereto. Each entry onto or activity on the Easement Parcel by Grantee (or Permitted Others) shall be deemed the agreement by Grantee and Permitted Others to be bound by the terms hereof.

7. Violations and Damage. The Grantee shall be liable for, shall defend Grantor against and indemnify and hold Grantor harmless from any violation of any provision herein and for any loss, claims or damage to Grantor arising from any activities of the Grantee or Permitted Others on the Easement Parcel, or otherwise in violation hereof.

8. Release of Access Easement. The Grantee and any successor in interest to the ownership of the Grantee may terminate this instrument and the Access Easement herein granted by recording a release in recordable form, with directions for delivery of same to Grantor at its last

ACKNOWLEDGMENT

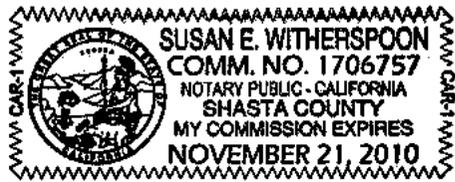
State of California  
County of Shasta

On April 13, 2010 before me, Susan E. Witherspoon, Notary  
(insert name and title of the officer) Public

personally appeared M. D. Emmerson  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in  
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the  
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.



Signature Susan E. Witherspoon (Seal)

SCHEDULE A

GRANTEE'S PARCEL

THE LAND DESCRIBED HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF TUOLUMNE, UNINCORPORATED AREA, AND IS DESCRIBED AS FOLLOWS:

TOWNSHIP 5 NORTH, RANGE 16 EAST, M.D.B.&M.

SECTION 29:

NORTHEAST QUARTER OF NORTHWEST QUARTER  
SOUTHEAST QUARTER OF NORTHWEST QUARTER  
SOUTHWEST QUARTER OF NORTHWEST QUARTER  
NORTHWEST QUARTER OF NORTHWEST QUARTER  
A.P.N. 16-070-10

SECTION 30:

NORTHEAST QUARTER OF NORTHEAST QUARTER  
NORTHWEST QUARTER OF NORTHEAST QUARTER  
NORTHEAST QUARTER OF NORTHWEST QUARTER  
AND LOT 1 (FRACTIONAL NORTHWEST QUARTER OF NORTHWEST QUARTER)  
A.P.N. 16-070-25

SCHEDULE B

EASEMENT PARCEL

**A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS OVER THOSE PORTIONS OF SECTION 17, 19, AND 20, TOWNSHIP 5 NORTH, RANGE 16 EAST, M.D.B.& M. SHOWN AS ROAD 5N05X AND 5N75, SHOWN ON SCHEDULE C, HEREIN.**

SCHEDULE C

MAP OF EASEMENT PARCEL

