



# Upper Mokelumne River Watershed Authority

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## UMRWA Regular Governing Board Meeting

### Agenda

Friday, January 25, 2019 – 1:30 p.m.  
McLean Hall, Pardee Center, Valley Springs, CA 95252

#### ROLL CALL

#### PLEDGE OF ALLEGIANCE

PUBLIC COMMENT: When responding to a matter not on the agenda, state law limits a Board member to providing a brief response, asking clarifying questions, and/or referring it to staff.

A. CONSENT CALENDAR: [Items below (3) are considered routine and may be enacted by one motion. Items may be removed for discussion and made a part of the regular agenda at the request of a Board member.]

#### Recommended Action

- |   |                        |
|---|------------------------|
| 1. Board Regular Meeting Minutes of October 5, 2018                 | Approve by Motion      |
| 2. Treasurer's Reports – Fourth Quarter 2018 and First Quarter 2019 | Accept for Filing      |
| 3. Executive Officer Grant Funded Quarterly Report                  | Information/Discussion |

#### B. AUTHORITY GENERAL:

- |   |                        |
|---|------------------------|
| 4. MAC Plan Update 2018 – Plan Adoption               | Approve by Motion      |
| 5. Pumpkin Hollow Restoration Project                 | Approve by Motion      |
| 6. Cabbage Patch Restoration Project                  | Possible Action        |
| 7. NFWF Grant Application for Erosion Control Project | Approve by Motion      |
| 8. Forest and Watershed Grant Opportunities           | Information/Discussion |
| 9. Legislative Issues Update                          | Possible Action        |

#### C. BOARD MEMBER COMMENTS:

10. Board Member Comments

#### D. EXECUTIVE OFFICER REPORT:

11. Executive Officer's Oral Report

#### ADJOURNMENT:

- Next Regular Board Meeting: April 26, 2019 at 1:30 p.m. (McLean Hall, Pardee Center)

*Requests for disability-related modification or accommodation, including auxiliary aids or services, may be made to Lisa Stuart at 209.772.8261 or [lisa.stuart@ebmud.com](mailto:lisa.stuart@ebmud.com) no later than 24 hours before the meeting.*



# Upper Mokelumne River Watershed Authority

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Agenda No: **1**

Meeting Date: January 25, 2019

Title:

Regular Meeting Minutes of October 5, 2018

Recommended Action:

Approve the regular meeting minutes of October 5, 2018.

Summary:

The summary minutes of the October 5, 2018 regular meeting are included for Board review and approval.

Friday, October 5, 2018 – 10:00 a.m.  
Governing Board Regular Meeting  
Upper Mokelumne River Watershed Authority  
Pardee Lodge – Pardee Center – Valley Springs, CA

**Summary Minutes**

**ROLL CALL**

Directors John Coleman, Terry Woodrow, Lynn Morgan, Richard Farrington, Jack Garamendi, Jeff Davidson, Richard Blood, and Ed Gonzalez were present. Also present were Executive Officer Rob Alcott, Authority Counsel Greg Gillott, Authority Secretary Lisa Stuart, and 16 visitors and presenters.

**PUBLIC COMMENT** – None

**AUTHORITY BUSINESS**

**1. Regular Meeting Minutes of July 27, 2018**

**Motion 30-18** to approve the regular meeting minutes of July 27, 2018 was made by Director Garamendi, seconded by Director Morgan, and carried by voice vote: Yea 7 – Nay 0 – Abstain 1 (Davidson).

**2. Pumpkin Hollow Restoration Project**

UMRWA's treatment of 971 acres of forested lands within the Pumpkin Hollow project is being completed by five contractors hired by the Authority in 2017 and 2018 and one contractor yet to be selected. The Board was updated on contractors, contract amounts, acres of work to be performed and status of work completed as of September 1 including the 185.9 acres of timber removal and fuel treatment work that has been bid twice (RFP 18-02 and 18-02A). In each of those solicitations, no proposals were received. Based on follow-up conversations with several contractors, Authority staff is working with Forest Service staff to determine the best course of action to complete this work in 2019 as specified by the SNC Pumpkin Hollow grant agreement. Following further discussions between FS and UMRWA staff, and a possible project site visit, a revised work plan will be developed.

This updated work plan is expected to be the basis for discussions with a qualified local contractor with prior US Forest Service experience for a direct award by the Board at the January 25, (or if need be April 26) 2019 meeting. A direct award to a local contractor is appropriate in this instance for several reasons. First, a third unsuccessful solicitation could result in a failure by UMRWA to complete the work in 2019 as required by the SNC grant agreement (as noted above, we have received no contractor proposals in response to the two previous RFP solicitations). Second, such a failure could jeopardize UMRWA's standing with SNC for future funding considerations. Third, a qualified local contractor may not incur the per diem costs that out-of-area contractors might incur and therefore avoid this additional expense. Finally, with significant prior experience and understanding of the work required, UMRWA and Forest Service staffs are positioned to negotiate a fair and reasonable cost with a qualified local contractor.

**3. Cabbage Patch Restoration Project**

The SNC Cabbage Patch grant agreement with UMRWA specifies 314 acres of forest will be treated. UMRWA's Cabbage Patch work is being completed by three contractors hired in July 2018. The Board was updated on the contractors, contract amounts, acres of work to be performed and status of work completed as of September 1.

#### **4. SNC Grant Application - Black Springs Restoration Project**

On July 26 the Board of Directors adopted a resolution authorizing the submittal of a Sierra Nevada Conservancy grant application for the Black Springs project. The completed application was submitted to SNC by the October 1 submittal deadline. As with the Pumpkin Hollow and Cabbage Patch projects the Black Springs Restoration Project is part of the larger Hemlock Restoration Project.

The primary purposes of the Black Springs Restoration Project are removal of forest fuels, reduction in risk to wildfire, reduction in potential for severe erosion, protection of water quality, restoration of the forest's ecological resilience and generation of potential economic benefit to local forest industry workers. Treatments will include hand thinning followed by piling and/or lopping, and plantation and natural forest thinning through mastication of small trees and brush. The total estimated cost of the project is \$1,725,000, including the UMRWA and US Forest Service funded portions.

The UMRWA element of this project is planned to reduce forest fuels and improve ecological resilience on 900 acres as provided under the proposed SNC grant agreement. The USFS will treat an additional 1,000 acres for a total planned treatment of 1,900 acres. Assuming SNC funding is forthcoming, this project will be implemented under a SPA agreement with the Stanislaus National Forest. It will be the third partnership under the Master Stewardship Agreement between the Forest Service and UMRWA, signed May 18, 2016.

#### **5. MAC Plan Update 2018**

On April 27 the Board approved an agreement for Woodard & Curran to prepare the MAC Plan Update 2018. The project schedule anticipates substantial completion of the updated plan by December 2018. The updated plan will be presented to the Board for approval on January 25, 2019. This schedule should allow UMRWA to be eligible to respond to a grant solicitation tentatively scheduled in April 2019 by DWR.

On August 30 the Regional Participants Committee (RPC) – made up of 12 agencies including UMRWA – conducted the second of three MAC Plan Update 2018 meetings (final meeting scheduled October 25). At the August 30 meeting, the RPC reviewed and tentatively endorsed the MAC Plan changes that are necessary to conform the plan to DWR's 2016 guidelines. Additionally, the MAC Plan's updated implementation projects were reviewed and reprioritized. The RPC is expected to review and approval the MAC Plan updated sections and projects on October 25.

#### **6. Legislative Issues Update**

Richard Sykes, EBMUD, advised the board SB1079 (Monning) had been signed by the Governor. The bill authorizes CalFire to provide advance payments up to 25 percent of the total grant award for the Forest Health or Fire Prevention Grant programs to eligible entities.

#### **7. Treasurer's Report –Fourth Quarter FY 2018**

The Treasurer's Report was unavailable for the meeting and will be provided at the January Board meeting instead.

#### **8. Executive Officer Grant Funded Quarterly Report**

The EO presented the quarterly report.

#### **9. Resolution Recognizing Executive Officer Rob Alcott**

Director Coleman and other Board members thanked retiring Executive Officer Rob Alcott and spoke of his dedication to UMRWA since its inception. They also offered a resolution recognizing the EO's contributions to UMRWA during its 18-year history.

**Motion 31-18** to approve Resolution No. 2018-2 recognizing Executive Officer Rob Alcott’s contributions to UMWRA was made by Director Davidson, seconded by Director Woodrow, and carried by voice vote: Yea 8 – Nay 0 – Abstain 0.

**Board Member Comments:** None

**Executive Officer Comments:** The EO described staff’s inquiry to PG&E regarding potential disposition of Project 137 and the delay in advancing a JPA amendment process. Richard Sykes described the WARMF model update, PG&E and JPA amendment process.

**ADJOURNMENT:** Director Coleman adjourned the meeting at 10:32 a.m., inviting all participants to the Pardee BBQ being held onsite. The next regular meeting will be held on January 25, 2019 at 1:30 p.m. at Pardee Center’s McLean Hall.

**SUBMITTED BY:**

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Lisa Stuart, Authority Secretary

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John Coleman, Chair of the Board  
APPROVED: January 25, 2019



# Upper Mokelumne River Watershed Authority

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Agenda No: **2**

Meeting Date: January 25, 2019

Title:

Treasurer Reports - Fourth Quarter 2018 and First Quarter 2019

Recommended Action:

Accept for filing

Summary:

The Treasurer's Report for the Fourth Quarter of fiscal year 2018 is attached for board review. The Treasurer's Report for the First Quarter of fiscal year 2019 will be distributed before the Board meeting.

Discussion:

As a consequence of several actions, the final accounting of FY 2018 assessment funds resulted in the allocation of \$84,360 to UMRWA's Operating Reserve. These are explained below.

The FY 2018 Total Assessment and Miscellaneous Funding budget was \$250,803 (which includes a \$50,000 mid-year transfer from UMRWA Operating Reserves). The end of fiscal year 2018 Total Assessment Expenditures sum was \$191,699. The \$59,104 difference (minus \$6,938 carried forward to this fiscal year for CSRCD's FY 2018 unbilled balance) results in \$52,166 being allocated to the UMRWA Operating Reserve.

The \$52,166 residual balance is comprised of unspent routine operating budget items plus \$40,850 of California Natural Resources Agency (CNRA) unbilled costs for UMRWA's half share of the Mokelumne Wild and Scenic Study (which reflects a \$9,150 credit for AWA and CCWD data contributions to the study). After multiple requests to CNRA beginning January 2018 for a final invoice, UMRWA staff, with CNRA staff concurrence, stopped asking in May 2018 for the final invoice. In the event CNRA at some future time tenders UMRWA a final invoice, the funding \$40,850 will be available in Operating Reserves.

In addition to unspent FY 2018 assessment dollars, a total of \$32,477 in indirect expense charges in FY 2018 to the USFS and SNC was collected. These funds have also been allocated to the UMRWA Operating Reserve.



# Upper Mokelumne River Watershed Authority

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Agenda No: **3**

Meeting Date: January 25, 2019

Title:

Executive Officer Grant Funded Quarterly Report

Recommended Action:

For information only

Discussion:

The Executive Officer's work agreement with UMRWA segregates the work into two categories; tasks related to UMRWA business that are funded by Member Agency contributions, and grant-funded or other work paid by non-Member Agency contributions. The work agreement specifies the EO is to report non-Member Agency funded work to the Board on a quarterly basis. This quarterly report reflects invoices submitted the past quarter for the grant-funded projects as displayed in the table below.

This is anticipated to be the final report of this nature for the immediate future. With the former Executive Officer's transition to Administrative Officer, and the latter now working under the new EO's direction, these reports will not be necessary unless or until the new EO undertakes grant-funded work.

Project	Time	Work Performed	Fee
Round 2 Grant admin	N/A	Project closed-out. Received DWR's formal Grant Closure letter on Nov. 28, 2018	\$0
Drought Grant admin	Aug. thru Nov.	Manage accounting and invoicing; coordinate with DWR, RMC, and Project Sponsor AWA.	\$1,330



# Upper Mokelumne River Watershed Authority

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Agenda No: **4**

Meeting Date: January 25, 2019

Title:

MAC Plan Update 2018 – Plan Adoption

Recommended Actions:

Adopt Resolution 2019 –1 approving the MAC Plan Update 2018

Summary:

This 2018 MAC Plan Update was initiated to capture updated regional information since the 2013 MAC Plan was prepared and to respond to updated state requirements. All required Plan elements as identified in DWR's 2016 IRWM Plan Standards are met by this MAC Plan 2018 Update (summarized in Table 1 below).

On April 27, 2018 the Board approved an agreement for Woodard & Curran to prepare the MAC Plan Update 2018. W&C convened the Regional Participants Committee (RPC) in May and that stakeholder committee, meeting three times over the course of the project, guided the update process. Additionally, two evening public meetings were conducted.

Katie Cole, Project Manager for Woodard & Curran, has been invited to make a brief presentation of the updated plan to the Board. The MAC Plan Update 2018 is presented for the Board's approval. The full plan may be reviewed at [http://www.umrwa.org/uploads/MAC%20Plan%20Update\\_Combined.pdf](http://www.umrwa.org/uploads/MAC%20Plan%20Update_Combined.pdf).

Discussion:

The RPC is the group of interested stakeholders that guided the preparation of the plan update. The RPC as reconstituted for the 2018 update included the following organizations:

- |   |                                      |
|---|--------------------------------------|
| • Amador Fire Safe Council              | • Calaveras County Water District    |
| • Amador Resource Conservation District | • Calaveras Public Utility District  |
| • Amador Tuolumne Community Action      | • East Bay MUD                       |
| • Amador Water Agency                   | • Foothill Conservancy               |
| • Buena Vista Rancheria                 | • Jackson Valley Irrigation District |
| • Calaveras Amador Forestry Team        | • UMRWA                              |

The MAC Plan's 2013 IRWM plan elements required by DWR's 2016 standards to be updated are shown in Table 1 below. Also shown are the corresponding MAC Plan sections.



**Table 1 –Location of IRWM Plan Standards in MAC Plan Update 2018**

<b>Plan Stand-ard No.</b>	<b>IRWM Plan Standard</b>	<b>MAC IRWMP Update Section</b>
<b>1</b>	Governance	Section 2 Governance
<b>2</b>	Region Description	Section 1 MAC Region
<b>3</b>	Objectives	Section 3.1 Policies, Goals, Objectives, and Performance Measures
<b>4</b>	Resource Management Strategies	Section 3.2 Resource Management Strategies
<b>5</b>	Integration	Section 2.4 Integration and Section 4.1.5 Project Integration
<b>6</b>	Project Review Process	Section 4.1 Project Review Process
<b>7</b>	Impact and Benefit	Section 4.3 Impact and Benefit Analysis
<b>8</b>	Plan Performance and Monitoring	Section 5.1 Plan Performance and Monitoring
<b>9</b>	Data Management	Section 5.2 Data Management
<b>10</b>	Finance	Section 4.4 Financing Plan
<b>11</b>	Technical Analysis	Section 4.5 Technical Analysis
<b>12</b>	Relation to Local Water Planning	Section 4.2 Coordination with Water and Land Use Agencies
<b>13</b>	Relation to Local Land Use Planning	Section 4.2 Coordination with Water and Land Use Agencies
<b>14</b>	Stakeholder Involvement	Section 2.3 Stakeholder Involvement
<b>15</b>	Coordination	Section 2.5 Coordination with Other IRWM Regions and State/Federal Agencies
<b>16</b>	Climate Change	Various locations, see Appendix A

The MAC Plan Update 2018 process included a complete update to the implementation project sections of the plan. The revised plan now includes 47 new or updated implementation projects in various stages of implementation readiness, from Planning/Initial Study to Design Complete.

**UPPER MOKELUMNE RIVER WATERSHED AUTHORITY**

**RESOLUTION 2019-1**

**ADOPTING THE UPDATED MOKELUMNE-AMADOR-CALAVERAS  
INTEGRATED REGIONAL WATER MANAGEMENT PLAN**

**UPDATE 2018**

**January 25, 2019**

WHEREAS, in 2002 the State Legislature enacted Division 6, Part 2.2 of the California Water Code, known as the Integrated Regional Water Management Planning Act of 2002; and

WHEREAS, the benefits of integrated regional planning for water resources management activities are intended to include increased efficiency and effectiveness, enhanced collaboration across agencies and stakeholders, and improved responsiveness to regional needs and priorities; and

WHEREAS, the Upper Mokelumne River Watershed Authority (UMRWA) is a regional water management group as defined by the California Water Code. A Joint Powers Agency formed in 2000 to address water quality, water supply and environmental matters, UMRWA is comprised by Amador Water Agency, Calaveras County Water District, Calaveras Public Utility District, East Bay Municipal Utility District, Jackson Valley Irrigation District, Alpine County Water Agency and the counties of Amador, Calaveras and Alpine; and

WHEREAS, the Mokelumne-Amador-Calaveras IRWM Region (MAC Region) is an established IRWM region as determined by California Department of Water Resources (DWR) in 2009 under DWR's Regional Acceptance Process; and

WHEREAS, the original 2006 MAC Plan, developed and adopted under then-existing rules and guidelines, was updated in 2013 to comply with new rules and guidelines established by DWR in November 2012; and

WHEREAS, the 2013 MAC Plan must be updated to comply with new rules and guidelines established by DWR in 2016 and to be eligible for future grant funding; and

WHEREAS, the MAC Plan Update 2018, developed over the past eight months under the direction of the Regional Participants Committee and vetted in two public community workshops, is herewith presented for adoption by UMRWA Board of Directors; and

WHEREAS, the adoption of the updated MAC Plan is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines §15262 and §15306 because the Plan involves planning studies for possible actions that participating agencies have not yet approved and consists of basic data collection that would not result in the disturbance of any environmental resource; and

WHEREAS, the MAC Plan is meant to be complementary to participating agencies' individual plans and programs and does not supersede such plans and programs, and adoption of the MAC Plan does not prohibit nor affect in any way a participating agencies' planning efforts separate from the MAC Plan;

NOW THEREFORE, BE IT RESOLVED that the UMRWA Board of Directors does hereby adopts the Mokelumne-Amador-Calaveras IRWM Plan – Update 2018.

ADOPTED this 25th day of January, 2019

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John Coleman  
President

ATTEST:

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Lisa Stuart  
Authority Secretary



# Upper Mokelumne River Watershed Authority

Agenda No: **5**

Meeting Date: January 25, 2019

Title:

Pumpkin Hollow Restoration Project

Recommended Actions:

(1) Approve the First Amendment to the Tree Services Unlimited, Inc. General Services Agreement to extend the term to December 31, 2019 and authorize the Executive Officer to sign the amendment.

(2) Approve a General Service Agreement with Ronwright Logging, Lumber and Construction, Inc. at a not-to-exceed cost of \$119,000, and authorize the Executive Officer to sign the agreement upon receipt of an updated Pumpkin Hollow SPA agreement that incorporates the additional required \$60,000 in federal funds.

Summary:

UMRWA's treatment of 971 acres of forested lands within the Pumpkin Hollow project is being completed by five contractors hired by the Authority in 2017 and 2018 and one contractor yet to be selected. The contractors, contract amounts, acres of work to be performed and status of work completed as of December 31, 2018 are shown below.

Contractor	Contract Date (Amount)	Acres	Completed
Tree Services Unlimited	July 2017 (\$272,460)	239	103 acres (43%)
J&R Logging	July 2017 (\$178,405)	21 & 9 road miles	Completed
Summitt Forests Inc.	July 2017 (\$130,183)	393	Completed
Greater Valley Conservation Corps (SJ County Office of Education)	July 2017 (\$66,000)	45	Completed
GTS Forestry, Inc.	July 2018 (\$139,596)	87	37 acres (42%)
<i>RFP 18-02 Ronwright Logging (recommended)</i>	<i>Award today (\$119,000)</i>	186	0%
Total		971	62%

Discussion:

**Tree Services Unlimited (TSU)** – The original General Services Agreement with TSU specifies December 31, 2018 as the agreement termination date unless extended in writing. Included with this agenda item is Amendment 1 (attached) to that original agreement.

Amendment 1 will extend the term of the agreement to December 31, 2019. This new termination date coincides with the January 1, 2020 Pumpkin Hollow project completion date specified in the SNC grant agreement with UMRWA. The SNC grant agreement also specifies that all associated payment requests and deliverables must be submitted to SNC by February 15, 2020.

**RFP 18-02 Contractor Selection** – The above-referenced 186 acres of timber removal and fuel treatment work has been bid twice (RFPs 18-02 and 18-02A). No proposals were received in response to the two solicitations. Based on follow-up conversations with several contractors UMRWA and USFS staff determined the logistically challenging work specified in the RFPs presented unacceptable economic risks and thus no proposers. As a result staff has reached out to a local contractor to facilitate a direct award procedure.

A direct award is appropriate in this circumstance for several reasons. First, a third unsuccessful solicitation could result in a failure by UMRWA to complete the work in 2019 as required by the SNC grant agreement. Second, such a failure could jeopardize UMRWA's standing with SNC for future funding considerations. Third, a qualified local contractor may not incur the per diem costs that out-of-area contractors might incur and therefore avoid this additional expense. And finally, with significant prior experience and understanding of the work required, UMRWA and Forest Service staffs are positioned to negotiate a fair and reasonable cost with a qualified local contractor.

Following the October 5 Board meeting, Authority staff, with support from Forest Service staff, contacted several qualified local contractors to determine if they were immediately available to visit and assess the 18-02 treatment area and potentially submit a bid. UMRWA staff, with USFS concurrence, subsequently negotiated a modified work plan for the 18-02 treatments with Ronwright Logging, Lumber and Construction, Inc. (a Calaveras County contractor) at a not-to-exceed cost of \$119,000. The primary adjustments from the original RFP 18-02 work plan versus the negotiated work plan are:

- Timber harvest acreage reduced to 16 acres (was 177 acres)
- Cut and pile, or masticate (contractor option) 113 acres
- Masticate 18 acres
- Total acreage treated is 147 acres (was 186). SNC has concurred.

With the 161-acre reduction in timber harvesting, and the associated diminution of anticipated timber harvest revenue (which would have offset a portion of the project's costs), the Forest Service has agreed to add \$60,000 to the Pumpkin Hollow SPA budget. Thus the USFS funding combined with the allotted SNC grant funding, totaling \$119,000 is sufficient to fund the recommended contract.

A copy of the recommended General Services Agreement is included.

FIRST AMENDMENT TO GENERAL SERVICES AGREEMENT  
FOR  
UPPER MOKELUMNE RIVER WATERSHED AUTHORITY

THIS FIRST AMENDMENT TO THE GENERAL SERVICES AGREEMENT ("Agreement") is made as of January 25, 2019 by and between the UPPER MOKELUMNE RIVER WATERSHED AUTHORITY, a joint powers agency formed pursuant to the laws of the State of California ("Authority") and TREE SERVICES UNLIMITED, INC. ("Contractor").

RECITALS

A. AUTHORITY and CONTRACTOR executed an agreement (the "Original Agreement") dated July 28, 2017, whereby CONTRACTOR agreed to provide plantation thinning and mastication services as an element (RFP No. 17-01) of the Pumpkin Hollow Restoration Project. The term of the Original Agreement terminates December 31, 2018.

B. AUTHORITY and CONTRACTOR desire to modify the Original Agreement as set forth in this First Amendment.

C. AUTHORITY BOARD OF DIRECTORS authorized this amendment and the Executive Officer's execution thereof at its January 25, 2019 regular meeting.

NOW, THEREFOR, the parties agree as follows:

1. The term of the Agreement is extended to December 31, 2019.

2. Except as set forth in this Amendment, the Original Agreement shall remain unmodified and in full force and effect.

IN WITNESS WHEREOF, the parties have executed this First Amendment as of the date first set forth above.

UPPER MOKELUMNE RIVER  
WATERSHED AUTHORITY

CONTRACTOR

\_\_\_\_\_  
Richard Sykes, Executive Officer

\_\_\_\_\_  
Tree Services Unlimited, Inc.

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**UPPER MOKELUMNE RIVER WATERSHED AUTHORITY**

**DRAFT - GENERAL SERVICES AGREEMENT**

**MECHANICAL THINNING, FUEL TREATMENT and HARVESTING**

**(Pumpkin Hollow Project)**

THIS SERVICES AGREEMENT (“Agreement”) is entered into by and between the UPPER MOKELUMNE RIVER WATERSHED AUTHORITY, a joint powers agency formed pursuant to the laws of the State of California (“Authority”) and Ronwright Logging, Lumber and Construction, Inc. (“Contractor”).

Authority desires to obtain thinning and fuel treatment services (“the Services”) which are more fully described in Exhibit A to this Agreement and;

Contractor is professionally and legally qualified to provide the Services and is willing to provide them to the Authority.

Now therefore it is agreed that Authority retains Contractor to provide the Services, and Contractor accepts such engagement, on the General Requirements specified in this Agreement, the attached Additional Provisions, and the following described exhibits, all of which are incorporated into this Agreement by this reference:

Exhibit A Scope of Work and Project Map

Exhibit B General Requirements

Exhibit C Insurance Certificates (i.e. Workers Comp; Commercial Liability, Auto)

Exhibit D Payment Terms and Procedures

Exhibit E Specifications for Operations

Exhibit F Road Maintenance Specifications

The maximum compensation payable to the Contractor shall not exceed one hundred nineteen thousand dollars and zero cents (\$119,000) as shown below for the term of this Agreement.

Description	Unit of Measure	Estimated Quantity	Unit Cost	Extended Cost
Item 1. Cut and Machine Pile, or Masticate (Units 38, 600, 602, 604, 609)	acre	113	<b>\$700.00</b>	<b>\$79,100.00</b>
Item 2. Masticate (Unit 605)	acre	18	<b>\$1,050.00</b>	<b>\$18,900.00</b>
Item 3. Timber Harvesting (Units 601 and 606)	acre	16	<b>\$1,280.49</b>	<b>\$21,000.00</b>
<b>TOTAL COST</b>				<b>\$119,000</b>

Each party executing this Agreement warrants that he or she has authority to enter into this Agreement on behalf the party for whom he or she signs. This Agreement shall become effective as of the date of the second signature below.

Term of Agreement: The term of this agreement begins on the date this agreement is executed by the Upper Mokelumne River Watershed Authority and terminates on December 31, 2019.

Notices: All notices herein provided to be given, or which may be given, by either party to the other, shall be deemed to have been fully given when made in writing, signed by an authorized representative, and hand delivered to a designated representative or deposited in the United States Postal Services, certified with return receipt requested, with postage prepaid and addressed as follows:

To Contractor: Ronwright Logging, Lumber Construction, Inc.  
Ron Glass, President  
822 Sawmill Road  
PO Box 4399  
Camp Connell, CA 95223

To Authority: Upper Mokelumne River Watershed Authority  
Richard Sykes, Executive Officer  
15083 Camanche Parkway South  
Valley Springs, CA 95252

With a copy to:

Gregory Gillott, Authority Counsel  
810 Court Street  
Jackson, CA 95642

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year below written.

UPPER MOKELUMNE RIVER  
WATERSHED AUTHORITY

CONTRACTOR:  
Name: Ronwright Logging, Lumber Construction, Inc.

BY: \_\_\_\_\_  
Richard Sykes, Executive Officer

BY: \_\_\_\_\_  
Ron Glass, President

DATE: \_\_\_\_\_

Federal Tax I.D. No.: 82-0771038

Approved as to form:

BY: \_\_\_\_\_  
Greg Gillott, Authority Counsel



## Exhibit A

### Scope of Work

This project lies entirely within Stanislaus National Forest Lands, on the Calaveras Ranger District. The Authority is implementing this project under a Supplemental Project Agreement pursuant to Master Stewardship Agreement #16-SA-11052000-065 between the Authority and the Forest Service.

This project consists of areas requiring one or combination of the following: cutting of small conifer trees, machine piling vegetative material and/or mastication, and timber harvesting. Treatments are designed to enhance meadow and aspen environments, and reduce fuel loading which is leading to a high risk of increased wildfire severity, intensity, and frequency.

#### SPECIFIC REQUIREMENTS

##### **Item 1: Cut and Machine Pile, or Masticate**

Applicable to Units: 600, 602 [SE portion], 604, 609, 38 for a total of 113 acres

Item	Treatment Unit Number	Acres
1. Cut and Machine Pile	38	6.1
	600	28.5
	602	15.3
	604	23.3
	609	39.8
		<b>113.0</b>

- a. Unit boundary is identified with orange paint on trees at dbh and below stump height.
- b. All conifer trees (live or dead) over 2 feet in height and less than 10 inches diameter at breast height (dbh) shall be cut or masticated. Trees forked below DBH are considered two trees; trees forked above DBH are considered one tree. If no trees are within 20 feet of an existing tree that is less than or equal to 10 inches at dbh, then the tree may be retained.
- c. Trees shall be cut below the lowest live branch and have a stump height no higher than 8 inches above ground level on the uphill side or obstacles (i.e. large rocks, down logs). Trees shall be bucked such that piece length is less than or equal to 8 feet.
- d. Cut trees shall be felled away from unit boundaries, roads, fence lines, established land corners and streams. Any trees falling on such areas shall be removed, or left standing if damage to improvement would result.
- e. Cut trees and concentrations of existing vegetative material on the ground less than 16" diameter at the mid-section of the log, excluding scattered individual pieces, shall be machine piled or masticated. Vegetative debris shall not be pushed into leave trees and left untreated.
- f. Piling shall be accomplished with minimal disturbance to top soil. Minimize turning of tracked equipment.
- g. Residual conifers and all hardwoods (Black oak, Aspen, Willow, Dogwood) shall not be damaged.

- h. All piles shall be reasonably compact and free of soil to facilitate burning and shall be constructed of such size and at such distance from trees so that burning shall not result in unnecessary damage to residual trees. No piles shall be located within 50 feet of stream channels or within wet areas.
- i. If because of unit shape, presence of live trees or terrain conditions it is not possible to locate piles in openings, Contractor and UMRWA will agree on pile locations.
- j. A fire line to mineral soil shall be constructed around each pile and shall be a minimum 36 inches width. Fire line will not contain any substantial quantities of dead, vegetative material.
- k. Piles shall be covered with a minimum 3 foot by 3 foot piece of durable waterproof material. Covering shall be secured in place by pieces of wood placed on top.
- l. Vegetative material shall be machine piled using equipment with a boom equipped with a grapple head unless Contractor and UMRWA agree that use of a dozer with brush rake or other method can be accommodated without damage to residual trees and excessive soil disturbance.
- m. No piles shall be built on top of any log that extends beyond 5 feet of the edge of the pile. Material extending three feet or more outside the edge of a pile shall be trimmed.
- n. Soils in the operating area must be dry enough to prevent rutting by a single pass of the equipment.
- o. Unless otherwise agreed, piling equipment shall not operate within 15 feet of edge of streams and aquatic features. Equipment shall not cross meadows, "wet" stream channels, or other non-work areas. Riparian vegetation shall not be cut or damaged.
- p. Controlled Area: No Operations between March 1 and August 15, unless otherwise agreed as indicated on Project Area Map.
- q. Mastication if employed shall meet specifications below.

## **Item 2. Masticate**

Applicable to Unit: 605 for a total of 18 acres

- a. Unit boundary is identified with orange paint on trees at dbh and below stump height.
- b. Masticate all live and dead brush, and coniferous trees less than 10" dbh. If no trees are within 20 feet of an existing tree that is less than or equal to 10 inches at dbh, then the tree may be retained.
- c. All brush and excess trees dead and/or alive shall be cut below the lowest live branch and have a stump height no higher than 8 inches above ground level on the uphill side or obstacles (i.e. large rocks, down logs).
- d. Debris resulting from the operation shall lie flat on the ground and not exceed 12 inches in depth. No masticated or cut material shall lean against or be suspended by a leave tree.
- e. No individual piece of slash or vegetative debris shall be greater than 3 feet in length.
- f. Protection of the residual trees shall be the highest priority in all operations.
- g. Soil displacement shall be minimized by working the masticating equipment in as straight a line as possible, up and down slopes, given the known limitations of residual trees and terrain.
- h. Residual conifers and all hardwoods (Black oak, Aspen, Willow, Dogwood) shall not be masticated, shredded, or damaged.
- i. Do not masticate or otherwise damage any down logs greater than 16" diameter at the mid-section of the log, or snags greater than 15" DBH.
- j. Equipment shall be kept free of debris accumulations that may result in fire starts.
- k. The masticated/shredded material shall be evenly distributed over the treated areas so as to not leave large accumulations of slash. Concentrations of brush, slash, and small dead trees may need repeated treatment in order to satisfy desired work standards.
- l. Vegetative debris shall not be pushed into leave trees and left unshredded.
- m. Soils in the operating area must be dry enough to prevent rutting by a single pass of the equipment.

- n. Equipment shall not operate within 15 feet of streams and shall not cross meadows, "wet" stream channels, or other non-work areas. Riparian vegetation shall not be shredded, cut or damaged.
- o. Road signs indicating warning of work in progress are required at the beginning of any road and/or OHV trail while the operator is working in the vicinity and material from operator's work might cause a hazard to the general public using these trails/roads.

### Item 3. Timber Harvesting

Applicable to Units: 601 and 606 for a total of 16 acres

This project includes the harvest and purchase of commercial timber designated by the Forest Service.

#### 3.1 Units and Acres

Unit Number	Acres
601	6
606	10
Total	16

Cutting and removal of designated trees in two units as listed above. Timber shall be paid for by Contractor at contract bid rates.

Included Timber is defined as live and dead trees and portions thereof that meet utilization standards and are designated for cutting as specified below. To meet minimum tree specifications, trees must equal or exceed tree diameters listed in the Volume Estimate and Utilization Standards table and contain at least one minimum piece. Contractor shall fell, yard to landings, and process such trees and shall remove merchantable logs from the Project area.

#### 3.2 Volume Estimate and Utilization Standards

Species	Product	Estimated Quantity <sup>1</sup>	Unit of Measure	Minimum Specifications				
				Merchantable Tree		Piece Required to be Removed		
				Diameter Breast High (d.b.h.) (inches)	Number of Minimum Pieces per Tree	Length (feet)	Diameter Inside Bark at Small End (inches)	Net Merch. Factor
Combined Softwoods	Sawtimber	1,013	Tons	10.0	1	10	6.0	12
Total Quantity		1,013	Tons					

<sup>1</sup>Quantities listed herein are an estimated quantity based on Forest Service measurements and are not to be construed as guarantees. No minimum or maximum is guaranteed or implied.

### 3.3 Timber Rates

Species	Product	Unit of Measure	Estimated Quantities	Base Rate	Advertised Rate	Bid Rates
Combined Softwoods	Sawtimber	Tons	1,013	\$0.83	\$0.83	\$0.83

### 3.4 Felling, Skidding and Yarding

Cutting Unit	Special Objectives
ALL	Trees shall be directionally felled away from roads, property lines, improvements, streams, and protected areas with the use of specialized equipment. Such directional felling shall not be required when in the faller's judgment it is unsafe to do so, and shall be left standing.
ALL	Skid road pattern shall be agreed in advance of felling and main skid roads shall be flagged in advance of felling, unless otherwise agreed. Products shall be skidded with the leading end clear of the ground.
ALL	To prevent damage to soil and hydrology resources: <ul style="list-style-type: none"> <li>a. Ground based skidding equipment will be restricted to slopes less than 40%.</li> <li>b. Skid trail crossings along stream corridors will be kept to a minimum and will be designated by project administrator with consultation from district hydrologist.</li> <li>c. Unless otherwise agreed, ground based skidding equipment shall not operate within 50 feet of edge of perennial and intermittent streams and aquatic features, and within 25 feet of edge of ephemeral streams.</li> <li>d. Retain a minimum of 50% evenly distributed ground cover in the area traveled by tires or tracks.</li> </ul>
ALL	To reduce residual stand damage where excessive downed material is present in partial cut units bucking of windfall and down material across skid road locations is required in advance of construction.
ALL	To prevent surface fuel buildup from harvest operations: Unless otherwise agreed, felled trees shall be yarded to the landing for processing with the top and limbs attached.

### 3.5 Tree Designation

Cutting Unit	Paint Color	Designation
601 and 606	Blue "H"	<b>Roadside Hazard Tree</b> – Notwithstanding all dead and unstable live trees which are leaning towards a road or are otherwise hazardous to a road, and are sufficiently tall to reach Contractor's landings or the roadbed of National Forest System roads within the Stewardship Project Area, shall be felled by Contractor when Marked in the specified paint color above and below stump height by Forest Service or UMRWA in advance of felling any other timber in the vicinity. Pieces meeting Utilization Standards from such dead and unstable live trees shall be removed unless Contractor is notified in writing that removal would cause unacceptable damage to areas requiring special protection such as residual timber, roads, administrative sites, streamside management zones, and areas identified on Stewardship Project Area Map or on the ground.

Cutting Unit	Paint Color	Designation
601 and 606	Blue	<b>Individual Tree Mark</b> – Individual trees are designated for cutting only if marked above and below stump height with the specified paint color. Trees which have had black tracer paint applied over blue paint are not designated for cutting.
601 and 606	Black	<b>Marked Out Trees.</b> When it is necessary to delete previously marked trees, black tracer paint will be used to Mark over original mark, but will not obscure the original marking. Trees Marked with the original marking paint color and black tracer paint are not Included Timber.

### 3.6 Stump Height

Species	Product	Maximum Stump Height (inches)
ALL	SAWTIMBER	Not to exceed 12 inches

### 3.7 Contractor's Slash Responsibility

#### Landing Cleanup

A landing is considered a place where any logs or products are gathered for loading. Logs not meeting utilization standards accumulated at landings shall be decked as agreed to in writing by the project administrator. All slash accumulated at landings shall be piled unless otherwise agreed. Piles shall be reasonably compact and free of soil to facilitate burning. Piles will not be greater than 20 feet in height, unless otherwise agreed. Piles shall be of a size and location which will not impair road use or result in damage to residual timber. Piles shall be located at least 30 feet from residual timber, or as far as practicable. Piles shall not be more than 20X20 feet long, unless otherwise agreed. All objects which extend more than 5 feet in any direction from the windrow or pile profile will be cut off and returned to the windrow or pile. An eight foot fuelbreak shall be cleared of all but fine material around each machine pile and an 18 inch wide fireline shall be cleared to mineral soil around the outer ring of the fuelbreak. Piles shall be covered with a minimum 3 foot by 3 foot piece of durable waterproof material. Covering shall be secured in place by pieces of wood placed on top.

By agreement, mastication, chipping, or mulching may be permitted in lieu of piling.

#### Fell Damaged Residual

Contractor shall fell all trees over 5 feet in height not meeting minimum diameter specifications for Included Timber that are damaged beyond recovery by Contractor's Operations. Such trees shall be limbed to a stem diameter of approximately 2 inches, at which point the top shall be cut from the remainder of the stem.

#### Lopping

All slash material generated by Contractor's operations left in the units shall be masticated, lopped, chipped, or mulched to not exceed depths over 12 inches in height above the ground.

### 3.8 Temporary Road, Skid Trail and Landing Obliteration Methods

Cutting Unit(s)	Type of Facility	Closure Method
ALL	Skid Trails	Obliterate existing skid trails using excess slash from landings.
ALL	Landings	Clean landings and pile slash for future burning.

ALL	Temporary Road Decommission	Obliterate Temporary Roads Using excess slash from landings.
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### **3.9 Advance Deposits.**

Contractor agree(s) to make advanced deposits in advance of cutting. These deposits may be in the form of cash (in a form agreed to by UMRWA). Advanced deposits will be in such amounts as to maintain an unobligated balance sufficient enough to cover the value of timber to be cut plus required deposits. UMRWA and Contractor will agree on a systematic approach to provide sufficient advanced deposits.

If the credit balance is less than the amount due for timber, UMRWA will suspend all or any part of Contractor's operations until payment or acceptable payment guarantee is received.

When Trees are marked after date of project advertisement, or when volume is added pursuant to authorization hereunder, payment shall be made at contract bid rates plus required deposits in advance of cutting.

### **3.10 Title Passage**

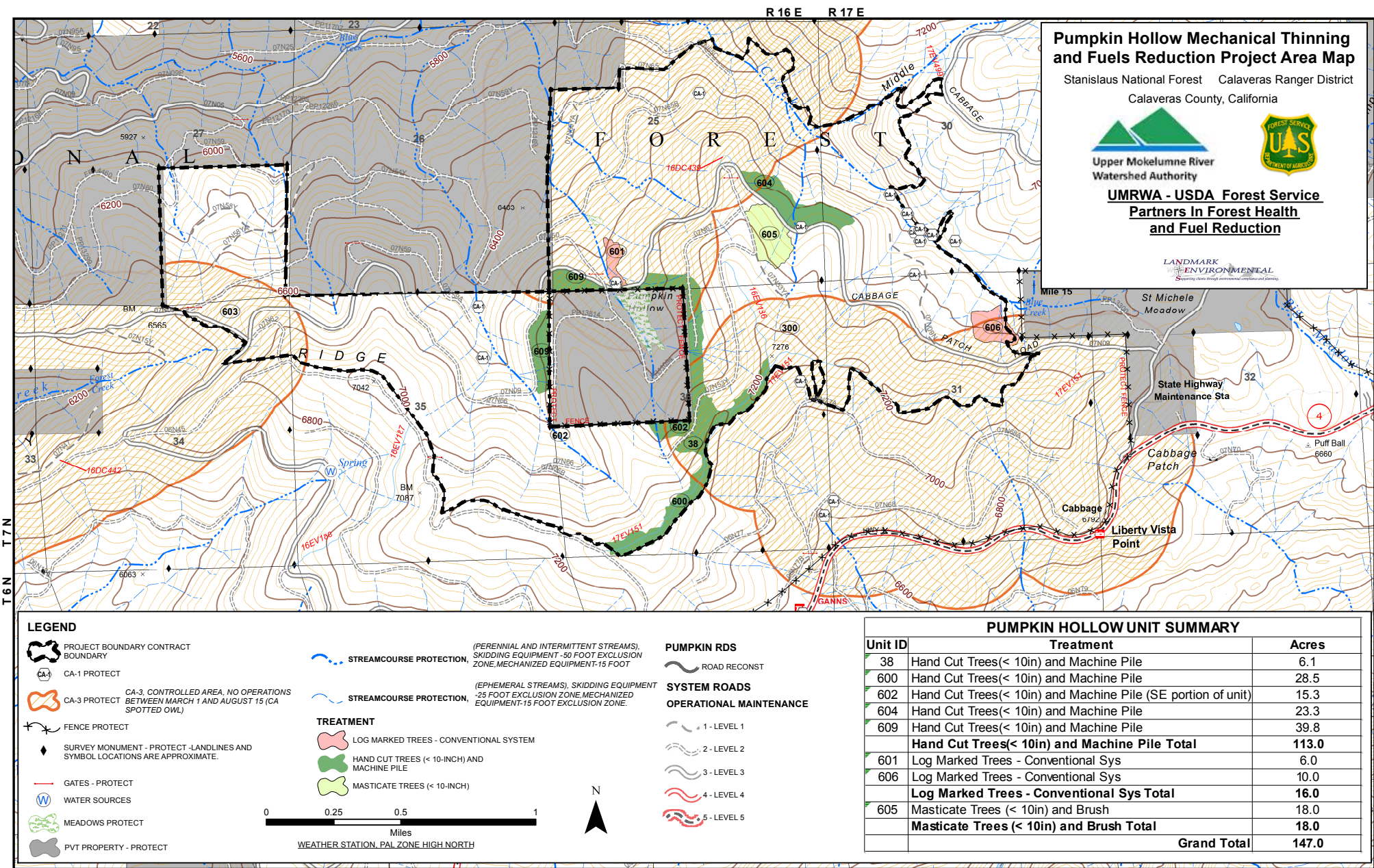
All right, title, and interest in and to any included timber shall remain with the Forest Service until it has been cut, scaled, removed from the Project Area or other authorized cutting area, and paid for, at which time title shall then vest with Contractor. Timber cut under cash deposit shall be considered to have been paid for. Title to any included timber that has been cut, scaled, and paid for, but not removed from the Project Area or other authorized cutting area by Contractor on or prior to the termination date, shall remain with the Forest Service.

### **3.11 Liability for Loss**

If Included Timber is destroyed or damaged by an unexpected event that significantly changes the nature of Included Timber, such as fire, wind, flood, insects, disease, or similar cause, the party holding title shall bear the timber value loss resulting from such destruction or damage; except that such losses after removal of timber from the Project Area, shall be borne by Contractor at current Contract Rates and Required Deposits. Deterioration or loss of value of salvage timber is not an unexpected event.

In the event Included Timber to which Forest Service holds title is destroyed, Contractor will not be obligated to remove and pay for such timber. There shall be no obligation for UMRWA or the Forest Service to supply, or for Contractor to accept and pay for, other timber in lieu of that destroyed or damaged. This Subsection shall not be construed to relieve either party of liability for negligence.

Project Area Map



## Exhibit B

### General Requirements

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1. DEFINITIONS
2. CONTRACTOR'S FINANCIAL OBLIGATION
3. MATERIAL AND WORKMANSHIP
4. DEFECTIVE WORK
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19. RIGHTS AND REMEDIES OF THE AUTHORITY
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21. CONFIDENTIALITY

#### 1. DEFINITIONS

The following terms shall be given the meaning shown, unless context requires otherwise or a unique meaning is otherwise specified.

- a. **"Authority"** means the Upper Mokelumne River Watershed Authority, its employees acting within the scope of their authority, and its authorized representatives.
- b. **"Change Order"** A Change Order is a written instrument used for modifying the contract with regards to the scope of Work, contract sum, and/or Contract Time. An approved Change Order is a Change Order signed by the Authority. An executed Change Order is a Change Order signed by both the Authority and the Contractor.
- c. **"Contract"** means the agreement between the Authority and Contractor as memorialized in the Contract Documents.
- d. **"Business Entity"** means any individual, business, partnership, joint venture, corporation, sole proprietorship, or other private legal entity recognized by statute.
- e. **"Buyer"** means the Authority's authorized contracting official.
- f. **"Contract Documents"** comprise the entire agreement between the Authority and the



Contractor and can include the Authority's contract form if used, any purchase order, RFP, RFQ or Contractor response packet, and any addenda, appendices and Authority approved changes or amendments. The Contract Documents are intended to be complementary and include all items necessary for the Contractor's proper execution and completion of the Work. Any part of the Work not shown or mentioned in the Contract Documents that is reasonably implied, or is necessary or usual for proper performance of the Work, shall be provided by the Contractor at its expense.

- g. **"Contractor"** means the Business Entity with whom the Authority enters into a contractual agreement. Contractor shall be synonymous with "supplier", "vendor", "consultant" or other similar term.
- h. **"Day"** unless otherwise specified, days are calendar days, measured from midnight to the next midnight.
- i. **"Goods"** means off the shelf software and all types of tangible personal property, including but not limited to materials, supplies, and equipment.
- j. **"Project Manager"** shall be the Authority designated individual responsible for administering and interpreting the terms and conditions of the Contract Documents, for matters relating to the Contractor's performance under the Contract with the Authority, and for liaison and coordination between the Authority and Contractor.
- k. **"Work"** means all labor, tasks, materials, supplies, and equipment required to properly fulfill the Contractor's obligations as required in the Contract Documents.
- l. **"Work Day"** Unless otherwise specified, work day includes all days of the year except Saturdays, Sundays and Authority holidays.

## **2. CONTRACTOR'S FINANCIAL OBLIGATION**

The Contractor shall promptly make payments to all persons supplying labor and materials used in the execution of the contract.

## **3. MATERIAL AND WORKMANSHIP**

- a. All work shall be done and completed in a thorough, workmanlike manner, notwithstanding any omission from these specifications or the drawings, and it shall be the duty of the Contractor to call attention to apparent errors or omissions and request instructions before proceeding with the work. The Project Manager may, by appropriate instructions, correct errors and omissions, which instructions shall be binding upon the Contractor as though contained in the original Contract Documents.
- b. All work must be satisfactory to the Project Manager. Work not in accordance with the Contract Documents, in the opinion of the Project Manager, shall be made to conform.

## **4. DEFECTIVE WORK**

The Contractor shall replace at its own expense any part of the work that has been improperly executed, as determined by the Project Manager. If Contractor refuses or neglects to replace such defective work, it may be replaced by the Authority at the expense of the Contractor, and its sureties shall be liable therefore.

**5. SAFETY AND ACCIDENT PREVENTION**

In performing work under the Contract on Authority premises, Contractor shall conform to any specific safety requirements contained in the Contract or as required by law or regulation. Contractor shall take any additional precautions as the Authority may reasonably require for safety and accident prevention purposes. Any violation of such rules and requirements, unless promptly corrected, shall be grounds for termination of this Contract or Contractor's right to preclude in accordance with the default provisions of the Contract Documents.

**6. CHARACTER OF WORKFORCE**

The Contractor shall employ none but skilled competent qualified personnel to perform the Work, and shall maintain discipline and order in the conduct of the Work at all times.

**7. CHANGES**

- a. Changes in the Work can only be made in writing signed by an authorized employee of the Authority. If the change causes an increase or decrease in the contract sum, or a change in the time for performance under the Contract, an adjustment may be made as determined by the Project Manager.
- b. The Authority reserves the right to make changes in the design of materials, equipment, or machinery, to make alterations or additions to or deviations or subtractions from the Contract and any specifications and drawings, to increase or decrease the required quantity of any item or portion of the Work or to omit any item or portion of the Work, as may be deemed by the Project Manager to be necessary or advisable and to order such extra work as may be determined by the Project Manager to be required for the proper execution and completion of the whole Work contemplated. Any such changes will be ordered in writing by the Project Manager. The determination of the Project Manager on all questions relating to changes, including extra work, shall be conclusive and binding.
- c. Prior to issuing an amendment or change to the Contract, the Project Manager may request that the Contractor submit a proposal covering the changes. Within 10 business days of receiving the request, the Contractor shall submit its proposal to the Project Manager of all costs associated with the proposed amendment or change and any request for an extension of Contract time. Contractor's proposal shall include detailed estimates with cost breakdowns, including labor, material, equipment, overhead, and profit. Labor shall be broken down into hours and rate per hour. If applicable, the proposal shall include a breakdown for off-site labor (including factory labor, engineering, etc.). The Contractor's proposal shall include an analysis of schedule impact when the Contractor is requesting an adjustment in contract time. The Contractor shall be responsible for any delay associated with its failure to submit its change proposal within the time specified. If the Project Manager decides not to issue an amendment or change after requesting a proposal from the Contractor, the Contractor will be notified in writing. The Contractor is not entitled to reimbursement for Change Order preparation costs if the Contractor's proposal is not accepted by the Project Manager.
- d. If the Contractor agrees with the terms and conditions of the approved Change Order, the Contractor shall indicate its acceptance by signing the original copy and returning it to the Project Manager within 10 Work Days after receipt or with reasonable promptness and in such sequence as to not delay the Work or activities of the Authority or of separate

contractors, whichever is sooner. If notice of any change is required to be given to a surety by the provisions of any bond, the Contractor shall provide notice and the amount of each applicable bond shall be adjusted separately. Payment in accordance with the terms and conditions set forth in the executed Change Order shall constitute full compensation for all Work included in the Change Order and the Authority will be released from any and all claims for direct, indirect, and impact expenses and additional time impact resulting from the Work. If the Contractor disagrees with the terms and conditions of the approved Change Order, the Contractor shall indicate specific areas of disagreement and return the approved Change Order to the Project Manager with a detailed written dispute. No payment will be made on the disputed work until the approved Change Order is returned to the Project Manager. However, whether or not the Contractor agrees with the terms and conditions of an approved Change Order, the Contractor shall immediately revise its sequence of operations as required to facilitate timely completion of the changed work and shall proceed with the revised work sequence.

- e. The Project Manager may, after having received a written cost quotation from the Contractor, order the Contractor, in writing, to proceed with the work prior to issuance of an approved Change Order through a change directive. The change directive will authorize the Contractor to proceed with the work subject to the cost quotation submitted by the Contractor. Within five days following receipt of the change directive, the Contractor shall submit a detailed change proposal documenting the amount of compensation. The Project Manager will review the change proposal and, at its option, will either issue an approved Change Order for the work or direct the Contractor to perform the work through Force Account. Until the method of compensation is determined and the approved Change Order is received, the Contractor shall keep full and complete time and material records of the cost of the ordered work and shall permit the Project Manager to have access to such records. An approved Change Order shall supersede any previously issued written change directive covering the same Work.

## **8. EFFECT OF EXTENSIONS OF TIME**

The granting, or acceptance, of extensions of time to complete the Work or furnish the labor, supplies, materials or equipment, or any one of the aforementioned, will not operate as a release of Contractor or the surety on Contractor's faithful performance bond.

## **9. DELAYS**

- a. The Contractor shall take reasonable precautions to foresee and prevent delays to the Work. When the Contractor foresees a delay event, and upon the occurrence of a delay event, the Contractor shall immediately notify the Project Manager of the probability or the actual occurrence of a delay, and its cause. With respect to all delays (compensable, excusable or inexcusable), the Contractor shall reschedule the Work and revise its operations, to the extent possible, to mitigate the effects of the delay. Within 15 days from the beginning of a delay the Contractor shall provide the Project Manager with a detailed written description of the delay, its cause, its impact and the Contractor's mitigation plans. Failure to provide the notification required above waives the Contractor's right to any additional time or compensation resulting from the delay for whatever cause. The Project Manager will investigate the facts and ascertain the extent of the delay, and the Project Manager's findings thereon shall be final and conclusive, except in the case of gross error. An extension

of time must be approved by the Project Manager to be effective, but an extension of time, whether with or without consent of the sureties, shall not release the sureties from their obligations, which shall remain in full force until the discharge of the contract.

- b. For inexcusable delays (delays caused by circumstances within the Contractor's control, the control of its subcontractors or supplies of any tier, or within the scope of the Contractor's contract responsibilities) the Contractor shall not be entitled to an extension of time or additional compensation for any loss, cost, damage, expense or liability resulting directly or indirectly from the inexcusable delay.
- c. For excusable delays (delays to completion of the Work within the time limits set forth in the Contract Documents directly caused by events beyond the control of both the Contractor and the Authority, which delay is not concurrent with an inexcusable delay and which could not have been avoided by the Contractor through reasonable mitigation measures).
- d. For compensable delays (delays to completion of the Work within the time limits set forth in the Contract Documents that could not be avoided by Contractor mitigation, caused directly and solely by the Authority or by causes within the exclusive control of the Authority, and which were not concurrent with any other type of delay) the Project Manager will grant the Contractor an extension of the time to perform under the Contract and compensation in an amount that represents the Contractor's actual direct costs incurred as a direct result of the compensable delay. The Contractor may recover its direct costs only and may not recover (and waives) all other types of indirect, consequential, special and incidental damages.
- e. For concurrent delays (two or more independent causes of delay directly preventing the Contractor from completing the Work within the time limits set forth in the Contract Documents where the delays occur at the same time during all or a portion of the delay period being considered, and where each of the delays would have caused delay to the Contractor even in the absence of any of the other delays, and none of the delays could have been avoided by Contractor mitigations) the following rules apply:
  - i. One or more of the concurrent delays are excusable or compensable, then the period of concurrent delay will be treated as an excusable delay; and
  - ii. All of the concurrent delays are inexcusable, then the period of concurrent delay will be inexcusable.

## **10. TERMINATION**

- a. Termination by the Authority for Cause:
  - i. Authority may terminate the Contractor's right to proceed under the Contract, in whole or in part, for cause at any time after the occurrence of any of the following events, each of which constitutes a default:
    - 1. The Contractor becomes insolvent or files for relief under the bankruptcy laws of the United States.
    - 2. The Contractor makes a general assignment for the benefit of its creditors or fails to pay its debts as the same become due.

3. A receiver is appointed to take charge of the Contractor's property.
  4. The Contractor fails to supply skilled supervisory personnel, an adequate number of properly skilled workers, proper materials, or necessary equipment to prosecute the Work in accordance with the Contract Documents.
  5. The Contractor fails to make progress so as to endanger performance of the Work within the contractually required time.
  6. The Contractor disregards legal requirements of agencies having jurisdiction over the Work, the Contractor, or the Authority.
  7. The Contractor fails to provide the Authority with a written plan to cure a Authority identified default within five business days after the Authority's request for a plan to cure; the Authority does not accept the Contractor's plan for curing its default; or the Contractor does not fully carry out an accepted plan to cure.
  8. The Contractor abandons the Work. Abandonment is conclusively presumed when the Authority requests a written plan to cure a default and the Contractor does not submit the plan within five business days of the Authority's request.
  9. The Contractor materially fails to meet its obligations in accordance with the Contract Documents.
  10. The Contractor is in default of any other material obligation under the Contract Documents.
- ii. If any of the above events occur, the Authority may, in its discretion, require that the Contractor submit a written plan to cure its default, which plan must be provided to the Authority within 5 business days of the request and must include a realistic, executable plan for curing the noted defaults.
  - iii. Upon any of the occurrences referred to in Article 18.a.i. above, the Authority may, at its election and by notice to the Contractor, terminate the Contract in whole or in part; accept the assignment of any or all of the subcontracts; and then complete the Work by any method the Authority may deem expedient. If requested by the Authority, the Contractor shall remove any part or all of the Contractor's materials, supplies, equipment, tools, and machinery from the site of the Work within seven days of such request; and, if the Contractor fails to do so, the Authority may remove or store, and after 90 days sell, any of the same at the Contractor's expense.
  - iv. No termination or action taken by the Authority after termination shall prejudice any other rights or remedies of the Authority provided by law or by the Contract Documents.
  - v. Conversion: If, after termination for other than convenience, it is determined that the Contractor was not in default or material breach, or that the default or material breach was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for convenience pursuant to Article 18.b. below.

b. Termination by the Authority for Convenience:

- i. The Authority may, at its option, and for its convenience, terminate the Contract at any time by giving written notice to the Contractor specifying the effective date of termination. Upon such termination, the Contractor agrees to comply with the notice and further agrees to waive any claims for damages, including loss of anticipated profits, on account of the termination; and, as the sole right and remedy of the Contractor, the Authority shall pay the Contractor as set forth below.
- ii. Upon receipt of a notice of termination for convenience, the Contractor shall, unless the notice directs otherwise, do the following:
  1. Immediately discontinue its performance of the Contract to the extent specified in the notice.
  2. Place no further orders or subcontracts for materials, equipment, services, or facilities, except as may be necessary for completion of a portion of the Work that is not discontinued or that is necessary for an orderly cessation of the Work.
  3. Promptly cancel, on the most favorable terms reasonably possible, all subcontracts to the extent they relate to the performance of the discontinued portion of the Work.
  4. Thereafter, do only such Work as may be necessary to preserve and protect Work already in progress and to protect materials, plants, and equipment in transit to or on the site of performance.
- iii. Upon such termination for convenience, the Authority will pay to the Contractor the sum of the following:
  1. The amount of the contract sum allocable to the portion of the Work properly performed by the Contractor as of the effective date of termination, less sums previously paid to the Contractor.
  2. Previously unpaid costs of any items delivered to the project site that were already fabricated for subsequent incorporation into the Work.
  3. Any proven losses with respect to materials and equipment directly resulting from the termination.
  4. Reasonable demobilization costs.
- iv. The above reimbursement is the sole and exclusive remedy to which the Contractor is entitled in the event the contract is terminated for convenience; and the Contractor expressly waives any other claims, damages, demands, compensation or recovery related to this contract or project. The Contractor agrees to sign a general release incorporating this waiver.

c. Effect of Termination: Upon termination, the obligations of the Contract shall continue as to portions of the Work already performed and, subject to the Contractor's obligations under

Article 18.b.ii, as to bona fide obligations assumed by the Contractor prior to the date of termination.

- d. Force Majeure: If the contract is suspended or terminated by the Authority because Contractor's performance is prevented or delayed by an event including an irresistible, superhuman cause, or by the act of public enemies of the State of California or of the United States ("Force Majeure"), the Contractor will be paid for Work performed prior to the Force Majeure event at either (i) the unit prices named in the Contract; or (ii) in the event no unit prices are named, a sum equal to the percentage of the total contract amount that matches the percentage of the total contract Work performed prior to the Force Majeure event.

**11. DAMAGES**

All losses or damages to material or equipment to be furnished pursuant to the Contract Documents occurring prior to receipt and final acceptance of the Work shall be sustained by the Contractor. The Contractor shall sustain all losses arising from unforeseen obstructions or difficulties, either natural or artificial, encountered in the prosecution of the Work, or from any action of the elements prior to final acceptance of the work, or from an act or omission on the part of the Contractor not authorized by the Contract Documents.

**12. ORDER OF PRECEDENCE**

- a. In the case of conflicts, errors, or discrepancies in any of the Contract Documents, the order of precedence is as follows. Within the same order of precedence, specific requirements shall take precedence over general requirements.
  - i. Approved Change Orders.
  - ii. Addenda.
  - iii. RFQ or RFP.
  - iv. Referenced Standard Specifications and Drawings.
  - v. Contractor's Response Packet

**13. INDEMNIFICATION/RESPONSIBILITY**

- a. Contractor shall indemnify, keep and save harmless the Authority and each of its directors, officers, agents and employees against any and all suits, claims or actions arising out of any of the following:
  - i. Any injury to persons or property that may occur, or that may be alleged to have occurred, arising from the performance or implementation of this Contract; or
  - ii. Any allegation that materials or services developed, provided or used for this Contract infringe or violate any copyright, trademark, patent, trade secret, or any other intellectual-property or proprietary right of any third party.
- b. Contractor further agrees to defend any and all such actions, suits or claims and pay all charges of attorneys and all other costs and expenses of defenses as they are incurred. If any judgment is rendered, or settlement reached, against the Authority or any of the other agencies or individuals enumerated above in any such action, Contractor shall, at its

expense, satisfy and discharge the same.

c. This indemnification shall survive termination or expiration of the Contract.

**14. PROHIBITION OF ASSIGNMENT**

The Contractor shall not assign, transfer, or otherwise dispose of any of its rights, duties or obligations under this Contract.

**15. NEWS RELEASES**

The Contractor, its employees, subcontractors, and agents shall not refer to the Authority, or use any logos, images, or photographs of the Authority for any commercial purpose, including, but not limited to, advertising, promotion, or public relations, without the Authority's prior written consent. Such written consent shall not be required for the inclusion of the Authority's name on a customer list.

**16. TRANSFER OF INTEREST**

Contractor shall not assign, transfer or otherwise substitute its interest in the Contract or any of the contract obligations without prior written consent from the Authority.

**17. SEVERABILITY**

Should any part of the Contract be declared by a final decision by a court or tribunal of competent jurisdiction to be unconstitutional, invalid or beyond the authority of either party to enter into or carry out, such decision shall not affect the validity of the remainder of the Contract, which shall continue in full force and effect, provided that the remainder of the Contract can be interpreted to give effect to the intentions of the parties.

**18. COVENANT AGAINST GRATUITIES**

The Contractor warrants that no gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the Authority with a view toward securing the Contract or securing favorable treatment with respect to any determinations concerning the performance of the Contract. For breach or violation of this warranty, the Authority shall have the right to terminate the Contract, either in whole or in part, and any loss or damage sustained by the Authority in procuring on the open market any items which Contractor agreed to supply shall be borne and paid for by the Contractor. The rights and remedies of the Authority provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or in equity.

**19. RIGHTS AND REMEDIES OF THE AUTHORITY**

The rights and remedies of the Authority provided herein shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

**20. WAIVER OF RIGHTS**

Any action or inaction by the Authority or the failure of the Authority on any occasion, to enforce any right or provision of the Contract, shall not be construed to be a waiver by the Authority of its rights and shall not prevent the Authority from enforcing such provision or right on any future occasion. Rights and remedies are cumulative and are in addition to any other rights or remedies that the Authority may have at law or in equity.

**21. CONFIDENTIALITY**

Contractor agrees to maintain in confidence and not disclose to any person or entity, without the



Authority's prior written consent, any trade secret or confidential information, knowledge or data relating to the products, process, or operation of the Authority. Contractor further agrees to maintain in confidence and not to disclose to any person or entity, any data, information, technology, or material developed or obtained by Contractor during the term of the Contract. The covenants contained in this paragraph shall survive the termination of this Contract for whatever cause.

## Exhibit C

### Insurance Certificates

CONTRACTOR shall take out and maintain during the life of the Agreement all the insurance required in this section, and if requested shall submit certificates for review and approval by the Authority. The Notice to Proceed shall not be issued, and CONTRACTOR shall not commence work until such insurance has been approved by the Authority. Acceptance of the certificates shall not relieve CONTRACTOR of any of the insurance requirements, nor decrease the liability of CONTRACTOR. The Authority reserves the right to require CONTRACTOR to provide insurance policies for review by the Authority.

#### A. Workers Compensation Insurance

CONTRACTOR shall take out and maintain during the life of the Agreement Workers Compensation Insurance for all of its employees on the project. In lieu of evidence of Workers Compensation Insurance, the Authority will accept a Self-Insured Certificate from the State of California. CONTRACTOR shall require any subcontractor to provide it with evidence of Workers Compensation Insurance.

#### B. Commercial General Liability Insurance

CONTRACTOR shall take out and maintain during the life of the Agreement Automobile and General Liability Insurance that provides protection from claims which may arise from operations or performance under this Agreement. If CONTRACTOR elects to self-insure (self-fund) any liability exposure during the contract period above \$50,000, CONTRACTOR is required to notify the Authority immediately. Any request to self-insure must first be approved by the Authority before the changed terms are accepted. CONTRACTOR shall require any subcontractor or Professional Service Provider to provide evidence of liability insurance coverages.

The amounts of insurance shall be not less than the following:

\$1,000,000/Occurrence, Bodily Injury, Property Damage -- Automobile.

\$1,000,000/Occurrence, Bodily Injury, Property Damage -- General Liability.

The following coverages or endorsements must be included in the policy(ies):

1. The Authority, its Directors, officers, and employees are Additional Insureds in the policy(ies) as to the work being performed under the contract.
2. The coverage is *Primary and non-contributory* to any other applicable insurance carried by the Authority.
3. The policy(ies) covers *contractual liability*.

4. The policy(ies) is written on an *occurrence* basis.
5. The policy(ies) covers the Authority's Property in Consultant's care, custody, and control.
6. The policy(ies) covers *personal injury* (libel, slander, and wrongful entry and eviction) liability.
7. The policy(ies) covers explosion, collapse, and underground hazards, fire suppression expense, property damage to forest land due to fire, and property damage to non-owned automobiles and equipment due to fire.
8. The policy(ies) covers *products and completed operations*.
9. The policy(ies) covers the use of *owned, non-owned*, and hired automobiles.
10. The policy(ies) and/or a separate pollution liability policy(ies) shall cover pollution liability for claims related to the release or the threatened release of pollutants into the environment arising out of or resulting from Consultant's performance under this agreement.

The policy(ies) will not be canceled nor the above coverages/endorsements reduced without 30 days written notice to Authority at the address above.

## **Exhibit D**

### **Payment Terms and Procedures**

Contractor shall submit a completed Form W-9 Request for Taxpayer Identification Number and Certification to the Authority at the same time as submitting Certificates of Insurance.

Contractor shall submit monthly invoices for work performed during the preceding period. Invoices shall contain, at a minimum, the job name and Authority agreement number, invoice number, remit to address, and itemized description of the work completed or the basis for payment.

Prior to making any payment, the Project Manager may require Contractor to furnish lien releases conforming to the requirements of California Civil Code section 8120, *et seq.*, receipts or other evidence of payment from all persons performing work and supplying material to Contractor.

Payment of all undisputed charges shall be made by the Authority within 30 days of receipt of the invoice. Disputed charges, along with supporting documentation that demonstrates the reasonableness of the dispute, must be communicated by Authority to the Contractor within 20 days of receipt of the invoice. Payments shall not be considered as acceptance by Authority of the whole or any part of the Work done up to that payment or to relieve Contractor from any of its obligations under the Agreement.

The Authority may withhold or nullify the whole or part of any payment as set out in this Agreement to protect the Authority from loss on account of any of the following:

- (a) Defective work not remedied.
- (b) Third party claims filed.
- (c) Failure of Contractor to make payments properly owed to subcontractors.
- (d) Reasonable evidence that the Work cannot be completed for the unpaid amount of the Contract.

The Authority will pay amount due Contractor not to exceed the maximum amount referenced on page one of this agreement.

## Exhibit E

### Specifications for Operations

Project units are listed in the table below and included on the Project Area Map.

Item	Treatment Unit Number	Acres
1. Cut and Machine Pile, or Masticate	38	6.1
	600	28.5
	602	15.3
	604	23.3
	609	39.8
<b>Total</b>		<b>113.0</b>
2. Masticate	605	18
<b>Total</b>		<b>18.0</b>
3. Timber Harvest	601	6
	606	10
<b>Total</b>		<b>16.0</b>
<b>Grand Total</b>		<b>147.0</b>

The following Specifications for Operations apply to activities under this Contract, when relevant to the project.

1. **Project Area Map (Map).** This is the boundary of the Treatment Units as shown on the Map and designated on the ground by the Forest Service. The following are identified on the Map as applicable:
  - a) Identified patented claims.
  - b) Boundaries of all stewardship treatment units.
  - c) Areas where leave trees are marked to be left uncut.
  - d) Roads where use is prohibited or restricted.
  - e) Roads and trails to be kept open.
  - f) Improvements to be protected.
  - g) Locations of known wildlife or plant habitat and cave resources to be protected.
  - h) Locations of areas known to be infested with specific invasive species of concern.
  - i) Streamcourses to be protected.
  - j) Locations of meadows requiring protection.
  - k) Locations of wetlands requiring protection.
2. **Project Operations Schedule.** Contractor shall schedule and conduct operations so that they do not conflict with operations being conducted under existing contracts within the Project Area. Contractor

shall reach agreement on operations with other contractors or adjust operations to eliminate the conflict.

3. **Wildlife Restrictions.** All units that fall within wildlife restrictions for California spotted owl as designated on the Project Area Map:
  - a) Controlled Area CA3: No Operations between March 1 and August 15, inclusive.
4. **Resource Protection Measures.** Unless otherwise agreed, no operations will be permitted within areas identified as CA-1 on the Project Area Map and/or flagged with orange/white and blue/black candy striped flagging and/or behind "Area Controlled" signs.
5. **Use of Roads by the Contractor.** Contractor is/are authorized to use existing National Forest system roads when such use will not cause damage to the roads or National Forest resources. UMRWA and the Forest Service will determine if such use will not cause damage to the roads or National Forest resources.
  - a) All roads leading into each project area are to be kept open and free of any debris that may occur as a result of the work.
  - b) Any damage to roads shall be repaired at Contractor's expense.
  - c) Roads shall be maintained as needed, commensurate with Contractor's use, and in accordance with Exhibit F Road Maintenance T-Specifications.
6. **Plan of Operations for Roads.** Annually, prior to start of operations, Contractor will prepare a Plan of Operations for Roads that shall include a schedule of proposed maintenance and construction progress and a description of planned measures to be taken to provide erosion control for work in progress, including special measures to be taken on any segments of construction not substantially completed prior to periods of seasonal precipitation or runoff. Contractor shall submit a revised schedule when they propose a significant deviation from the progress schedule. Prior to beginning construction on any portion of specified roads identified as sensitive on plans, the parties shall agree on the proposed method of construction and maintenance.
7. **Snow Removal.** If Contractor removes snow from roads, such work shall be done with UMRWA approval and in a manner that will protect roads and adjacent resources.

Snow berms shall be removed or placed to avoid accumulation of melt water on the road and prevent water concentration on erosive slopes or soils.

Snow must not be removed to the road surface. A minimum 6 inch snow depth must be left to protect roadway. If the road surface is damaged, Contractor shall replace lost surface material and repair structures damaged in blading operations.
8. **Water Supply Use.** Water supply locations, access, method of filling trucks, period of water availability and procedures designed to maintain water quality at each location shall be approved by Forest Service or UMRWA in advance of use. Such use shall at no time reduce water supplies to the level that further

use may be detrimental to aquatic resources or other established uses. Waterholes and other improvements relating to said water supplies shall be put into condition, prior to expected seasonal periods of precipitation or runoff, to avoid resource damage.

9. **Protection of Residual Trees.** Contractor's operations shall not unnecessarily damage young growth or other trees to be reserved.
10. **Safety.** Contractor's operations shall facilitate UMRWA's safe and practical inspection of Contractor's operations and conduct of other official duties on the Project Area. Contractor has/have all responsibility for compliance with safety requirements for Contractor's employees.

When operations are in progress adjacent or on Forest Service controlled roads and trails open to public travel, Contractor shall furnish, install, and maintain all temporary traffic controls that provide the user with adequate warning of hazardous or potentially hazardous conditions associated with operations occurring in the area. The parties shall agree to a specific traffic control plan prior to commencement of work. Devices shall be appropriate to current conditions and shall be covered or removed when not needed.

During periods of general recreation activity within Project Area or vicinity, UMRWA may restrict road construction, timber cutting, yarding, and other harvesting operations to days other than Saturdays, Sundays, and holidays.

## **PROJECT OPERATIONS SIGNING STANDARDS**

All signs must be manufactured & installed as specified in the FHWA "**Manual on Uniform Traffic Control Devices**" (MUTCD) & FS publication "**Standards for Forest Service Signs & Posters**"( EM 7100-15).

### **SIGN STANDARDS**

**SHAPE & COLOR:** Generally, signs for logging and maintenance operations are either diamond-shaped or rectangular. All signs are **reflective orange background with black legend and border** unless shown otherwise. Handpainted, homemade signs are not legal. Fluorescent paint is not reflectorized.

**SUBSTRATE:** Sign substrate material may be High Density Overlay (HDO) Plywood, Aluminum, Fiberglass Reinforced Plastic, Corrugated Plastic or Roll-up Fabrics.

**SIGN SIZE:** Sign size is a factor of speed and MUTCD & FS standards. Where conditions of speed, volume, or special hazard require greater visibility or emphasis, larger signs should be used. Minimum sizes for the most common signs can be found in Figure 4. Refer to the EM-7100-15 for additional sign sizes.

**LEGEND:** All lettering shall be Series "C" alphabet, conforming to Standard Alphabets for Highway Signs. Letter size is also a function of speed - use letter size and word messages as specified in MUTCD and EM-7100-15.

## SIGN PLACEMENT

Signs are to be installed in locations as agreed to in the traffic control plan. All signs are to be removed, covered, or folded when operations are not in progress or the sign message is not applicable. Signs should generally be located on the right-hand side of the roadway. When special emphasis is needed, signs may be placed on both the left and right sides of the road. Sign message shall be clearly visible to road users, mounted on posts or portable sign stands.

### LATERAL CLEARANCE

From the edge of the road - 2 foot minimum, where slope limits to less than 6 feet. 6-12 foot preferred.

### HEIGHT

Minimum of 7 feet, measured from the bottom of the sign to the near edge of the travelway. The height to the bottom of a supplemental sign mounted below the primary sign will be 6 feet.

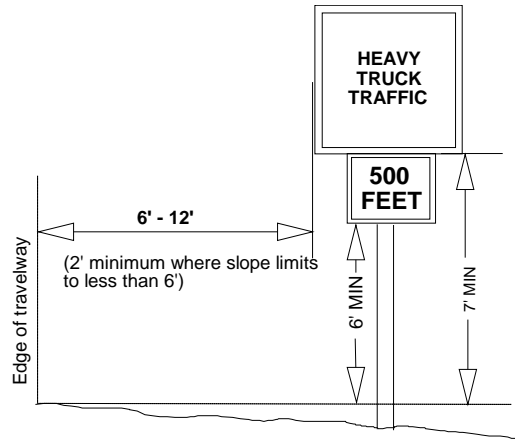


Figure 1: Sign Placement Dimensions

### PLACEMENT DISTANCE

Signs must be located 100-500 feet prior to the activity, (both ends if a through road) and maintained at that distance. This distance is based on speed. Refer to Figure 2, Table II-1, MUTCD, a portion of which is reproduced here, to determine correct placement distance.

Posted or 85 percentile speed MPH	Deceleration to listed advisory speed MPH				
	10	20	30	40	50
20		NA			
25		100			
30		150	100		
35		200	175		
40		275	250	175	
45		350	300	250	
50		425	400	325	225
55		500	475	400	300
60		575	550	500	400
65		650	625	575	500

Figure 2: A Portion of MUTCD TABLE II-1

## SIGN SUPPORTS

**POSTS:** Signs are to be mounted on separate posts. Supplemental signs such as Speed Advisory plates are to be mounted on the same post as the primary sign. **Do not mount signs on trees or other signs.** Posts may be wood, metal, carsonite or similar material. Where sign supports cannot be sufficiently offset from the road edge, supports will meet breakaway standards. Single wood posts with less than 24 square inches do not require breakaway design.

**TEMPORARY/PORTABLE SUPPORTS:** Portable supports may be used for short-term, short-duration, and mobile conditions. MUTCD defines this time period as one work shift, 12 hours or less. All portable supports must meet MUTCD standards, including breakaway. These must be a minimum of 1 foot above the road surface or more if visibility requires it.



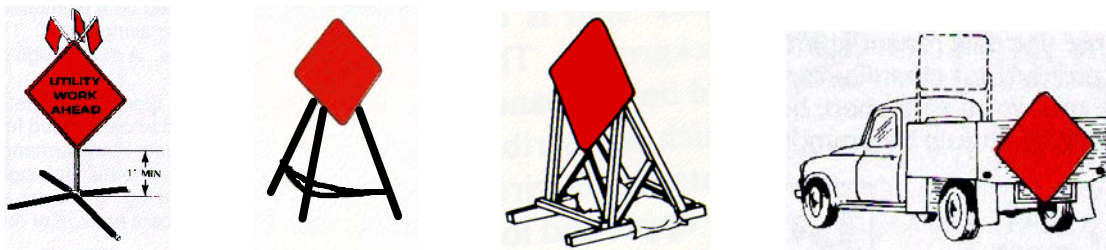


Figure 3: Examples of Temporary/Portable Supports

## SIGNS

The following signs meet the intent of the Safety standard. *This is not a complete listing of signs that may be needed.*



FG20-1-48\*



FG20-2-48



FG20-3-42\*



FG20-3a-42



FW22-3-30



FW20-1-30\*



W21-3-30\*



FW21-4a-30



FW11-7-24



W22-1-36\*



FW8-6-24



FW11-9a-24



W7-3a-24\*



W13-1-18\*\*



W20-7aP-24\*

\* Specify Distance

\*\* Specify Speed



BM-L-O



BM-R-O

Barricade Markers (See MUTCD for length and stripe size)

11. **Safety (Timber Hauling).** Contractor shall secure all products transported by truck with at least two chain or cable wrappers over the load, such wrappers being securely fastened to effectively contain every bolt or log in at least two places.
12. **Accident and Injury Notification.** Contractor shall notify UMRWA of any lost time personal injury accident or any accident or vandalism resulting in personal property damage over \$400 in value that occurs as a result of or is associated with Contractor's Operations.

Contractor shall notify UMRWA within 8 hours of any personal injury accident. For vandalism and personal property accidents, Contractor shall notify UMRWA at the same time notification is given to the state and local law enforcement authorities.

Contractor shall take all reasonable measures after an accident or vandalism event to preserve the scene of the incident and provide information to facilitate a Forest Service investigation.

13. **Sanitation and Servicing.** Contractor shall take all reasonable precautions to prevent pollution of air, soil, and water by Contractor's operations. Precautions shall include if facilities for employees are established on the Project Area, they shall be operated in a sanitary manner. The parties shall agree to the cleanup and restoration of a polluted site. Contractor shall maintain all equipment operating on Project Area in good repair and free of abnormal leakage of lubricants, fuel, coolants, and hydraulic fluid. Contractor shall not service tractors, trucks, or other equipment on National Forest lands where servicing is likely to result in pollution to soil or water. Contractor shall furnish oil-absorbing mats for use under all stationary equipment or equipment being serviced to prevent leaking or spilled petroleum-based products from contaminating soil and water resources. Contractor shall remove from National Forest lands all contaminated soil, vegetation, debris, vehicle oil filters (drained of free-flowing oil), batteries, oily rags, and waste oil resulting from use, servicing, repair, or abandonment of equipment.
14. **Prevention of Oil Spills.** If Contractor maintain(s) storage facilities for oil or oil products on the Project Area, Contractor shall take appropriate preventive measures to ensure that any spill of such oil or oil products does not enter any stream or other waters of the United States or any of the individual States. If the total oil or oil products storage exceeds 1,320 gallons in containers of 55 gallons or greater, Contractor shall prepare a Spill Prevention Control and Countermeasures Plan. Such plan shall meet applicable EPA requirements (40 CFR 112), including certification by a registered professional engineer. Contractor shall notify the UMRWA and appropriate agencies of all reportable (40 CFR 110) spills of oil or oil products on or in the vicinity of the Project Area that are caused by Contractor's employees, agents, contractors or their employees or agents, directly or indirectly, as a result of Contractor's operations. Contractor will take whatever initial action may be safely accomplished to contain all spills.
15. **Hazardous Substances.** Contractor shall notify the National Response Center, UMRWA, and Forest Service principal contact of all releases of reportable quantities of hazardous substances on or in the vicinity of the Project Area that are caused by Contractor's employees, agents, contractors or their employees or agents, directly or indirectly, as a result of Contractor's operations, in accordance with 40 CFR 302.
16. **Washing Equipment.** In order to prevent the spread of noxious weeds into the Project Area, Contractor shall be required to clean all off-road equipment **prior** to entry on to the Project Area. This cleaning shall remove all soil, plant parts, seeds, vegetative matter, or other debris that could contain or hold seeds. Only equipment so cleaned and inspected by UMRWA will be allowed to operate within the Project Area. All subsequent move-ins of equipment to the Project Area shall be treated in the same manner as the initial move in. "Equipment" includes all logging, mastication, and construction

machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles.

Contractor shall employ whatever cleaning methods are necessary to ensure that off-road equipment is free of noxious weeds. Equipment shall be considered free of soil, seed, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required.

As agreed upon, UMRWA shall inspect equipment at cleaning location.

New infestations of noxious weeds, of concern to Forest Service and identified by either UMRWA or Contractor, on the Project Area or on the haul route, shall be promptly reported to the other party. Contractor and UMRWA shall agree on treatment methods to reduce or stop the spread of noxious weeds when new infestations are found. A current list of noxious weeds of concern to Forest Service is available at each Forest Service office.

17. **Conduct of Logging.** Unless otherwise specifically provided herein, Contractor shall fell trees designated for cutting and shall remove the portions that meet Utilization Standards, prior to acceptance of work for completion of logging and stewardship projects. UMRWA may make exceptions for occasional trees inadvertently not cut or trees or pieces not removed for good reason, including possible damage to forest resources or gross economic impracticability at the time of removal of other timber.
18. **Felling and Bucking.** Felling shall be done to minimize breakage of included timber and damage to residual timber. Unless agreed otherwise, felling shall be done by saws or shears. Bucking shall be done to permit removal of all minimum pieces. Contractor may buck out cull material when necessary to produce pieces meeting utilization standards. Such bucked out material shall contain a minimum amount of sound wood, not in excess of the net scale in percentage of gross scale, or based on the merchantability factor. If necessary to assess extent of defect, Contractor shall make sample saw cuts or wedges.
19. **Felling in Clearings.** Insofar as ground conditions, tree lean, and shape of clearings permit, trees shall be felled so that their tops do not extend outside clearcutting units, construction clearings, and areas of regeneration cutting.
20. **Stump Heights.** Stumps shall not exceed, on the side adjacent to the highest ground, the maximum heights set forth in Appendix E except that occasional stumps of greater heights are acceptable when Contractor determine(s) that they are necessary for safe and efficient conduct of logging. Unless otherwise agreed, Contractor shall re-cut high stumps so they will not exceed heights specified in F-14 and shall dispose of severed portions in the same manner as other logging debris. The stump heights shown in Timber Removal Specifications were selected with the objective of maximum reasonable utilization of the timber, unless the Map shows special areas where stump heights are lower for aesthetic, land treatment, or silvicultural reasons.
21. **Bucking Lengths.** Trees shall be bucked in various lengths to obtain the greatest utilization of material meeting utilization standards.
22. **Skidding and Yarding.** Methods of skidding or yarding specified for particular areas, if any, are

indicated on the Map. Outside clearcutting units and construction clearings, insofar as ground conditions permit, products shall not be skidded against reserve trees or groups of reproduction and tractors shall be equipped with a winch to facilitate skidding.

23. **Landings and Skid Trails.** Location of all landings, tractor roads, and skid trails shall be agreed upon prior to their construction. The cleared or excavated size of landings shall not exceed that needed for efficient skidding and loading operations.
24. **Arches and Dozer Blades.** Skidding tractors equipped with pull-type arches or dozer blades wider than tractor width or C-frame width, whichever is greater, shall not be used in residual timber outside clearcutting units and other authorized clearings, except on constructed tractor roads or landings, unless there is written agreement that residual timber will not be damaged materially by such use.
25. **Protection of Streamcourses.** Contractor's Operations shall be conducted to prevent debris from entering streamcourses, except as may be authorized under paragraph (c). In event Contractor cause(s) debris to enter streamcourses in amounts that may adversely affect the natural flow of the stream, water quality, or fishery resource, Contractor shall remove such debris as soon as practicable, but not to exceed 2 days, and in an agreed manner that will cause the least disturbance to streamcourses.
- a) Culverts or bridges shall be required on Temporary Roads at all points where it is necessary to cross Streamcourses. Such facilities shall be of sufficient size and design and installed in a manner to provide unobstructed flow of water and to minimize damage to streamcourses. Trees or products shall not be otherwise hauled or yarded across streamcourses unless fully suspended.
  - b) Wheeled or track-laying equipment shall not be operated in streamcourses, except at crossings agreed to by Contractor and UMRWA or as essential to construction or removal of culverts and bridges.
  - c) Flow in streamcourses may be temporarily diverted only if such diversion is necessary for Contractor's planned construction and Forest Service or UMRWA gives written authorization. Such flow shall be restored to the natural course as soon as practicable and, in any event, prior to a major storm runoff period or runoff season.
26. **Erosion Prevention and Control.** Contractor's operations shall be conducted reasonably to minimize soil erosion. Equipment shall not be operated when ground conditions are such that excessive damage will result. Contractor shall adjust the kinds and intensity of erosion control work done, to ground conditions and weather conditions and the need for controlling runoff. Erosion control work shall be kept current immediately preceding expected seasonal periods of precipitation or runoff.

Prior to and during periods of accelerated water runoff, especially during the spring runoff and periods of heavy rainfall, commensurate with its use, Contractor shall inspect and open culverts and drainage structures, construct special cross ditches for road runoff, and take other reasonable measures needed to prevent soil erosion and siltation of streams.

Unless otherwise agreed in writing, Contractor shall complete erosion prevention and control work, including streamcourse protection, within 15 calendar days after completion of skidding and/or yarding

operations for each landing. Any hay, straw, or mulch used in this Contract shall be State of California certified weed free.

Designation of on the ground work shall be done as promptly as feasible unless it is agreed that the location of such work can be established without marking on the ground.

When operations are active, erosion control work will be kept current and will be completed as soon as practicable.

27. **Protection of Land Survey Monuments.** Contractor shall protect all known survey monuments, and bearing trees against avoidable destruction, obliteration, or damage during Contractor's operations. If any known monuments are, corners, or accessories are destroyed, obliterated, or damaged by Contractor's operations, Contractor shall hire the appropriate county surveyor or a registered land surveyor to reestablish or restore at the same location the monuments, corners or accessories. Such surveyors shall use procedures in accordance with the Bureau of Land Management "Manual of Instructions for the Survey of the Public Lands of the United States" for General Land Office surveys and in accordance with State law for others. Contractor shall record such survey in appropriate county records.
28. **Protection of Improvements.** So far as practicable, Contractor shall protect specified roads and other improvements (such as roads, trails, telephone lines, ditches, and fences):
- a) Existing in the operating area,
  - b) Determined to have a continuing need or use, and
  - c) Designated on the Map.

Contractor shall keep roads and trails needed for fire protection or other purposes and designated on the Map reasonably free of equipment and products, slash, and debris resulting from Contractor's operations. Contractor shall make timely restoration of any such improvements damaged by Contractor's operations and, when necessary because of such operations, shall move such improvements.

29. **Meadow Protection.** Reasonable care shall be taken to avoid damage to the cover, soil, and water in meadows shown on the Map. Vehicular or other equipment shall not be used on meadows, except where roads, landings, and tractor roads are approved. Unless otherwise agreed, trees felled into meadows shall be removed by hand. Resulting slash shall be removed where necessary to protect cover, soil, and water.
30. **Wetlands Protection.** Wetlands requiring protection under Executive Order 11990 are shown on the Map. Vehicular or other equipment shall not be used in such wetlands, except where roads, landings, and tractor roads are approved.
31. **Temporary Roads and Skid Trails.** Contractor shall locate Temporary Roads and Skid Trails on locations approved by UMRWA. Such location shall include the marking of road centerline or grade-line and the setting of such construction stakes as are necessary to provide a suitable basis for economical construction and the protection of National Forest lands.

Temporary road surface width shall be limited to truck bunk width plus four (4) feet, except for needed turnouts which shall not exceed two (2) times the bunk width plus four (4) feet. If shovels or cranes with revolving carriage are used to skid or load, temporary road surface width equal to track width plus tail swing shall be permitted.

32. **Temporary Roads.** As necessary to attain stabilization of roadbed and fill slopes of temporary roads, Contractor shall employ such measures as outslowing, drainage dips, and water-spreading ditches. After a temporary road has served Contractor's purpose, Contractor shall give notice to UMRWA and shall remove bridges and culverts, eliminate ditches, outslope roadbed, remove ruts and berms, effectively block the road to normal vehicular traffic where feasible under existing terrain conditions, and build cross ditches and water bars, as staked or otherwise agreed to. When bridges and culverts are removed, associated fills shall also be removed to the extent necessary to permit normal maximum flow of water.
33. **Temporary Roads to Remain Open.** All bridges and culverts shall remain in place and ditches shall not be eliminated on Temporary Roads, shown as "Remained Open" on the Map or as agreed. All drainage structures shall be left in functional condition.
34. **Landings.** After landings have served Contractor's purpose, Contractor shall ditch and slope them to permit water to drain or spread. Unless agreed to otherwise, cut and fill banks around landings shall be sloped to remove overhangs and otherwise minimize erosion.
35. **Skid Trails and Fire Lines.** Contractor shall construct cross ditches and water-spreading ditches on tractor roads and skid trails, where needed to prevent erosion. By agreement, Contractor may use other comparable erosion control measures, such as backblading skid trails, in lieu of cross ditching.
36. **Current Operating Areas.** Where logging, road construction, or other project work is in progress but not completed, unless agreed to otherwise, Contractor shall, before operations cease annually, remove all temporary log culverts and construct temporary cross drains, drainage ditches, dips, berms, culverts, or other facilities needed to control erosion. Such protection shall be provided, for all disturbed, unprotected ground that is not to be disturbed further prior to end of operations each year, including roads and associated fills, tractor roads, skid trails, and fire lines. When weather permits operations, Contractor shall keep such work on any additional disturbed areas as up to date as practicable.
37. **Erosion Control Structure Maintenance.** During the period of this Contract, Contractor shall provide maintenance of soil erosion control structures constructed by Contractor until they become stabilized, but not for more than one year after their construction.
38. **Slash Disposal.** Contractor's timing of product removal and preparatory work shall not unnecessarily delay slash disposal. Specific slash disposal measures to be employed by Contractor are stated in Timber Removal Specifications.
39. **Accountability.** UMRWA and Contractor shall agree upon the haul route(s) prior to use. All products removed from Project Area shall be transported over the designated route of haul.  
Contractor shall:

- a) Require truck drivers to sign Forest Service product removal permit, assure permit is attached to the load prior to removal from the Project Area and while in transit to load destination.
  - b) Assign a competent individual at the landing to record the following information for each load on the product removal permit provided by UMRWA or Forest Service:
    - 1. Date and time load is punched out with a paper punch or equivalent
    - 2. Truck ID or license number
    - 3. Load destination
  - c) Used books of product removal permits (stub portion) shall be returned to UMRWA or the Forest Service at least weekly, unless otherwise agreed.
  - d) Require truck drivers to stop for transportation inspections, if requested by UMRWA or the Forest Service, when products are in transit from Project Area to processing facility(s).
  - e) Inform truck drivers of the designated route(s) of haul, the agreed upon location(s) for transportation inspections, the method of alerting drivers of an impending stop, and the fact that loads may be inspected at other locations where it is safe and possible to do so.
  - f) Require truck drivers to assure the product removal permit is secured to each load of product (including chip vans, dump trucks or other container used for removing material) on the front lower corner of the driver's side of the load. Staple product removal permits to a log or attached piece of wood or other suitable material. Product removal permit shall remain attached to log until manufactured into products or if chips, until load has been unloaded. After logs are processed or load of chips unloaded the product removal permit shall be either destroyed or otherwise rendered unusable, unless otherwise agreed.
40. **Product Identification.** Before removal from the Stewardship Project Area, unless UMRWA or the Forest Service determines that circumstances warrant a written waiver or adjustment, Contractor shall:
- a) Hammer brand all products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter.
  - b) West of the 100th meridian, paint with a spot of highway-yellow paint all domestic processing products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter. Each paint spot must be not less than three (3) square inches in size.

The Forest Service shall assign brands and, if the Stewardship Project Area is within a State that maintains a log brand register, brands shall be registered with the State. Contractor shall use assigned brand exclusively on logs under this Contract until Forest Service releases brand. Contractor will furnish and apply highway-yellow paint of a lasting quality (oil-base or equivalent).

All hammer brands and/or highway-yellow paint must remain on logs until they are domestically processed. Contractor shall replace identifying marks if they are lost, removed, or become unreadable. Contractor may remanufacture products into different log lengths. Except for logs remanufactured as part of the mill infeed process immediately before processing, remanufactured products must be rebranded with the assigned brand and repainted with highway-yellow paint, unless otherwise agreed to in writing by the Forest Service. For such remanufactured products, Forest Service may approve use of a brand to be used exclusively as a catch brand, in lieu of the assigned brand.

41. **Weighing Services.** Weighing services for stumpage payment purposes may be provided by either public or privately owned and operated weighing facilities. A "Weighing Services Agreement," approved by the Forest Supervisor, must be executed at each weighing facility providing weighing services.

Scales used to weigh National Forest products for payment purposes must be a currently certified scale in accordance with State law and be capable of weighing the entire load of logs in a single operation. The weighing of less than the entire load or weighing two loads at once is prohibited. Unless otherwise agreed, the minimum sized weighing facility shall be a 60-ton capacity scale with a 10 foot by 70 foot platform or larger. The weighmaster must work in a position where it is possible to verify that the truck wheels are on or off the scales. Weighing facilities shall meet the following minimum requirements:

- a) Be an electronic design,
  - b) Use electronic load cells or have a fully enclosed and sealed weigh-beam,
  - c) Have digital weight meters sealed with a seal approved by the State,
  - d) Have a zero interlocking device on the printer,
  - e) Have an automatic zero-setting mechanism,
  - f) Have an automatic motion-detecting device,
  - g) Be shielded against radio or electromagnetic interference, and
- Have a date and time stamp and gross and tare weights that print electronically with each weighing. The Forest Service may waive electronic printing for public or third party weighing facilities. **Error! Reference source not found.** shall bear all charges or fees for weighing services.

#### 42. Fire Precautions and Control

- a) **Plans.** Prior to initiating Contractor's operations during Fire Precautionary Period, Contractor shall file with UMRWA a Fire Prevention and Control Plan providing for the prevention and control of fires on the Project Area and other areas of Contractor's Operations. Such plan shall include a detailed list of personnel and equipment at Contractor disposal for implementing the plan. This requirement may be met by preparing a single plan for more than one Contract.
- b) **Fire Precautions.** Specific fire precautionary measures listed in this Contract shall be applicable during Contractor's Operations in "Fire Precautionary Period" described. The dates of Fire Precautionary Period may be changed by agreement, if justified by unusual weather or other conditions. Required tools and equipment shall be kept in serviceable condition and immediately available for fire fighting at all times during Contractor's operations in Fire Precautionary Period.
- c) **Substitute Precautions.** UMRWA or Forest Service may authorize substitute measures or equipment, or waive specific requirements by written notice, if substitute measures or equipment will afford equal protection or some of the required measures and equipment are unnecessary.
- d) **Emergency Precautions.** UMRWA or Forest Service may require the necessary shutting down of equipment on portions of Contractor's Operations, as specified by the emergency fire precautions schedule. Under such conditions, after Contractor cease(s) active operations, Contractor shall release for hire by Forest Service, if needed, Contractor's shutdown equipment for fire standby on the Project Area or other areas of Contractor's Operations and personnel for fire standby or fire patrol, when such personnel and equipment are not needed by Contractor for other fire fighting or protection from fire. Equipment shall be paid for at fire fighting equipment rates common in the area or at prior agreed rates and, if Contractor request(s), shall be operated only by personnel approved by the Contractor. Personnel so hired shall be subject to direction and control by Forest Service and shall be paid by Forest Service at fire fighting rates common in the area or at prior



agreed rates.

- e) **Fire Precautionary Period and Fire Precautions.** Specific fire precautionary measures are set forth below. Upon request of UMRWA, Contractor shall permit and provide an individual to assist in periodic testing and inspection of required fire equipment. Contractor shall promptly remedy deficiencies found through such inspecting and testing.
  - 1. The following requirements shall apply during the period May 1- December 1 and during other such periods as specified by UMRWA.
  - 2. *See fire plan below*
- 43. **Fire Control.** Contractor shall, both independently and in cooperation with Forest Service, take all reasonable and practicable action to prevent and suppress fires resulting from Contractor's Operations and to suppress any forest fire on Project Area. Contractor's independent initial fire suppression action on such fires shall be immediate and shall include the use of all necessary personnel and equipment at Contractor's disposal on Project Area or within the distance of Project Area: **(Initial fire suppression within 25 road miles, and fire suppression re-inforcement within 100 miles).**
  - a) **The Contractor's Reinforcement Obligations.** Whenever an Operations Fire or Negligent Fire, whether on or off Project Area or any other forest fire on Project Area, has not been suppressed by initial action and appreciable reinforcement strength is required, UMRWA or Forest Service may require further actions by Contractor until such fire is controlled and mopped up to a point of safety. Such actions may include any or all of the following as necessary to fight such fire:
  - b) **Suspend Operations.** To suspend any or all of Contractor's Operations.
  - c) **Personnel.** To release for employment by Forest Service any or all of Contractor's personnel engaged in Contractor's Operations or timber processing within the distance of Project Area: **(25 Road miles).** Any organized crew so hired shall include Contractor's supervisor, if any. Personnel so employed shall be paid at Forest Service standard emergency fire fighting rates.
  - d) **Equipment.** To make available for Forest Service rental at fire fighting equipment rates common in the area or at prior agreed rates any or all of Contractor's equipment suitable for fire fighting and currently engaged in Contractor's Operations within the distance of Project Area: **(100 Road miles).** Equipment shall be operated only by personnel approved by Contractor, if so requested by Contractor.
  - e) **Operations Fire.** An "Operations Fire" is a fire caused by Contractor's Operations, in the course of fulfilling the Contract, other than a Negligent Fire.

Contractor agrees to reimburse UMRWA for the cost for each Operations Fire, subject to a maximum of the dollar amount stated herein. The cost of Contractor's actions, supplies, and equipment on any such fire provided pursuant to this Contract, or otherwise at the request of UMRWA or Forest Service, shall be credited toward such maximum. If Contractor's actual cost exceeds its fire liability limit stated herein, Forest Service, through UMRWA, shall reimburse

Contractor for the excess.

Maximum Amount of Contractor's Obligation per Operation's Fire.

**Contractor's Obligation per Operations Fire,  
Maximum  
Amount:** \$27,600

- f) **Negligent Fire.** A "Negligent Fire" is a fire caused by carelessness or fault of Contractor's Operations, including, but not limited to, one caused by smoking by persons engaged in Contractor's Operations during the course of their service, or during rest or lunch periods; or if Contractor's failure to comply with the requirements of **17. Fire Precautions and Control** results in a fire starting or permits a fire to spread. Damages and the cost of suppressing Negligent Fires shall be borne by Contractor.

**FIRE PLAN**

1. **SCOPE:**

The provisions set forth below outline the responsibility for fire prevention and suppression activities and establish a suppression plan for fires within the Contract area. The Contract area is delineated by map in the Contract. The provisions set forth below also specify conditions under which Contract activities will be curtailed or shut down.

2. **RESPONSIBILITIES:**

A. Contractor

- (1) Shall abide by the requirements of this Fire Plan.
- (2) Shall take all steps necessary to prevent his/her employees, subcontractors and their employees from setting fires not required in completion of the Contract, shall be responsible for preventing the escape of fires set directly or indirectly as a result of Contract operations, and shall extinguish all such fires which may escape.
- (3) Shall permit and assist in periodic testing and inspection of required fire equipment. Contractor shall certify compliance with specific fire precautionary measures in the fire plan, before beginning operations during Fire Precautionary Period and shall update such certification when operations change.
- (4) Shall designate in the Fire Plan and furnish on Contract Area, during operating hours, a qualified fire supervisor authorized to act on behalf of Contractor in fire prevention and suppression matters.

B. UMRWA

UMRWA may conduct one or more inspections for compliance with the Fire Plan. The number, timing, and scope of such inspections will be at the discretion of personnel responsible for Contract administration. Such inspections do not relieve the Contractor of responsibility for correcting violations of the fire plan or for fire safety in general.

### 3. **DEFINITIONS:**

**Active Landing:** A location that Contractor may be skidding logs into, or performing other operations such as delimbing, log manufacturing, and chipping logs. Except for EV and E days, loading logs or stockpiling chips only, on a cleared landing, does not constitute an Active Landing.

**Hot Saw:** A harvesting system that employs a high-speed (>1100 rpm) rotating felling head, i.e., full rotation lateral tilt head.

**Mechanical Operations:** The process of felling, skidding, chipping, shredding, masticating, piling, log processing and/or yarding which requires the use of motorized power which includes, chainsaws, chippers, motorized carriages, masticators, stroke delimiters, skidders, dozers etc.

### 4. **TOOLS AND EQUIPMENT:**

The Contractor shall comply with the following requirements during the fire precautionary period, as defined by unit administering contracts:

**The Fire Precautionary Period is set by the State of California which is April 1 through December 1 of any year.**

**A. Fire Tools and Equipment:** Contractor shall meet minimum requirements of Section 4428 of the California Public Resources Code (C.P.R.C.). Fire tools kept at each operating landing shall be sufficient to equip all employees in the felling, yarding, loading, chipping, and material processing operations associated with each landing. Fire equipment shall include two tractor headlights for each tractor dozer used in Contractor's Operations. Tractor headlights shall be attachable to each tractor and served by an adequate power source. All required fire tools shall be maintained in suitable and serviceable condition for firefighting purposes.

Trucks, pickups and other similar mobile equipment shall be equipped with and carry at all times a size 0 or larger shovel with an overall length of not less than 46 inches and a 2-1/2 pound axe or larger with an overall length of not less than 28 inches.

**B. Fire Extinguishers:** Contractor shall equip each internal combustion fuel truck with a fire extinguisher for oil and grease fires (4-A:60-B:C).

Skidders and tractors shall be equipped with a minimum 5-BC fire extinguisher.

All Fire Extinguishers shall be mounted, readily accessible, properly maintained and fully charged.

Contractor shall equip each mechanized harvesting machine with hydraulic systems, powered by an internal combustion engine (chipper, feller/buncher, harvester, forwarder, hot saws, stroke delimiter, etc), except tractors and skidders, with at least two 4-A:60-B:C fire extinguishers or equivalent.

**C. Spark Arresters and Mufflers:** Contractor shall equip each internal combustion engine with a spark arrester, except for motor vehicles equipped with a maintained muffler as defined in C.P.R.C. Section 4442. Spark Arresters shall be a model tested and approved under Forest Service Standard 5100-1a as shown in the. National Wildlife Coordinating Group Spark Arrester Guide, Volumes 1 and 2, and shall be maintained in good operating condition. Every motor vehicle subject to registration shall at all times be equipped with an adequate exhaust system meeting the requirements of the California Vehicle Code.

**D. Power Saws:** Each power saw shall be equipped with a spark arrester approved according to C.P.R.C. Section 4442 or 4443 and shall be maintained in effective working order. An Underwriters Laboratories (UL) approved fire extinguisher containing a minimum 14 ounces of fire retardant shall be kept with each operating power saw. In addition, a size 0 or larger shovel with an overall length of not less than 38 inches shall be kept with each gas can but not more than 300 feet from each power saw when used off cleared landing areas.

**E. Tank Truck or Trailer:** Unless waived in writing by the Forest Service, Contractor shall provide a **water tank truck or trailer** on or in proximity to Contract Area during Contractor's Operations hereunder during Fire Precautionary Period. When Project Activity Level B or higher is in effect, a tank truck or trailer shall be on or immediately adjacent to each active unit. See Section 6 for specific Contract requirements.

The tank shall contain at least 300 gallons of water available for fire suppression. Ample power and hitch shall be readily available for promptly and safely moving tank over roads serving Contract Area. Tank truck or trailer shall be equipped with the following:

- (1) Pump, which at sea level, can deliver 23 gallons per minute at 175 pounds per square inch measured at the pump outlet. Pumps shall be tested on Contract Area using a 5/16 inch orifice in the Forester One Inch In-Line Gauge test kit. Pump shall meet or exceed the pressure value in the following table for nearest temperature and elevation:

T e m p	Sea Level		1000 Feet		2000 Feet		3000 Feet		4000 Feet		5000 Feet		6000 Feet		7000 Feet		8000 Feet		9000 Feet		10000 Feet	
55	179	23	174	23	169	23	165	22	161	22	157	22	153	22	150	21	146	21	142	21	139	21
70	175	23	171	23	166	22	162	22	158	22	154	22	150	21	147	21	143	21	139	21	136	20
85	171	23	168	23	163	22	159	22	155	22	151	21	147	21	144	21	140	21	136	20	133	20
100	168	23	164	23	159	22	155	22	152	22	148	21	144	21	141	21	137	20	133	20	131	20
	P SI	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M

The pump outlet shall be equipped with 1-1/2 inch National Standard Fire Hose thread. A bypass or pressure relief valve shall be provided for other than centrifugal pumps.

- (2) 300 feet of 3/4-inch inside diameter rubber-covered high-pressure hose mounted on live reel attached to pump with no segments longer than approximately 50 feet, when measured to the extreme ends of the couplings. Hose shall have reusable compression

wedge type 1-inch brass or lightweight couplings (aluminum or plastic). One end of hose shall be equipped with a coupling female section and the other end with a coupling male section. The hose shall, with the nozzle closed, be capable of withstanding 200 PSI pump pressure without leaking, distortions, slipping of couplings, or other failures.

- (3) A shut-off combination nozzle that meets the following minimum performance standards when measured at 100 P.S.I. at the nozzle:

	G.P.M.	Horizontal Range
Straight Stream	10	38 feet
Fog Spray	6 - 20	N/A

- (4) Sufficient fuel to run the pump at least 2 hours and necessary service accessories to facilitate efficient operation of the pump.

**This equipment and accessories shall be deliverable to a fire in the area of operations and is subject to the requirements for each specific activity level identified in Section 6.**

**F. Compressed Air Foam System:** A Compressed Air Foam System (CAFS) is a fire suppression system where compressed air is added to water and a foaming agent. By agreement, Contractor may substitute a CAFS or functional equivalent in lieu of the tank truck, trailer or fire extinguishers, provided it meets or exceeds the following specifications and requirements:

1. Variable foam expansion ratio – 10:1 to 20:1.
2. Units shall be kept fully charged with air; water and foam concentrate as recommended by the manufacturer and have the appropriate tools to service the system.
3. The unit shall contain enough energy to empty tank and clear hose prior to exhausting propellant.
4. The unit shall be capable of being completely recharged within 10 minutes.
5. When used on cable yarding landings, the unit shall be outfitted for immediate attachment to carriage and transported without damage to the unit.

Fire extinguishers required for Hot Saws, Masticators and similar equipment identified in Section 4 B. above may be substituted with a 3 gallon CAFS.

Tank truck, trailer or equivalent may be substituted with a 30 Gallon CAFS with at least 550 feet of one inch hose and an adjustable nozzle with enough water, air and foam concentrate for at least one recharge.

**This equipment and accessories shall also be deliverable to a fire in the area of operations and subject to the requirements for each specific activity level identified in Section 6.**

## 5. **GENERAL**

- A. **State Law:** In addition to the requirements in this Fire Plan, the Contractor shall comply with all applicable laws of the State of California. In particular, see California Public Resource Codes.

- B. **Permits Required:** The Contractor must secure a special written permit from the Forest Service District Ranger or designated representative before burning, welding or cutting metal or starting any warming fires. If Contract requires Blasting and Storing of Explosives and Detonators, an Explosives Permit may be required pursuant to the California Health and Safety Code, Section 12101.
- C. **Smoking:** Smoking shall not be permitted during fire season, except in a barren area or in an area cleared to mineral soil at least three feet in diameter. In areas closed to smoking, UMRWA may approve special areas to be used for smoking. The Contractor shall sign designated smoking areas. Contractor shall post signs regarding smoking and fire rules in conspicuous places for all employees to see. Contractor's supervisory personnel shall require compliance with these rules. Under no circumstances shall smoking be permitted during fire season while employees are operating light or heavy equipment, or walking or working in grass and woodlands.
- E. **Storage and Parking Areas.** Equipment service areas, parking areas, and gas and oil storage areas shall be cleared of all flammable material for a radius of at least 10 feet unless otherwise specified by local administrative unit. Small mobile or stationary internal combustion engine sites shall be cleared of flammable material for a slope distance of at least 10 feet from such engine. UMRWA shall approve such sites in writing.
- F. **Reporting Fires:** As soon as feasible but no later than 15 minutes after initial discovery, Contractor shall notify Forest Service of any fires on Contract Area or along roads used by Contractor. Contractor's employees shall report all fires as soon as possible to UMRWA and any of the following Forest Service facilities and/or personnel listed below, but not necessarily in the order shown:

	Name	Office Address	Office telephone
<b>Dispatch Center</b>	<b>Office 24 Hour</b>		<b>209-533-1130/1140</b> <b>209-532-3786</b>
Nearest FS Station	Calaveras R.D	Hathaway Pines	209-795-1381
Inspector	TBD		
UMRWA	Rob Alcott	Valley Springs	707-785-1008
District Ranger	Ray Cablayan	Hathaway Pines	209-813-6017

**When reporting a fire, provide the following information:**

- Your Name
  - Call back telephone number
  - Project Name
  - Location: Legal description (Township, Range, Section); and Descriptive location (Reference point)
  - Fire Information: Including Acres, Rate of Spread and Wind Conditions.
- G. **Communications:** Contractor shall furnish a serviceable telephone, radio-telephone or radio system connecting each operating side with Contractor's headquarters. When such

headquarters is at a location which makes communication to it clearly impractical, UMRWA may accept a reasonable alternative location. The communication system shall provide prompt and reliable communications between Contractor's headquarters (or agreed to alternative) and UMRWA via commercial or telephone.

- H. **Fire Patrolperson:** Contractor shall furnish a qualified fire patrolperson each operating day when Project Activity Level C or higher is in effect. When on duty, sole responsibility of patrolperson shall be to patrol the operation for prevention and detection of fires, take suppression action where necessary and notify UMRWA and the Forest Service as required. This Fire patrol is required on foot, unless otherwise agreed. By agreement, one patrolperson may provide patrol on this and adjacent projects.

The Contractor shall, prior to commencing work, furnish the following information relating to key personnel:

Title	Name	Telephone Number
Fire Supervisor		
Fire Patrolperson		

- I. **Clearing of Fuels:** Contractor shall clear away, and keep clear, fuels and logging debris as follows:

Welding equipment and stationary log loaders, yarders and other equipment listed in California State Law:	10 feet slope radius
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## 6. **EMERGENCY PRECAUTIONS**

Contractor's Operations shall conform to the limitations or requirements in the Project Activity Level (PAL) table below. Project Activity Levels applicable to this project shall be the predicted activity levels for the Fire Danger Rating Area(s), or fire weather station(s) stated herein.

**Fire Danger Rating Area/Fire Weather Station for Project**    HIGH/ North  
**(Forest Service)**

The Forest Service, in its sole discretion, may change the predicted activity level if the current fire suppression situation, weather and vegetation conditions warrant an adjustment. If practicable, Forest Service will determine the following day's activity level by 6:00 PM. Contractor shall obtain the predicted Project Activity Level from the appropriate Ranger District Office before starting work each day.

**Phone Number or Website to obtain Predicted Activity Levels:**    209-532-5601 (Stanislaus Dispatch)

Forest Service may change the Project Activity Level Table to other values upon revision of the National Fire Danger Rating System. When Contractor is notified, the revised Project Activity Levels will supersede the levels in the Project Activity Level Table below.

## PROJECT ACTIVITY LEVEL

<b>Level</b>	<b><i>Project Activity Minimum Requirements and Restrictions. Restrictions at each level are cumulative.</i></b>
<b>A</b>	Minimum requirements noted above in Sections 4 and 5.
<b>B</b>	<ol style="list-style-type: none"><li>1. Tank truck, trailer, or approved CAFS substitute shall be on or adjacent to the Active Landing.</li></ol>
<b>C</b>	<ol style="list-style-type: none"><li>1. When Hot Saws or Masticators are operating, a tank truck, trailer, or approved CAFS substitute shall be within ¼ mile of these operations. Effective communications shall exist between the operator and the Active Landing.</li><li>2. Immediately after Mechanical Operations cease, Fire patrol is required for two hours.</li></ol>
<b>D</b>	<ol style="list-style-type: none"><li>1. Immediately after Hot Saw or Masticator operations cease, Fire patrol is required for three hours.</li><li>2. No Dead Tree felling after 1:00 PM, except recently dead.</li><li>3. No burning, blasting, welding or cutting of metal after 1:00 PM, except by special permit.</li></ol>



Level	<b><i>Project Activity Minimum Requirements and Restrictions. Restrictions at each level are cumulative.</i></b>
<b>Ev</b>	<ol style="list-style-type: none"> <li>1. The following activities may operate all day: <ol style="list-style-type: none"> <li>a) Loading and hauling logs decked at approved landings.</li> <li>b) Loading and hauling chips stockpiled at approved landings.</li> <li>c) Servicing equipment at approved sites.</li> <li>d) Dust abatement, road maintenance (Chainsaw use prohibited), culvert installation within cleared area, chip sealing, paving, earth moving or rock aggregate stock pile loading and installation (does not include pit or quarry development).</li> <li>e) Chainsaw and log processing operations associated with loading logs or other forest products at approved landings.</li> </ol> </li> <li>2. Hot Saws or Masticators may operate until 1:00 PM; provided that: <ol style="list-style-type: none"> <li>a) A tractor or other equipment with a blade capable of constructing fireline is on or adjacent to the active landing or within ¼ mile of the operating equipment. This piece of equipment shall have effective communication with the Hot Saw or Masticator.</li> <li>b) Any additional restrictions specified by the Forest.</li> </ol> </li> <li>3. All other conventional Mechanical Operations are permitted until 1:00 PM.</li> <li>4. Some operations may be permitted after 1:00 PM, on a case-by-case basis, under the terms of a PAL Ev Variance Agreement. Activities for which a Variance may be issued are: <ul style="list-style-type: none"> <li>• Rubber Tire Skidding</li> <li>• Chipping on Landings</li> <li>• Helicopter Yarding</li> <li>• Fire Salvage</li> </ul> </li> </ol> <p>When approved by UMWRA and a Forest Service Line Officer, a Variance Agreement can be implemented when the criteria specified in the agreement are met and mitigation measures are in place. This approval is good for ten (10) days unless cancelled sooner or extended by UMWRA and the Forest Service for an additional ten (10) days. Variance approval can be withdrawn at the sole discretion of UMWRA or the Forest Service. Variance approval is contingent on the 7-day fire weather forecast, fuel conditions, site characteristics, current fire situation, state of Contractor's equipment for prevention and suppression readiness, type of operation and social and community considerations etc. (See attached Project Activity Level Variance Agreement).</p>

<b>Level</b>	<b><i>Project Activity Minimum Requirements and Restrictions. Restrictions at each level are cumulative.</i></b>
<b>E</b>	<p>The following activities may operate all day:</p> <ol style="list-style-type: none"> <li>1. Loading and hauling logs decked at approved landings.</li> <li>2. Loading and hauling chips stockpiled at approved landings.</li> <li>3. Servicing Equipment at approved sites.</li> <li>4. Dust abatement, road maintenance (chainsaw use prohibited) or loading stock piles and rock aggregate installation (does not include pit or quarry development).</li> <li>5. Chainsaw operation associated with loading at approved landings.</li> </ol> <p>All other activities are prohibited.</p>

**This Project utilizes “The Project Activity Level” (PAL), an industrial operation’s fire precaution system. The following Climatology Chart indicates the Historic Activity Levels for the Project Fire Danger Rating Area or Fire Weather Station utilized on this Project. This is only a historical average of the Activity Levels for the identified Fire Danger Rating Area or Weather Station.**

The Project Activity Level (PAL), and industrial operations fire precaution system will be used for this project. The PAL Zone High North RAWS will be used to calculate the Project Activity Level. The normal operating season is May 1 through October 31. The expected days per month at each PAL value for the normal operation season is shown in the following table:

<b>Project Activity Level 2010</b>						
Station/SIG/Unit:	PAL Zone High North		STF	Years Analyzed: 2009-2011		
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>Ev</b>	<b>E</b>
Month	Expected Days per Month at each PAL Level					
April	24	4	2	0	0	0
May	23	5	2	2	0	0
June	12	9	9	1	0	0
July	0	4	17	6	4	0
August	0	1	10	11	9	0
September	0	2	7	9	12	0
October	7	6	16	2	1	0
November	10	8	6	4	1	0

## EXHIBIT F

### Road Maintenance T-Specifications

<b><u>No.</u></b>	<b><u>Specification Title</u></b>
T-800	Definitions
T-801	Slide and Slump Repair
T-802	Ditch Cleaning
T-803	Surface Blading
T-805	Drainage Structures
T-806	Dust Abatement

## SPECIFICATION T-800 DEFINITIONS

Wherever the following terms or pronouns are used in Specifications T-801 through T-811, the intent and meaning shall be interpreted as follows:

800-1.1 - Agreement. Maintenance projects require a mutually acceptable method to resolve the problems which arise when incompatible situations arise between drawings and specifications and actual conditions on the ground to allow orderly and satisfactory progress of the maintenance.

These specifications have been developed in anticipation of those problem areas and have provided that such changes will be by Agreement.

It is intended that drawings and specifications will govern unless "on-the-ground" conditions warrant otherwise, when specifications call for "Agreement", "agreed", or "approval" such Agreement or approval shall be promptly confirmed in writing.

800-1.2 - Annual Road Maintenance Plan. A plan prepared by various users of one or several roads. The plan is an Agreement on maintenance responsibilities to be performed for the coming year.

800-1.3 - Base Course. Material used to reinforce Subgrade or, as shown on drawings, placed on Subgrade to distribute wheel loads.

800-1.4 - Berm. Curb or dike constructed to prevent Roadway runoff water from discharging onto embankment slope.

800-1.5 - Borrow. Select Material taken from designated borrow sites.

800-1.6 - Crown, Inslope, and Outslope. The cross slope of the Traveled Way to aid in drainage and traffic maneuverability.

800-1.7 - Culverts. A conduit or passageway under a road, trail, or other obstruction. A culvert differs from a bridge in that it is usually entirely below the elevation of the Traveled Way.

800-1.8 - Drainage Dip. A dip in the Traveled Way which intercepts surface runoff and diverts the water off the Traveled Way. A Drainage Dip does not block the movement of traffic.

800-1.9 - Drainage Structures. Manufactured structures which control the runoff of water from the Roadway including Inslope, overside drains, aprons, flumes, downdrains, downpipes, and the like.

800-1.10 - Dust Abatement Plan. A table which lists the road, dust palliative, application rates, and estimated number of subsequent applications.

800-1.11 - Lead-off Ditches. A ditch used to transmit water from a Drainage Structure or Drainage Dip outlet to the natural drainage area.

800-1.12 - Material. Any substances specified for use in the performance of the work.

800-1.13 - Prehaul Maintenance. Road maintenance work which the Contractor determines must be accomplished to maintain the roads to a satisfactory condition commensurate with the Contractor's use, provided Contractor's Operations do not damage improvements or National Forest resources and hauling can be done safely. This work will be shown in the Road Maintenance Plan.

Prehaul Maintenance work the Contractor elects to perform will be in compliance with the Road Maintenance T-Specifications.

800-1.14 - Roadbed. The portion of a road between the intersection of Subgrade and sideslopes, excluding that portion of the ditch below Subgrade.

800-1.15 - Road Maintenance Plan. A table which shows applicable road maintenance specifications to be performed by Contractor on specific roads.

800-1.16 - Roadside. A general term denoting the area adjoining the outer edge of the Roadway.

800-1.17 - Roadway. The portion of a road within the limits of excavation and embankment.

800-1.18 - Shoulder. That portion of Roadway contiguous with Traveled Way for accommodation of stopped vehicles, for emergency use, and lateral support of base and Surface Course, if any.

800-1.19 - Slide. A concentrated deposit of Materials from above or on backslope extending onto the Traveled Way or Shoulders, whether caused by mass land movements or accumulated ravelling.

800-1.20 - Slough. Material eroded from the backslope which partially or completely blocks the ditch, but does not encroach on the Traveled Way so as to block passage of traffic.

800-1.21 - Slump. A localized portion of the Roadbed which has slipped or otherwise become lower than that of the adjacent Roadbed and constitutes a hazard to traffic.

800-1.22 - Special Project Specifications. Specifications which detail conditions and requirements peculiar to the individual project.

800-1.23 - Subgrade. Top surface of Roadbed upon which Base Course or Surface Course is constructed. For roads without Base Course or Surface Course, that portion of Roadbed prepared as the finished wearing surface.

800-1.24 - Surface Course. The Material placed on Base Course or Subgrade primarily to resist abrasion and the effects of climate. Surface Course may be referred to as surfacing.

800-1.25 - Surface Treatment Plan. A table which lists the roads and surface treatments to be applied.

800-1.26 - Traveled Way. That portion of Roadway, excluding Shoulders, used for the movement of vehicles.

800-1.27 - Turnouts. That portion of the Traveled Way constructed as additional width on single lane roads to allow for safe passing of vehicles.

800-1.28 - Water Source. A place designated on the Road Maintenance Map for acquiring water for road maintenance purposes.

800-1.29 - Waterbar. A dip in the Roadbed which intercepts surface runoff and diverts the water off the Roadway. A Waterbar is not designed to be traversable by logging trucks.

## SPECIFICATION T-801 SLIDE AND SLUMP REPAIR

### DESCRIPTION

1.1 Slide removal is the removal from Roadway and disposal of any Material, such as soil, rock, and vegetation that cannot be routinely handled by a motorgrader during Ditch Cleaning, T-802, and Surface Blading, T-803 Operations.

Slump repair is the filling of depressions or washouts in Roadway which cannot be routinely filled by a motor grader during Surface Blading, T-803 Operations.

Slide removal and Slump repair includes excavation, loading, hauling, placing, and compacting of waste or replacement Material and the development of disposal or borrow areas.

### REQUIREMENTS

3.1 Slide Material, including soil, rock and vegetative matter which encroaches into the Roadway, shall be removed. The slope which generated the Slide Material shall be reshaped during the removal of the Slide Material with the excavation and loading equipment. Slide Material deposited on the fillslope and below the Traveled Way will not be removed unless needed for slope stability or to protect adjacent resources.

Surface and Base Courses shall not be excavated during Slide removal operations.

Slide Material which cannot be used for other beneficial purposes shall be disposed of at disposal sites shown on Contract Area Map. Material placed in disposal sites will not require compaction unless compaction is shown on Road Maintenance Plan.

3.2 When filling Slumps or washouts, Material shall be moved from agreed locations or borrow sites shown on Contract Area Map, placed in layers, and compacted by operating the hauling and spreading equipment uniformly over the full width of each layer.

Existing aggregate surfacing shall be salvaged when practical and relaid after depressions have been filled.

Damaged aggregate base, aggregate surfacing, and bituminous pavement shall be repaired under Specification T-804 Surfacing Repair.

The repaired areas of the Slump shall conform to the cross-section which existed prior to the Slump and shall blend with the adjacent undisturbed Traveled Way.

3.3 The maximum volume of Contractor responsibility for Slide and Slump repair is shown on Road Maintenance Plan. Greater volumes of Slide and Slump repair not qualifying as Catastrophic Damage are Forest Service responsibility.

## SPECIFICATION T-802 DITCH CLEANING

### DESCRIPTION

1.1 Ditch cleaning is removing and disposing of all Slough Material from Roadway ditches to provide a free-draining waterway.

### REQUIREMENTS

3.1 Ditch cleaning shall be repeated during the year as often as necessary to facilitate proper drainage.

3.2 All Slough Material or other debris which might obstruct water flow in the Roadway ditch shall be removed. Material removed from the ditch, if suitable, may be blended into existing native road surface or Shoulder or placed in designated Berms in conjunction with Surface Blading T-803 operations.

Material removed from ditches that is not by Agreement blended into existing roads or placed in Berms shall be loaded and hauled to the disposal site shown on Contract Area Map.

3.3 Roadway backslope or Berm shall not be undercut.



## SPECIFICATION T-803 SURFACE BLADING

### DESCRIPTION

1.1 Surface blading is keeping a native or aggregate Roadbed in a condition to facilitate traffic and provide proper drainage. It includes maintaining the Crown, Inslope or Outslope of the Traveled Way, Turnouts, and Shoulder; repairing Berms; blending approach road intersections; and cleaning bridge decks, Drainage Dips, and Lead-off Ditches.

### REQUIREMENTS

3.1 Surface blading shall be performed before, during, and after Contractor's use as often as necessary to facilitate traffic and proper drainage.

3.2 The surface blading shall preserve the existing cross-section. Surface irregularities shall be eliminated and the surface left in a free-draining state and to a smoothness needed to facilitate traffic. Surface Material which has been displaced to the Shoulders or Turnouts shall be returned to the Traveled Way. The blading operation shall be conducted to prevent the loss of surface Material and to provide for a thorough mixing of the Material being worked.

3.3 Water, taken from Water Sources designated on Contract Area Map, shall be applied during blading if sufficient moisture is not present to cut, mix, or compact the surface Material.

3.4 On native surfaced roads, Material generated from backslope Sloughing, and ditch cleaning may be blended with the surface Material being worked. On aggregate surfaced roads this Material shall not be blended with Surface or Base Course Material unless agreed otherwise.

3.5 Roadway backslopes or Berms shall not be undercut, nor shall new Berms be established unless agreed otherwise.

Berms shall be repaired by placing Material, as needed to restore the Berm, to reasonably blend with existing line, grade, and cross-section.

3.6 Drainage Dips and Lead-off Ditches shall be cleaned and maintained to reasonably blend with existing line, grade, and cross-section.

3.7 Intersecting roads shall be bladed for a distance of 50 feet to assure proper blending of the two riding surfaces.

3.8 Rocks or other Material remaining on the Traveled Way after the final pass that are larger than 4 inches in diameter or are larger than the maximum size of imported surfacing shall be removed from the Traveled Way. The oversized Material shall be disposed of by sidecasting, unless shown otherwise on Contract Area Map. Sidecasting into streams, lakes, or water courses will not be permitted.

3.9 Material resulting from work under this specification shall not remain on or in structures, such as Culverts, overside drains, cattleguards, ditches, Drainage Dips, and the like.

3.10 Material resulting from work under this specification, plus any accumulated debris, shall be removed from bridge decks and the deck drains opened.

## SPECIFICATION T-805 DRAINAGE STRUCTURES

### DESCRIPTION

1.1 This work consists of maintaining Drainage Structures and related items such as inlet and outlet channels, existing riprap, trash racks, and drop inlets.

### MATERIALS

2.1 All Materials used in the maintenance of Drainage Structures shall conform by type and specification to the Material in the structure being maintained.

### REQUIREMENTS

3.1 Drainage Structures and related items shall be cleared of all foreign Material which has been deposited above the bottom of the structure and all vegetative growth which interferes with the flow pattern. Material removed that cannot be incorporated into maintenance work shall be hauled to a disposal site shown on Contract Area Map.

3.2 If outlet or inlet riprap was installed by Contractor as a construction item or existed prior to Contractor's haul, it shall be maintained in good condition including the replacement of riprap if necessary to previous line, grade, and cross-section.

3.3 Perform maintenance to insure the proper functioning of the head walls, aprons, inlet assemblies, overside drains, riprap, trash racks, and other facilities related to the Drainage Structure.

## SPECIFICATION T-806 DUST ABATEMENT

### DESCRIPTION

1.1 This work shall consist of preparing Traveled Way and furnishing and applying Materials to abate dust.

### MATERIALS

2.1 Unless otherwise agreed, water shall be used for dust abatement.

2.2 Water. The locations of Water Sources are shown on Project Area Map.

### REQUIREMENTS

3.1 General. Water shall be applied to the road surface as necessary to control road surface loss, provide for road user safety, and minimize damage to adjacent resources.



# Upper Mokelumne River Watershed Authority

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Agenda No: **6**

Meeting Date: January 25, 2019

Title:

Cabbage Patch Restoration Project

Recommended Actions:

Discussion/possible action

Summary:

The Sierra Nevada Conservancy grant agreement with UMRWA specifies 314 acres of forest within the Cabbage Patch Restoration Project area will be treated. Three contractor's hired by UMRWA in July 2018 are completing UMRWA's Cabbage Patch work. The contractors, contract amounts, acres to be treated and status of work completed as of December 31, 2018 are shown in the table below.

Contractor	Contract Date (Amount)	Acres	Completed
GTS Forestry, Inc.	July 2018 (\$74,375)	174.5	None
D. Watt Industries	July 2018 (\$105,840)	132.3	36 acres (27%)
Greater Valley Conservation Corp (SJ County Office of Education)	July 2018 (\$10,800)	7.2	None
Total		314	11%



# Upper Mokelumne River Watershed Authority

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Agenda No: **7**

Meeting Date: January 25, 2019

Title:

NFWF Grant Application for Erosion Control Project

Recommended Action:

Authorize the preparation and submittal of a NFWF Grant Application for the Power Fire Culvert Replacement and Maintenance Project and authorize the Executive Officer to issue a Task Order to Landmark Environmental to complete this task. Funding is provided in UMRWA's approved FY 2019 Budget (estimated not to exceed \$25,000).

Summary:

The National Fish and Wildlife Foundation (NFWF) and partner U.S. Forest Service (USFS) on January 9<sup>th</sup> announced funding for the Northern California Forests and Watersheds Program (2019 Program). This funding program will aid the recovery of lands and watersheds degraded from the influences of past wildfire events as well as restore Sierra Nevada meadows and remove targeted fish passage barriers.

Mr. Rick Hopson, District Ranger of the Amador District (Eldorado National Forest), has reached out to Director Farrington and staff to promote UMRWA's potential key role in implementing the Project. This project proposes to replace or reconstruct 90+ culverts and surface drainages affected by the 2004 Power Fire that burned 16,933 acres. The Power Fire area is located in the southwest corner of the Amador District and within the Upper Mokelumne River watershed. The fire perimeter includes meadows, springs and waterholes that exist within the elevation range of 3,100 to 6,792 feet above sea level, and 18 miles of perennial and 26 miles of seasonal streams.

Discussion:

A set amount of NFWF funding - \$2.54 million - will be used exclusively for Eldorado National Forests (ENF) watersheds and ecosystems that were directly affected by, or have a nexus to, the Power Fire. The priority ENF watersheds being targeted for the available funding are Panther Creek, Bear Creek and Cole Creek (all tributary to the North Fork Mokelumne River). The announcement describes four eligible projects categories, two of which relate to the PROJECT: watershed restoration (including improved hydrologic connectivity), and non-natural features management (including post-fire restoration, road and trails maintenance and upgrades.

The Power Fire Culvert Replacement and Maintenance Project has been proposed by the ENF to address a serious and pressing infrastructure problem that adversely impacts water quality and a variety of natural resources. UMRWA has participated in several conference call meetings with ENF District Ranger and Director Farrington has visited

and inspected many of the proposed culvert replacement locations. This type of project falls within the scope of the 2016 Master Stewardship Agreement between UMRWA and the USFS. The many project benefits that could be achieved through the implementation of this project include reduced erosion, improved hydrologic connectivity, improved water quality and improved riparian and aquatic resource conditions. It is a project that seems clearly worthy of the Board's consideration.

NFWF Grant Application Particulars:

- Application due February 26, 2019
- Grant awards announced August 2019
- All awarded projects must complete work by Summer 2021
- Grant funds may be used for necessary NEPA/CEQA work
- Grant amounts up to \$400,000 (exceptions may be considered)
- Non-federal match a competitiveness factor (50% encouraged, but not required)



# Upper Mokelumne River Watershed Authority

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Agenda No: **8**

Meeting Date: January 25, 2019

Title:

Forest and Watershed Grant Opportunities

Recommended Actions:

For information/discussion

Summary:

This is the first of a planned series of periodic reports to the Board regarding UMRWA forest and watershed grant opportunities. The grant opportunities targeted in the report generally relate to projects or programs that are consistent with UMRWA's purpose and goals: protecting water quality and the environment, enhancement of Mokelumne River water supply, and forest fuels management and improved forest health.

These reports will typically include a brief summary of planned and submitted grant applications, and a table that displays identified potential grant opportunities that may be relevant for supporting UMRWA-worthy projects.

Black Springs Restoration Project – \$1,000,000 SNC Grant Application Submitted Sept. 28, 2019:

On July 26th the Board of Directors adopted a resolution authorizing the submittal of a Sierra Nevada Conservancy grant application for the Black Springs project. As with the Pumpkin Hollow and Cabbage Patch projects the Black Springs Restoration Project is part of the larger Hemlock Restoration Project. The Hemlock Project Areas are delineated on attached map. If funded, it will be the third partnership under the Master Stewardship Agreement between the Forest Service and UMRWA, signed May 18, 2016. The SNC Grant Application was submitted Sept. 28, 2019.

The Black Springs Restoration Project is located on the Calaveras Ranger District of the Stanislaus National Forest. The primary purposes of the project are removal of forest fuels, reduction in risk to wildfire, reduction in potential for severe erosion, protection of water quality, and restoration of the forest's ecological resilience, and generation of potential economic benefit to local forest industry workers. Treatments will include hand thinning followed by piling and/or lopping, and plantation and natural forest thinning through mastication of small trees and brush. The total estimated cost of the project is \$1,725,000, including the UMRWA and US Forest Service funded portions.

The UMRWA element of this project is planned to reduce forest fuels and improve ecological resilience on 900 acres as provided under the proposed SNC grant agreement. The USFS will treat an additional 1,000 acres for a total planned treatment of 1,900



acres. Assuming SNC funding is forthcoming, this project will be implemented under a SPA agreement with the Stanislaus National Forest.

Summary of Grant Opportunities Table:

Potential grant opportunities that staff are tracking and may be relevant to projects that UMRWA might consider pursuing are shown in the attached table.

## Summary of UMRWA Grant Opportunities Table

Funding Entity	Amount Available	Allocation for:	Potential project types:	Recent and/or Upcoming Due Dates
<b>FUELS REDUCTION AND FOREST HEALTH</b>				
Sierra Nevada Conservancy (SNC)	Prop 1 - \$25 million Prop 68 - \$30 million (plus \$25 million allocated from CalFire)	Specified grant purposes and goals: <ul style="list-style-type: none"> <li>• <i>Healthy, diverse and economically sustainable local communities thrive and are prepared for and protected from natural disasters.</i></li> <li>• <i>Invest in healthy watersheds that provide high quality water, spectacular scenery and important wildlife habitat.</i></li> <li>• <i>Sustain working landscapes that provide environmental, economic and social benefits to the Region.</i></li> <li>• <i>The Region's cultural, archeological and historical resources are preserved, visited and treasured.</i></li> <li>• <i>Healthy and sustainable tourism, recreation and commercial activities are valued and encouraged.</i></li> </ul>	Forest restoration, fuel reduction	Last Deadline: Oct. 1, 2018 ( <b><i>Black Springs Application pending</i></b> ).  Upcoming application due dates unknown.
National Forest Foundation Matching Awards Program		Provides funding for results-oriented on-the-ground projects that enhance forest health and outdoor experiences on National Forests.	Forest restoration, fuel reduction, reforestation, meadow restoration, etc.	January 26, 2019
Wildlife Conservation Board (WCB)	Prop 68 \$60 million Non-competitive	Protection, restoration, and improvement of upper watersheds in Sierra Cascade region – including forest lands, meadows, wetlands, chaparral, and riparian habitat, in order to protect and improve water supply and water quality, improve forest health, reduce wildfire danger, mitigate the effects of wildfires on water quality and supply, increase flood protection, or to protect or	Forest restoration, fuel reduction, reforestation, meadow restoration, etc.	

Funding Entity	Amount Available	Allocation for:	Potential project types:	Recent and/or Upcoming Due Dates
		restore riparian or aquatic resources.		
CAL FIRE Forest Health Grants		Funds projects that proactively restore forest health to reduce greenhouse gases, protect upper watersheds, promote the long-term storage of carbon in forest trees and soils, and minimize the loss of forest carbon from large, intense wildfires.	Fuels reduction and fire protection on State Responsibility Area lands.	January 29, 2019
US Forest Service Wood Innovation Grants		Seeks to expand and accelerate wood energy and wood products markets throughout the United States to support forest management needs.	Biomass	<b>October 24, 2018</b> - Issuance of RFP <b>January 23, 2019</b> - Proposal submission <b>August 1, 2019</b> - awards
<b>WATER QUALITY AND WATERSHED HEALTH</b>				
National Fish and Wildlife Foundation	\$1.26 million	Northern California Forests and Watersheds grant. The 2004 Power Fire on the Eldorado National Forest burned 14,000 acres in the Mokelumne River watershed. The partnership between NFWF and the Forest Service will help restore watersheds and ecosystems impacted by the Power Fire.	Fund projects focused on the Power and Storrie Fires in Eldorado and Lassen National Forests, and other projects focused on Sierra Nevada meadows.	RFP issued anytime (likely after government is re-opened)
National Fish and Wildlife Foundation	\$1.7 million	Supports diverse local partnerships focused on improving water quality, watersheds, and the species and habitats they support.	Projects include a variety of ecological improvements along with targeted community outreach, education and stewardship	January 31, 2019 There is one round of full proposals annually for this program. Awards range from \$20,000 to \$50,000 and 45

<b>Funding Entity</b>	<b>Amount Available</b>	<b>Allocation for:</b>	<b>Potential project types:</b>	<b>Recent and/or Upcoming Due Dates</b>
				grants awarded per year.
State Water Resources Control Board		Funds projects that address problems in impaired waters and that implement forest management measures to improve water quality.	Water quality projects	Last Deadline: December 18, 2018
CAL FIRE	No Cap on Funding	Aims to reduce the risk of wildland fires to habitable structures and communities, while maximizing carbon sequestration in healthy wildland habitat.	State Responsibility Areas only (e.g., non-federal land)	Last Deadline: December 19, 2018
Bureau of Reclamation		WaterSMART Cooperative Watershed Management Grant Program	Funds restoration projects selected as priorities by watershed groups.	January 30, 2019

RIPARIAN, MEADOW, AND STREAM RESTORATION				
CNRA –	Prop 68 - \$10 million competitive	River Parkway Grant Program	Stream restoration <sup>1</sup>	
SNC -	Prop 68 - \$30 million	<p>Specified grant purposes and goals:</p> <ul style="list-style-type: none"> <li>• <i>Healthy, diverse and economically sustainable local communities thrive and are prepared for and protected from natural disasters.</i></li> <li>• <i>Invest in healthy watersheds that provide high quality water, spectacular scenery and important wildlife habitat.</i></li> <li>• <i>Sustain working landscapes that provide environmental, economic and social benefits to the Region.</i></li> <li>• <i>The Region's cultural, archeological and historical resources are preserved, visited and treasured.</i></li> <li>• <i>Healthy and sustainable tourism, recreation and commercial activities are valued and encouraged.</i></li> </ul>	Stream and meadow restoration	
DFW	Prop 68 - \$25 million	Stream restoration protecting fisheries and wildlife and restoration and protection of upper watershed forests and meadow systems that are important for fish and wildlife resources.	Stream and meadow restoration	Endangered species grant applications due January 11, 2019
WCB -	Prop 68 - \$60 million Non-competitive	Protection, restoration, and improvement of upper watersheds in Sierra Cascade region – including forest lands, meadows, wetlands, chaparral, and riparian habitat, in order to protect and improve water supply and water quality, improve forest health, reduce wildfire danger, mitigate the effects of wildfires on water quality and supply, increase flood protection, or to protect or restore riparian or aquatic resources.	Meadow restoration, etc.	

<sup>1</sup> Not necessarily in urban areas, though the development of recreation and open-space is an important part of this program. Former guidelines state: *Eligible projects shall include, but are not limited to, projects that protect and enhance urban creeks.*



# Upper Mokelumne River Watershed Authority

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Agenda No: **9**

Meeting Date: January 25, 2019

Title:

Legislative Issues Update

Recommended Actions:

For discussion and possible action – legislative matters discussed by the Board

Discussion:

No pending legislation was identified at the time this agenda packet was prepared that is squarely within UMRWA's field of interest. Therefore no legislation has been reviewed and summarized for inclusion in this agenda item. Board directors and/or agency staff, however, may have particular legislation of interest and this agenda item is intended to also facilitate that or those potential discussions.