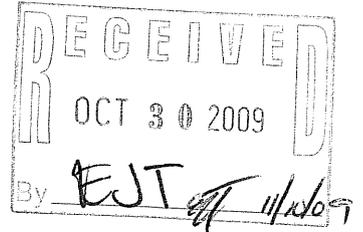




P.O. Box 2428 · Truckee, CA 96160 · p. 530.582.4800 · f. 530.582.1230 · www.sbcouncil.org

**TO: Eric J. Taxer, P.E.**  
**Lahontan Regional Water Quality Control Board (LRWQCB)**  
**2501 Lake Tahoe Boulevard**  
**South Lake Tahoe, CA 96150**



**Quarterly Report Review:** #2  
**Reporting Period:** 7/1/09 – 9/30/09  
**Submittal Date:** 10/29/09  
**Project #:** R6T-2009-0012  
**Project Name:** Waddle Ranch/Northstar Watershed Improvement Program  
Supplemental Environmental Project (SEP)  
Northstar Mountain Properties, LLC

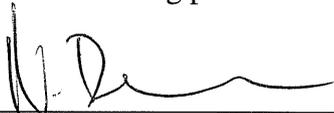
**Third Party Review Subcontractor Name:** Sierra Business Council  
**Third Party Review Project Director:** Nicole DeJonghe

This is the second Quarterly Report Review submitted to LRWQCB by Sierra Business Council (SBC). It provides third-party review of the work completed by Integrated Environmental Restoration Services (IERS) and Northstar Fire Department (NFD) from July 1, 2009 through September 30, 2009. During this time period, SBC received three invoices from IERS, three invoice from NFD, and the attached Quarterly Report from IERS which also reports on work completed by NFD.

The third party review Project Director, Nicole DeJonghe, of the Sierra Business Council has completed the third party review of this Quarterly Report and has ensured that it accurately reports on activities undertaken to complete the Waddle Ranch/Northstar Watershed Improvement Program SEP. As specified in the ACL Order #R6T-2009-0012 and the Waddle Ranch/Northstar Watershed Improvement Program SEP document, this quarterly report includes:

- ✓ Complete description of all activities undertaken and/or completed during the relevant quarter, including draft products and photographs if necessary
- ✓ Cost tracking and invoices
- ✓ Minutes of public or advisory meetings
- ✓ Other pertinent information which could include: information for the previous quarter, correspondence, specific direction provided by Advisory Group, permits, other documents, budget modifications

I certify that the descriptions and accounting provided in the report are true and accurate to the best of my knowledge:

**Project Director Signature:**  **Date:** 10/28/09

**Project Director Printed Name:** Nicole DeJonghe

Q Report



PO Box 7559  
Tahoe City, CA 96145

## Quarterly Report

To: Sierra Business Council  
PO Box 2428  
Truckee, CA 96160

**Project Name:** SEP Waddle Ranch / Northstar Watershed Improvement Program

**Project Number:** R6T-2009-0012

**Quarterly Report #:** 2

**Reporting Date:** September 30th, 2009

**Reporting Period:** July 1 to September 30<sup>th</sup>, 2009

This quarterly report covers work done in the following three invoices:

(1) #2 (July) (2) # 3(August) (3) # 4 (September)

*Quarterly Progress Report Produced by IERS*

**IERS Printed Name:** Don Triplat

**IERS Signature:**

Date: 10/15/09

As specified in the NMP SEP Project Description document, this quarterly report includes:

- All activities undertaken and/or completed, including draft products and photographs if necessary
- Cost tracking
- Minutes of public or advisory meetings
- Other pertinent information which could include: information for the previous quarter, correspondence, specific direction provided by Advisory Group, permits, other documents, budget modifications

**Attachments to this report:**

Attachment 1: Cost tracking spreadsheet (through Sept. 30th, 2009)

Task No.	Subtask No.	Product Description	Product Due Date	% Expended Budget to Date	Product Completed/ Submitted Date
<b>1</b>		<b>Project Initiation</b>			
	1.1	Steering committee development and facilitation		55%	N/A
	1.2	Steering committee meetings (3/yr)		35%	N/A
	1.3	Steering committee coordination		98%	N/A
	1.4	Review and integration of pertinent Martis Valley projects	Nov. 30, 2009	32%	N/A
<b>2</b>		<b>Project Administration</b>			
	2.1	Quarterly progress reports  <u>Quarterly periods / Report due:</u> January – March / April 15 April – June / July 15 July – September / Oct. 15 October – December / Jan. 15	July 15, 2009 Oct. 15, 2009 Jan. 15, 2010 April 15, 2010 July 15, 2010 Oct. 15, 2010 Jan. 15, 2011 April 15, 2011 July 15, 2011 Oct. 15, 2011 Jan. 15, 2012 April 15, 2012 July 15, 2012 Oct. 15, 2012 Jan. 15, 2013 April 15, 2013 July 15, 2013 Oct. 15, 2013 Jan. 15, 2014	48%	N/A
	2.2	Draft project report	Feb. 30, 2013	N/A	N/A
	2.3	Final project report	Feb. 30, 2014	N/A	N/A
	2.4	Project coordination	Ongoing	92%	N/A
	2.5	Direct overhead	Ongoing	98%	N/A
<b>3</b>		<b>PAEP and QAPP</b>			
	3.1	PAEP document (and PAEP table)	Oct. 15, 2009	82%	N/A
	3.1.1	Northstar PAEP & QAPP integration	Dec. 15, 2009	65%	N/A
	3.2	PAEP Annual Oversight and Documentation and QAPP annual report	April 15, 2010 April 15, 2011 April 15, 2012 April 15, 2013	31%	N/A
	3.3	Monitoring Plan	Oct. 15, 2009	79%	N/A
	3.4	QAPP Preparation	Oct. 15, 2009	70%	N/A
<b>4</b>		<b>Waddle Ranch Restoration</b>			
	4.1	Site/watershed evaluation (EfRA) summary document	July 30: 2010-2014	88%	N/A
	4.2	Environmental/permitting documentation	Project design: Feb prior to construction season, Env'tl. Doc: each year by 60 days prior to construction	N/A	N/A

	4.3	Treatment sites identification	Project design: Feb-May, prior to construction season, Env'tl. Doc: each year by 60 days prior to construction	66%	N/A
	4.4	Permitting assistance	Project design: Feb-May, prior to construction season, Env'tl. Doc: each year by 60 days prior to construction	N/A	N/A
	4.5	Treatment specifications	Oct-Nov: 2009, 2010, 2011, 2012, 2013	32%	N/A
	4.6	Pre-treatment sites monitoring	Oct-Nov: 2009, 2010, 2011, 2012, 2013	82%	N/A
	4.7	WQ monitoring	Oct-Nov: 2010, 2011, 2012, 2013	100%	N/A
	4.8	Road removal	Oct-Nov: 2009, 2010, 2011, 2012, 2013	34%	N/A
	4.9	Stream/wetland restoration	Oct-Nov: 2010, 2011, 2012, 2013	N/A	N/A
	4.10	Forest vegetation demonstration treatments	Oct-Nov: 2010, 2011, 2012, 2013	N/A	N/A
	4.11	Post treatment monitoring (per PAEP)	Oct-Nov: 2010, 2011, 2012, 2013	N/A	N/A
	4.12	Site tours & technology transfer	By Nov: 2010, 2011, 2012	N/A	N/A
	4.13	Public outreach program and materials	By Nov: 2010, 2011, 2012	N/A	N/A
<b>5</b>	<b>Watershed Evaluation, Treatment and Monitoring Handbook</b>				
	5.1	Technical group development, meetings	By Nov: 2009, 2010, 2011, 2012	15%	N/A
	5.1.1	Technical group review	By Nov: 2009, 2010, 2011, 2012	N/A	N/A
	5.2	Literature summary	4/14/10 Dec. 31, 2009, 2010	6%	N/A
	5.3	Document outline	3/1/10 Dec. 31, 2010	20%	N/A
	5.4	Draft document	12/23/10 Dec. 31, 2010	N/A	N/A
	5.5	Interim/working document	10/21/11 Dec. 31, 2012	N/A	N/A
	5.6	Document iteration	7/27/12 Dec. 31, 2012	N/A	N/A
	5.7	Final document	2/13/13 Dec. 31, 2013	N/A	N/A
	5.8	Document layout and printing	6/20/13 Dec. 31, 2013	N/A	N/A
<b>6</b>	<b>Forest Vegetation Treatment/Water Quality Protection Handbook</b>				
	6.1	Forest technical group formation	10/23/09 Nov 15, 2009	99%	N/A
	6.2	Forestry technical group meetings	1/7/10 Minutes, doc., etc submitted around July and Nov/Dec	N/A	N/A
	6.3	Literature summary	Feb., 2010, 2011	12%	N/A

6.4

	6.4	Develop draft hand book outline & guiding principles	Feb. 2010, 2011	N/A	N/A
	6.5	Identify treatments options	Aug. 2010, 2011	38%	N/A
	6.6	Forest vegetation reduction treatment implementation (research plots)	Nov., 2010, 2011	N/A	N/A
	6.7	Develop working draft forest handbook	Dec. 31, 2011	N/A	N/A
	6.8	Monitor treatments	Nov. 2010, 2011, 2012	N/A	N/A
	6.9	Distribution copy - Forest Handbook	Dec. 31, 2011	N/A	N/A
	6.10	Final draft – Forest Handbook	Nov. 31, 2012	N/A	N/A
	6.11	Printing & distribution of Forest Handbook	N/A	N/A	N/A
<b>7</b>	<b>Northstar Riparian and Forest Enhancement Project</b>				
	7.1	Permitting and Notification	July 2009	100%	N/A
	7.2	Pre Treatment Monitoring	Oct-Nov: 2010-2014	100%	N/A
	7.3	Field Work (Site Preparation)	Oct-Nov: 2010-2014	N/A	N/A
	7.4	Hand Crew Work (Treatment)	Oct-Nov: 2010-2014	N/A	N/A
	7.5	Hand Crew Work (Chipping)	Oct-Nov: 2010-2014	N/A	N/A
	7.6	Hand Crew Work (Pile Burning)	Oct-Nov: 2010-2014	N/A	N/A
	7.7	Mastication	Oct-Nov: 2010-2014	100%	N/A
	7.8	Project Inspections and Forestry Management	Oct-Nov: 2010-2014	46%	N/A
	7.9	Post Treatment Monitoring and Reporting –included in PAEP annual report	April 15: 2010-2014	N/A	N/A
<b>8</b>	<b>Project Implementation and Monitoring Contingency</b>				
	<i>(document as needed)</i>				

## **Work Log Narrative for July through September 2009:**

### **Task 1 – Project Initiation**

#### **Task 1.1 SEP Steering Committee Development and Facilitation**

Communicate with H. Parzybok and S. Clark on issues and ideas for discussion among SC members.

#### **Task 1.2 SEP Steering Committee meetings**

Construct sharepoint site logistics and post meeting notes.

#### **Task 1.3 Sep Steering Committee Coordination**

Principal of IERS coordinated steering committee member process for decision of fund transfer within Task 7 for Northstar Fire Dept. project. Coordinate Sharepoint site documentation, survey, and questions for review by SC members. Attend conference call for project review process with Steering Committee Members.

#### **Task 1.4: Review & Integration of MV projects**

Research Martis Valley projects pertinent to SEP and review Middle Truckee TMDL for applicability to SEP project.

### **Task 2 – Project Administration**

#### **Task 2.1 Quarterly Progress Reports**

Draft first quarterly report and iterate format to include all necessary report items and review with N. Dejonghe and H. Parzybok. Spoke with Eric Taxer about report details and format. Follow up meeting with N. Dejonghe and H. Parzybok in July to discuss report format changes and work log descriptions to meet agency requirements. Iteration of work logs for Quarterly Reports to include changes for agency approval. Coordinate information inclusion with Northstar Fire for Task 7 budget and reporting items for months of July, August, and September. Budget tracking and work log documentation for July, August, and September. Draft monthly invoice work log for inclusion in quarterly reports.

#### **Task 2.4 Project Coordination**

Manage Sharepoint site to update documents, calendar, and NFD (Northstar Fire Dept.) correspondence for funds transfer. Review ACL deadlines and timetables and manage budget tracking. Project management meeting with Kevin Drake and Michael Hogan to track and update project progress.

#### **Task 2.5.3 Travel**

Travel expense charged to budget item for travel to Steering Committee meeting.

#### **Task 2.5.4 Budget and Project Tracking**

Create first invoice and iterate format to comply with SBC and LRWQCB requirements. Research budget item questions with E. Taxer and SBC.

### **Task 3 – PAEP and QAPP**

#### **Task 3.1 PAEP Document**

Coordinate PAEP strategy meeting to develop research design, treatment areas, and monitoring approaches to create PAEP table. Develop and draft PAEP table from research questions identified at PAEP meeting. Review of PAEP and QAPP document with IERS staff. Revise PAEP table.

#### **Task 3.1.1 Northstar-at-Tahoe PAEP & QAPP**

Coordinate monitoring work and PAEP development with NFD for Task 7. Meet with J. Barron to develop PAEP outline for Task 7. Review QAPP and PAEP next steps with Joe Barron at Northstar Fire and coordinate treatment maps with NCSD. Incorporate Northstar Fire project elements and review of Northstar Water Quality monitoring plan with JBR consultants and GPS documentation for Task 7 project.

#### **Task 3.2 PAEP Oversight and Documentation**

No work on this budget item during this quarter

#### **Task 3.3 Monitoring Plan**

Develop runoff simulation process for monitoring pre-treatment assessment. Develop monitoring plan and prepare monitoring map for QAPP preparation and updates. Edit and revise monitoring plan to 95% complete

#### **Task 3.4 QAPP Preparation**

Develop outline for QAPP document and revise table for final QAPP document. QAPP development; edit and revise to 95% complete

### **Task 4 – Waddle Ranch Restoration**

#### **Task 4.1 Site/Watershed Evaluation**

Conduct field work for Watershed Evaluation and Assessment document by walking streams, roads, and historic features found on ground to evaluate water quality and erosion threats and document locations. Conduct GPS field mapping for project map outline. Review and coordination of watershed evaluation work plan by principal for GIS information to guide work strategy and progress of document. Process GPS data and create a draft GIS map of project site for EfRA document including layers for soil, roads, hydrology, and county boundaries. Coordination of site evaluation, approaches and project tie in by principal. Continuation of Watershed Assessment with vegetation layer mapping and creation of GIS map layers for 2009 site work scope and project treatment selection locations. Draft methodology for watershed assessment process and outline documentation for reporting format by senior planner. Conduct a site visit with Matt Kiese, (River Run Consulting) to assess conditions of East Fork Martis Creek and assess upslope erosion and drainage patterns. Review and revise watershed

assessment methodology with M. Kiese. Prepare draft watershed assessment methodology and preliminary overview assessment GIS map for Steering Committee meeting.

#### **Task 4.2 Environmental Permitting Documentation**

No work on this budget item during this quarter

#### **Task 4.3 Treatment Sites Identification**

Inspect potential sites for forest fuels demonstration treatments. Draft outline of questions for SWPPP document for road removal work. Create a site selection criteria matrix for 2009 treatment sites for review by Steering Committee members. Conduct a site visit to evaluate treatment and monitoring sites at Waddle Ranch and take GPS locations. Develop a modeling approach for assessment with Mark Grismer by principal, plus site visit for re evaluation of project sites after current year logging operations. Review of site selection matrix and coordination with TDLT and TTAD for project coordination. Coordinate project site selection approval with Steering Committee and communication with H. Parzybok and S. Clark about project approval process. Respond to email questions about 2009 project treatment site selection.

#### **Task 4.4 Permitting Assistance**

No work on this budget item during this quarter

#### **Task 4.5 Treatment Specifications**

Evaluate treatment sites and prepare selection criteria matrix document with projects and treatment specifications in preparation for review by Steering Committee. Coordinate material quantities available on site and delivery by Robinson Timber to 2009 project sites. Develop treatment specifications for 2009 projects and review with M. Hogan. Draft treatment specifications for internal use and project documentation.

#### **Task 4.6 Pre-treatment Site Monitoring**

Design monitoring protocol and develop research framework for QAQC (Quality Assurance, Quality Control) of data. Develop water quality monitoring budget and review monitoring approach. IERS monitoring crew conducted pre-treatment monitoring on three sites including: runoff and rainfall, soil and veg, and solar exposure. Process samples and run turbidity analysis on rainfall simulator samples at the water quality lab. Enter field data into database for future analysis and create species lists of soil and vegetation monitoring data by monitoring crew.

#### **Task 4.7 Water Quality Monitoring**

No work on this budget item during this quarter

#### **Task 4.8 Road Removal**

Project set up and management for 2009 treatment sites, materials, delivery, and site coordination with TTAD and Robinson Timber to clear project sites for access by archaeological document by restoration manager. Mobilize BMP's, equipment, and haul materials on site for 2009 projects. Conduct pre-treatment site survey, photo documentation, and penetrometer readings for pre-treatment documentation. Draft process to calculate nutrient content of soil amendments and appropriate application rates for restoration work.

## **Task 5 Evaluation, Treatment and Monitoring Handbook**

### **Task 5.1 Watershed Technical Group development, meetings**

Coordinate Watershed Technical Group (WTG) membership and selection criteria and steering team efforts with potential involvement with Dr. M. Singer. Iterate budget and revision forecasts for Watershed Evaluation Treatment Technical Group (WTG). Invite steering team members and interview potential members. Follow up with invitees to form group with contact calls. Review and edit Watershed Technical Group member justification memo. Finalize decision matrix for Watershed Technical Group and membership document. Iterate with H. Parzybok and send out to group.

#### **Task 5.1.1 Watershed Technical Group Review**

No work on this budget item during this quarter

#### **Task 5.2 Literature Summary**

Collect carbon sequestration documents for literature review and discuss potential issues and possibilities for SEP project goals. Set up sharepoint site for WTG formation and coordinate documents for literature review.

#### **Task 5.3 Document Outline**

Begin watershed evaluation document outline and format. Develop outline and content for draft watershed assessment.

#### **Task 5.4 Draft Document**

Develop funding for draft document production

#### **Task 5.5 Interim/working Document**

No work on this budget item during this quarter

#### **Task 5.6 Document Iteration**

No work on this budget item during this quarter

#### **Task 5.7 Final Document**

No work on this budget item during this quarter

#### **Task 5.8 Document Layout and Printing**

No work on this budget item during this quarter

## **Task 6 – Forest Vegetation Treatment/Water Quality Protection Handbook**

### **Task 6.1 Forestry Technical Group Formation**

Contact Forestry Technical group invitees and follow up. Discuss potential member's points of work for group.

### **Task 6.2 Forestry Technical Group Meetings**

No work on this budget item during this quarter

### **Task 6.3 Literature Summary**

Collect literature for review of potential projects and discuss treatment options with J. Quashish (Sierra Club). Review existing research projects in Martis Valley and Tahoe region.

### **Task 6.4 Develop Draft Handbook / Guiding Principles**

No work on this budget item during this quarter

### **Task 6.5 Identify Treatment Options**

Coordinate treatment options with Tahoe Burn Pile group and discuss options for tie in to Handbook. Coordinate treatment options and discussion with Sierra Forest Legacy and Sierra Club for Handbook and related research tie in.

### **Task 6.6 Forest Vegetation Treatment Implementation**

No work on this budget item during this quarter

### **Task 6.7 Develop Working Draft Handbook**

No work on this budget item during this quarter

### **Task 6.8 Monitor Treatments**

No work on this budget item during this quarter

### **Task 6.9 Distribution Copy-Forest Vegetation Treatment/Water Quality Protection Handbook**

No work on this budget item during this quarter

### **Task 6.10 Final Draft Forest Vegetation Treatment /Water Quality Protection Handbook**

No work on this budget item during this quarter

## **Task 7 – Northstar Riparian and Forest Enhancement Project**

### **Task 7.1 Permitting and Notification**

This task was completed in March, 2009 consisting of an archaeological records check for the entire Northstar Community Services District Boundary and within the SEP project. The records search pertained to identification of historical and archaeological sites that may exist within, adjacent or outside the SEP project area. This information was shared with our consulting professional forester prior to project work and field work identifying and protecting sites is

X 12 2009

expected in July, 2009. No other work for the SEP project relating to Task Items 7.2-7.9 was performed between May and June 2009.

### **Task 7.2 Pre-Treatment Monitoring**

Monitoring was performed by Integrated Environmental Restoration Services, (IERS) within the SEP project area on pre-treatment plot numbers 22 & 25. The following data was collected by IERS:

- Surface cover
- Mulch/litter depth
- Vegetation species composition
- Soil density (penetrometer depth to refusal)
- Soil moisture
- Solar input
- Photo points

The two plots monitored were intended to have post treatment monitoring of mastication work. Unfortunately, the plots were discovered to be within a site what our consulting forester Bill Banka deemed historical. Bill Banka preferred that hand crew work be performed within the historical area where the two monitored plots exist. Further discussions with IERS have indicated that (Post-Treatment Monitoring, Task 7.9) will involve monitoring of pile burning where the plots exist. This will not have an impact or disturbance to the historical site. Post treatment monitoring will take place following the pile burning which will be late fall/early winter.

An invoice is expected from IERS now that a post-treatment monitoring decision has been made.

### **Task 7.7 Mastication**

Mastication was performed by Operator Dave Theis of Cold Creek Land Services from July 27<sup>th</sup> through August 19<sup>th</sup>. Work was done within the northeastern and eastern boundary of the SEP project. This machine and operator was selected for the ability to operate with low impact ground pressure, and the ability to remove larger trees with the advantage of a thirty foot reach. 7.67 total acres were treated by mastication for season one in terrain that was rocky and dense in vegetation. Plans for next season's mastication will begin in September 2010 within the northern portion of the SEP boundary tying into this seasons work. At this point in time it is NFD's intention to bring Dave Theis back for the 2010 field season.

### **Task 7.8 Project inspections and Forestry Management**

Consulting forester Bill Banka was hired by the Northstar Fire Department and began work July 6<sup>th</sup>, 2009. Bill has managed portions of the SEP project area in the past and represents the current land owner. His duties for the SEP include the following:

- Flagging project boundary areas, watercourse buffer zones, historical protection zones, and wildlife habitat exclusion zones
- Marking trees for removal with an orange band at dbh, 4.5 feet (For the masticator machine and Cal Fire Hand Crew(s))
- Performing a timber stand inventory within fixed radius plots
- Managing and supervising the mastication project

To date, Bill has inventoried 39 pre-treatment plots out of 86 total. Each plot inventoried represents one acre of the project area. Bill will be performing a post treatment inventory as well. Once the data is collected he will work with NFD in the data analysis process. In addition, Bill will be working with the Cal Fire hand crew(s) September 21<sup>st</sup> for 15 scheduled days of work. The hand crews will be working within area's identified as sensitive, removing larger snags and stacking the material for pile burning. He will also be flagging and marking next season's project area and breaking down the method of treatment acres for the remaining four years.

**Task 8 – Project Implementation and Monitoring Contingency**

No activity at this time.

Attachment 1

LLX Repa 7)

NORTHSTAR MOUNTAIN PROPERTIES, LLC  
SEP BUDGET vs. ACTUAL

Work Item	Description	(A)	(B) <sup>1</sup>	SEP 09	(D)	(D/A)	(D/B)	(A - D)	(B - D)
		Total Budget	Budget to Date	Current Pay Application	Cost to Date	% Expended Total Budget	% Expended Budget to Date	Total Budget - Remaining Balance	Budget to Date - Remaining Balance
<b>Work Item 1: Project Initiation and Coordination</b>									
1.1	SEP Advisory Group development and facilitation	22,500.00	6,500.00	-	3,553.01	15.79%	54.66%	18,946.99	2,946.99
1.2	SEP Advisory Group meetings	22,500.00	4,500.00	-	1,592.75	7.08%	35.39%	20,907.25	2,907.25
1.3	SEP Advisory Group coordination	13,500.00	3,000.00	-	2,946.25	21.82%	98.21%	10,553.75	53.75
1.4	Review and integration of pertinent Martis Valley projects	5,500.00	2,500.00	145.00	802.50	14.59%	32.10%	4,697.50	1,697.50
	<b>Work Item 1 - Subtotal</b>	<b>64,000.00</b>	<b>16,500.00</b>	<b>145.00</b>	<b>8,894.51</b>	<b>13.90%</b>	<b>53.91%</b>	<b>55,105.49</b>	<b>7,605.49</b>
<b>Work Item 2: Project Administration (5 years)</b>									
2.1	Quarterly progress reports	30,500.00	6,000.00	110.00	2,902.50	9.52%	48.38%	27,597.50	3,097.50
2.2	Draft project report	3,000.00	-	-	-	0.00%	0.00%	3,000.00	-
2.3	Final project report	9,000.00	-	-	-	0.00%	0.00%	9,000.00	-
2.4	Project coordination	46,000.00	5,000.00	-	4,614.50	10.03%	92.29%	41,385.50	385.50
2.5	Direct overhead	22,000.00	3,500.00	-	1,812.85	8.24%	51.80%	20,187.15	1,687.15
2.5.1	Office supplies	-	-	-	-	-	-	-	-
2.5.2	Copies	5,500.00	500.00	-	-	0.00%	0.00%	5,500.00	500.00
2.5.3	Travel	6,200.00	1,200.00	-	47.85	0.77%	3.99%	6,152.15	1,152.15
2.5.4	Budget and project tracking	10,300.00	1,800.00	-	1,765.00	17.14%	98.06%	8,535.00	35.00
	<b>Work Item 2 - Subtotal</b>	<b>110,500.00</b>	<b>14,500.00</b>	<b>110.00</b>	<b>9,329.85</b>	<b>8.44%</b>	<b>64.34%</b>	<b>101,170.15</b>	<b>5,170.15</b>
<b>Work Item 3: PAEP and QAPP</b>									
3.1	PAEP Document	3,800.00	3,800.00	110.00	3,107.50	81.78%	81.78%	692.50	692.50
3.1.1	Northstar-at-Tahoe PAEP & QAPP Integration	2,500.00	2,500.00	290.00	1,615.00	64.60%	64.60%	885.00	885.00
3.2	PAEP Oversight and Documentation	8,000.00	2,000.00	-	620.00	7.75%	31.00%	7,380.00	1,380.00
3.3	Monitoring Plan	4,000.00	4,000.00	110.00	3,177.50	79.44%	79.44%	822.50	822.50
3.4	QAPP Preparation	7,500.00	7,500.00	632.50	5,252.50	70.03%	70.03%	2,247.50	2,247.50
	<b>Work Item 3 - Subtotal</b>	<b>25,800.00</b>	<b>19,800.00</b>	<b>1,142.50</b>	<b>13,772.50</b>	<b>53.38%</b>	<b>69.56%</b>	<b>12,027.50</b>	<b>6,027.50</b>
<b>Work Item 4: Waddle Ranch Restoration</b>									
4.1	Site/watershed evaluation (EFRA)	61,000.00	18,000.00	4,966.50	15,764.00	25.84%	87.58%	45,236.00	2,236.00
4.2	Environmental/permitting documentation	21,000.00	-	-	-	0.00%	0.00%	21,000.00	-
4.3	Treatment sites identification	30,000.00	8,000.00	2,720.00	5,246.25	17.49%	65.58%	24,753.75	2,753.75
4.4	Permitting assistance	33,000.00	4,000.00	-	-	0.00%	0.00%	33,000.00	4,000.00
4.5	Treatment specifications	20,500.00	2,000.00	522.50	632.50	3.09%	31.63%	19,867.50	1,367.50
4.6	Pre-treatment site monitoring	120,000.00	20,000.00	2,801.00	16,405.00	13.67%	82.03%	103,595.00	3,595.00
4.7	Water Quality Monitoring	81,000.00	20,000.00	-	19,959.73	24.64%	99.80%	61,040.27	40.27
4.8	Road removal	430,000.00	24,600.00	8,303.50	8,303.50	1.93%	33.75%	421,696.50	16,296.50
4.9	Stream/wetland restoration	415,000.00	-	-	-	0.00%	0.00%	415,000.00	-
4.10	Forest fuels demonstration treatments	-	-	-	-	-	-	-	-
4.11	Post treatment monitoring	125,000.00	-	-	-	0.00%	0.00%	125,000.00	-
4.12	Site tours-education and technology transfer	38,000.00	-	-	-	0.00%	0.00%	38,000.00	-
4.13	Public outreach program and materials	10,500.00	-	-	-	0.00%	0.00%	10,500.00	-
	<b>Work Item 4 - Subtotal</b>	<b>1,385,000.00</b>	<b>96,600.00</b>	<b>19,313.50</b>	<b>66,310.98</b>	<b>4.79%</b>	<b>68.64%</b>	<b>1,318,689.02</b>	<b>30,289.02</b>
<b>Work Item 5: Watershed Evaluation, Treatment and Monitoring Handbook</b>									
5.1	Watershed Technical Group development, meetings	48,000.00	15,000.00	427.50	2,220.00	4.63%	14.80%	45,780.00	12,780.00
5.1.1	Watershed Technical Group review	6,000.00	-	-	-	0.00%	0.00%	6,000.00	-
5.2	Literature summary	7,000.00	3,500.00	-	217.50	3.11%	6.21%	6,782.50	3,282.50
5.3	Document outline	7,000.00	6,000.00	565.00	1,202.50	17.18%	20.04%	5,797.50	4,797.50
5.4	Draft document	12,000.00	4,000.00	-	-	0.00%	0.00%	12,000.00	4,000.00
5.5	Interim/working document	8,000.00	-	-	-	0.00%	0.00%	8,000.00	-
5.6	Document iteration	4,000.00	-	-	-	0.00%	0.00%	4,000.00	-
5.7	Final document	6,000.00	-	-	-	0.00%	0.00%	6,000.00	-
5.8	Document layout and printing	4,000.00	-	-	-	0.00%	0.00%	4,000.00	-
	<b>Work Item 5 - Subtotal</b>	<b>102,000.00</b>	<b>28,500.00</b>	<b>992.50</b>	<b>3,640.00</b>	<b>3.57%</b>	<b>12.77%</b>	<b>98,360.00</b>	<b>24,860.00</b>
<b>Work Item 6: Forest Vegetation Treatment/Water Quality Protection Handbook</b>									
6.1	Forestry Technical Group formation	1,100.00	1,100.00	-	1,088.75	98.98%	98.98%	11.25	11.25
6.2	Forestry Technical Group meetings	24,000.00	7,500.00	-	-	0.00%	0.00%	24,000.00	7,500.00
6.3	Literature summary	10,000.00	5,000.00	290.00	580.00	5.80%	11.60%	9,420.00	4,420.00
6.4	Develop draft Handbook/Guiding Principles	12,000.00	8,000.00	-	-	0.00%	0.00%	12,000.00	8,000.00
6.5	Identify treatment options	5,000.00	2,000.00	435.00	761.25	15.23%	38.06%	4,238.75	1,238.75
6.6	Forest Vegetation Treatment Implementation (research plots)	13,000.00	-	-	-	0.00%	0.00%	13,000.00	-
6.7	Develop working draft Handbook	14,000.00	-	-	-	0.00%	0.00%	14,000.00	-
6.8	Monitor treatments	24,000.00	-	-	-	0.00%	0.00%	24,000.00	-
6.9	Distribution Copy-Forest Vegetation Treatment/Water Quality Protection Handbook	8,000.00	-	-	-	0.00%	0.00%	8,000.00	-
6.10	Final Draft Forest Vegetation Treatment/Water Quality Protection Handbook	12,000.00	-	-	-	0.00%	0.00%	12,000.00	-
6.11	Printing-distribution of Forest Vegetation Treatment/Water Quality Protection Handbook	-	-	-	-	-	-	-	-
	<b>Work Item 6 - Subtotal</b>	<b>123,100.00</b>	<b>23,600.00</b>	<b>725.00</b>	<b>2,430.00</b>	<b>1.97%</b>	<b>10.30%</b>	<b>120,670.00</b>	<b>21,170.00</b>
<b>Work Item 7: Northstar Riparian and Vegetation Enhancement Project</b>									
7.1	Permitting and Notification	800.00	800.00	-	800.00	100.00%	100.00%	-	-
7.2	Pre Treatment Monitoring	7,500.00	1,500.00	1,500.00	1,500.00	20.00%	100.00%	6,000.00	-
7.3	Field Work (Site Preparation)	10,000.00	2,500.00	-	-	0.00%	0.00%	10,000.00	2,500.00
7.4	Hand Crew Work (Treatment)	306,500.00	30,200.00	-	-	0.00%	0.00%	306,500.00	30,200.00
7.5	Hand Crew Work (Chipping)	-	-	-	-	-	-	-	-
7.6	Hand Crew Work (Pile Burning)	2,500.00	-	-	-	0.00%	0.00%	2,500.00	-
7.7	Mastication	27,700.00	-	-	27,697.28	99.99%	99.99%	2.72	(27,697.28)
7.8	Project Inspections & Forestry Management	30,000.00	10,000.00	1,140.00	4,640.00	15.47%	46.40%	25,360.00	5,360.00
7.9	Post Treatment Monitoring and Reporting	12,500.00	2,500.00	-	-	0.00%	0.00%	12,500.00	2,500.00
	<b>Work Item 7 - Subtotal</b>	<b>397,500.00</b>	<b>47,500.00</b>	<b>2,640.00</b>	<b>34,637.28</b>	<b>8.71%</b>	<b>72.92%</b>	<b>362,862.72</b>	<b>12,862.72</b>
<b>Work Item 8: Project Implementation and Monitoring Contingency</b>									
		42,100.00	3,000.00	-	-	0.00%	0.00%	42,100.00	3,000.00
	<b>PROJECT TOTAL</b>	<b>2,250,000.00</b>	<b>250,000.00</b>	<b>25,068.50</b>	<b>139,015.12</b>	<b>6.18%</b>	<b>55.61%</b>	<b>2,110,984.88</b>	<b>110,984.88</b>

Notes:

1 - Reflects the cumulative budget. For example, for pay apps submitted in year two of the SEP this budget will be the sum of the Year 1 and the Year 2 Budgets.

## Choosing Technical Group members for Waddle Ranch-Northstar SEP

Prepared September 18, 2009

For the Waddle Ranch/Northstar SEP

By Michael Hogan, Kevin Drake

We submit this document and list of technical group members for approval by the SEP Steering Committee. We have included a general introduction and language from the SEP (in *italics*) as supporting information. If you are familiar with this information, you may go directly to the chart and individual qualifications for further information. We will discuss and vote on the membership when we meet on October 7<sup>th</sup>.  
Thank you.

Michael Hogan

### Introduction

*The Waddle Ranch/Northstar Watershed Improvement Program Supplemental Environmental Project (SEP) includes two components that will result in handbooks that are intended to transfer information gained in the SEP program to other individuals and groups. The intent of these handbooks is to develop information relating to watershed assessment and vegetation management/fuels reduction work and translate that information into user-friendly, widely available handbooks. In this way, we will leverage actual work done in the field into a form that is useful beyond this project.*

### Purpose of the technical committees

*The two Technical Advisory Groups will function as technical advisors and will not be responsible for making management decisions for the overall SEP. However, they will be tasked with assisting in the development of the two handbooks. Further, their general and specific advice and suggestions will be brought forward to the SEP Steering Committee for consideration where appropriate. The purpose of the Technical Advisory Groups is to offer the highest level of technical input in order to produce technical documents and implement processes with the highest level of technical competence possible. The Technical groups will not direct work at Waddle Ranch or Northstar but may make recommendations in order to support the handbooks. Technical input will be tracked and made available to the SEP Steering Committee so that suggestions put*

forward can be understood and supported technically. The Advisory Groups, through their collective experience and expertise, will help add legitimacy to the Handbooks included in the SEP.

## **Description of the Handbooks**

### ***Watershed Evaluation, Treatment, and Monitoring Handbook***

*This element of the SEP project involves the development and application of a systematic, cost-effective, and transferable approach to watershed evaluation, treatment, and monitoring that is focused specifically on erosion and sedimentation and associated ecosystem functions. This document will fill a void that currently exists and will provide land managers and agencies with a user-friendly process to: 1) focus watershed assessment on erosion problem areas, 2) provide an adaptive management-based planning and implementation guidance process, and 3) provide clear direction on how and what to monitor in order to quantitatively assess impacts of watershed improvement efforts. This handbook and process is directly applicable to TMDL implementation<sup>1</sup> within and beyond the Martis Valley and Middle Truckee River.*

### ***Forest Vegetation Treatment/Water Quality Protection Handbook***

*This portion of the project will define an adaptive management approach to fuels treatment and forest management with special emphasis on soil-based water quality protection and prevention of erosion. This handbook will be based on the Sediment Source Control Handbook (available at [www.ierstahoe.com](http://www.ierstahoe.com)) and will use a similar adaptive, collaborative process to define and achieve goals. Deliverables will be a set of guiding principles for forestry practices with a foundation in adaptive environmental management, a 'toolkit' for fuels reduction and forest management that quantifies the impacts and potential impacts on water quality, and a set of related mitigation procedures where applicable. This portion of the project is designed to serve as a foundation for a more robust understanding of the impacts of forest vegetation treatments currently underway or planned for the Truckee-Tahoe region. If used appropriately, this handbook will help maintain or improve water quality while allowing land managers to implement cost-effective fuels reduction treatments.*

*This handbook may provide a starting point for a more robust, regional Forest Vegetation and Erosion Management Handbook that can be used throughout the region.*

## **Technical Group Process**

### **5.1 Watershed Technical Group Development and Meetings**

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<sup>1</sup> Essentially, a Total Maximum Daily Load (TMDL) is the estimated amount of a particular pollutant that can enter a water body without causing long term impairment. This regulatory tool is being used to attempt to help a number of water bodies to recover. The Middle Truckee River, into which Martis Creek flows, is now under the requirements of a TMDL.

A Watershed Technical Group (WTG) will be developed to guide this portion of the project. Invited WTG members (outlined in the Partners and Committees section above) have been chosen based on their involvement in watershed management issues and their understanding of the use and need for such a handbook. This group will be tasked with providing input and information into the process, and developing connections with watershed groups and other entities that need guidance in implementing and monitoring watershed improvement efforts.

### **6.1 Forestry Technical Group Formation**

Form a Forestry Technical Group (FTG) comprised of representatives of the following entities: LRWQCB, California Department of Forestry, Tahoe Fire Chiefs Association, NFD, and a citizen representative. Specific invitees are outlined in the Partners and Committees section above. (Note: this group is separate from both the overall SEP Steering Committee and the WTG.) This group will be tasked with ensuring that the project is focused on identified needs and that effective communication occurs with appropriate groups and individual stakeholders in order to maximize information sharing and technology transfer. Further, this group will work to make sure that this program is aligned with other existing forestry and fuels management programs and efforts in the region. Formation of this group includes the development of key agreements that identify the goals and outcomes of this effort (charter) through a facilitated process. This group will also advise the treatments by the Northstar Community Services District (NCSD) in Work Item 7.

### **General Qualifications**

Technical group members should have some of all of the following qualifications:

- Education in the subject area
- Experience, including scientific, practical and regulatory understanding of the issue and their implications for both the field and the larger regulatory and social [political?] landscape
- Actual field experience with the subject area (this is a critical element since both handbooks are intended to be application-based tools)
- Interaction with/connection to individuals, organizations and entities where the subject area is of interest, use and relevance. This qualification insures the widest unofficial peer input into the handbooks.
- Demonstrated ability to work with other individuals in this type of setting (this may be one of the most important qualifications. Scientists and others can come with large egos and defended or siloed positions. The intent of these groups is to recognize what we don't really know and approach new solutions to understanding.)

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### Specific Technical Group Qualifications

In order to make the product that we produce actually useful, the technical groups are expected to bring a range of experience and abilities to the table. While we will not be able to include everything possible in the groups, we are looking for broad spectrum experience, knowledge and training. The individuals put forth represent that and/or have direct access to those elements. For instance, we have not included a wildlife specialist, partly because the emphasis on the assessment process and fuels efforts is on soil impacts, sediment production and water quality and we have limited funding to populate the groups. However, some individuals have experience in habitat issues (Matt Kiese, Joe Barron, John Stanley, Randy Westmoreland, Susie Kocher and others). Additionally, some members have direct access to wildlife specialists so that the information or direct access to those individuals is easily available without putting undue burden on our budget. Essentially, we need a group that has that range of knowledge and experience, can work within and outside the normal ideological or dogmatic constraints of practice and understand the need to produce a useable product, not just one that is intellectually interesting or clever. The group members have been suggested based on a known ability to fulfill these perceived needs and to work cooperatively with other team members.

There are many specific overall group qualifications or elements which should be included in the technical groups. The following list includes some specific qualifications. Note that most of these qualifications link directly to experience and are often supported by education but education alone is not an adequate qualifier. In other words, we believe that these groups need to have a solid foundation of actual field work and/or applied understanding within their specific area of competence. This will allow us to relate the output directly to management activities rather than knowledge for knowledge's sake.

- Experience in design, construction, permitting, monitoring of local projects
- Experience beyond the local environmental (regional and national scale)
- Experience across implementation platforms; i.e. USFS, CalFire, Private, local fire districts
- Experience with the range of soil issues relative to the specific group, including erosion, nutrient cycling, forestry impacts on soils, soil quality, soils and hydrology, soil restoration
- Experience with soil-plant-hydrology interactions
- Experience with local geology and geomorphology including trends and differences in stream geomorphology across the region (for the watershed evaluation group)

AA. 2

- Forestry project planning and implementation experience within the Lahontan region
- Experience with wildlife aspects of forestry and watershed enhancement practices
- Experience with research design and implementation in a management context (vs. pure research that may not link directly to management activities)
- Public perspective on proposed handbook content
- Implementers perspective on handbook content and recommendations (are recommendations implementable?)

The following table lists the specific qualifications of each technical group member. Following this table is a list of individual skills and qualifications for each member.

#### Suggested Technical Group Members with Qualification Matrix

Group Name	Proposed Members	Affiliation	Member Status	Education	Relevant Experience	Field Experience	Connectivity	Specialty
Watershed Technical Group	Lisa Wallace or rep.	TRWC	Paid member	Yes	Yes	some	Yes	Community
	Robert Larsen	LRWQCB	Unpaid member	Yes	Yes	Yes	Yes	Regulatory
	Dr. John Stanley	Consultant	Paid member	Yes	Yes	Yes	Yes	Restoration
	Dr. Vic Claassen	UC Davis	Paid member	Yes	Yes	Yes	Yes	Soils, hydrology
	Matt Kiese	Consultant	Paid member	Yes	Yes	Yes	Yes	Watershed, geomorph
	Randy Westmoreland	USFS	Unpaid member	Yes	Yes	Yes	Yes	Soils, watersheds
	Michael Hogan	IERS	Paid member	Yes	Yes	Yes	Yes	Ecology, soils, hydrology
	Dr. Susan Clark	Dynamic Competence (Facilitator)	Paid member					
	<i>Alternates:</i>							
	<i>Dr. Mike Singer</i>	<i>UC Davis (Prof Emeritus)</i>	Unpaid member	Yes	Yes	Yes	Yes	Soils, erosion

Att. 2

Forestry Technical Group	Lisa Wallace or rep. Doug Cushman Mary Huggins Martin Goldberg Joe Barron Vince Archer Susie Kocher Dr. Ken Hubbert Dr. Mike Singer Michael Hogan  Dr. Susan Clark,  <i>Alternates: Jeff Brown                  Stewart McMorrow</i>	TRWC LRWQCB CALFIRE Lake Valley Fire Northstar Fire USFS UC Berkeley Extension USFS-PSW UC Davis (Prof Emeritus) IERS  Dynamic Competence (Facilitator) Sagehen Field Station North Tahoe Fire	Paid member Unpaid member Unpaid member Unpaid member Unpaid member Unpaid member Unpaid member Unpaid member Unpaid member Unpaid member Paid member	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	some Yes Yes Yes Yes Yes Some Yes Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Community Regulatory Field operations Field operations, soils Forestry, field ops Soils, forestry research Coordination Field research, apps Research, connectivity Field research, apps	Forestry research Forestry, field ops
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## Individual Qualifications

### Watershed

Lisa Wallace/TRWC

- Representation from the public in the Truckee region
- Demonstrated credibility and neutrality (no pre-set agenda aside from enhancing the Truckee River Watershed)
- A practical perspective from the 'public' viewpoint (will this fly, will this work on the ground?)

Dr. John Stanley

- Many years of field-oriented watershed research and application efforts
- Founder of Society for Ecological Restoration International
- Breadth of knowledge, understanding and connectivity in the field of ecological restoration, wildlife, riparian issues, sediment and forestry issues

Dr. Vic Claassen, UC Davis

- Broad knowledge of soil-plant-watershed interaction in the Sierra
- One of the most field-based soil researchers in California with a vast body of applied field research
- Lectures broadly on soil-based watershed issues

Matt Kiese

- Fisheries biologist by training, watershed geomorphologist and restorationists by practice
- One of the most highly regarded and knowledgeable watershed/riparian restoration planners and practitioners in the Sierra
- Field and practical orientation, firmly founded in scientific knowledge
- Creative thinker, developer of new understandings of watershed processes

Randy Westmoreland, USFS

- Extensive field knowledge and ability from a practitioner and agency perspective
- Practical application of watershed science
- Liaison with needs of USFS

Alternates:

Dr. Mike Singer, UCD, emeritus

- Extensive soil based research
- Extensive reach within research community worldwide
- Recognized soil quality expert (authored Soil Quality chapter in the Soils Encyclopedia)

### Forestry

Mary Huggins, CALFIRE

- Aware of and supportive of Handbook concept
- Broad working knowledge of issues and rules
- Representative of regulatory body that may also use this handbook

Martin Goldberg, Lake Valley Fire

- Initial developer of concept with MPH
- Former Water Board staff, knowledgeable about regulations
- Potential model user of handbook
- Soil Science degree

Joe Barron, Northstar Fire Department

- Forester for NFD, liaison with NFD work
- Practical understanding of field issues, habitat

Vince Archer, USFS

- USFS soil scientist with extensive experience on timber harvest projects and post-fire erosion research
- Broad geographic perspective – has worked in Tahoe, throughout California, in the Pacific Northwest and the Northeast US
- Works closely with Tom DeLuca, a leading international soil scientist/researcher focused on effects of forest management and restoration practices on soil processes

*Note: We are extremely pleased that someone with as much experience and geographic reach as Vince is interested in participating in this group. Since Vince is based in Missoula, MT, he would be physically present for occasional meetings and would participate in most meetings via conference calls. Vince offers a much-needed link to the USFS at the national level and increased connectivity with researchers in the Rocky Mountains.*

Susie Kocher

- Deeply involved with forestry and fuels work in Tahoe Basin
- Liaison to UC Berkeley extension, assistance with technology transfer
- Excellent meeting organizer

Dr. Ken Hubbard PSW

- Vast experience with forestry research in California
- Currently engaged in related research that can be leveraged for this effort
- Field oriented research focus
- Extremely supportive of Handbook project

Dr. Mike Singer, UCD, emeritus

- Extensive soil based research
- Extensive reach within research community worldwide
- Recognized soil quality expert (authored Soil Quality chapter in the Soils Encyclopedia)

Alternates:

Jeff Brown, Sagehen Field Station (Alternate)

- Broad working knowledge of forestry issues
- Coordinator of large amount of forestry research
- Linkage (2-way) between Sagehen (an NSF Research Watershed) and Handbook project

Stewart McMorrow

- Fuels officer for North Tahoe Fire
- Deeply committed to gaining knowledge about fuels reduction effects and application of that knowledge
- Performing fuels reduction monitoring work in Tahoe
- Beyond Truckee perspective

A11. 3

**NMP SEP PROGRAM INVOICE - YEAR 1**  
 SEP Waddle Ranch / Northstar Watershed Improvement Program  
**OFFICIAL INVOICE FORMAT DO NOT MODIFIED WITHOUT CONSENT**

From:  
 IERS  
 PO Box 7559  
 Tahoe City, CA 96145  
 530-581-4377

3rd Party Reviewer:  
 Sierra Business Council  
 PO Box 2428  
 Truckee, CA 96160  
 530-582-4800

Project Number: R6T-2009-0012
Invoice No.: <u>711092</u> 2
Billing Period: Through 7/31/09
Date: 8/7/2009

A	B	C	D	E	F	G
Work Item #	Work Item Description	Year 1 Work Item Allotment <i>(per line item or N/A)</i>	Previous Expenditures to Date (Year 1) <i>(From previous invoice-Column F)</i>	Current Expenditures	Total Expenditures to Date (Year 1) <i>D + E - F</i>	% of Y1 Line Item Budget Spent to Date <i>F/C - G</i>
1.1	SEP Steering Committee development and facilitation	\$ 6,500.00	3,553.01		\$ 3,553.01	54.66%
1.2	SEP Steering Committee meetings	\$ 4,500.00	1,484.00	108.75	\$ 1,592.75	35.39%
1.3	SEP Steering Committee coordination	\$ 3,000.00	2,508.75	437.50	\$ 2,946.25	98.21%
1.4	Review and integration of pertinent Martis Valley projects	\$ 2,500.00		657.50	\$ 657.50	26.30%
2.1	Quarterly progress reports	\$ 6,000.00		1,912.50	\$ 1,912.50	31.88%
2.4	Project coordination	\$ 5,000.00	4,022.00	345.00	\$ 4,367.00	87.34%
2.5.2	Copies	\$ 500.00			\$ -	0.00%
2.5.3	Travel	\$ 1,200.00	47.85		\$ 47.85	3.99%
2.5.4	Budget and project tracking	\$ 1,800.00	1,618.75	146.25	\$ 1,765.00	98.06%
3.1	PAEP Document	\$ 3,800.00		2,997.50	\$ 2,997.50	78.88%
3.1.1	Northstar-at-Tahoe PAEP & QAPP Integration	\$ 2,500.00		747.50	\$ 747.50	29.90%
3.2	PAEP Oversight and Documentation	\$ 2,000.00		620.00	\$ 620.00	31.00%
3.3	Monitoring Plan	\$ 4,000.00	1,547.50	145.00	\$ 1,692.50	42.31%
3.4	QAPP Preparation	\$ 7,500.00		2,392.50	\$ 2,392.50	31.90%
4.1	Site/watershed evaluation (EIRA)	\$ 18,000.00	3,587.50	4,142.50	\$ 7,730.00	42.94%
4.3	Treatment sites identification	\$ 8,000.00	145.00	977.50	\$ 1,122.50	14.03%
4.4	Permitting assistance	\$ 4,000.00			\$ -	0.00%
4.5	Treatment specifications	\$ 2,000.00			\$ -	0.00%
4.6	Pre-treatment site monitoring	\$ 20,000.00	165.50	12,911.00	\$ 13,076.50	65.38%
4.7	Water Quality Monitoring	\$ 20,000.00	19,959.73		\$ 19,959.73	99.80%
4.8	Road removal	\$ 24,600.00			\$ -	0.00%
5.1	Watershed Technical Group development, meetings	\$ 15,000.00	725.00	217.50	\$ 942.50	6.28%
5.2	Literature summary	\$ 3,500.00	145.00		\$ 145.00	4.14%
5.3	Document outline	\$ 6,000.00	145.00		\$ 145.00	2.42%
5.4	Draft document	\$ 4,000.00			\$ -	0.00%
6.1	Forestry Technical Group formation	\$ 1,100.00	978.75		\$ 978.75	88.98%
6.2	Forestry Technical Group meetings	\$ 7,500.00			\$ -	0.00%
6.3	Literature summary	\$ 5,000.00	145.00	145.00	\$ 290.00	5.80%
6.4	Develop draft Handbook/Guiding Principles	\$ 8,000.00			\$ -	0.00%
6.5	Identify treatment options	\$ 2,000.00	253.75	72.50	\$ 326.25	16.31%
8	Project Implementation and Monitoring Contingency	\$ 3,000.00			\$ -	0.00%
<b>TOTALS</b>		\$202,500.00	\$ 41,032.09	\$ 28,976.00	\$ 70,008.09	

*Michael Hogan* 8/7/09  
 IERS Date  
 Print Name: MICHAEL HOGAN

Total Amount Due This Invoice  
*N. De...* 8/14/09  
 Third Party Reviewer, SBC Date  
 Print Name:

By signing this invoice I certify, under penalty of law, that this document and any attachment was prepared by me or under my direction in accordance with the terms and conditions of the SEP Agreement, and, to the best of my knowledge and belief, is accurate. I am aware that there are significant penalties for submitting false or misleading information.

I certify this invoice, to the best of my knowledge and belief, is accurate and complete and I approve this invoice for payment.

**Notes Regarding Completing this Invoice:**

- IERS - Please be sure to accompany this invoice with a description and/or work log
- Columns A, B, and C were obtained from the approved NMP SEP budget and shall not be changed, unless appropriate action is taken (following SEP contract / agreement).
- Previous Expenditures to Date: From the last invoice, enter line item amounts from Expenditures to Date, Column F. If first invoice, enter zero (0).

111-5

### NMP SEP PROGRAM INVOICE - YEAR 1 - TASK 7 ONLY, NORTHSTAR FIRE DEPT.

SEP Waddle Ranch / Northstar Watershed Improvement Program  
OFFICIAL INVOICE FORMAT DO NOT MODIFIED WITHOUT CONSENT

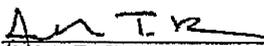
**From:**  
Northstar Fire Department  
910 Northstar Drive  
Northstar, CA 96161  
(530) 562-1212

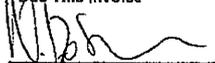
**3rd Party Reviewer:**  
Sierra Business Council  
PO Box 2428  
Truckee, CA 96160  
530-582-4800

Project Number:	R6T-2009-0012
Invoice No.:	2
Billing Period:	July 1-31 2009
Date:	8/10/2009

A	B	C	D	E	F	G
Work Item #	Work Item Description	Year 1 Work Item Allotment	Previous Expenditures to Date (Year 1)	Current Expenditures	Total Expenditures to Date (Year 1)	% of Y1 Line Item Budget Spent to Date
		<i>(per line item or N/A)</i>	<i>(From previous invoice-Column E)</i>		<i>D - E - F</i>	<i>F / C - G</i>
7.1	Permitting and Notification	\$ 800.00	\$ 800.00	\$ -	\$ 800.00	100.00%
7.2	Pre Treatment Monitoring	\$ 1,500.00	\$ -	\$ -	\$ -	0.00%
7.3	Field Work (Site Preparation)					N/A
7.4	Hand Crew Work (Treatment)	\$ 2,500.00	\$ -	\$ -	\$ -	0.00%
7.5	Hand Crew Work (Chipping)					N/A
7.6	Hand Crew Work (Pile Burning)	\$ 2,500.00	\$ -	\$ -	\$ -	0.00%
7.7	Mastication	\$ 27,700.00	\$ -	\$ 8,158.28	\$ 8,158.28	29.45%
7.8	Project Inspections & Forestry Management	\$ 10,000.00	\$ -	\$ 2,100.00	\$ 2,100.00	21.00%
7.9	Post Treatment Monitoring and Reporting	\$ 2,500.00	\$ -	\$ -	\$ -	0.00%
<b>TOTALS</b>		<b>\$ 47,500.00</b>	<b>\$ 800.00</b>	<b>\$ 10,258.28</b>	<b>\$ 11,058.28</b>	<b>23.28%</b>

Total Amount Due This Invoice

  
Northstar Fire Signature Date 08-10-2009  
Print Name: Joseph T. Barron

  
Third Party Reviewer, SBC Date 8/14/09  
Print Name: \_\_\_\_\_

By signing this invoice I certify, under penalty of law, that this document and any attachment was prepared by me or under my direction in accordance with the terms and conditions of the SEP Agreement, and, to the best of my knowledge and belief, is accurate. I am aware that there are significant penalties for submitting false or misleading information.

I certify this invoice, to the best of my knowledge and belief, is accurate and complete and I approve this invoice for payment.

#### Notes Regarding Completing this Invoice:

Northstar Fire - Please be sure to accompany this invoice with a description and/or work log

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Previous Expenditures to Date: From the last invoice, amounts from Expenditures to Date, Column F will automatically be entered from the previous invoice. If first invoice, enter zero (0).

**NMP SEP PROGRAM INVOICE - YEAR 1**  
 SEP Waddle Ranch / Northstar Watershed Improvement Program  
 OFFICIAL INVOICE FORMAT DO NOT MODIFIED WITHOUT CONSENT

From:  
 IERS:  
 PO Box 7559  
 Tahoe City, CA 96145  
 530-581-4377

3rd Party Reviewer:  
 Sierra Business Council  
 PO Box 2428  
 Truckee, CA 96160  
 530-582-4800

Project Number: R6T-2009-0012
Invoice No.: 3
Billing Period:
Date:

A	B	C	D	E	F	G
Work Item #	Work Item Description	Year 1 Work Item Allotment	Previous Expenditures to Date (Year 1)	Current Expenditures	Total Expenditures to Date (Year 1)	% of Y1 Line Item Budget Spent to Date
		<i>(per line item or N/A)</i>	<i>(From previous Invoice-Column F)</i>		<i>D - E = F</i>	<i>F / C = G</i>
1.1	SEP Steering Committee development and facilitation	\$ 6,500.00	\$ 3,553.01		\$ 3,553.01	54.66%
1.2	SEP Steering Committee meetings	\$ 4,500.00	\$ 1,592.75		\$ 1,592.75	35.39%
1.3	SEP Steering Committee coordination	\$ 3,000.00	\$ 2,946.25		\$ 2,946.25	98.21%
1.4	Review and integration of pertinent Martis Valley projects	\$ 2,500.00	\$ 657.50		\$ 657.50	26.30%
2.1	Quarterly progress reports	\$ 6,000.00	\$ 1,912.50	\$ 880.00	\$ 2,792.50	46.54%
2.4	Project coordination	\$ 5,000.00	\$ 4,367.00	\$ 247.50	\$ 4,614.50	92.29%
2.5.2	Copies	\$ 500.00	\$ -		\$ -	0.00%
2.5.3	Travel	\$ 1,200.00	\$ 47.85		\$ 47.85	3.99%
2.5.4	Budget and project tracking	\$ 1,800.00	\$ 1,765.00		\$ 1,765.00	98.06%
3.1	PAEP Document	\$ 3,800.00	\$ 2,997.50		\$ 2,997.50	78.88%
3.1.1	Northstar-at-Tahoe PAEP & QAPP Integration	\$ 2,500.00	\$ 747.50	\$ 577.50	\$ 1,325.00	53.00%
3.2	PAEP Oversight and Documentation	\$ 2,000.00	\$ 620.00		\$ 620.00	31.00%
3.3	Monitoring Plan	\$ 4,000.00	\$ 1,692.50	\$ 1,375.00	\$ 3,067.50	76.69%
3.4	QAPP Preparation	\$ 7,500.00	\$ 2,392.50	\$ 2,227.50	\$ 4,620.00	61.60%
4.1	Site/watershed evaluation (EIRA)	\$ 18,000.00	\$ 7,730.00	\$ 3,067.50	\$ 10,797.50	59.99%
4.3	Treatment sites identification	\$ 8,000.00	\$ 1,122.50	\$ 1,403.75	\$ 2,526.25	31.58%
4.4	Permitting assistance	\$ 4,000.00	\$ -		\$ -	0.00%
4.5	Treatment specifications	\$ 2,000.00	\$ -	\$ 110.00	\$ 110.00	5.50%
4.6	Pre-treatment site monitoring	\$ 20,000.00	\$ 13,076.50	\$ 527.50	\$ 13,604.00	68.02%
4.7	Water Quality Monitoring	\$ 20,000.00	\$ 19,959.73		\$ 19,959.73	99.80%
4.8	Road removal	\$ 24,600.00	\$ -		\$ -	0.00%
5.1	Watershed Technical Group development, meetings	\$ 15,000.00	\$ 942.50	\$ 850.00	\$ 1,792.50	11.95%
5.2	Literature summary	\$ 3,500.00	\$ 145.00	\$ 72.50	\$ 217.50	6.21%
5.3	Document outline	\$ 6,000.00	\$ 145.00	\$ 492.50	\$ 637.50	10.63%
5.4	Draft document	\$ 4,000.00	\$ -		\$ -	0.00%
6.1	Forestry Technical Group formation	\$ 1,100.00	\$ 978.75	\$ 110.00	\$ 1,088.75	98.98%
6.2	Forestry Technical Group meetings	\$ 7,500.00	\$ -		\$ -	0.00%
6.3	Literature summary	\$ 5,000.00	\$ 290.00		\$ 290.00	5.80%
6.4	Develop draft Handbook/Guiding Principles	\$ 8,000.00	\$ -		\$ -	0.00%
6.5	Identify treatment options	\$ 2,000.00	\$ 326.25		\$ 326.25	16.31%
8	Project Implementation and Monitoring Contingency	\$ 3,000.00	\$ -		\$ -	0.00%
<b>TOTALS</b>		\$202,500.00	70,008.09	\$ 11,941.25	\$ 81,949.34	

Total Amount Due This Invoice

*M. Hogan* 9/11/09  
 IERS Date  
 Print Name: MICHAEL HOGAN

*M. Dea* 9/11/09  
 Third Party Reviewer, SBC Date  
 Print Name:

By signing this invoice I certify, under penalty of law, that this document and any attachments was prepared by me or under my direction in accordance with the terms and conditions of the SEP Agreement and, to the best of my knowledge and belief, is accurate. I am aware that there are significant penalties for submitting false or misleading information.

I certify this invoice, to the best of my knowledge and belief, is accurate and complete and I approve this invoice for payment.

**Notes Regarding Completing this Invoice:**

IERS.- Please be sure to accompany this invoice with a description and/or work log

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Previous Expenditures to Date: From the last invoice, enter line item amounts from Expenditures to Date, Column F. If first invoice, enter zero (0).

**NMP SEP PROGRAM INVOICE - YEAR 1 - TASK 7 ONLY, NORTHSTAR FIRE DEPT.**

SEP Waddle Ranch / Northstar Watershed Improvement Program  
OFFICIAL INVOICE FORMAT DO NOT MODIFIED WITHOUT CONSENT

**From:**  
Northstar Fire Department  
910 Northstar Drive  
Northstar, CA 96161  
(530) 562-1212

**3rd Party Reviewer:**  
Sierra Business Council  
PO Box 2428  
Truckee, CA 96160  
530-582-4800

Project Number:	R6T-2009-0012
Invoice No.:	3
Billing Period:	Aug 1-Aug 31
Date:	8/31/2009

A	B	C	D	E	F	G
Work Item #	Work Item Description	Year 1 Work Item Allotment	Previous Expenditures to Date (Year 1)	Current Expenditures	Total Expenditures to Date (Year 1)	% of Y1 Line Item Budget Spent to Date
		<i>(per line item or N/A)</i>	<i>(From previous invoice-Column F)</i>		<i>D + E = F</i>	<i>F / C = G</i>
7.1	Permitting and Notification	\$ 800.00	\$ 800.00	\$ -	\$ 800.00	100.00%
7.2	Pre Treatment Monitoring	\$ 1,500.00	\$ -	\$ -	\$ -	0.00%
7.3	Field Work (Site Preperation)	\$ -		\$ -	\$ -	N/A
7.4	Hand Crew Work (Treatment)	\$ 3,000.00	\$ -	\$ -	\$ -	0.00%
7.5	Hand Crew Work (Chipping)	\$ -		\$ -	\$ -	N/A
7.6	Hand Crew Work (Pile Burning)	\$ 2,500.00	\$ -	\$ -	\$ -	0.00%
7.7	Mastication	\$ 27,700.00	\$ 8,158.28	\$ 19,539.00	\$ 27,697.28	99.99%
7.8	Project Inspections & Forestry Management	\$ 10,000.00	\$ 2,100.00	\$ 1,400.00	\$ 3,500.00	35.00%
7.9	Post Treatment Monitoring and Reporting	\$ 2,500.00	\$ -	\$ -	\$ -	0.00%
<b>TOTALS</b>		\$ 48,000.00	\$ 11,058.28	\$ 20,939.00	\$ 31,997.28	66.66%

Total Amount  
Due This Invoice

John T. R      09-08-09  
Northstar Fire      Date

[Signature]      9/11/09  
Third Party Reviewer, SBC      Date

By signing this invoice I certify, under penalty of law, that this document and any attachment was prepared by me or under my direction in accordance with the terms and conditions of the SEP Agreement and, to the best of my knowledge and belief, is accurate. I am aware that there are significant penalties for submitting false or misleading information.

I certify this invoice, to the best of my knowledge and belief, is accurate and complete and I approve this invoice for payment.

**Notes Regarding Completing this Invoice:**

Northstar Fire - Please be sure to accompany this invoice with a description and/or work log

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**Previous Expenditures to Date:** From the last invoice, amounts from Expenditures to Date, Column F will automatically be entered from the previous invoice. If first invoice, enter zero (0).

**NMP SEP Program Invoice - Year 1-Task 7 Only (Northstar Fire Department)**

**Narration:**

**Item 7.7** Mastication was completed for year 1 on 08-19-2009 by Dave Theis of Cold Creek Land Services. The machine mechanically treated the understory and overstory vegetation. Total cost for Mastication was \$27,697.28 which is 99.99% of the estimated cost for year one.

**Item 7.8** Consulting Licensed RPF Forester Bill Banka has continued overseeing the Northstar SEP Project. His contributions include, flagging, tree marking (removal), forest inventory and project management. Total cost for Bill's services combined is \$3,500, and 35.00% of the estimated cost for year one has been spent.

**NMP SEP PROGRAM INVOICE - YEAR 1**  
 SEP Waddle Ranch / Northstar Watershed Improvement Program  
 OFFICIAL INVOICE FORMAT DO NOT MODIFIED WITHOUT CONSENT

**From:**  
 IERS  
 PO Box 7559  
 Tahoe City, CA 96145  
 530-581-4377

**3rd Party Reviewer:**  
 Sierra Business Council  
 PO Box 2428  
 Truckee, CA 96160  
 530-582-4800

Project Number: R6T-2009-0012
Invoice No.: 4
Billing Period: 9/1-9/26/09
Date: Sep, 30th, 2009

A	B	C	D	E	F	G
Work Item #	Work Item Description	Year 1 Work Item Allotment	Previous Expenditures to Date (Year 1)	Current Expenditures	Total Expenditures to Date (Year 1)	% of Y1 Line Item Budget Spent to Date
		<i>(per line item or N/A)</i>	<i>(From previous Invoice-Column F)</i>		<i>D + E = F</i>	<i>F / C - G</i>
1.1	SEP Steering Committee development and facilitation	\$ 6,500.00	\$ 3,553.01		\$ 3,553.01	54.66%
1.2	SEP Steering Committee meetings	\$ 4,500.00	\$ 1,592.75		\$ 1,592.75	35.39%
1.3	SEP Steering Committee coordination	\$ 3,000.00	\$ 2,946.25		\$ 2,946.25	98.21%
1.4	Review and integration of pertinent Maris Valley projects	\$ 2,500.00	\$ 657.50	145.00	\$ 802.50	32.10%
2.1	Quarterly progress reports	\$ 6,000.00	\$ 2,792.50	110.00	\$ 2,902.50	48.38%
2.4	Project coordination	\$ 5,000.00	\$ 4,614.50		\$ 4,614.50	92.29%
2.5.2	Copies	\$ 500.00	\$ -		\$ -	0.00%
2.5.3	Travel	\$ 1,200.00	\$ 47.85		\$ 47.85	3.99%
2.5.4	Budget and project tracking	\$ 1,800.00	\$ 1,765.00		\$ 1,765.00	98.06%
3.1	PAEP Document	\$ 3,800.00	\$ 2,997.50	110.00	\$ 3,107.50	81.78%
3.1.1	Northstar-at-Tahoe PAEP & QAPP Integration	\$ 2,500.00	\$ 1,325.00	290.00	\$ 1,615.00	64.60%
3.2	PAEP Oversight and Documentation	\$ 2,000.00	\$ 620.00		\$ 620.00	31.00%
3.3	Monitoring Plan	\$ 4,000.00	\$ 3,067.50	110.00	\$ 3,177.50	79.44%
3.4	QAPP Preparation	\$ 7,500.00	\$ 4,620.00	632.50	\$ 5,252.50	70.03%
4.1	Site/watershed evaluation (BIRA)	\$ 18,000.00	\$ 10,797.50	4,966.50	\$ 15,764.00	87.58%
4.3	Treatment sites identification	\$ 8,000.00	\$ 2,526.25	2,720.00	\$ 5,246.25	65.58%
4.4	Permitting assistance	\$ 4,000.00	\$ -		\$ -	0.00%
4.5	Treatment specifications	\$ 2,000.00	\$ 110.00	522.50	\$ 632.50	31.63%
4.6	Pre-treatment site monitoring	\$ 20,000.00	\$ 13,604.00	2,801.00	\$ 16,405.00	82.03%
4.7	Water Quality Monitoring	\$ 20,000.00	\$ 19,959.73		\$ 19,959.73	99.80%
4.8	Road removal	\$ 24,600.00	\$ -	8,303.50	\$ 8,303.50	33.75%
5.1	Watershed Technical Group development, meetings	\$ 15,000.00	\$ 1,792.50	427.50	\$ 2,220.00	14.80%
5.2	Literature summary	\$ 3,500.00	\$ 217.50		\$ 217.50	6.21%
5.3	Document outline	\$ 6,000.00	\$ 637.50	565.00	\$ 1,202.50	20.04%
5.4	Draft document	\$ 4,000.00	\$ -		\$ -	0.00%
6.1	Forestry Technical Group formation	\$ 1,100.00	\$ 1,088.75		\$ 1,088.75	98.98%
6.2	Forestry Technical Group meetings	\$ 7,500.00	\$ -		\$ -	0.00%
6.3	Literature summary	\$ 5,000.00	\$ 290.00	290.00	\$ 580.00	11.60%
6.4	Develop draft Handbook/Guiding Principles	\$ 8,000.00	\$ -		\$ -	0.00%
6.5	Identify treatment options	\$ 2,000.00	\$ 326.25	435.00	\$ 761.25	38.06%
8	Project Implementation and Monitoring Contingency	\$ 3,000.00	\$ -		\$ -	0.00%
<b>TOTALS</b>		\$202,500.00	81,949.34	22,428.50	\$ 104,377.84	

Total Amount Due This Invoice

*Don Triplat* 9/30/09  
 IERS Date  
 Print Name: *Don Triplat*

*N. D.* 10/15/09  
 Third Party Reviewer, SBC Date  
 Print Name:

By signing this invoice I certify, under penalty of law, that this document and any attachment was prepared by me or under my direction in accordance with the terms and conditions of the SEP Agreement and, to the best of my knowledge and belief, is accurate. I am aware that there are significant penalties for submitting false or misleading information.

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- Previous Expenditures to Date: From the last invoice, enter line item amounts from Expenditures to Date, Column F. If first invoice, enter zero (0).

**NMP SEP PROGRAM INVOICE - YEAR 1 - TASK 7 ONLY, NORTHSTAR FIRE DEPT.**

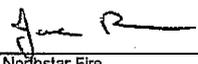
SEP Waddle Ranch / Northstar Watershed Improvement Program  
OFFICIAL INVOICE FORMAT DO NOT MODIFIED WITHOUT CONSENT

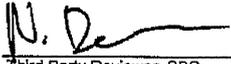
**From:**  
Northstar Fire Department  
910 Northstar Drive  
Northstar, CA 96161  
(530) 562-1212

**3rd Party Reviewer:**  
Sierra Business Council  
PO Box 2428  
Truckee, CA 96160  
530-582-4800

Project Number:	R6T-2009-0012
Invoice No.:	4
Billing Period:	Sept 1 - Sept 30
Date:	<del>10/9/2009</del> 9/10/09

A	B	C	D	E	F	G
Work Item #	Work Item Description	Year 1 Work Item Allotment	Previous Expenditures to Date (Year 1)	Current Expenditures	Total Expenditures to Date (Year 1)	% of Y1 Line Item Budget Spent to Date
		<i>(per line item or N/A)</i>	<i>(From previous invoice-Column F)</i>		<i>D + E = F</i>	<i>F / C = G</i>
7.1	Permitting and Notification	\$ 800.00	\$ 800.00		\$ 800.00	100.00%
7.2	Pre Treatment Monitoring	\$ 1,500.00	\$ -	\$ 1,500.00	\$ 1,500.00	100.00%
7.3	Field Work (Site Preparation)	\$ -	\$ -		\$ -	N/A
7.4	Hand Crew Work (Treatment)	\$ 2,500.00	\$ -		\$ -	0.00%
7.5	Hand Crew Work (Chipping)	\$ -	\$ -		\$ -	N/A
7.6	Hand Crew Work (Pile Burning)	\$ 2,500.00	\$ -		\$ -	0.00%
7.7	Mastication	\$ 27,700.00	\$ 8,158.28		\$ 8,158.28	29.45%
7.8	Project Inspections & Forestry Management	\$ 10,000.00	\$ 2,100.00	\$ 1,140.00	\$ 3,240.00	32.40%
7.9	Post Treatment Monitoring and Reporting	\$ 2,500.00	\$ -		\$ -	0.00%
<b>TOTALS</b>		\$ 47,500.00	\$ 11,058.28	\$ 2,640.00	\$ 13,698.28	28.84%

Joe Barran  
  
Northstar Fire  
Date 10-09-09

Total Amount Due This Invoice  
  
Third Party Reviewer, SBC  
Date 10/15/09

By signing this invoice I certify, under penalty of law, that this document and any attachment was prepared by me or under my direction in accordance with the terms and conditions of the SEP Agreement and, to the best of my knowledge and belief, is accurate. I am aware that there are significant penalties for submitting false or misleading information.

I certify this invoice, to the best of my knowledge and belief, is accurate and complete and I approve this invoice for payment.

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**NMP SEP Program Invoice - Year 1-Task 7 Only (Northstar Fire Department)**

**Narration:**

**Item 7.2 (Pre Treatment Monitoring)** Pre treatment monitoring was performed in July 2009 on two plots #22 & #25 by IERS. The intention was to collect data prior to mastication and study the results following mastication. Unfortunately, the masticator could not enter the area of the two inventoried plots due to a historical site later identified by Bill Banka, (Consulting Forester). After discussion with IERS, post treatment monitoring will follow in October since this restricted area was treated by a hand crew. A bill from IERS was submitted in September.

**Item 7.4 (Hand crew work, Treatment)** Hand crew work from Cal Fire's Washington Ridge began on September 21st. For the month of September, seven crews have worked on the project. Two out of the seven days consisted of two crews on the project. The project work consisted of falling trees, limbing, bucking and brush removal by chain saw. Crews dragged the downed material and stacked burn piles. Approximately 24 burn piles were constructed for September. Due to Cal Fire's (Washington Ridge's) administration being on fire assignment, a billing for September could not be sent to Northstar Fire Department on time. As stated above, seven days of hand crew work were performed for September, totaling \$1,400.00. Billing for Item 7.4 will be submitted with October's billing.

**Item 7.8 (Project Inspections & Forestry Management)** Consulting Licensed RPF Forester Bill Banka is actively overseeing the Northstar SEP Project. His contributions for September include, project boundary flagging, tree marking with an orange band at dbh indicating (removal), flagging historical sites and watercourse protection zones (Class I, II and III). Bill continued his pre-treatment forest inventory completing a total of 40 inventory plots. Each inventory plot has been marked with a nail and pink flagging at plot center. He has indicated each "counted" tree within the inventory plot with blue paint at the base of the tree. These plots will be permanent records and will be used even after the 5 year SEP project. Bill will continue to inventory pre-treatment plots for October and our goal is to have Bill begin post treatment plots. Bill Banka's tree marking (approximately 2 acres for September) has been for the 15 man Cal Fire (Washington Ridge) fire crew(s). \* Note- Bill Banka's work for September 30th will be submitted in October's reimbursement. This day worked is grouped with NFD's pay period #8 which goes 09-26 to 10-09. Payday will be 10-16-09.