

Section V

Attachments:

Estimated EHR Worksheets

Soils Map

Erosion Control Plan

Culvert sizing worksheets

Card THP Botanical Survey Report

CNDDDB 9-Quad Search Summary Report Table

NSO Habitat Analysis and Support Documentation

GRT Completed Road Work

GRI Landslide Database

I. SOIL FACTORS				FACTOR RATING BY AREA		
A. SOIL TEXTURE	FINE	MEDIUM	COARSE	CaE	CaF	Cra
1. DETACHABILITY Rating	<u>Low</u> 1-9	<u>Moderate</u> 10-18	<u>High</u> 19-30	23	23	12
2. PERMEABILITY Rating	<u>Slow</u> 5-4	<u>Moderate</u> 3-2	<u>Rapid</u> 1	4	4	1

B. DEPTH TO RESTRICTIVE LAYER OR BEDROCK

	Shallow	Moderate	Deep			
	1"-19"	20"-39"	40"-60" (+)	1	1	1
Rating	15-9	8-4	3-1			

C. PERCENT SURFACE COARSE FRAGMENTS GREATER THAN 2 MM IN SIZE
INCLUDING ROCKS OR STONES.

	<u>Low</u> (-) 10-39	<u>Moderate</u> 40-70%	<u>High</u> 71-100%	10	10	5	FACTOR RATING BY AREA		
Rating	10-6	5-3	2-1				A	B	C
SUBTOTAL =>							38	38	19

II. SLOPE FACTOR

Slope Rating	5-15%	16-30%	31-40%	41-50%	51-70%	71-80% +	2	7	1
	1-3	4-6	7-10	11-15	16-25	26-35			

III. PROTECTIVE VEGETATIVE COVER REMAINING AFTER DISTURBANCE

Rating	Low	Moderate	High	1	1	1
	0-40%	41-80%	81-100%			
	15-8	7-4	3-1			

IV. TWO-YEAR, ONE-HOUR RAINFALL INTENSITY (Hundredths Inch)

Rating	Low	Moderate	High	Extreme	12	12	12
	(-) 30-39	40-59	60-69	70-80 (+)			
	1-3	4-7	8-11	12-15			
TOTAL SUM OF FACTORS =>					53	58	33

EROSION HAZARD RATING

<50	50-65	66-75	>75			
LOW (L)	MODERATE (M)	HIGH (H)	EXTREME (E)	M	M	L
THE DETERMINATION IS =>						

I. SOIL FACTORS				FACTOR RATING BY AREA		
A. SOIL TEXTURE	FINE	MEDIUM	COARSE	<i>EmE</i>	<i>HhF</i>	<i>HsG</i>
1. DETACHABILITY Rating	Low 1-9	Moderate 10-18	High 19-30	20	20	20
2. PERMEABILITY Rating	Slow 5-4	Moderate 3-2	Rapid 1	3	3	3

B. DEPTH TO RESTRICTIVE LAYER OR BEDROCK

	Shallow	Moderate	Deep			
	1"-19"	20"-39"	40"-60" (+)	2	2	1
Rating	15-9	8-4	3-1			

C. PERCENT SURFACE COARSE FRAGMENTS GREATER THAN 2 MM IN SIZE
INCLUDING ROCKS OR STONES.

	Low (-) 10-39	Moderate 40-70%	High 71-100%	8	10	10	FACTOR RATING BY AREA		
Rating	10-6	5-3	2-1						
SUBTOTAL =>							33	35	34

II. SLOPE FACTOR

Slope Rating	5-15%	16-30%	31-40%	41-50%	51-70%	71-80% +	5	10	12
	1-3	4-6	7-10	11-15	16-25	26-35			

III. PROTECTIVE VEGETATIVE COVER REMAINING AFTER DISTURBANCE

Rating	Low	Moderate	High			
	0-40%	41-80%	81-100%	1	1	1
	15-8	7-4	3-1			

IV. TWO-YEAR, ONE-HOUR RAINFALL INTENSITY (Hundredths Inch)

Rating	Low	Moderate	High	Extreme			
	(-) 30-39	40-59	60-69	70-80 (+)	12	12	12
	1-3	4-7	8-11	12-15			
TOTAL SUM OF FACTORS =>					51	58	59

EROSION HAZARD RATING

<50	50-65	66-75	>75			
LOW (L)	MODERATE (M)	HIGH (H)	EXTREME (E)	M	M	M
THE DETERMINATION IS =>						

I. SOIL FACTORS				FACTOR RATING BY AREA		
A. SOIL TEXTURE	FINE	MEDIUM	COARSE	RnA		
1. DETACHABILITY Rating	<u>Low</u> 1-9	<u>Moderate</u> 10-18	<u>High</u> 19-30	2		
2. PERMEABILITY Rating	<u>Slow</u> 5-4	<u>Moderate</u> 3-2	<u>Rapid</u> 1	1		

B. DEPTH TO RESTRICTIVE LAYER OR BEDROCK

	Shallow	Moderate	Deep			
	1"-19"	20"-39"	40"-60" (+)	1		
Rating	15-9	8-4	3-1			

C. PERCENT SURFACE COARSE FRAGMENTS GREATER THAN 2 MM IN SIZE
INCLUDING ROCKS OR STONES.

	<u>Low</u> (-) 10-39	<u>Moderate</u> 40-70%	<u>High</u> 71-100%	1			FACTOR RATING BY AREA
Rating	10-6	5-3	2-1				
SUBTOTAL =>							5

II. SLOPE FACTOR

Slope Rating	5-15%	16-30%	31-40%	41-50%	51-70%	71-80% +	1		
	1-3	4-6	7-10	11-15	16-25	26-35			

III. PROTECTIVE VEGETATIVE COVER REMAINING AFTER DISTURBANCE

Rating	Low	Moderate	High			
	0-40%	41-80%	81-100%	15		
	15-8	7-4	3-1			

IV. TWO-YEAR, ONE-HOUR RAINFALL INTENSITY (Hundredths Inch)

Rating	Low	Moderate	High	Extreme			
	(-) 30-39	40-59	60-69	70-80 (+)	12		
	1-3	4-7	8-11	12-15			
TOTAL SUM OF FACTORS =>					33		

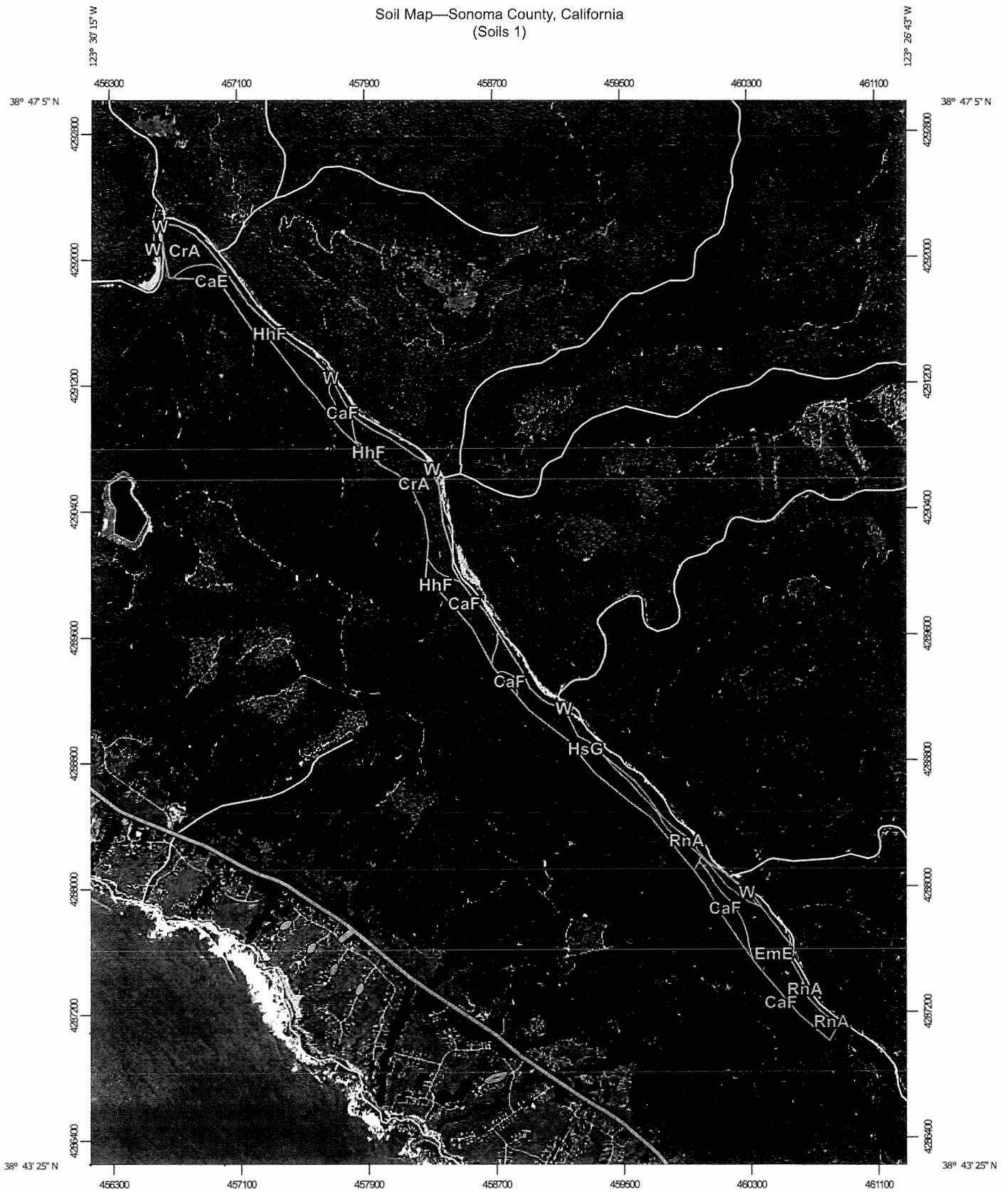
EROSION HAZARD RATING

<50	50-65	66-75	>75			
LOW (L)	MODERATE (M)	HIGH (H)	EXTREME (E)	L		
THE DETERMINATION IS =>						

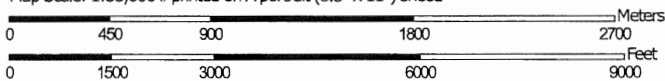
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CaE	Caspar sandy loam, 15 to 30 percent slopes	0.1	0.0%
CaF	Caspar sandy loam, 30 to 50 percent slopes	39.3	17.2%
CrA	Cortina very gravelly sandy loam, 0 to 2 percent slopes	58.6	25.7%
EmE	Empire loam, 9 to 30 percent slopes	43.3	18.9%
HhF	Hugo loam, 30 to 50 percent slopes	34.6	15.2%
HsG	Hugo-Hely complex, 50 to 75 percent slopes	42.0	18.4%
RnA	Riverwash	8.9	3.9%
W	Water	1.5	0.7%
Totals for Area of Interest		228.4	100.0%

Soil Map—Sonoma County, California
(Soils 1)



Map Scale: 1:33,000 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

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11/25/2025
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Soil Map—Sonoma County, California
(Soils 1)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sonoma County, California

Survey Area Data: Version 19, Sep 8, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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Sonoma County, California

CaE—Caspar sandy loam, 15 to 30 percent slopes

Map Unit Setting

National map unit symbol: hfbd
Elevation: 100 to 1,000 feet
Mean annual precipitation: 30 to 65 inches
Mean annual air temperature: 54 to 55 degrees F
Frost-free period: 290 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Caspar and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Caspar

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 12 inches: sandy loam
H2 - 12 to 60 inches: sandy clay loam

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: F004BL102CA - Salt-affected marine terraces with eolian sand parent materials
Hydric soil rating: No

Minor Components

Empire

Percent of map unit: 8 percent

Hydric soil rating: No

Mendocino

Percent of map unit: 7 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Sonoma County, California

Survey Area Data: Version 19, Sep 8, 2025

Sonoma County, California

CaF—Caspar sandy loam, 30 to 50 percent slopes

Map Unit Setting

National map unit symbol: hfbf
Elevation: 100 to 1,000 feet
Mean annual precipitation: 30 to 65 inches
Mean annual air temperature: 54 to 55 degrees F
Frost-free period: 290 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Caspar and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Caspar

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 12 inches: sandy loam
H2 - 12 to 60 inches: sandy clay loam

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: F004BL102CA - Salt-affected marine terraces with eolian sand parent materials
Hydric soil rating: No

Minor Components

Empire

Percent of map unit: 8 percent

Hydric soil rating: No

Mendocino

Percent of map unit: 7 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Sonoma County, California

Survey Area Data: Version 19, Sep 8, 2025

Sonoma County, California

CrA—Cortina very gravelly sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hfc1
Elevation: 30 to 2,400 feet
Mean annual precipitation: 8 to 40 inches
Mean annual air temperature: 57 to 61 degrees F
Frost-free period: 250 to 270 days
Farmland classification: Not prime farmland

Map Unit Composition

Cortina and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cortina

Setting

Landform: Flood plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 7 inches: very gravelly sandy loam
H2 - 7 to 60 inches: stratified very gravelly loamy sand to very gravelly loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: R014XG907CA - Loamy Bottom
Hydric soil rating: No

Minor Components

Cole

Percent of map unit: 7 percent

Hydric soil rating: No

Yolo

Percent of map unit: 7 percent

Hydric soil rating: No

Riverwash

Percent of map unit: 1 percent

Landform: Flood plains

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Sonoma County, California

Survey Area Data: Version 19, Sep 8, 2025

Sonoma County, California

EmE—Empire loam, 9 to 30 percent slopes

Map Unit Setting

National map unit symbol: hfc
Elevation: 1,500 feet
Mean annual precipitation: 50 inches
Mean annual air temperature: 52 degrees F
Frost-free period: 350 days
Farmland classification: Not prime farmland

Map Unit Composition

Empire and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Empire

Setting

Landform: Terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Alluvium derived from sedimentary rock

Typical profile

H1 - 0 to 19 inches: loam
H2 - 19 to 60 inches: clay loam
H3 - 60 to 70 inches: weathered bedrock

Properties and qualities

Slope: 9 to 30 percent
Depth to restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: F004BL103CA - Fog-influenced, low elevation mountain slopes
Hydric soil rating: No

Minor Components

Caspar

Percent of map unit: 4 percent

Hydric soil rating: No

Hugo

Percent of map unit: 4 percent

Hydric soil rating: No

Mendocino

Percent of map unit: 4 percent

Hydric soil rating: No

Noyo

Percent of map unit: 3 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Sonoma County, California

Survey Area Data: Version 19, Sep 8, 2025

Sonoma County, California

HhF—Hugo loam, 30 to 50 percent slopes

Map Unit Setting

National map unit symbol: hff2
Elevation: 800 to 3,000 feet
Mean annual precipitation: 60 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 200 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Hugo and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hugo

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Residuum weathered from sedimentary rock

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 31 inches: gravelly sandy clay loam
H3 - 31 to 48 inches: gravelly clay loam
H4 - 48 to 59 inches: weathered bedrock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B

Ecological site: F004BK102CA - Fog-influenced, low elevation
mountain slopes
Hydric soil rating: No

Minor Components

Atwell

Percent of map unit: 5 percent
Hydric soil rating: No

Josephine

Percent of map unit: 5 percent
Hydric soil rating: No

Laughlin

Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Sonoma County, California
Survey Area Data: Version 19, Sep 8, 2025

Sonoma County, California

HsG—Hugo-Hely complex, 50 to 75 percent slopes

Map Unit Setting

National map unit symbol: hffj
Elevation: 800 to 3,000 feet
Mean annual precipitation: 40 to 60 inches
Mean annual air temperature: 55 to 57 degrees F
Frost-free period: 200 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Hugo and similar soils: 50 percent
Hely and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hugo

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Residuum weathered from sedimentary rock

Typical profile

H1 - 0 to 8 inches: very gravelly loam
H2 - 8 to 25 inches: gravelly sandy clay loam
H3 - 25 to 30 inches: gravelly clay loam
H4 - 30 to 59 inches: weathered bedrock

Properties and qualities

Slope: 50 to 75 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C

Ecological site: F004BK102CA - Fog-influenced, low elevation mountain slopes
Hydric soil rating: No

Description of Hely

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Residuum weathered from sedimentary rock

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 29 inches: silt loam
H3 - 29 to 59 inches: weathered bedrock

Properties and qualities

Slope: 50 to 75 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: C
Ecological site: F004BK103CA - Upper slopes and higher elevation mountains
Hydric soil rating: No

Minor Components

Unnamed

Percent of map unit: 10 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: Sonoma County, California
Survey Area Data: Version 19, Sep 8, 2025

Sonoma County, California

RnA—Riverwash

Map Unit Setting

National map unit symbol: hfj7
Elevation: 700 to 2,900 feet
Mean annual precipitation: 8 to 15 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 110 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Riverwash: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverwash

Setting

Landform: Flood plains
Parent material: Sandy and gravelly alluvium

Typical profile

H1 - 0 to 6 inches: very gravelly sand
H2 - 6 to 60 inches: stratified very gravelly coarse sand to very gravelly sand

Properties and qualities

Slope: 0 to 2 percent
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Frequent
Available water supply, 0 to 60 inches: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: Yes

Minor Components

Unnamed

Percent of map unit: 15 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Sonoma County, California
Survey Area Data: Version 19, Sep 8, 2025

Erosion Control Plan

Card Timber Harvest Plan

On June 23, 2004, the North Coast Regional Water Quality Control Board adopted General Waste Discharge Requirements for timber harvest activities on non-federal land (Order #R1-2004-0030). These requirements call for technical reports to be developed as a basis for corrective actions undertaken to include an Erosion Control Plan (this document), a Fuel Management, and an Inspection Plan. The Fuel Management Plan applies to tanks over 1,320 gallons. No such tanks shall be used for this project; therefore, a Fuel Management Plan has not been prepared. The Inspection Plan is found at the end of this Erosion Control Plan.

RPF who prepared the Erosion Control Plan: Patrick Hovland, RPF #2431.

Date Erosion Control Plan Prepared: November 28, 2025.

The Erosion Control Plan must identify all controllable sediment discharge sources in the project area, including those roads used for timber harvest activities owned by or under the control of the landowner. "Controllable sediment discharge sources" is defined as sites or locations, both existing and those created by proposed timber harvest activities, within the project area that meet all of the following conditions:

1. is discharging or has the potential to discharge sediment to waters of the state in violation of applicable water quality requirements or other provisions of the General Waste Discharge Requirements (WDRs).
2. was caused or affected by human activity, and
3. may feasibly and reasonably respond to prevention and minimization management measures.

During the spring, summer and fall of 2025, field inspections of the project area including those roads used for timber harvest activities owned by or under the control of the landowner were inspected for sites defined as controllable sediment discharge sources. All watercourses and harvest units were walked during the THP preparation. Unstable areas were found near watercourses but, are not discussed here because they do not meet #2 and #3 of the definition for controllable sediment discharge sources. A map is attached showing the project area and roads owned or controlled by the landowner.

The road system within the THP and that accesses the THP is all existing road. No new watercourse crossings are proposed. There are six temporary Class II truck road watercourse crossings proposed. There are multiple Class III truck road crossings that are existing dry fords. Points and crossing numbers refer to points and crossings discussed in the THP. Estimated controllable volume was estimated by the RPF. The potential for sediment delivery is defined as "high" if 66-100% of the volume of the site had potential to access a watercourse, "moderate" if 33-65% of the volume of the site had potential to access a watercourse, and "low" if 1-32% of the volume of the site had potential to access a watercourse.

<u>Map Point/Xing #</u>	<u>Estimated Sediment Volume (cu. yds)</u>	<u>Relative Potential of Sediment Delivery (%)</u>	<u>Priority for Treatment (based on risk of failure and beneficial uses)</u>	<u>Implementation Schedule (Season/year)</u>	<u>Treatment</u>
<i>Crossing 6:</i>	5	50%	Medium	Work scheduled for April 1-Nov. 15. Work to be conducted during life of plan.	The existing seasonal road crosses a Class III watercourse. There is an 18-inch culvert in place with considerable rust. Replace the culvert with a new 24-inch culvert to channel grade with the same alignment as the existing culvert. If the culvert were to fail 5 cubic yards of sediment could erode.
<i>Crossing 9:</i>	10	50%	Medium	Work scheduled for April 1-Nov. 15. Work to be conducted during life of plan.	The existing seasonal road crosses a Class II watercourse. There is a culvert in place. The outlet of the culvert is partially blocked. Clean the outlet of the culvert. If the culvert were to fail 10 cubic yards of sediment could erode.
<i>MP B:</i>	20	100%	High	Work scheduled for April 1-Nov. 15. Work to be conducted during life of plan.	At this location there is a relief culvert that is rusted through. In the last THP, 1-11-087-SON, there was armoring and logs place at the outlet of the culvert to function as an energy dissipator. These objects are now gone. What likely happened is that the fill became saturated from the water leaking through the culvert and caused the fill to fail. The outer 2 feet of the road along with approximately 50 cubic yards of material was lost. It is proposed to remove the culvert and move the road away from the river and next to the existing cutbank. The road is to be out sloped for 150 feet on either side of the location removed culvert. All bare soil below the road shall be mulched and seeded. Note that the road at this location is within the WLPZ of the Gualala River.

<i>Crossing 14:</i>	25	50%	Medium	Work scheduled for April 1-Nov. 15. Work to be conducted during life of plan.	The existing seasonal road crosses a Class II watercourse. There is a 24 inch culvert in place. Clean the inlet of the culvert. If the culvert were to fail, 25 cubic yards of material could be lost.
<i>Crossing 20:</i>	40	80%	High	Work scheduled for April 1-Nov. 15. Work to be conducted during life of plan.	The existing seasonal road crosses a Class II watercourse. There is a 24-inch iron pipe in place that is badly rusted. If the pipe were to fail 40 cubic yards of material could be lost. Replace the pipe with a new 36" sized culvert set to channel grade. Lower the road grade over the culvert by two feet to form a critical dip. The road width can be reduced by 5 feet.
<i>Crossing 22:</i>	2	50%	Low	Work scheduled for April 1-Nov. 15. Work to be conducted during life of plan.	The existing seasonal road crosses a spring on the inside of the road and a Class III below the road. There is a 30" iron pipe in place that has rusted through. Replace the pipe with a 24-inch culvert set to channel grade. If the pipe were to fail approximately 2 cubic yards of material could be lost.

<i>Crossing 31:</i>	5	50%	Low	Work scheduled for April 1-Nov. 15. Work to be conducted during life of plan.	The existing seasonal road crosses a Class III watercourse. There is a 30-inch culvert in place. The culvert is partially plugged with sediment. Clean out the culvert.
<i>Crossing 33:</i>	40	75%	High	Work scheduled for April 1-Nov. 15. Work to be conducted during the first year of operations.	The existing seasonal appurtenant road crosses a Class II watercourse. There is a 36-inch culvert in place that has rusted through and failed. Approximately 5 cubic yards of material has eroded and another 40 cubic yards could erode if the culvert is not replaced. Replace the culvert with a new 36-inch culvert set to channel grade.

Implementation Schedule

As discussed in the table, minimization management measures are proposed to be conducted for “Low” to “High” sites. Minimization management measures are proposed to be conducted upon commencement of harvest operations. This work may be conducted during the life of the plan.

Inspection Plan

Inspections conducted prior to the winter period shall be designed to assure that management measures are properly installed and maintained; winter period inspections should be designed to assure and assess management measure performance and determine if new controllable sediment discharge sources developed; post-winter period inspections should be designed to assure that the management measures have functioned adequately and whether any new controllable sediment discharge sources have developed. Management measures shall be evaluated for adequacy and proper implementation and whether additional management measures are required in accordance with the terms of the Order.

Qualified professionals shall conduct all specified inspections of the Project site to identify areas causing or contributing to a violation of applicable water quality requirements or other provisions of the General WDRs. The following person(s) may conduct the inspections:

Jesse Weaver, RPF Office # 707 669-4029 or

Mark Pugsley, RPF Office # 707 894-8839

The following inspection requirements shall begin once the startup of timber harvest activities begin within the Project areas:

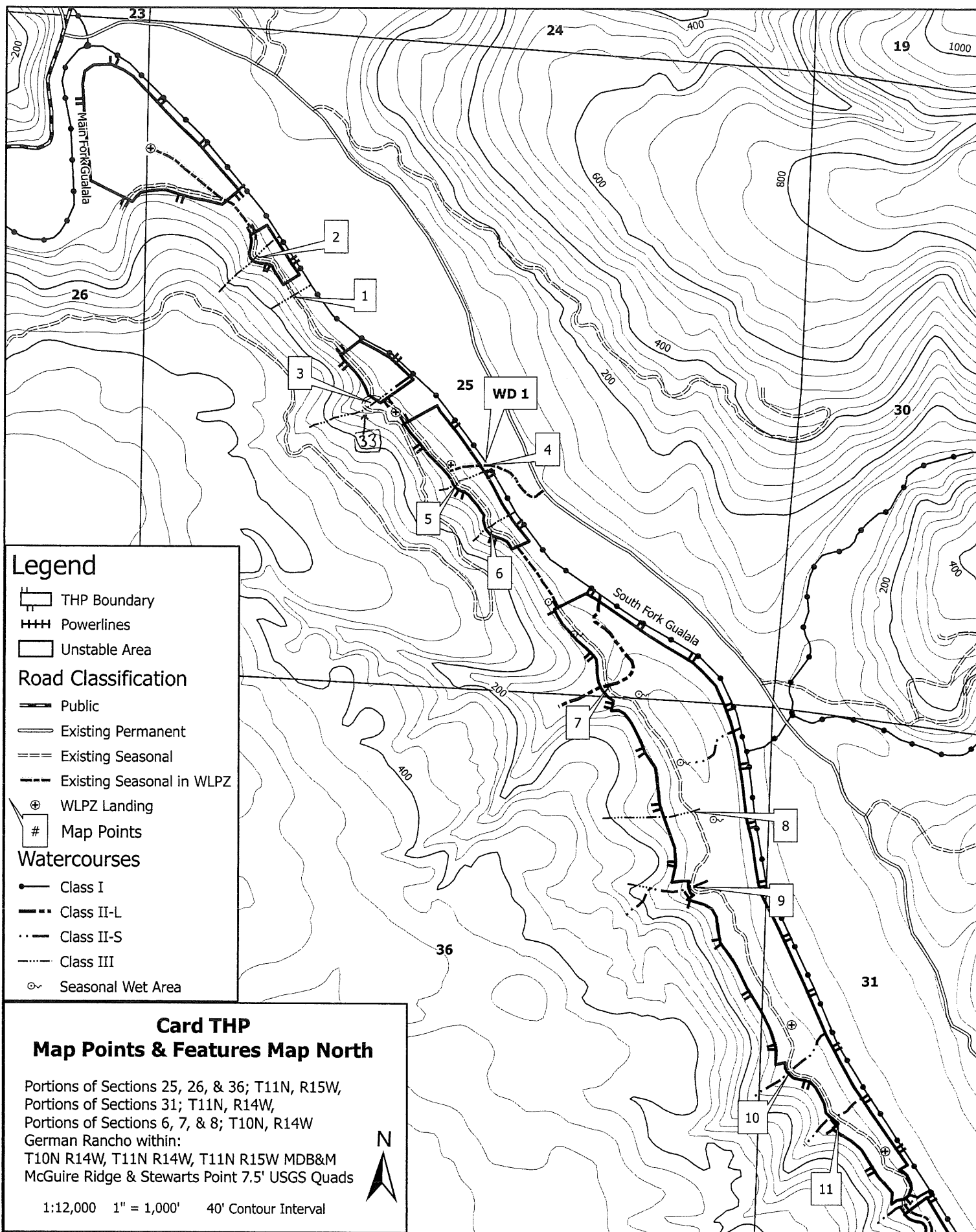
At a minimum, conduct inspections each year and throughout the duration of the Project while Timber Harvest Activities occur, and the Project is covered under General WDRs as follows:

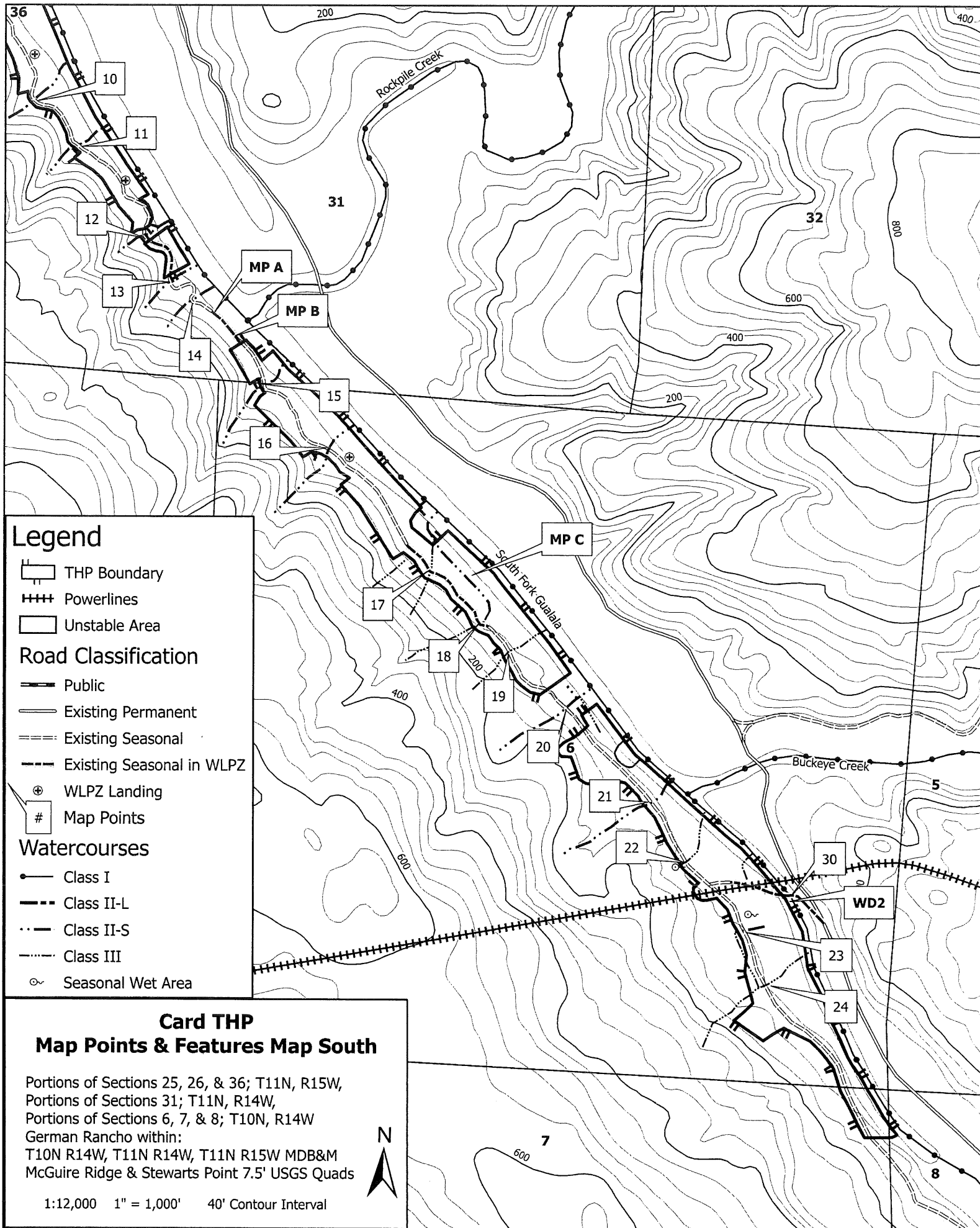
1. By November 15 to assure Project areas are secure for the winter; and
2. Once following ten (10) inches of cumulative rainfall commencing on November 15th and prior to March 1st, as worker safety and access allows; and
3. After April 1st and before June 15th to assess the effectiveness of management measures designed to address controllable sediment discharges and to determine if any new controllable sediment discharge sources have developed.

The only winter period operations proposed in this plan are potentially pile burning, reforestation (i.e. planting), and maintenance of erosion control structures. Access on non-rocked roads will be limited to walking or ATV use. Pick-up travel may occur during extended dry periods that result in dry soil conditions.

If during any inspection or during timber harvest activities, a violation of an applicable water quality requirement or conditions of the General WDRs is discovered, the provisions of Section III.B.3. shall be followed. For all other inspections conducted pursuant to Section III.G. where violations are not discovered, the Discharger shall submit a summary report to the Executive Officer by June 30 for each year of coverage under the General WDRs or upon inspection, the inspector's name, the location of each

inspection, and the title and name of the person submitting the summary report. The inspection reports shall be signed by the Discharger or their duly authorized representative, pursuant to Section IV.S.





Card THP culvert sizing

Time of concentration using the Airport Drainage equation

$$TC = ((1.8)(1.1-C)(D^{0.5}))/ (S^{0.33})$$

TC= time of concentration in minutes

C= runoff coefficient

D= distance in feet from the point of interest to the point in the watershed from which the time of flow is greatest

S= slope in percent

For Crossing # 6

C= .3

D= 600 feet

S= 40 percent

$$TC = ((1.8)(1.1- .3)(600^{0.5})) / (40^{0.33}) = 10.6 \text{ minutes}$$

Using the TC the intensity in inches per hour taken from intensity duration frequency curves from 1940 to 1974 for Point Arena.

$Q_{100} = CIA$

Q_{100} = predicted peak runoff from a 100-year storm (cubic feet per second or cfs)

C = runoff coefficient = .35

I = rainfall intensity (inches per hour) for the 100-year storm = 4.0

A = basin drainage area (acres) = 5 acres

$$Q = (.3) (4.0) (5) = 6 \text{ cfs}$$

Using a HW/D of 0.75 the culvert diameter for a 100-year event would be 24 inches.

Time of concentration using the Airport Drainage equation

$$TC = ((1.8)(1.1-C)(D^{0.5}))/ (S^{0.33})$$

TC= time of concentration in minutes

C= runoff coefficient

D= distance in feet from the point of interest to the point in the watershed from which the time of flow is greatest

S= slope in percent

For Crossing # 20

C= .3

D= 2050 feet

S= 25 percent

$$TC = ((1.8)(1.1-.3)(2050^{0.5})) / (25^{0.33}) = 22.4 \text{ minutes}$$

Using the TC the intensity in inches per hour taken from intensity duration frequency curves from 1940 to 1974 for Point Arena.

Q_{100} = CIA

Q_{100} = predicted peak runoff from a 100-year storm (cubic feet per second or cfs)

C = runoff coefficient = .3

I = rainfall intensity (inches per hour) for the 100-year storm = 2.5

A = basin drainage area (acres) = 23 acres

$$Q = (.3) (2.5) (23) = 17.25 \text{ cfs}$$

Using a HW/D of 0.75 the culvert diameter for a 100-year event would be 36 inches.

Time of concentration using the Airport Drainage equation

$$TC = ((1.8)(1.1-C)(D^{0.5}))/ (S^{0.33})$$

TC= time of concentration in minutes

C= runoff coefficient

D= distance in feet from the point of interest to the point in the watershed from which the time of flow is greatest

S= slope in percent

For Crossing # 22

C= .3

D= 450 feet

S= 35 percent

$$TC = ((1.8)(1.1-.3)(450^{0.5})) / (35^{0.33}) = 9 \text{ minutes}$$

Using the TC the intensity in inches per hour taken from intensity duration frequency curves from 1940 to 1974 for Point Arena.

$Q_{100} = CIA$

Q_{100} = predicted peak runoff from a 100-year storm (cubic feet per second or cfs)

C = runoff coefficient = .3

I = rainfall intensity (inches per hour) for the 100-year storm = 4.0

A = basin drainage area (acres) = 2.4 acres

$$Q = (.3) (4) (2.4) = 2.9 \text{ cfs}$$

Using a HW/D of 0.75 the culvert diameter for a 100-year event would be 18 inches.

Time of concentration using the Airport Drainage equation

$$TC = ((1.8)(1.1-C)(D^{0.5}))/ (S^{0.33})$$

TC= time of concentration in minutes

C= runoff coefficient

D= distance in feet from the point of interest to the point in the watershed from which the time of flow is greatest

S= slope in percent

For Crossing # 33

C= .3

D= 450 feet

S= 35 percent

$$TC = ((1.8)(1.1-.3)(450^{0.5})) / (35^{0.33}) = 9 \text{ minutes}$$

Using the TC the intensity in inches per hour taken from intensity duration frequency curves from 1940 to 1974 for Point Arena.

$Q_{100} = CIA$

Q_{100} = predicted peak runoff from a 100-year storm (cubic feet per second or cfs)

C = runoff coefficient = .3

I = rainfall intensity (inches per hour) for the 100-year storm = 4.0

A = basin drainage area (acres) = 2.4 acres

$$Q = (.3) (4) (2.4) = 2.9 \text{ cfs}$$

Using a HW/D of 0.75 the culvert diameter for a 100-year event would be 18 inches.

Card THP 2025 Botanical survey

Project Description

The Card THP is located approximately three air miles east of the town of Gualala, Mendocino County, CA. The THP area is located within Sonoma County along the South Fork Gualala River. With the exception of a few areas outside the flood prone areas on the south side of the river, the proposed harvest will occur on the flood prone areas of the river. Ground elevations within the plan area are similar with an average elevation of 120 feet above mean sea level. The THP is situated on predominantly flat to moderate slopes. The flood prone areas within the THP are all Single Tree Selection silviculture. Areas outside of the flood prone areas are Group Selection silviculture. The plan proposed all ground-based equipment including Tractor/Skidder/Forwarder/Feller buncher and Shovel yarding. A breakdown of acreage per silviculture can be found in Section II, item 14 of the approved THP.

The overall vegetational habitat of the THP is North Coast Coniferous Forest, and the alliance is redwood. The timberland is composed of dense second and third growth redwood with minor amounts of Douglas-fir, grand fir, hemlock, tanoak and an occasional madrone. The area has been logged several times since the old growth timber was removed over 100 years ago.

Patrick Hovland conducted both a floristic survey and non-floristic survey to determine if the proposed project would have a significant adverse impact to special status plant species or communities located within the plan area. The report was prepared, and surveys were consistent with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018).

Location

The THP covers approximately 164 acres. It is located within the Big Pepperwood Creek and Mouth of Gualala River planning watersheds. It is located in the McGuire Ridge and Stewarts Point 7.5 minute quadrangles in portions of sections 25, 26 and 36 of Township 11 North, Range 15 West, and Sections 6, 7, 8 and 17 of Township 10 North, Range 14 West and Section 31, T11 North, R14 West MDBM. The South Fork Gualala River, is the only named watercourse in the plan area.

Plant Communities

Based on the Sawyer and Keeler-Wolf classification system, the primary community present on the THP are best described as *Sequoia sempervirens* Forest Alliance Ranking G3 S3.2 (NCFrs). Redwood is dominant with elements of Douglas-fir, tanoak, madrone, and hemlock.

The THP proposes harvests in areas of Selection with Group Selection silviculture methods. The stocking standard shall be met immediately upon completion of timber operations.

Proposed harvests in areas of Group Selection silviculture are retaining a minimum of 75 square feet of basal area and cleared areas of small group clearings shall not exceed 20% of the THP area under this method. The harvest in the areas of single tree selection will retain, on average over 200 square feet of basal area.

Topography

Elevational range is all similar with an average elevation of 120 feet above mean sea level. Aspects are north to northeast. Soils present within the plan area include: Empire Loam 9 to 30 percent slope, Riverside wash, Hugo-Hely Complex 50 to 70 percent slope, Casper Sandy Loam 30 to 50 percent slope, Cortina Very gravelly Sandy Loam 0 to 2 percent slope and Hugo Loam 30 to 50 percent slope.

Land Use

The primary use of the land by the owner is for timber production, with a minor use of residential, rangeland, and recreation. Within the main goal the plan has specified the desire to maximize and sustain production of high quality timber products, maintain a forest products industry in the local community, maintain or improve existing wildlife habitat, maintain or improve exiting cold water fisheries, and to earn an economic return by operating the property as commercial timberland per its present zoning and intended use.

Previous Surveys in the area

The most recent botanical assessment of the THP was conducted under THP 1-11-087-SON. This survey attempted to relocate several previous locations where swamp harebell was located. No swamp harebell was located in the survey for 1-11-087-SON.

- No sensitive species were observed during the surveys.

Scoping, Survey Methodology, and Dates

The project was surveyed in 2025 by Patrick Hovland of Patrick Hovland Forestry. Scoping strategies, survey methods, and impact assessments/mitigations were consistent with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018), *Conservation of Sensitive Native Plant Resources within the Timber Harvest Review Process and During Timber Harvesting Operations* (DFG 2005), *California Forest Practice Rules* (CALFIRE 2021) and *California Environmental Quality Act* (State of California revised 2001). Ground was traversed to cover roads, watercourses, tractor roads, appurtenant roads, and landings. In addition the following took place during the field layout of the THP:

- The core zones of all Class I, Class II and Class II-L were walked and flagged
- All Inner Zone A were walked and flagged
- All Inner Zone B were walked and flagged
- The WLPZs were walked and flagged
- The largest trees were all measured to determine the 13 largest trees per acre for retention
- All skid trails were flagged.
- Boundaries of individual acres were flagged.

Virtually all of the ground was covered.

With the surveys 2025 Spring into late Fall weather pattern being in the “normal” range and in the absence of other disturbance factors in the project area, the potential of a false negative survey is considered to be minimal. Floristic field surveys were conducted during sensitive plant blooming windows unless species were readily identifiable by vegetative characteristics, or reference sites were visited, and sensitive plants were found blooming outside the expected windows. When potentially sensitive species are found, e.g., *Piperia*, where some of the species bloom late in the year, survey periods are adjusted as necessary to observe blooms and make positive determinations. A known population of *Piperia candida* was visited, by Patrick, and found to be in bloom June 23, 2023.

All plant species located during the surveys were identified to the lowest taxonomic level necessary to determine the presence of special status plant species. *The Jepson Manual: Vascular Plants of California* (Baldwin 2012) was used to determine the taxonomic nomenclature.

Survey effort for the THP was as follows

From the beginning of April 2025 to the end of October 2025, Patrick Hovland was in the field on site at least once a week with the exception of the second half of July. While flagging and marking floristic surveys were being conducted. Every acre of land was likely visited three different times during field layout.

No target species and/or sensitive natural communities were located during surveys.

Special Status Plant Species and Communities Scoping

A "9-quad-search" of the CNNDDB database for rare and listed species and communities was done for the area and is included.

Species Observed

Common and Latin names used for plant identifications are from the references listed at the end of this report. The observed plants are listed in appendix B. (not all plants were blooming but were recognizable to the author).

Impact Assessment and Mitigation Measures

No CNPS 1A, 1B, 2A, 2B listed plants were located.

Due to the density of the canopy, little ground cover not adapted to low light levels such as ever-green huckleberry, exist in the understory over the majority of the THP. Most of the diversity of the species occurred on the existing appurtenant roads. The majority of the species identified were along the South Fork Gualala River Road in small open areas and along roads and skid trails.

The surveyor believes that the proposed Silviculture will not significantly change the current habitat types of the THP area. Additionally, the watercourse and lake protection measures provided within the THP are suitable for protection of special plant species that occur or could occur in the future.

In addition to time specifically surveying for plants. The RPF walked the majority of the acres within the THP during field layout of the Plan. This was mostly during the months of May, June, July, August and September. No rare plants were observed.

Patrick Hovland, RPF #2431
Author and Surveyor of Botanical Report, July 3, 2023
P.O. Box 2920
Ukiah, CA 95482
707-462-4477

References

Baldwin, Bruce G. et al. Eds. The Jepson Manual – Vascular Plants of California. Second Edition. 2012 University of California Press.

Cal Flora on-line plant search. CalFlora, 1770 Shattuck Avenue, #198, Berkeley, CA 94709.

California Native Plant Society On-line Rare Plant Inventory. California Native Plant Society, 2707 K Street, Suite 1, Sacramento, CA 95816.

Department of Fish and Wildlife “Protocols for surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities”, March 20, 2018.

Department of Fish and Game NDDB/BIOS 9 Quad query.

Qualifications

Patrick Hovland received a B.S. in Forestry with an emphasis in forest production from Humboldt State University in 1983. Coursework primarily focused on growing and harvesting of trees. Additional courses include: botany, forest pathogens and diseases, forest dendrology and forest ecology. Patrick conducted botanical surveys for timber harvest plans in the late 1990s early 2000s on the Mendocino and Sonoma coast range. Patrick conducted field surveys with botanist Gordon McBride in these early surveys. Patrick on most occasions accompanied botanist on THPs that he prepared in order to learn all the plants that he could. Over the past 22 years Patrick has learned much about plants and where they thrive.

I have been working in timber harvest plan layout for 44 years. I have been working on the Mendocino and Sonoma coast for 35 years. Over that time period I have learned to identify the vast majority of plants that occur in the coast redwood Douglas-fir forest.

Appendix A

Target Species/Communities list

Listing and Rank Codes: CNPS - 1A = Presumed extinct in CA, 1B = Rare in CA and elsewhere, 2 = Rare in CA but more common elsewhere, 3 = More info needed, 4 = Watchlist.

GLOBAL RANKING - G1 = Less than 6 viable element occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres. G2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres. G3 = 21-100 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres. G4 = Apparently secure; this rank is clearly lower than G3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat. G5 = Population or stand demonstrably secure to ineradicable due to being commonly found in the world. GX = All sites are extirpated; this element is extinct in the wild. GXC = Extinct in the wild; exists in cultivation. G1Q = The element is very rare, but there is a taxonomic question associated. T-rank = Subspecies receive a T-rank attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety. GH = All sites are historical; the element has not been seen for at least 20 years, but suitable habitat still exists.

STATE RANKING - S1 = Less than 6 element occurrences (Eos) OR less than 1,000 individuals OR less than 2,000 acres. S1.1 = very threatened. S1.2 = threatened. S1.3 = no current threats known. S2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres. S2.1 = very threatened. S2.2 = threatened. S2.3 = no current threats known. S3 = 21-100 EOs or 3,000-10,000 individuals OR 10,000-50,000 acres. S3.1 = very threatened. S3.2 = threatened. S3.3 = no current threats known. S4 = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat. **NO THREAT RANK.** S5 = Demonstrably secure to ineradicable in California. **NO THREAT RANK.** SH = All California sites are historical (not observed in at least 20 years, but suitable habitat still exists). SX = All California sites are extirpated.

Appendix B

Species List observed in the field

<i>Abies grandis</i> grand fir	<i>Carex bolanderi</i> Bolander's sedge
<i>Acer macrophyllum</i> bigleaf maple	<i>Carex gynodynamis</i> Olney's hairy sedge
<i>Achlys triphylla</i> vanilla leaf	<i>Castanopsis chrysophylla</i> Giant Chinquapin
<i>Actaea rubra</i> Red baneberry	
<i>Adelinia grandis</i> houndstongue	<i>Ceanothus thyrsiflorus</i> blue blossom
<i>Adenocaulon bicolor</i> Trail plant	<i>Cirsium vulgare</i> bull thistle
<i>Adiantum aleuticum</i> five-fingered fern	<i>Claytonia perfoliata</i> miner's lettuce
<i>Adiantum jordanii</i> California maidenhair fern	<i>Claytonia sibirica</i> Candy flower
	<i>Clinton andrewsiana</i> red clintonia
<i>Alnus rubra</i> red alder	<i>Conium maculatum</i> Poison-hemlock
	<i>Corallorhiza striata</i> Striped coral-root
<i>Anthoxanthum occidentale</i> vanilla grass	<i>Cornus nuttallii</i> Pacific dogwood
<i>Aquilegia formosa</i> crimson columbine	<i>Cortaderia jubata</i> pampas grass
<i>Aralia californica</i> elk clover	<i>Corylus cornuta</i> California hazelnut
<i>Arbutus menziesii</i> Pacific madrone	<i>Cotoneaster integerrimus</i> Common cotoneaster
	<i>Cynoglossum grande</i> hound's-tongue
<i>Asarum caudatum</i> creeping wild ginger	<i>Cytisus scoparius</i> Scotch broom
<i>Artemisia douglasiana</i> wormwood	
<i>Athyrium filix-femina</i> lady fern	<i>Digitalis purpurea</i> foxglove
<i>Baccharis pilularis</i> coyote brush	
<i>Berberis nervosa</i> Oregon grape	
<i>Briza maxima</i> Rattlesnake grass	<i>Elymus glaucus</i> ssp. <i>glaucus</i> blue wildrye
<i>Bromus carinatus</i> California brome	<i>Epilobium ciliatum watsonii</i> Northern willow herb
	<i>Equisetum telmateia</i> ssp. <i>braunii</i> giant horsetail
<i>Calypso bulbosa</i> fairy slipper orchid	<i>Eriodictyon californicum</i> Yerba santa
<i>Cardamine californica</i> California toothwort	<i>Erythranthe guttata</i> Seep-spring monkey flower
	<i>Fragaria vespa</i> wood strawberry
	<i>Fraxinus latifolia</i> Oregon ash
	<i>Galium</i> sp. bedstraw

Galutharia shallon salal

Genista monspessulana French broom

Heteromeles arbutifolia Toyon

Heracleum maximum Common cow parsnip

Juncus effusus common rush

Leucanthemum vulgare oxeye daisy

Lonicera hispidula hairy honeysuckle

Luzula comosa common wood rush

Lysimachia latifolia Pacific starflower

Maianthemum racemosum False Solomon's seal

Melissa officinalis Lemon balm

Myosotis azorica forget me not

Myosotis latifolia forget-me-not

Navarretia squarrosa skunkweed

Notholithocarpus densiflorus tanbark oak

Oxalis oregana redwood sorrel

Osmorhiza chilensis sweet cicely

Petasites palmatus Western coltsfoot

Pentagramma triangularis Gold backed fern

Polypodium californicum five finger fern

Polysticum munitum sword fern

Prosartes hookeri Hooker's fairy bells

Prunella vulgaris self heal

Holcus lanatus velvet grass

Iris douglasiana Douglas iris

Pseudotsuga menziesii var. *menziesii* Douglas-fir

Pteridium aquilinum var. *pubescens* western bracken fern

Quercus agrifolia Coast live oak

Rhododendron occidentale western azalea

Ribes californicum California gooseberry

Ribes sanguineum var. *glutinosum* pink-flowering currant

Rosa sp. rose

Rubus discolor Himalayan blackberry

Rubus leucodermis white-stemmed raspberry

Rubus parviflorus thimbleberry

Rubus ursinus California blackberry

Salix spp. Willow

Sambucus racemosa var. *racemosa* red elderberry

Scoliopus bigelovii slink-pod

Sequoia sempervirens coast redwood

Smilicacina stellata false Solomon's seal

Stachys ajugoides hedge nettle

Strathiopteris spicant Deer fern

Taraxacum officinale Common Dandelion

Tellima grandiflora fringe cups

Thermopsis californica California goldenbanner

Tiarella trifoliata var. *unifoliata* sugar scoops

Torilis arvensis hedge parsley

Torreya californica California nutmeg

Toxicodendron diversilobum poison-oak

Trientalis latifolia Pacific star flower

Trifolium sp. clover

Trillium ovatum western trillium

Tsuga heterophylla western hemlock

Umbellularia californica California-bay

Urtica dioica stinging nettle

Vaccinium ovatum evergreen huckleberry

Vaccinium parvifolium red huckleberry

Vanconveria planipetala inside-out flower

Veratrum fimbriatum fringed corn lily

Veronica americana American brooklime

Umbellularia californica **California bay laurel**

Vicia sp. vetch

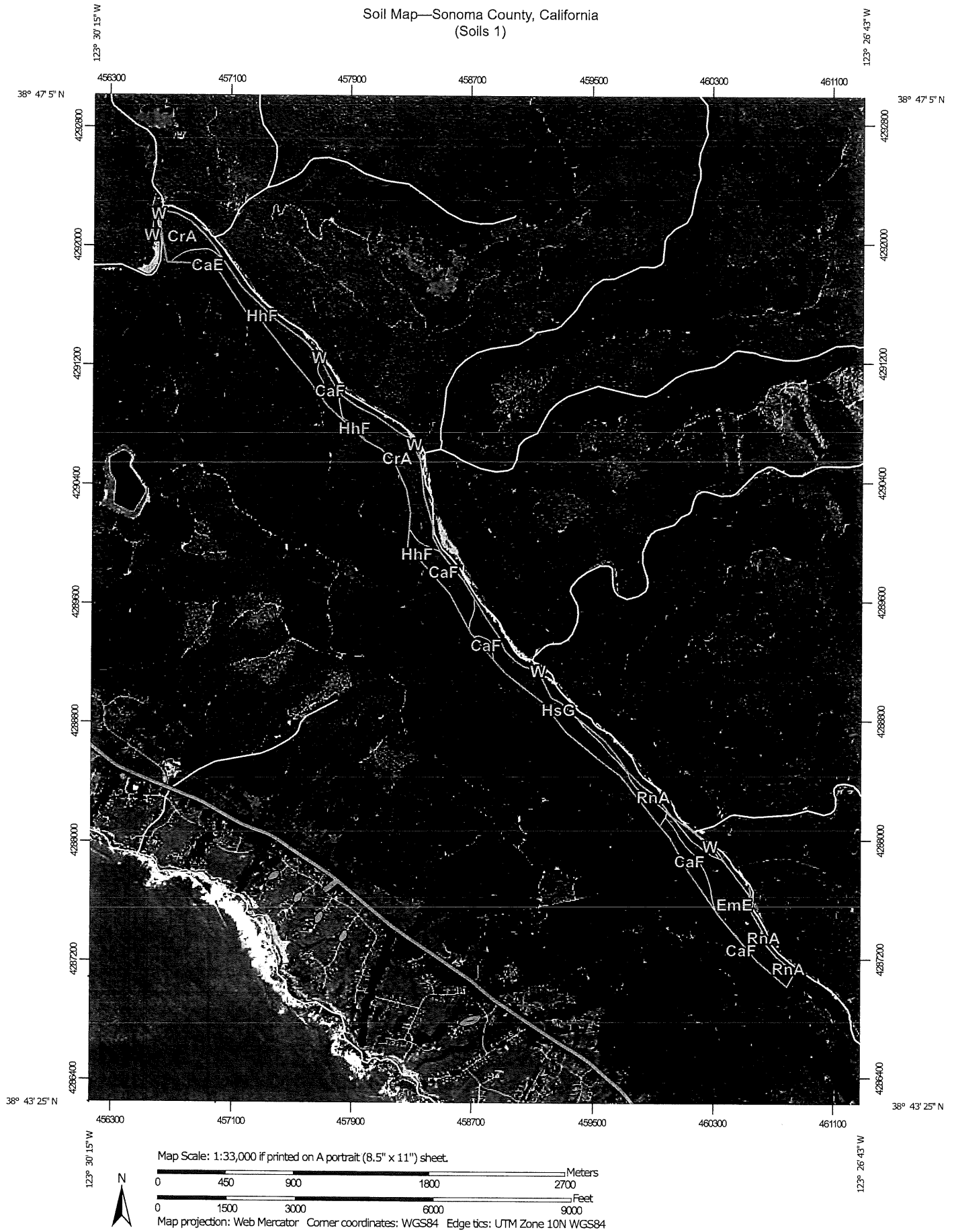
Viola glabella smooth yellow violet

Viola sempervirens Redwood violet

Whipplea modesta modesty

Woodwardia fimbriata giant chain fern

Soil Map—Sonoma County, California
(Soils 1)



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

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11/25/2025
Page 1 of 3

Soil Map—Sonoma County, California
(Soils 1)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features

Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sonoma County, California

Survey Area Data: Version 19, Sep 8, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CaE	Caspar sandy loam, 15 to 30 percent slopes	0.1	0.0%
CaF	Caspar sandy loam, 30 to 50 percent slopes	39.3	17.2%
CrA	Cortina very gravelly sandy loam, 0 to 2 percent slopes	58.6	25.7%
EmE	Empire loam, 9 to 30 percent slopes	43.3	18.9%
HhF	Hugo loam, 30 to 50 percent slopes	34.6	15.2%
HsG	Hugo-Hely complex, 50 to 75 percent slopes	42.0	18.4%
RnA	Riverwash	8.9	3.9%
W	Water	1.5	0.7%
Totals for Area of Interest		228.4	100.0%

Element_Type	Scientific_Name	Common_Name	Element_Code	Federal_Status	State_Status	CDFW_Status	CA_Rare_Plant_Rank	Quad_Code	Quad_Name	Data_Status	Taxonomic_Sr
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	3812375	GUALALA	Mapped	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Ascaphus truei	Pacific tailed frog	AAABA01010	None	None	SSC	-	3812385	EUREKA HILL	Mapped	Animals - Amphibians - Ascaphidae - Ascaphus truei
Animals - Amphibians	Dicamptodon ensatus	California giant salamander	AAAAH01020	None	None	SSC	-	3812385	EUREKA HILL	Mapped	Animals - Amphibians - Dicamptodontid: Dicamptodon ensatus
Animals - Amphibians	Dicamptodon ensatus	California giant salamander	AAAAH01020	None	None	SSC	-	3812383	ORNBAUN VALLEY	Mapped	Animals - Amphibians - Dicamptodontid: Dicamptodon ensatus
Animals - Amphibians	Dicamptodon ensatus	California giant salamander	AAAAH01020	None	None	SSC	-	3812384	ZENI RIDGE	Mapped	Animals - Amphibians - Dicamptodontid: Dicamptodon ensatus
Animals - Amphibians	Dicamptodon ensatus	California giant salamander	AAAAH01020	None	None	SSC	-	3812374	MCGUIRE RIDGE	Mapped and Unprocessed	Animals - Amphibians - Dicamptodontid: Dicamptodon ensatus
Animals - Amphibians	Dicamptodon ensatus	California giant salamander	AAAAH01020	None	None	SSC	-	3812375	GUALALA	Mapped and Unprocessed	Animals - Amphibians - Dicamptodontid: Dicamptodon ensatus
Animals - Amphibians	Dicamptodon ensatus	California giant salamander	AAAAH01020	None	None	SSC	-	3812363	ANNAPOLIS	Mapped and Unprocessed	Animals - Amphibians - Dicamptodontid: Dicamptodon ensatus
Animals - Amphibians	Dicamptodon ensatus	California giant salamander	AAAAH01020	None	None	SSC	-	3812364	STEWARTS POINT	Mapped and Unprocessed	Animals - Amphibians - Dicamptodontid: Dicamptodon ensatus
Animals - Amphibians	Dicamptodon ensatus	California giant salamander	AAAAH01020	None	None	SSC	-	3812373	GUBE MOUNTAIN	Mapped and Unprocessed	Animals - Amphibians - Dicamptodontid: Dicamptodon ensatus
Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	3812373	GUBE MOUNTAIN	Unprocessed	Animals - Amphibians - Ranidae - Rana boylei pop. 1
Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	3812364	STEWARTS POINT	Mapped	Animals - Amphibians - Ranidae - Rana boylei pop. 1

3812375

Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	3812363	ANNAPOLIS	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei pop. 1
Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	3812375	GUALALA	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei pop. 1
Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	3812374	MCGUIRE RIDGE	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei pop. 1
Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	3812384	ZENI RIDGE	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei pop. 1
Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	3812383	ORNBAUN VALLEY	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana boylei pop. 1
Animals - Amphibians	Rana boylei pop. 1	foothill yellow-legged frog - north coast DPS	AAABH01051	None	None	SSC	-	3812385	EUREKA HILL	Mapped	Animals - Amphibians - Ranidae - Rana boylei pop. 1
Animals - Amphibians	Rana draytonii	California red-legged frog	AAABH01022	Threatened	None	SSC	-	3812374	MCGUIRE RIDGE	Mapped	Animals - Amphibians - Ranidae - Rana draytonii
Animals - Amphibians	Rana draytonii	California red-legged frog	AAABH01022	Threatened	None	SSC	-	3812375	GUALALA	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana draytonii
W W 2 Animals - Amphibians	Rana draytonii	California red-legged frog	AAABH01022	Threatened	None	SSC	-	3812364	STEWARTS POINT	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana draytonii
Animals - Amphibians	Taricha rivularis	red-bellied newt	AAAAF02020	None	None	SSC	-	3812363	ANNAPOLIS	Mapped and Unprocessed	Animals - Amphibians - Salamandridae - Taricha rivularis
Animals - Amphibians	Taricha rivularis	red-bellied newt	AAAAF02020	None	None	SSC	-	3812375	GUALALA	Mapped	Animals - Amphibians - Salamandridae - Taricha rivularis
Animals - Amphibians	Taricha rivularis	red-bellied newt	AAAAF02020	None	None	SSC	-	3812374	MCGUIRE RIDGE	Mapped	Animals - Amphibians - Salamandridae - Taricha rivularis
Animals - Amphibians	Taricha rivularis	red-bellied newt	AAAAF02020	None	None	SSC	-	3812373	GUBE MOUNTAIN	Mapped and Unprocessed	Animals - Amphibians - Salamandridae - Taricha rivularis
Animals - Amphibians	Taricha rivularis	red-bellied newt	AAAAF02020	None	None	SSC	-	3812383	ORNBAUN VALLEY	Mapped and Unprocessed	Animals - Amphibians - Salamandridae - Taricha rivularis

Animals - Amphibians	Taricha rivularis	red-bellied newt	AAAAF02020	None	None	SSC	-	3812384	ZENI RIDGE	Mapped	Animals - Amphibians - Salamandridae - Taricha rivularis
Animals - Birds	Aquila chrysaetos	golden eagle	ABNKC22010	None	None	FP WL	-	3812375	GUALALA	Unprocessed	Animals - Birds - Accipitridae - Aquila chrysaetos
Animals - Birds	Astur atricapillus	American goshawk	ABNKC12061	None	None	SSC	-	3812383	ORNBAUN VALLEY	Mapped	Animals - Birds - Accipitridae - Astur atricapillus
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	3812364	STEWARTS POINT	Unprocessed	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3812363	ANNAPOLIS	Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Haliaeetus leucocephalus	bald eagle	ABNKC10010	Delisted	Endangered	FP	-	3812383	ORNBAUN VALLEY	Mapped and Unprocessed	Animals - Birds - Accipitridae - Haliaeetus leucocephalus
Animals - Birds	Brachyramphus marmoratus	marbled murrelet	ABNNN06010	Threatened	Endangered	-	-	3812363	ANNAPOLIS	Mapped	Animals - Birds - Alcidae - Brachyramphus marmoratus
Animals - Birds	Cerorhinca monocerata	rhinoceros auklet	ABNNN11010	None	None	WL	-	3812375	GUALALA	Mapped	Animals - Birds - Alcidae - Cerorhinca monocerata
Animals - Birds	Fratrula cirrhata	tufted puffin	ABNNN12010	None	None	SSC	-	3812375	GUALALA	Mapped	Animals - Birds - Alcidae - Fratercula cirrhata
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	3812375	GUALALA	Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Progne subis	purple martin	ABPAU01010	None	None	SSC	-	3812375	GUALALA	Unprocessed	Animals - Birds - Hirundinidae - Progne subis
Animals - Birds	Progne subis	purple martin	ABPAU01010	None	None	SSC	-	3812363	ANNAPOLIS	Unprocessed	Animals - Birds - Hirundinidae - Progne subis
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812364	STEWARTS POINT	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812375	GUALALA	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812374	MCGUIRE RIDGE	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	3812385	EUREKA HILL	Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus
Animals - Birds	Ammodramus savannarum	grasshopper sparrow	ABPBXA0020	None	None	SSC	-	3812364	STEWARTS POINT	Mapped	Animals - Birds - Passerellidae - Ammodramus savannarum

334	Animals - Birds	Passerculus sandwichensis alaudinus	Bryants savannah sparrow	ABPBX99011	None	None	SSC	-	3812364	STEWARTS POINT	Unprocessed	Animals - Birds - Passerellidae - Passerculus sandwichensis alaudinus
	Animals - Birds	Pelecanus occidentalis californicus	California brown pelican	ABNFC01021	Delisted	Delisted	-	-	3812375	GUALALA	Unprocessed	Animals - Birds - Pelecanidae - Pelecanus occidentalis californicus
	Animals - Birds	Numenius americanus	long-billed curlew	ABNNF07070	None	None	WL	-	3812385	EUREKA HILL	Unprocessed	Animals - Birds - Scolopacidae - Numenius americanus
	Animals - Birds	Asio flammeus	short-eared owl	ABNSB13040	None	None	SSC	-	3812384	ZENI RIDGE	Unprocessed	Animals - Birds - Strigidae - Asio flammeus
	Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	3812363	ANNAPOLIS	Mapped	Animals - Birds - Strigidae - Strix occidentalis caurina
	Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	3812364	STEWARTS POINT	Mapped	Animals - Birds - Strigidae - Strix occidentalis caurina
	Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	3812373	GUBE MOUNTAIN	Mapped	Animals - Birds - Strigidae - Strix occidentalis caurina
	Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	3812374	MCGUIRE RIDGE	Mapped	Animals - Birds - Strigidae - Strix occidentalis caurina
	Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	3812375	GUALALA	Mapped	Animals - Birds - Strigidae - Strix occidentalis caurina
	Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	3812383	ORNBAUN VALLEY	Mapped	Animals - Birds - Strigidae - Strix occidentalis caurina
	Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	3812384	ZENI RIDGE	Mapped	Animals - Birds - Strigidae - Strix occidentalis caurina
	Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	3812385	EUREKA HILL	Mapped	Animals - Birds - Strigidae - Strix occidentalis caurina
	Animals - Birds	Contopus cooperi	olive-sided flycatcher	ABPAE32010	None	None	SSC	-	3812364	STEWARTS POINT	Unprocessed	Animals - Birds - Tyrannidae - Contopus cooperi
	Animals - Fish	Hesperoleucus parvipinnis	Gualala roach	AFCJB19025	None	None	SSC	-	3812364	STEWARTS POINT	Mapped and Unprocessed	Animals - Fish - Cyprinidae - Hesperoleucus parvipinnis

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Bios6 Print Table

Animals - Fish	Hesperoleucus parvipinnis	Gualala roach	AFCJB19025	None	None	SSC	-	3812363	ANNAPOLIS	Mapped and Unprocessed	Animals - Fish - Cyprinidae - Hesperoleucus parvipinnis
Animals - Fish	Hesperoleucus parvipinnis	Gualala roach	AFCJB19025	None	None	SSC	-	3812375	GUALALA	Mapped	Animals - Fish - Cyprinidae - Hesperoleucus parvipinnis
Animals - Fish	Hesperoleucus venustus navarroensis	northern coastal roach	AFCJB19031	None	None	SSC	-	3812363	ANNAPOLIS	Unprocessed	Animals - Fish - Cyprinidae - Hesperoleucus venustus navarroensis
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	None	Threatened	-	-	3812375	GUALALA	Unprocessed	Animals - Fish - Osmeridae - Spirinchus thaleichthys
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	3812375	GUALALA	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	3812374	MCGUIRE RIDGE	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	3812363	ANNAPOLIS	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	3812383	ORNBAUN VALLEY	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	-	-	3812383	ORNBAUN VALLEY	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 4
Animals - Fish	Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	-	-	3812384	ZENI RIDGE	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 4
Animals - Fish	Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	-	-	3812385	EUREKA HILL	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 4
Animals - Fish	Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	-	-	3812363	ANNAPOLIS	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 4
Animals - Fish	Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	-	-	3812373	GUBE MOUNTAIN	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 4
Animals - Fish	Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	-	-	3812374	MCGUIRE RIDGE	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 4

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Animals - Fish	Oncorhynchus kisutch pop. 4	coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	-	-	3812375	GUALALA	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 4
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	SSC	-	3812375	GUALALA	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus p 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	SSC	-	3812374	MCGUIRE RIDGE	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus p 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	SSC	-	3812373	GUBE MOUNTAIN	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus p 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	SSC	-	3812364	STEWARTS POINT	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus p 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	SSC	-	3812363	ANNAPOLIS	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus p 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	SSC	-	3812385	EUREKA HILL	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus p 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	SSC	-	3812384	ZENI RIDGE	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus p 49
Animals - Fish	Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	AFCHA0213Q	Threatened	None	SSC	-	3812383	ORNBAUN VALLEY	Mapped	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus p 49
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	3812385	EUREKA HILL	Mapped and Unprocessed	Animals - Insect Apidae - Bombu caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	3812384	ZENI RIDGE	Mapped and Unprocessed	Animals - Insect Apidae - Bombu caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	3812364	STEWARTS POINT	Mapped and Unprocessed	Animals - Insect Apidae - Bombu caliginosus
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	3812374	MCGUIRE RIDGE	Mapped	Animals - Insect Apidae - Bombu caliginosus

Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	3812375	GUALALA	Mapped and Unprocessed	Animals - Insect Apidae - Bombus caliginosus
Animals - Insects	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	Proposed Threatened	None	-	-	3812375	GUALALA	Mapped and Unprocessed	Animals - Insect Nymphalidae - Danaus plexippus plexippus pop. 1
Animals - Insects	Danaus plexippus plexippus pop. 1	monarch - California overwintering population	IILEPP2012	Proposed Threatened	None	-	-	3812364	STEWARTS POINT	Mapped and Unprocessed	Animals - Insect Nymphalidae - Danaus plexippus plexippus pop. 1
Animals - Insects	Speyeria zerene behrensii	Behrens silverspot butterfly	IILEPJ6088	Endangered	None	-	-	3812364	STEWARTS POINT	Mapped	Animals - Insect Nymphalidae - Speyeria zerene behrensii
Animals - Insects	Speyeria zerene behrensii	Behrens silverspot butterfly	IILEPJ6088	Endangered	None	-	-	3812375	GUALALA	Mapped	Animals - Insect Nymphalidae - Speyeria zerene behrensii
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	3812375	GUALALA	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	3812374	MCGUIRE RIDGE	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	3812364	STEWARTS POINT	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	3812363	ANNAPOLIS	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	3812385	EUREKA HILL	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	3812384	ZENI RIDGE	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Arborimus pomo	Sonoma tree vole	AMAFF23030	None	None	SSC	-	3812383	ORNBAUN VALLEY	Mapped and Unprocessed	Animals - Mammals - Cricetidae - Arborimus pomo
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	3812375	GUALALA	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatum
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812375	GUALALA	Unprocessed	Animals - Mammals - Mustelidae - Taxidea taxus
Animals - Mammals	Taxidea taxus	American badger	AMAJF04010	None	None	SSC	-	3812364	STEWARTS POINT	Mapped	Animals - Mammals -

	Animals - Mammals	Bassariscus astutus raptor	northern California ringtail	AMAJE01014	None	None	FP	-	3812375	GUALALA	Unprocessed	Mustelidae - Taxidea taxus
	Animals - Mammals	Bassariscus astutus raptor	northern California ringtail	AMAJE01014	None	None	FP	-	3812383	ORNBAUN VALLEY	Unprocessed	Animals - Mammals - Procyonidae - Bassariscus astutus raptor
	Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	3812383	ORNBAUN VALLEY	Mapped	Animals - Mammals - Vespertilionidae Corynorhinus townsendii
	Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	3812375	GUALALA	Mapped	Animals - Mammals - Vespertilionidae Corynorhinus townsendii
	Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	3812373	GUBE MOUNTAIN	Mapped	Animals - Mammals - Vespertilionidae Corynorhinus townsendii
	Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	3812363	ANNAPOLIS	Mapped and Unprocessed	Animals - Mammals - Vespertilionidae Corynorhinus townsendii
338	Animals - Mammals	Lasiurus frantzii	western red bat	AMACC05080	None	None	SSC	-	3812384	ZENI RIDGE	Unprocessed	Animals - Mammals - Vespertilionidae Lasiurus frantzii
	Animals - Mammals	Myotis thysanodes	fringed myotis	AMACC01090	None	None	-	-	3812383	ORNBAUN VALLEY	Unprocessed	Animals - Mammals - Vespertilionidae Myotis thysanodes
	Animals - Mammals	Myotis thysanodes	fringed myotis	AMACC01090	None	None	-	-	3812363	ANNAPOLIS	Unprocessed	Animals - Mammals - Vespertilionidae Myotis thysanodes
	Animals - Mammals	Myotis thysanodes	fringed myotis	AMACC01090	None	None	-	-	3812374	MCGUIRE RIDGE	Unprocessed	Animals - Mammals - Vespertilionidae Myotis thysanodes
	Animals - Mammals	Myotis yumanensis	Yuma myotis	AMACC01020	None	None	-	-	3812373	GUBE MOUNTAIN	Unprocessed	Animals - Mammals - Vespertilionidae Myotis yumanensis
	Animals - Mollusks	Haliotis kamtschatkana	pinto abalone	IMGASV2040	None	None	-	-	3812375	GUALALA	Unprocessed	Animals - Mollusks - Haliotidae - Haliotis kamtschatkana

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Animals - Mollusks	Helminthoglypta arrosa pomoensis	Pomo bronze shoulderband	IMGASC2033	None	None	-	-	3812375	GUALALA	Unprocessed	Animals - Mollusks - Helminthoglypta arrosa pomoensis
Animals - Mollusks	Juga chacei	Chace juga	IMGASK4180	None	None	-	-	3812375	GUALALA	Unprocessed	Animals - Mollusks - Pleuroceridae Juga chacei
Animals - Reptiles	Actinemys marmorata	northwestern pond turtle	ARAAD02031	Proposed Threatened	None	SSC	-	3812375	GUALALA	Unprocessed	Animals - Reptiles - Emydidae - Actinemys marmorata
Animals - Reptiles	Actinemys marmorata	northwestern pond turtle	ARAAD02031	Proposed Threatened	None	SSC	-	3812364	STEWARTS POINT	Mapped and Unprocessed	Animals - Reptiles - Emydidae - Actinemys marmorata
Animals - Reptiles	Actinemys marmorata	northwestern pond turtle	ARAAD02031	Proposed Threatened	None	SSC	-	3812383	ORNBAUN VALLEY	Unprocessed	Animals - Reptiles - Emydidae - Actinemys marmorata
Community - Terrestrial	Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	-	-	3812375	GUALALA	Mapped	Community - Terrestrial - Coastal and Valley Freshwater Marsh
Community - Terrestrial	Coastal Brackish Marsh	Coastal Brackish Marsh	CTT52200CA	None	None	-	-	3812375	GUALALA	Mapped	Community - Terrestrial - Coastal Brackish Marsh
Plants - Lichens	Sulcaria spiralifera	twisted horsehair lichen	NLT0042560	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped	Plants - Lichens - Alectoriaceae - Sulcaria spiralifera
Plants - Lichens	Sulcaria spiralifera	twisted horsehair lichen	NLT0042560	None	None	-	1B.2	3812363	ANNAPOLIS	Mapped	Plants - Lichens - Alectoriaceae - Sulcaria spiralifera
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	3812363	ANNAPOLIS	Mapped and Unprocessed	Plants - Lichens - Parmeliaceae - Usnea longissima
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	3812364	STEWARTS POINT	Mapped and Unprocessed	Plants - Lichens - Parmeliaceae - Usnea longissima
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	3812375	GUALALA	Unprocessed	Plants - Lichens - Parmeliaceae - Usnea longissima
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	3812383	ORNBAUN VALLEY	Unprocessed	Plants - Lichens - Parmeliaceae - Usnea longissima
Plants - Lichens	Usnea longissima	Methuselahs beard lichen	NLLEC5P420	None	None	-	4.2	3812385	EUREKA HILL	Unprocessed	Plants - Lichens - Parmeliaceae - Usnea longissima
Plants - Vascular	Allium peninsulare var. franciscanum	Franciscan onion	PMLIL021R1	None	None	-	1B.2	3812373	GUBE MOUNTAIN	Unprocessed	Plants - Vascular - Alliaceae - Allium peninsulare var. franciscanum
Plants - Vascular	Erigeron biolettii	streamside daisy	PDAST3M5H0	None	None	-	3	3812375	GUALALA	Unprocessed	Plants - Vascular - Asteraceae - Erigeron biolettii
Plants - Vascular	Erigeron biolettii	streamside daisy	PDAST3M5H0	None	None	-	3	3812363	ANNAPOLIS	Unprocessed	Plants - Vascular - Asteraceae - Erigeron biolettii

Plants - Vascular	Erigeron biolettii	streamside daisy	PDAST3M5H0	None	None	-	3	3812385	EUREKA HILL	Unprocessed	Erigeron biolettii
Plants - Vascular	Erigeron supplex	supple daisy	PDAST3M3Z0	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped and Unprocessed	Plants - Vascular Asteraceae - Erigeron biolettii
Plants - Vascular	Erigeron supplex	supple daisy	PDAST3M3Z0	None	None	-	1B.2	3812375	GUALALA	Mapped and Unprocessed	Plants - Vascular Asteraceae - Erigeron supple:
Plants - Vascular	Hemizonia congesta ssp. tracyi	Tracys tarplant	PDAST4R067	None	None	-	4.3	3812383	ORNBAUN VALLEY	Unprocessed	Plants - Vascular Asteraceae - Hemizonia congesta ssp. tracyi
Plants - Vascular	Hesperevax sparsiflora var. brevifolia	short-leaved evax	PDASTE5011	None	None	-	1B.2	3812375	GUALALA	Mapped and Unprocessed	Plants - Vascular Asteraceae - Hesperevax sparsiflora var. brevifolia
Plants - Vascular	Hesperevax sparsiflora var. brevifolia	short-leaved evax	PDASTE5011	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped and Unprocessed	Plants - Vascular Asteraceae - Hesperevax sparsiflora var. brevifolia
Plants - Vascular	Lasthenia californica ssp. bakeri	Bakers goldfields	PDAST5L0C4	None	None	-	1B.2	3812375	GUALALA	Mapped	Plants - Vascular Asteraceae - Lasthenia californica ssp. bakeri
Plants - Vascular	Lasthenia californica ssp. macrantha	perennial goldfields	PDAST5L0C5	None	None	-	1B.2	3812375	GUALALA	Mapped	Plants - Vascular Asteraceae - Lasthenia californica ssp. macrantha
Plants - Vascular	Lasthenia californica ssp. macrantha	perennial goldfields	PDAST5L0C5	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped	Plants - Vascular Asteraceae - Lasthenia californica ssp. macrantha
Plants - Vascular	Erysimum concinnum	bluff wallflower	PDBRA160E3	None	None	-	1B.2	3812375	GUALALA	Mapped	Plants - Vascular Brassicaceae - Erysimum concinnum
Plants - Vascular	Brasenia schreberi	watershield	PDCAB01010	None	None	-	2B.3	3812375	GUALALA	Unprocessed	Plants - Vascular Cabombaceae - Brasenia schreb
Plants - Vascular	Brasenia schreberi	watershield	PDCAB01010	None	None	-	2B.3	3812363	ANNAPOLIS	Mapped	Plants - Vascular Cabombaceae - Brasenia schreb
Plants - Vascular	Eastwoodiella californica	swamp harebell	PDCAM02060	None	None	-	1B.2	3812363	ANNAPOLIS	Mapped	Plants - Vascular Campanulaceae Eastwoodiella californica
Plants - Vascular	Eastwoodiella californica	swamp harebell	PDCAM02060	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped and Unprocessed	Plants - Vascular Campanulaceae

Plants - Vascular	Eastwoodiella californica	swamp harebell	PDCAM02060	None	None	-	1B.2	3812375	GUALALA	Mapped and Unprocessed	Eastwoodiella californica Plants - Vascular Campanulaceae Eastwoodiella californica
Plants - Vascular	Eastwoodiella californica	swamp harebell	PDCAM02060	None	None	-	1B.2	3812374	MCGUIRE RIDGE	Mapped and Unprocessed	Plants - Vascular Campanulaceae Eastwoodiella californica
Plants - Vascular	Eastwoodiella californica	swamp harebell	PDCAM02060	None	None	-	1B.2	3812385	EUREKA HILL	Mapped	Plants - Vascular Campanulaceae Eastwoodiella californica
Plants - Vascular	Calystegia collina ssp. oxyphylla	Mt. Saint Helena morning-glory	PDCON04032	None	None	-	4.2	3812363	ANNAPOLIS	Unprocessed	Plants - Vascular Convolvulaceae Calystegia collina ssp. oxyphylla
Plants - Vascular	Calystegia purpurata ssp. saxicola	coastal bluff morning-glory	PDCON040D2	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped and Unprocessed	Plants - Vascular Convolvulaceae Calystegia purpurata ssp. saxicola
Plants - Vascular	Calystegia purpurata ssp. saxicola	coastal bluff morning-glory	PDCON040D2	None	None	-	1B.2	3812375	GUALALA	Mapped and Unprocessed	Plants - Vascular Convolvulaceae Calystegia purpurata ssp. saxicola
Plants - Vascular	Cuscuta pacifica var. papillata	Mendocino dodder	PDCUS011A2	None	None	-	1B.2	3812375	GUALALA	Mapped	Plants - Vascular Convolvulaceae Cuscuta pacifica var. papillata
Plants - Vascular	Hesperocyparis pygmaea	pygmy cypress	PGCUP04032	None	None	-	1B.2	3812385	EUREKA HILL	Mapped and Unprocessed	Plants - Vascular Cupressaceae - Hesperocyparis pygmaea
Plants - Vascular	Hesperocyparis pygmaea	pygmy cypress	PGCUP04032	None	None	-	1B.2	3812375	GUALALA	Mapped and Unprocessed	Plants - Vascular Cupressaceae - Hesperocyparis pygmaea
Plants - Vascular	Carex californica	California sedge	PMCYP032D0	None	None	-	2B.2	3812375	GUALALA	Mapped and Unprocessed	Plants - Vascular Cyperaceae - Carex californica
Plants - Vascular	Carex californica	California sedge	PMCYP032D0	None	None	-	2B.2	3812385	EUREKA HILL	Mapped	Plants - Vascular Cyperaceae - Carex californica
Plants - Vascular	Carex saliniformis	deceiving sedge	PMCYP03BY0	None	None	-	1B.2	3812385	EUREKA HILL	Mapped	Plants - Vascular Cyperaceae - Carex saliniform
Plants - Vascular	Carex saliniformis	deceiving sedge	PMCYP03BY0	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped	Plants - Vascular Cyperaceae - Carex saliniform
Plants - Vascular	Astragalus agnicidus	Humboldt County milk-vetch	PDFAB0F080	None	Endangered	-	1B.1	3812375	GUALALA	Mapped	Plants - Vascular Fabaceae - Astragalus agnicidus

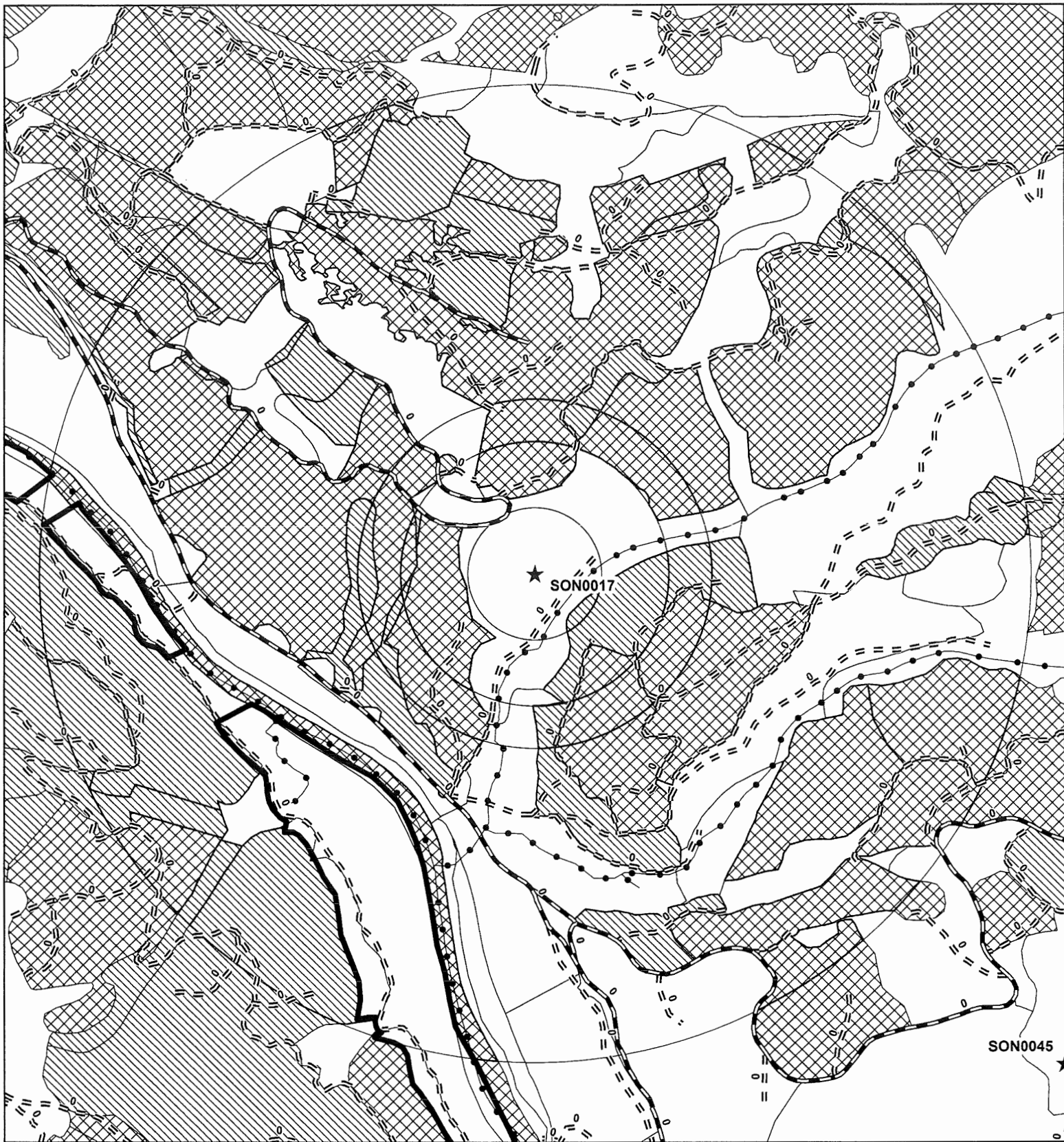
Plants - Vascular	Astragalus agnicidus	Humboldt County milk-vetch	PDFAB0F080	None	Endangered	-	1B.1	3812374	MCGUIRE RIDGE	Mapped	Plants - Vascular Fabaceae - Astragalus agnicidus
Plants - Vascular	Astragalus rattanii var. rattanii	Rattans milk-vetch	PDFAB0F7E2	None	None	-	4.3	3812375	GUALALA	Unprocessed	Plants - Vascular Fabaceae - Astragalus rattanii var. rattanii
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	3812375	GUALALA	Unprocessed	Plants - Vascular Fabaceae - Hosackia gracilis
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	3812374	MCGUIRE RIDGE	Unprocessed	Plants - Vascular Fabaceae - Hosackia gracilis
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	3812364	STEWARTS POINT	Unprocessed	Plants - Vascular Fabaceae - Hosackia gracilis
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	3812363	ANNAPOLIS	Unprocessed	Plants - Vascular Fabaceae - Hosackia gracilis
Plants - Vascular	Lathyrus palustris	marsh pea	PDFAB250P0	None	None	-	2B.2	3812364	STEWARTS POINT	Mapped	Plants - Vascular Fabaceae - Lathyrus palustris
Plants - Vascular	Lathyrus palustris	marsh pea	PDFAB250P0	None	None	-	2B.2	3812375	GUALALA	Mapped	Plants - Vascular Fabaceae - Lathyrus palustris
Plants - Vascular	Lathyrus palustris	marsh pea	PDFAB250P0	None	None	-	2B.2	3812385	EUREKA HILL	Mapped	Plants - Vascular Fabaceae - Lathyrus palustris
Plants - Vascular	Trifolium buckwestiorum	Santa Cruz clover	PDFAB402W0	None	None	-	1B.1	3812384	ZENI RIDGE	Mapped and Unprocessed	Plants - Vascular Fabaceae - Trifolium buckwestiorum
Plants - Vascular	Trifolium buckwestiorum	Santa Cruz clover	PDFAB402W0	None	None	-	1B.1	3812385	EUREKA HILL	Mapped and Unprocessed	Plants - Vascular Fabaceae - Trifolium buckwestiorum
Plants - Vascular	Trifolium buckwestiorum	Santa Cruz clover	PDFAB402W0	None	None	-	1B.1	3812383	ORNBAUN VALLEY	Mapped	Plants - Vascular Fabaceae - Trifolium buckwestiorum
Plants - Vascular	Trifolium buckwestiorum	Santa Cruz clover	PDFAB402W0	None	None	-	1B.1	3812374	MCGUIRE RIDGE	Mapped	Plants - Vascular Fabaceae - Trifolium buckwestiorum
Plants - Vascular	Trifolium buckwestiorum	Santa Cruz clover	PDFAB402W0	None	None	-	1B.1	3812373	GUBE MOUNTAIN	Mapped	Plants - Vascular Fabaceae - Trifolium buckwestiorum
Plants - Vascular	Trifolium trichocalyx	Monterey clover	PDFAB402J0	Endangered	Endangered	-	1B.1	3812385	EUREKA HILL	Mapped and Unprocessed	Plants - Vascular Fabaceae - Trifolium trichocalyx
Plants - Vascular	Iris longipetala	coast iris	PMIRI092E0	None	None	-	4.2	3812375	GUALALA	Unprocessed	Plants - Vascular Iridaceae - Iris longipetala

Plants - Vascular	Calochortus uniflorus	pink star-tulip	PMLIL0D1F0	None	None	-	4.2	3812364	STEWARTS POINT	Unprocessed	Plants - Vascular Liliaceae - Calochortus uniflorus
Plants - Vascular	Fritillaria roderickii	Rodericks fritillary	PMLIL0V0M0	None	Endangered	-	1B.1	3812375	GUALALA	Mapped	Plants - Vascular Liliaceae - Fritillaria roderickii
Plants - Vascular	Lilium maritimum	coast lily	PMLIL1A0C0	None	None	-	1B.1	3812375	GUALALA	Mapped and Unprocessed	Plants - Vascular Liliaceae - Lilium maritimum
Plants - Vascular	Lilium maritimum	coast lily	PMLIL1A0C0	None	None	-	1B.1	3812385	EUREKA HILL	Mapped	Plants - Vascular Liliaceae - Lilium maritimum
Plants - Vascular	Lilium maritimum	coast lily	PMLIL1A0C0	None	None	-	1B.1	3812364	STEWARTS POINT	Mapped and Unprocessed	Plants - Vascular Liliaceae - Lilium maritimum
Plants - Vascular	Lilium maritimum	coast lily	PMLIL1A0C0	None	None	-	1B.1	3812374	MCGUIRE RIDGE	Unprocessed	Plants - Vascular Liliaceae - Lilium maritimum
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	3812374	MCGUIRE RIDGE	Mapped	Plants - Vascular Lycopodiaceae - Lycopodium clavatum
Plants - Vascular	Sidalcea calycosa ssp. rhizomata	Point Reyes checkerbloom	PDMAL11012	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped	Plants - Vascular Malvaceae - Sidalcea calycosa ssp. rhizomata
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	3812364	STEWARTS POINT	Mapped and Unprocessed	Plants - Vascular Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	3812375	GUALALA	Mapped	Plants - Vascular Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	3812385	EUREKA HILL	Mapped	Plants - Vascular Malvaceae - Sidalcea malachroides
Plants - Vascular	Sidalcea malviflora ssp. purpurea	purple-stemmed checkerbloom	PDMAL110FL	None	None	-	1B.2	3812375	GUALALA	Mapped	Plants - Vascular Malvaceae - Sidalcea malviflora ssp. purpurea
Plants - Vascular	Sidalcea malviflora ssp. purpurea	purple-stemmed checkerbloom	PDMAL110FL	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped and Unprocessed	Plants - Vascular Malvaceae - Sidalcea malviflora ssp. purpurea
Plants - Vascular	Toxicoscordion fontanum	marsh zigadenus	PMLIL28050	None	None	-	4.2	3812375	GUALALA	Unprocessed	Plants - Vascular Melanthiaceae - Toxicoscordion fontanum
Plants - Vascular	Veratrum fimbriatum	fringed false-hellebore	PMLIL25030	None	None	-	4.3	3812375	GUALALA	Unprocessed	Plants - Vascular Melanthiaceae - Veratrum fimbriatum
Plants - Vascular	Veratrum fimbriatum	fringed false-hellebore	PMLIL25030	None	None	-	4.3	3812364	STEWARTS POINT	Unprocessed	Plants - Vascular Melanthiaceae -

Plants - Vascular	Veratrum fimbriatum	fringed false-hellebore	PMLIL25030	None	None	-	4.3	3812374	MCGUIRE RIDGE	Unprocessed	Veratrum fimbriatum Plants - Vascula Melanthiaceae - Veratrum fimbriatum
Plants - Vascular	Epilobium septentrionale	Humboldt County fuchsia	PDONA06110	None	None	-	4.3	3812383	ORNBAUN VALLEY	Unprocessed	Plants - Vascula Onagraceae - Epilobium septentrionale
Plants - Vascular	Piperia candida	white-flowered rein orchid	PMORC1X050	None	None	-	1B.2	3812383	ORNBAUN VALLEY	Mapped	Plants - Vascula Orchidaceae - Piperia candida
Plants - Vascular	Piperia candida	white-flowered rein orchid	PMORC1X050	None	None	-	1B.2	3812384	ZENI RIDGE	Mapped and Unprocessed	Plants - Vascula Orchidaceae - Piperia candida
Plants - Vascular	Piperia candida	white-flowered rein orchid	PMORC1X050	None	None	-	1B.2	3812385	EUREKA HILL	Mapped and Unprocessed	Plants - Vascula Orchidaceae - Piperia candida
Plants - Vascular	Piperia candida	white-flowered rein orchid	PMORC1X050	None	None	-	1B.2	3812374	MCGUIRE RIDGE	Mapped	Plants - Vascula Orchidaceae - Piperia candida
Plants - Vascular	Piperia candida	white-flowered rein orchid	PMORC1X050	None	None	-	1B.2	3812363	ANNAPOLIS	Mapped	Plants - Vascula Orchidaceae - Piperia candida
Plants - Vascular	Castilleja ambigua var. ambigua	johnny-nip	PDSCR0D401	None	None	-	4.2	3812364	STEWARTS POINT	Unprocessed	Plants - Vascula Orobanchaceae Castilleja ambig var. ambigua
Plants - Vascular	Castilleja ambigua var. ambigua	johnny-nip	PDSCR0D401	None	None	-	4.2	3812375	GUALALA	Unprocessed	Plants - Vascula Orobanchaceae Castilleja ambig var. ambigua
Plants - Vascular	Castilleja mendocinensis	Mendocino Coast paintbrush	PDSCR0D3N0	None	None	-	1B.2	3812375	GUALALA	Mapped	Plants - Vascula Orobanchaceae Castilleja mendocinensis
Plants - Vascular	Kopsiopsis hookeri	small groundcone	PDORO01010	None	None	-	2B.3	3812375	GUALALA	Mapped	Plants - Vascula Orobanchaceae Kopsiopsis hook
Plants - Vascular	Agrostis blasdalei	Blasdales bent grass	PMPOA04060	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped	Plants - Vascula Poaceae - Agros blasdalei
Plants - Vascular	Agrostis blasdalei	Blasdales bent grass	PMPOA04060	None	None	-	1B.2	3812375	GUALALA	Mapped and Unprocessed	Plants - Vascula Poaceae - Agros blasdalei
Plants - Vascular	Calamagrostis bolanderi	Bolanders reed grass	PMPOA17010	None	None	-	4.2	3812375	GUALALA	Unprocessed	Plants - Vascula Poaceae - Calamagrostis bolanderi
Plants - Vascular	Calamagrostis bolanderi	Bolanders reed grass	PMPOA17010	None	None	-	4.2	3812385	EUREKA HILL	Unprocessed	Plants - Vascula Poaceae - Calamagrostis bolanderi
Plants - Vascular	Calamagrostis bolanderi	Bolanders reed grass	PMPOA17010	None	None	-	4.2	3812364	STEWARTS POINT	Unprocessed	Plants - Vascula Poaceae -

Plants - Vascular	Calamagrostis bolanderi	Bolanders reed grass	PMPOA17010	None	None	-	4.2	3812363	ANNAPOLIS	Unprocessed	Calamagrostis bolanderi
Plants - Vascular	Glyceria grandis	American manna grass	PMPOA2Y080	None	None	-	2B.3	3812385	EUREKA HILL	Mapped	Plants - Vascular Poaceae - Calamagrostis bolanderi
Plants - Vascular	Gilia capitata ssp. pacifica	Pacific gilia	PDPLM040B6	None	None	-	1B.2	3812364	STEWARTS POINT	Mapped	Plants - Vascular Poaceae - Glyceria grandis
Plants - Vascular	Gilia capitata ssp. pacifica	Pacific gilia	PDPLM040B6	None	None	-	1B.2	3812375	GUALALA	Mapped	Plants - Vascular Polemoniaceae Gilia capitata ssp. pacifica
Plants - Vascular	Gilia capitata ssp. tomentosa	woolly-headed gilia	PDPLM040B9	None	None	-	1B.1	3812364	STEWARTS POINT	Mapped	Plants - Vascular Polemoniaceae Gilia capitata ssp. pacifica
Plants - Vascular	Leptosiphon aureus	bristly leptosiphon	PDPLM09010	None	None	-	4.2	3812383	ORNBAUN VALLEY	Unprocessed	Plants - Vascular Polemoniaceae Leptosiphon aureus
Plants - Vascular	Potamogeton epihydrus	Nuttalls ribbon-leaved pondweed	PMPOT03080	None	None	-	2B.2	3812385	EUREKA HILL	Mapped	Plants - Vascular Potamogetonaceae Potamogeton epihydrus
Plants - Vascular	Coptis laciniata	Oregon goldthread	PDRAN0A020	None	None	-	4.2	3812385	EUREKA HILL	Mapped	Plants - Vascular Ranunculaceae Coptis laciniata
Plants - Vascular	Ceanothus gloriosus var. exaltatus	glory brush	PDRHA040F4	None	None	-	4.3	3812375	GUALALA	Unprocessed	Plants - Vascular Rhamnaceae - Ceanothus gloriosus var. exaltatus
Plants - Vascular	Ceanothus gloriosus var. gloriosus	Point Reyes ceanothus	PDRHA040F5	None	None	-	4.3	3812375	GUALALA	Unprocessed	Plants - Vascular Rhamnaceae - Ceanothus gloriosus var. gloriosus
Plants - Vascular	Ceanothus gloriosus var. gloriosus	Point Reyes ceanothus	PDRHA040F5	None	None	-	4.3	3812364	STEWARTS POINT	Unprocessed	Plants - Vascular Rhamnaceae - Ceanothus gloriosus var. gloriosus
Plants - Vascular	Horkelia marinensis	Point Reyes horkelia	PDROS0W0B0	None	None	-	1B.2	3812375	GUALALA	Mapped	Plants - Vascular Rosaceae - Horkelia marinensis
Plants - Vascular	Horkelia tenuiloba	thin-lobed horkelia	PDROS0W0E0	None	None	-	1B.2	3812375	GUALALA	Mapped and Unprocessed	Plants - Vascular Rosaceae - Horkelia tenuiloba
Plants - Vascular	Horkelia tenuiloba	thin-lobed horkelia	PDROS0W0E0	None	None	-	1B.2	3812363	ANNAPOLIS	Mapped	Plants - Vascular Rosaceae - Horkelia tenuiloba

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Pre Harvest Northern Spotted Owl Habitat Types within 0.7 Miles of Activity Center

SON0017

Pre Habitat

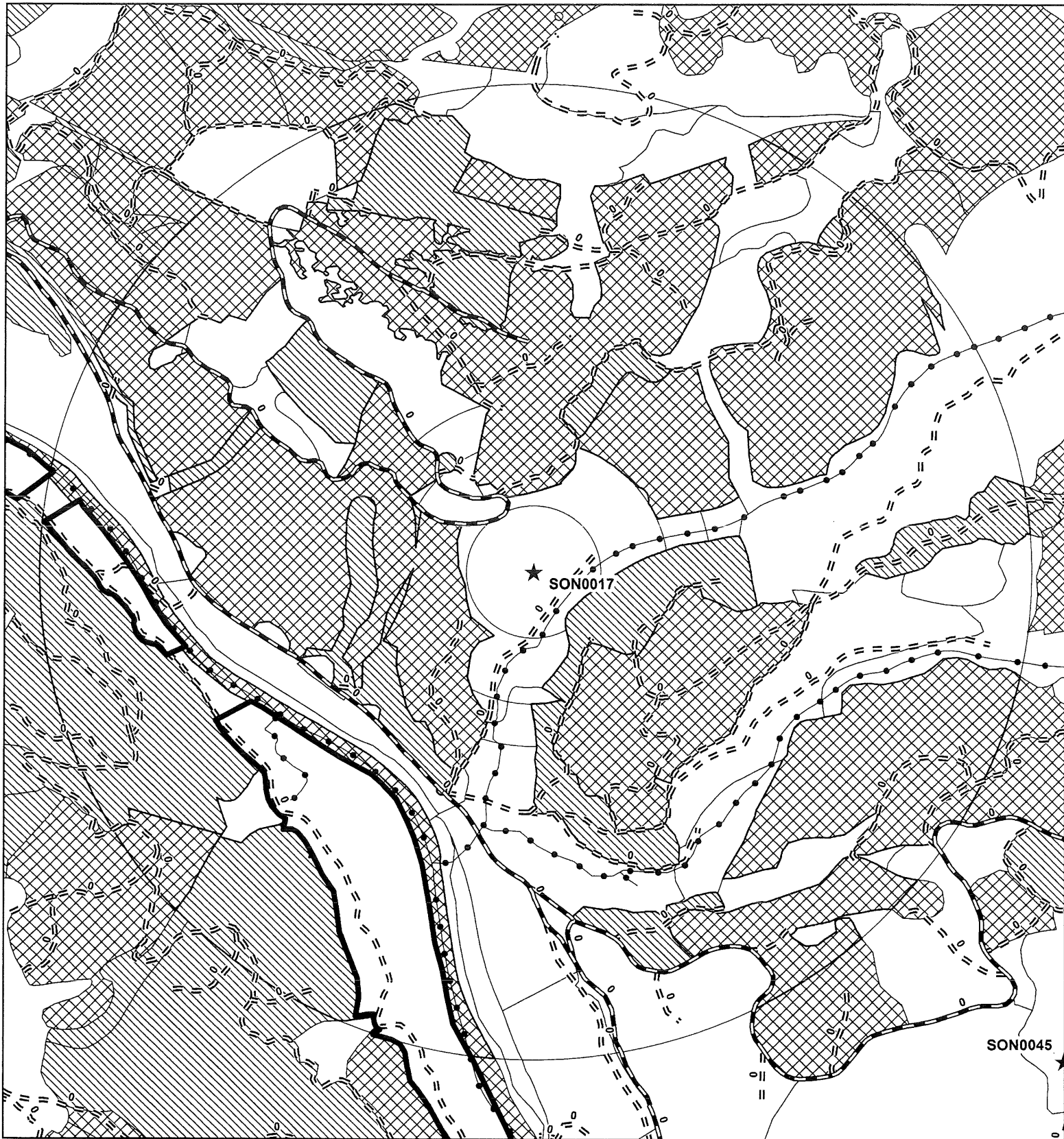
-  Foraging
-  Nesting/Roosting
-  Non Habitat

-  NSO AC
-  Harvest Plan Area
-  Dirt Road
-  Class I Watercourse
-  Permanent Road



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Post Harvest Northern Spotted Owl Habitat Types within 0.7 Miles of Activity Center

SON0017

Post Habitat

 Foraging

 Nesting/Roosting

 Non Habitat

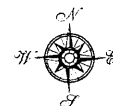
 NSO AC

 Harvest Plan Area

 Class I Watercourse

 Dirt Road

 Permanent Road



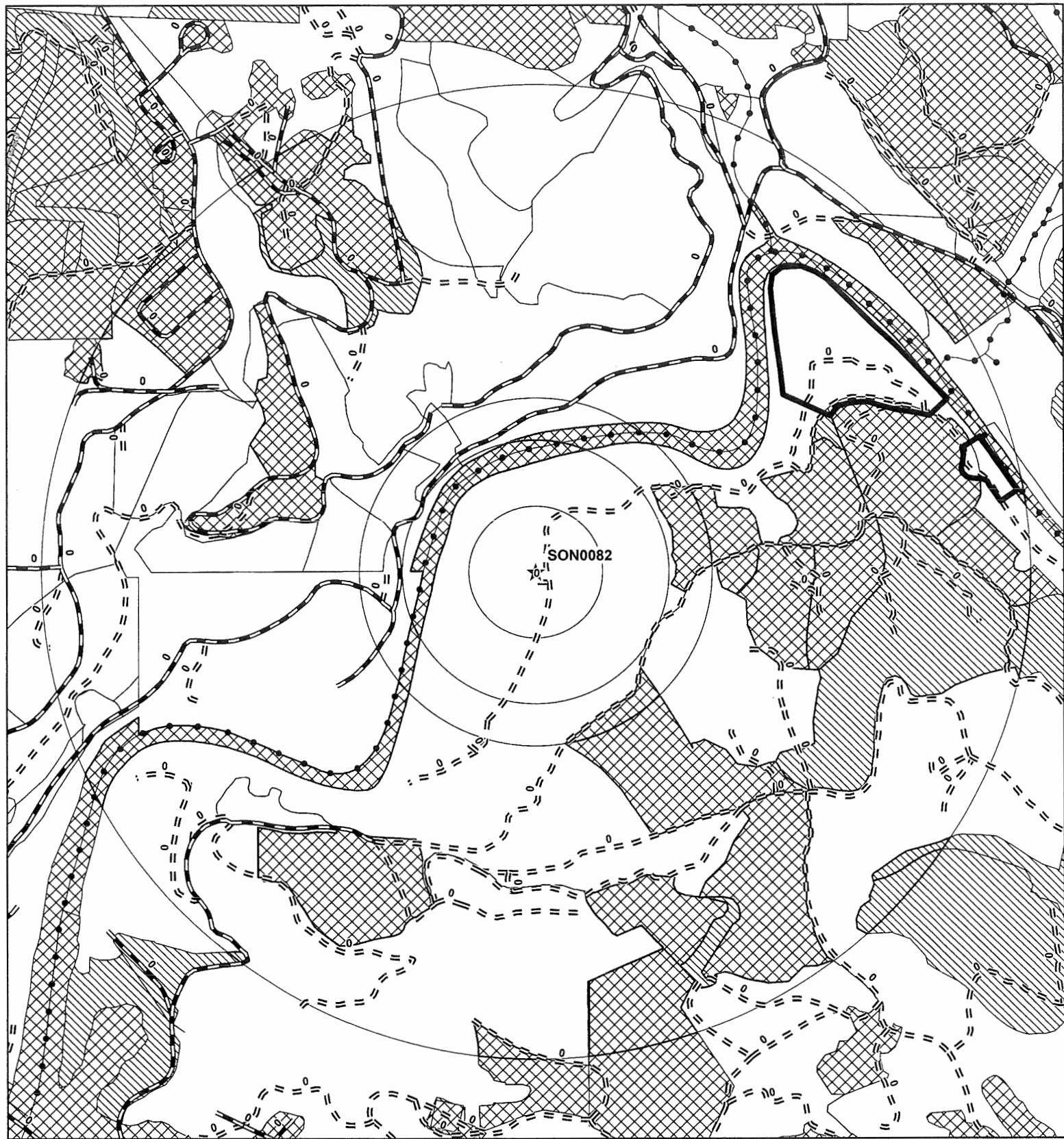
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Print Date: 1/22/2026



NSO Activity Center
with buffers of:
500', 1000', & 0.7 mi

347



Pre Harvest Northern Spotted Owl Habitat Types within 0.7 Miles of Activity Center

SON0082

Pre Habitat

Foraging

Nesting/Roosting

Non Habitat



NSO AC



Harvest Plan Area

Class I Watercourse

Dirt Road

Permanent Road



1:12,000

Print Date: 1/22/2026



NSO Activity Center
with buffers of:
500', 1000', & 0.7 mi

348



Post Harvest Northern Spotted Owl Habitat Types within 0.7 Miles of Activity Center

SON0082

Post Habitat

 Foraging

 Nesting/Roosting

 Non Habitat

 NSO AC

 Harvest Plan Area

 Class I Watercourse

 Dirt Road

 Permanent Road

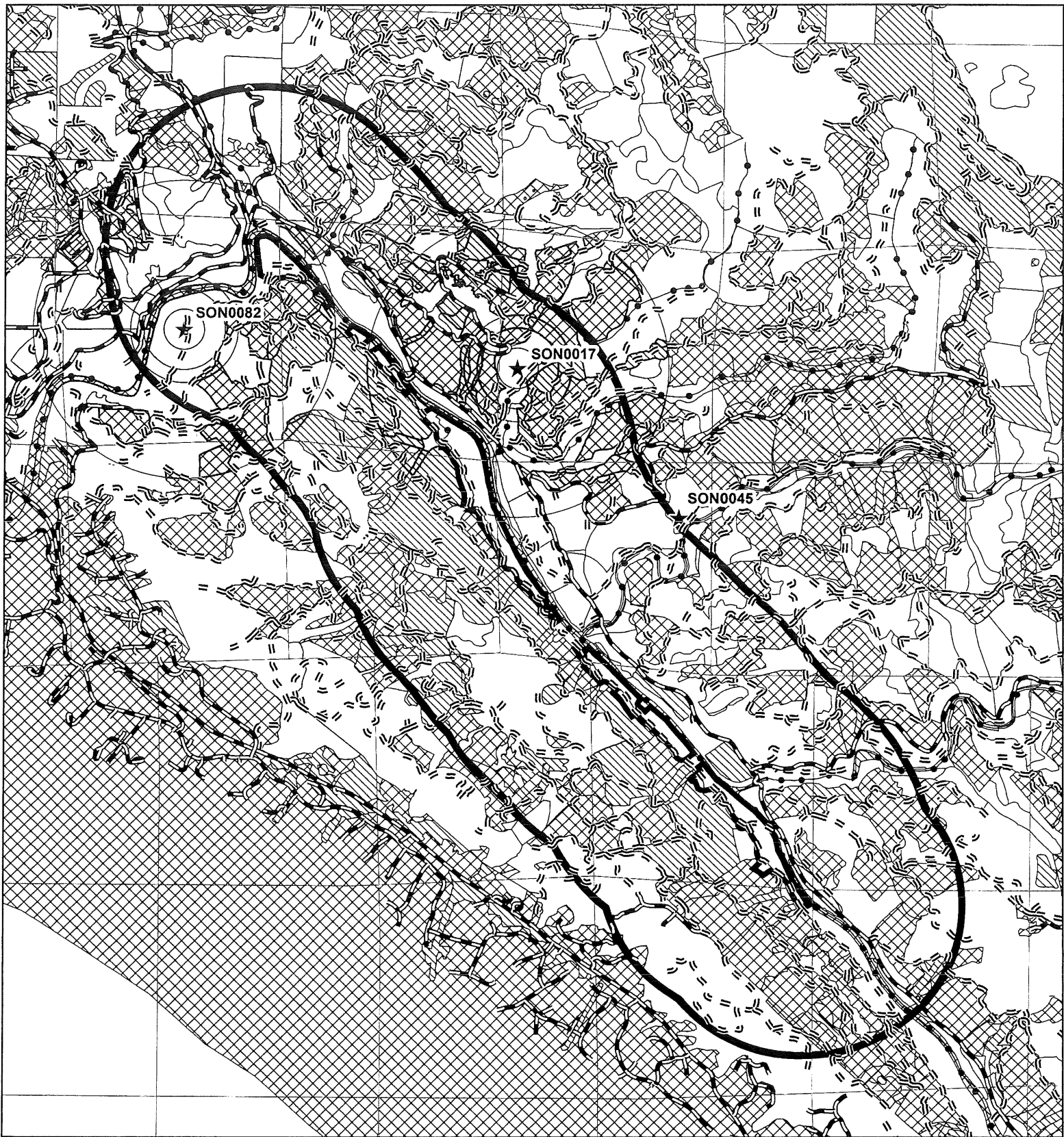
 NSO Activity Center
with buffers of:
500', 1000', & 0.7 mi



1:12,000

Print Date: 1/22/2026

349



Pre Harvest Northern Spotted Owl Habitat Types within 0.7 Miles of Plan Area

Card

-  0.7 mile NSO Buffer
-  Dirt Road
-  Permanent Road
-  Class I Watercourse
-  NSO Sites
-  Harvest Area

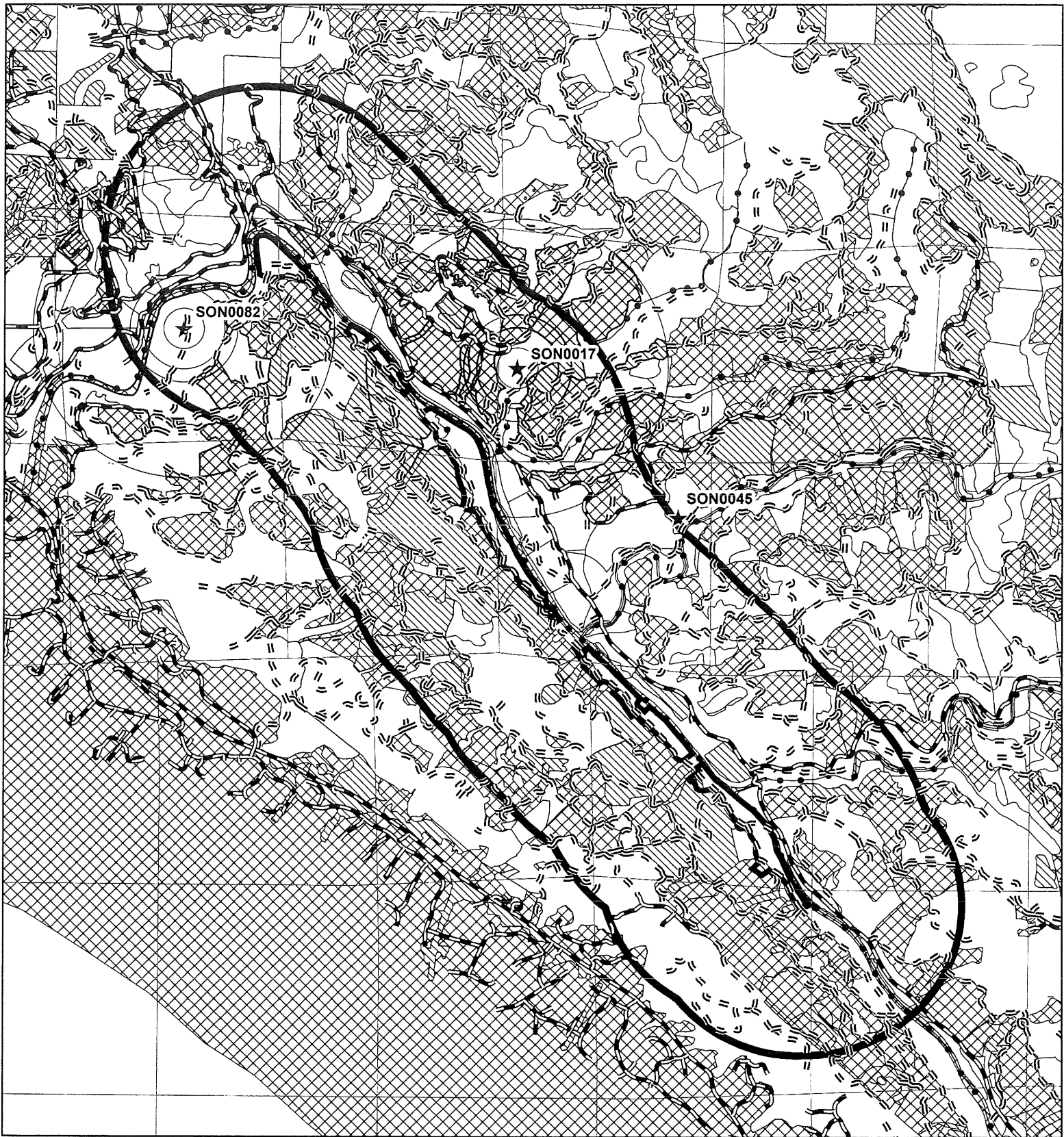
Pre Habitat

-  Foraging
-  Nesting/Roosting
-  Non Habitat

 NSO Activity Center
with buffers of:
500', 1000', & 0.7 mi

1:39,168

Print Date: 1/22/2026



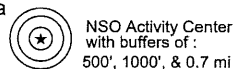
Post Harvest Northern Spotted Owl Habitat Types within 0.7 Miles of Plan Area

Card

-  0.7 mile NSO Buffer
-  Dirt Road
-  Permanent Road
-  Class I Watercourse
-  NSO Sites
-  Harvest Area

Post Habitat

-  Foraging
-  Nesting/Roosting
-  Non Habitat



1:39,168

Print Date: 1/22/2026

351

Pre SON0017

NSO_HABTYPE	BUFF_DIST	Acres
Foraging	500	0.67
Nesting/Roosting	500	17.36
Non Habitat	500	0.00
Foraging	1000	10.61
Nesting/Roosting	1000	42.09
Non Habitat	1000	19.42
Foraging	1320	19.48
Nesting/Roosting	1320	50.03
Non Habitat	1320	56.16
Foraging	3696	169.25
Nesting/Roosting	3696	433.06
Non Habitat	3696	382.89
Total Habitat		985.2
Habitat over 500		102.3

Post SON0017

NSO_HABTYPE	BUFF_DIST	Acres
Foraging	500	0.67
Nesting/Roosting	500	17.36
Non Habitat	500	0.00
Foraging	1000	10.61
Nesting/Roosting	1000	42.09
Non Habitat	1000	19.42
Foraging	1320	19.48
Nesting/Roosting	1320	50.03
Non Habitat	1320	56.16
Foraging	3696	169.25
Nesting/Roosting	3696	433.06
Non Habitat	3696	382.89
Total Habitat		985.2
Habitat over 500		102.3

Change

	Post -Pre	
Foraging	500	0.00
Nesting/Roosting	500	0.00
Non Habitat	500	0.00
Foraging	1000	0.00
Nesting/Roosting	1000	0.00
Non Habitat	1000	0.00
Foraging	1320	0.00
Nesting/Roosting	1320	0.00
Non Habitat	1320	0.00
Foraging	3696	0.00
Nesting/Roosting	3696	0.00
Non Habitat	3696	0.00

Pre SON0082

NSO_HABTYPE	BUFF_DIST	Acres
Foraging	500	0.00
Nesting/Roosting	500	18.03
Non Habitat	500	0.00
Foraging	1000	0.00
Nesting/Roosting	1000	65.08
Non Habitat	1000	7.04
Foraging	1320	0.00
Nesting/Roosting	1320	108.48
Non Habitat	1320	17.19
Foraging	3696	52.34
Nesting/Roosting	3696	704.35
Non Habitat	3696	228.44
Total Habitat		985.1
Habitat over 500		256.7

Post SON0082

NSO_HABTYPE	BUFF_DIST	Acres
Foraging	500	0.00
Nesting/Roosting	500	18.03
Non Habitat	500	0.00
Foraging	1000	0.00
Nesting/Roosting	1000	65.08
Non Habitat	1000	7.04
Foraging	1320	0.00
Nesting/Roosting	1320	108.48
Non Habitat	1320	17.19
Foraging	3696	52.34
Nesting/Roosting	3696	704.35
Non Habitat	3696	228.44
Total Habitat		985.1
Habitat over 500		256.7

Change

	Post -Pre	
Foraging	500	0.00
Nesting/Roosting	500	0.00
Non Habitat	500	0.00
Foraging	1000	0.00
Nesting/Roosting	1000	0.00
Non Habitat	1000	0.00
Foraging	1320	0.00
Nesting/Roosting	1320	0.00
Non Habitat	1320	0.00
Foraging	3696	0.00
Nesting/Roosting	3696	0.00
Non Habitat	3696	0.00

Data Version Date:
12/22/2025
Report Generation Date:
1/20/2026

Report #1 - Spotted Owl Sites Found
Known Spotted Owl sites having observations
within the search area.



Meridian, Township, Range, Section (MTRS) searched:

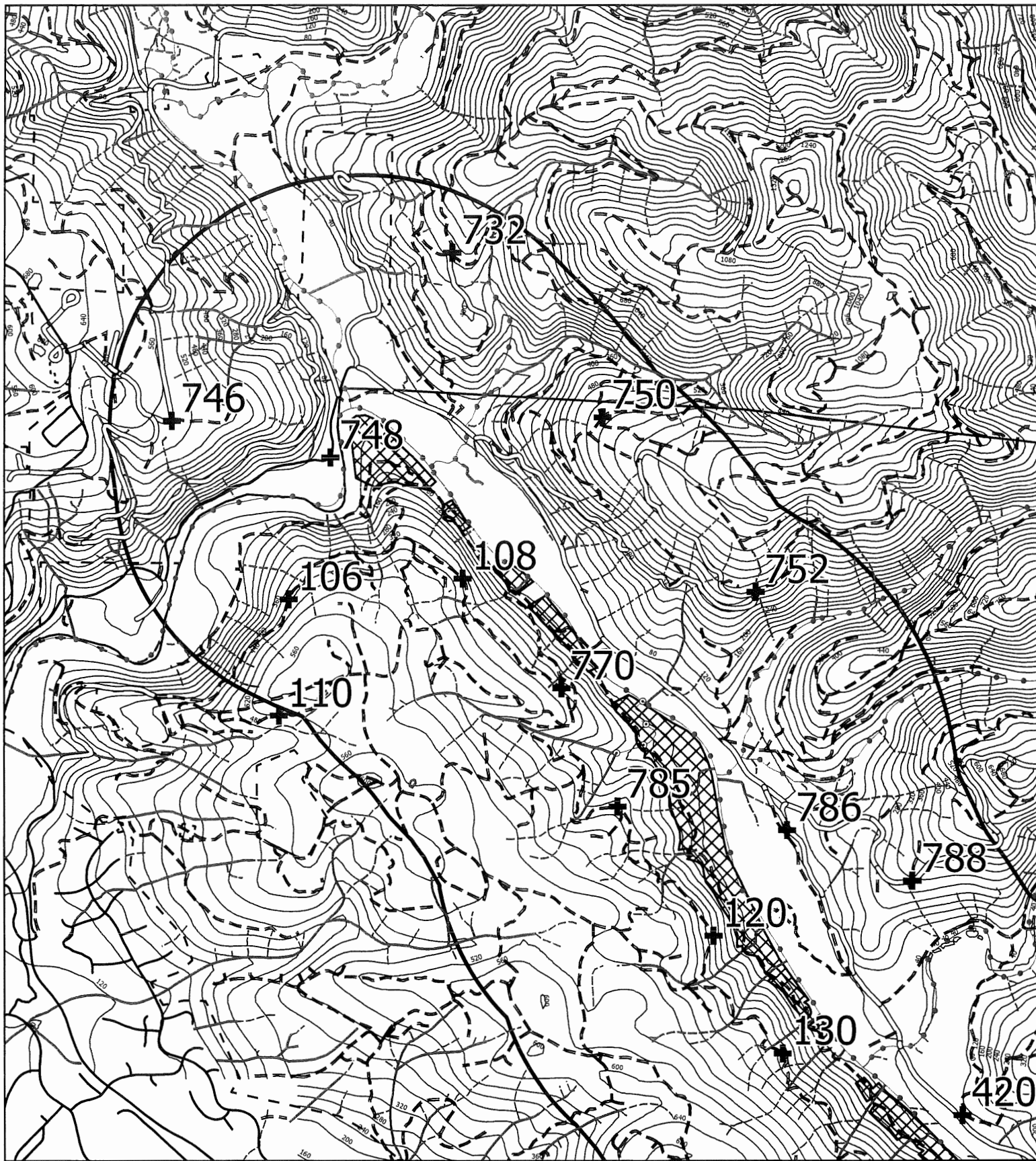
M_11N_15W Sections(23,24,25,26,35,36);

M_11N_14W Sections(30,31,32);

M_10N_14W Sections(05,06,07,08);

M_10N_15W Sections(01);

<i>Masterowl</i>	<i>Subspecies</i>	<i>LatDD NAD83</i>	<i>LonDD NAD83</i>	<i>MTRS</i>	<i>AC Coordinate Source</i>
MEN0179	NORTHERN	38.789914	-123.504183	M 11N 15W 23	Contributor
MEN0371	NORTHERN	38.806553	-123.517364	M 11N 15W 15	Contributor
MEN0412	NORTHERN	38.784737	-123.464537	M 11N 14W 19	Contributor
MEN0510	NORTHERN	38.798709	-123.480809	M 11N 15W 13	Contributor
SON0012	NORTHERN	38.744370	-123.434267	M 10N 14W 05	Contributor
SON0017	NORTHERN	38.768938	-123.476506	M 11N 14W 30	Contributor
SON0034	NORTHERN	38.763439	-123.429531	M 11N 14W 28	Contributor
SON0045	NORTHERN	38.758815	-123.462607	M 11N 14W 31	Contributor
SON0082	NORTHERN	38.771471	-123.505195	M 11N 15W 26	Contributor
SON0085	NORTHERN	38.726478	-123.430503	M 10N 14W 09	Contributor



Card THP
NSO Call Stations
Map 1 of 2

Scale: 1:24,000

- Public Permanent Road
- - - Private Permanent Road
- · - Private Seasonal Road
- · - Class I Watercourse
- - - Class II-S Watercourse
- - - Class III Watercourse

- - ○ Class II-L Watercourse

0.7 Mile Buffer

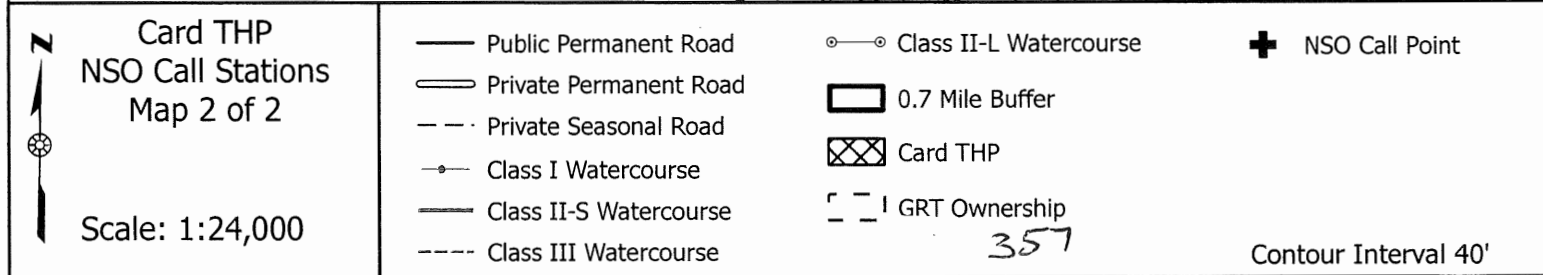
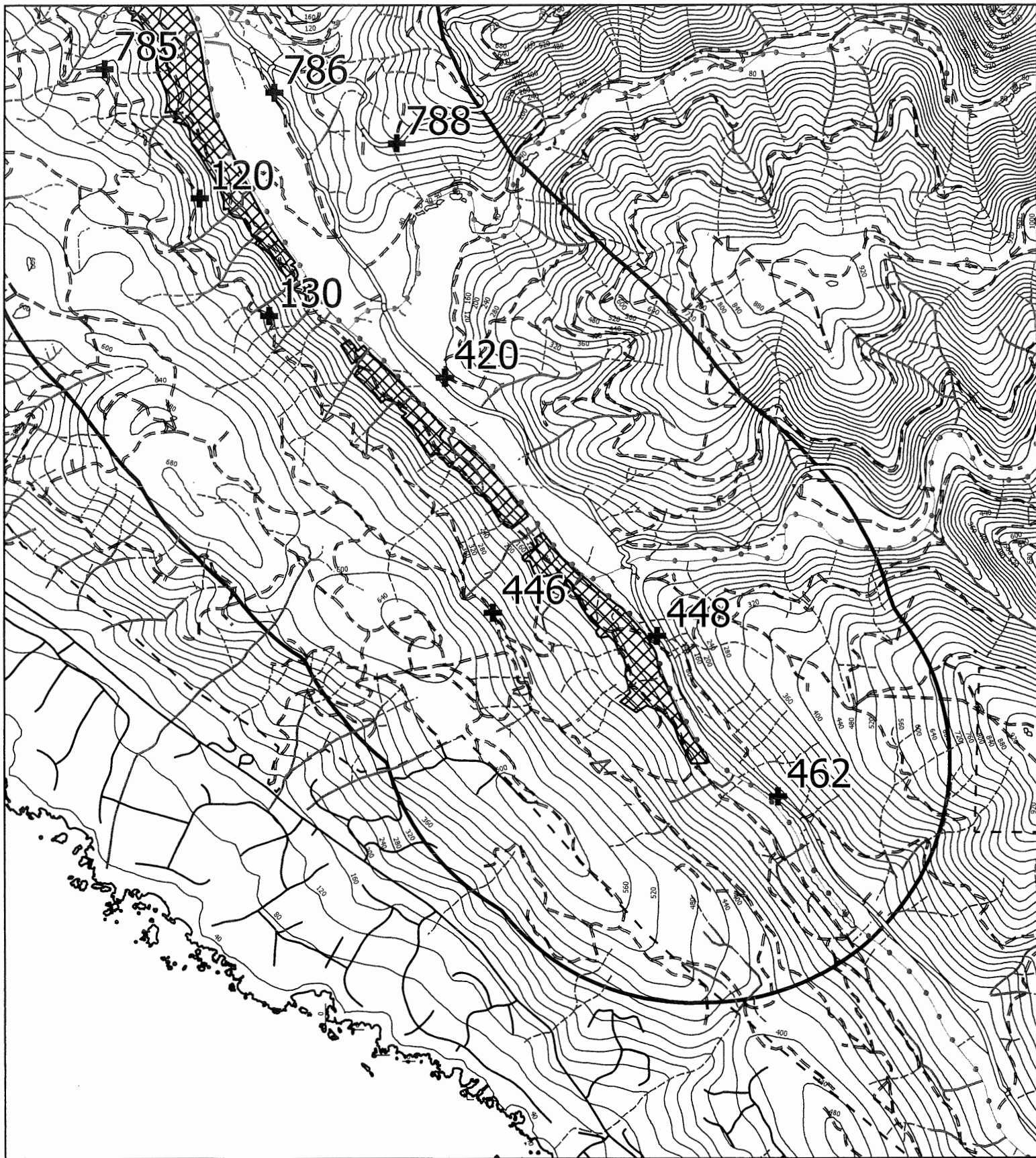
Card THP

GRT Ownership

- + NSO Call Point

356

Contour Interval 40'



NORTHERN SPOTTED OWL SURVEY FORM
2025 Breeding Season

Project/General Location: Gualala Redwood Timber – Card THP

Visit #: 1 Date: 05MAR25

General Location: Gualala River – Rancho

County: Sonoma

NSO Detection: No **Barred Owl Detection:** No

Surveyor: Pam Town

Survey Type: Nocturnal 10-minute Point – Walking & Broadcast Calling

Weather Description (cloud/wind): Partly cloudy with occasional light breeze

Station #	Survey Time	Owl Response	Comments
748	1904 – 1914	N/R	River Noise
750	1843 - 1853	N/R	
752	1830 - 1840	N/R	
786	1700 - 1815	N/R	Road was blocked due to log jam from earlier flooding – Daytime walk for safety and walked from log jam (near Pepperwood Creek) to Stations #786 and #788. Broadcast calling was used.
788	1700 - 1815	N/R	Road was blocked due to log jam from earlier flooding – Daytime walk for safety and walked from log jam (near Pepperwood Creek) to Stations #786 and #788. Broadcast calling was used.
07MAR25			Weather: Clear and Calm
448	1827 - 1837	N/R	
462	1840 - 1850	N/R	
08MAR25			Weather: Clear and Calm
106	2215 – 2225	N/R	
108	2159 - 2209	N/R	
110	2130 - 2140	N/R	
120	2300 – 2310	N/R	
130	2353 – 0003	N/R	
420	2339 – 2349	N/R	Called from upper Rancho Road as cannot stream cross safely (wet crossings)
446	2325 - 2335	N/R	
732	2036 - 2046	N/R	
770	2145 – 2155	N/R	
785	2237 - 2247	N/R	
03MAR25			Weather: Cloudy with a light breeze
746	2013 – 2023	N/R	NOTE: Gate was open

NORTHERN SPOTTED OWL SURVEY FORM
2025 Breeding Season

Project/General Location: Gualala Redwood Timber – Card THP

Visit #: 2 Date: 13MAR25

General Location: Gualala River – Rancho

County: Sonoma

NSO Detection: No Barred Owl Detection: No

Surveyor: Pam Town

Survey Type: Nocturnal 10-minute Point – Walking & Broadcast Calling

Weather Description (cloud/wind): Clear and Calm

Station #	Survey Time	Owl Response	Comments
748	2020 – 2030	N/R	Rabbit
750	2000 - 2010	N/R	
752	1945 - 1955	N/R	
786	1830 - 1930	N/R	Road was blocked due to log jam from earlier flooding – Daytime walk for safety and walked from log jam (near Pepperwood Creek) to Stations #786 and #788. Broadcast calling was used. Other species include: pretty sure bobcat and not mt lion, STJA, BTPI, DEJU, and MADU.
788	1830 - 1930	N/R	Road was blocked due to log jam from earlier flooding – Daytime walk for safety and walked from log jam (near Pepperwood Creek) to Stations #786 and #788. Broadcast calling was used. Other species include: pretty sure bobcat and not mt lion, STJA, BTPI, DEJU, and MADU.
14MAR25			Weather: Cloudy with light breeze
448	0020 - 0030	N/R	
462	2359 – 0009	N/R	Black Bear
08MAR25			Weather: Clear and Calm
106	2300 - 2310	N/R	
108	2246 - 2256	N/R	
110	2230 - 2240	N/R	
120	2344 - 2354	N/R	
130	0034 - 0045	N/R	
420	0018 - 0028	N/R	Called from upper Rancho Road as cannot stream cross safely (wet crossings)
446	0005 - 0015	N/R	
732	2140 - 2150	N/R	
770	2317 – 2327	N/R	Tree Frogs
785	2330 – 2340	N/R	Great Horned Owl and tree frogs
10MAR25			Weather: Partly Cloudy with a light breeze
746	2154 – 2204	N/R	Saw-whet owl and lots of frogs

NORTHERN SPOTTED OWL SURVEY FORM
2025 Breeding Season

Project/General Location: Gualala Redwood Timber – Card THP

Visit #: 3 Date: 10APR25

General Location: Gualala River – Rancho

County: Sonoma

NSO Detection: No **Barred Owl Detection:** Yes

Surveyor: Pam Town

Survey Type: Nocturnal 10-minute Point – Walking & Broadcast Calling

Weather Description (cloud/wind): Partly cloudy and light breeze

Station #	Survey Time	Owl Response	Comments
748	2020 – 2030	N/R	River noise and car drove by
750	2000 - 2010	N/R	
752	1945 - 1956	N/R	
786	1800 - 1900	Barred Owl Up Pepperwood Creek	Road was blocked due to log jam from earlier flooding – Daytime walk for safety and walked from log jam (near Pepperwood Creek) to Stations #786 and #788. Broadcast calling was used. Other species include: STJA, NOFL, BTPA, CAQU, CBCH, deer, AMRO, and Barred Owl
788	1800 - 1900	Barred Owl Up Pepperwood Creek	Road was blocked due to log jam from earlier flooding – Daytime walk for safety and walked from log jam (near Pepperwood Creek) to Stations #786 and #788. Broadcast calling was used. Other species include: STJA, NOFL, BTPA, CAQU, CBCH, deer, AMRO, and Barred Owl .
106	2240 - 2250	N/R	
108	2224 - 2234	N/R	
110	2150 - 2200	N/R	
120	2314 - 2324	N/R	
130	0013 - 0025	N/R	
420	2359 - 0009	N/R	Called from upper Rancho Road as cannot stream cross safely (wet crossings)
446	2345 – 2355	N/R	Skunk
770	2210 - 2220	N/R	
785	2300 – 2310	N/R	Western Screech owl
11APR25			Weather: Clear with light breeze
448	2004 - 2014	N/R	
462	2018 – 2028	N/R	
08APR25			Weather: Clear with a light breeze
746	2304 – 2314	N/R	Gate was open
13APR25			Weather: Partly cloudy and light breeze
732	2310 – 2320	N/R	

NORTHERN SPOTTED OWL SURVEY FORM
2025 Breeding Season

Project/General Location: Gualala Redwood Timber – Card THP

Visit #: 4 Date: 17APR25

General Location: Gualala River – Rancho

County: Sonoma

NSO Detection: No **Barred Owl Detection:** Yes

Surveyor: Pam Town

Survey Type: Nocturnal 10-minute Point

Weather Description (cloud/wind): Cloudy and light breeze

Station #	Survey Time	Owl Response	Comments
106	2154 – 2204	N/R	Barred Owl by Gualala River
108	2139 - 2150	N/R	
110	2215 - 2225	N/R	
120	2050 - 2100	N/R	
130	2023 - 2033	N/R	
420	2010 - 2020	N/R	Called from upper Rancho Road as cannot stream cross safely (wet crossings)
446	1955 - 2005	N/R	
748	2359 – 0009	N/R	
750	0043 - 0053	N/R	
752	0030 - 0040	N/R	
770	2120 - 2130	N/R	
785	2104 - 2114	N/R	
786	0109 - 0119	N/R	Road had been cleared
788	0122 – 0132	N/R	Road had been cleared
15APR25			Weather: Cloudy and light breeze
746	0021 - 0031	N/R	
18APR25			Weather: Clear and calm
448	0153 - 0203	N/R	Beautiful clear evening
462	0139 - 0149	N/R	Beautiful clear evening
20APR25			Weather: Partly Cloudy with light breeze
732	2258 – 2308	Vocal Barred	Barred Owl near Little North Fork

NORTHERN SPOTTED OWL SURVEY FORM
2025 Breeding Season

Project/General Location: Gualala Redwood Timber – Card THP

Visit #: 5 Date: 11MAY25

General Location: Gualala River – Rancho

County: Sonoma

NSO Detection: No **Barred Owl Detection:** Yes

Surveyor: Pam Town (unless otherwise indicated)

Survey Type: Nocturnal 10-minute Point

Weather Description (cloud/wind): Cloudy and light breeze

Station #	Survey Time	Owl Response	Comments
106	0020 – 0030	Vocal Barred	Pair of Barred Owls very vocal
108	0000 – 0014	Vocal Barred	Barred Owl flew to surveyor
110	0045 – 0055	N/R	Light rain beginning
120	2315 - 2325	N/R	
130	2245 - 2255	N/R	
420	2000 – 2026	Vocal Barred	Pair of Barred Owls – Very vocal
446	2225 – 2235	Vocal Barred	Single Barred Owl by Gualala River
732	2304 - 2315	N/R	Chris Town Surveyor
748	2345 – 2355	N/R	Chris Town Surveyor
750	2137 - 2147	N/R	
752	2125 - 2135	N/R	
770	2344 - 2354	N/R	
785	2330 - 2340	N/R	
786	2048 - 2100	Vocal Barred	Pair of Barred Owls – Very Vocal
788	2035 - 2045	N/R	
12MAY25			Weather: Cloudy and light breeze
746	2225 – 2235	N/R	Gate was open
09MAY25			Weather: Partly cloudy with light breeze
448	2030 – 2040	Vocal Barred	Barred Owl by Gualala River
462	2044 – 2055	N/R	Black Bear

NORTHERN SPOTTED OWL SURVEY FORM
2025 Breeding Season

Project/General Location: Gualala Redwood Timber – Card THP Visit #: 6 Date: 18MAY25

General Location: Gualala River – Rancho County: Sonoma

NSO Detection: No **Barred Owl Detection:** Yes

Surveyor: Pam Town (unless otherwise indicated)

Survey Type: Nocturnal 10-minute Point

Weather Description (cloud/wind): Partly cloudy with occasional light breeze

Station #	Survey Time	Owl Response	Comments
106	0040 – 0050	N/R	
108	0024 – 0034	N/R	
110	0105 – 0115	N/R	
120	2340 – 2350	N/R	
130	2315 – 2325	N/R	
420	2100 – 2110	Barred Owl	At the stream crossing – very Vocal Barred Owl
446	2256 – 2306	N/R	
732	2315 – 2325	N/R	Chris Town Surveyor
748	2345 – 2355	N/R	Chris Town Surveyor
750	2143 – 2155	N/R	
752	2130 – 2140	N/R	
770	0010 – 0020	N/R	
785	2354 – 0004	N/R	
786	2045 – 2055	N/R	
788	2030 – 2040	N/R	
			18MAY25 – Quiet evening with lots of crickets
16MAY25			Weather: Clear with light breeze
448	2035 – 2045	N/R	Crickets
462	2049 – 2100	N/R	Crickets
19MAY25			Weather: Clear with light breeze
746	2149 – 2200	N/R	

Walk-In for Northern Spotted Owls 2025 Breeding Season

SON082 Date: 17APR25 Weather: Partly Cloudy and Calm
Surveyor: Pam Town Time: 1630 – 1815 hours

Began broadcast calling at the water treatment plant and walked uphill along the road towards the activity center. Walked around the activity center looking for owl sign and continued to broadcast NSO calls. One old pellet was found. When leaving the area, I continued to broadcast NSO calls while walking down the road back to the water treatment plant. On the way back down, I heard STJAs mobbing something, which turned out to be a barred owl (near the gate). Barred Owl began vocalizing at 1800 hours and became very vocal as I walked away. Later that evening, a pair of very aggressive barred owls flew to me while I was surveying for NSOs. One barred owl grabbed my speaker and threw it a few feet.

Species identified: lots of mosquitoes, can hear the highway, group of 5 CORAs, TUVU, AMRO, PAWR, WEFL, WBNU, STJAs (lots of them), CBCH, deer, and barred owl.

NO NORTHERN SPOTTED OWLS WERE DETECTED

SON017 Date: 18MAY25 Weather: Clear and gentle breeze
Surveyor: Pam Town Time: 1730 – 1830 hours

Began broadcast calling from the road, and walked up Big Pepperwood Creek towards the historic activity center. Walked around the activity center looking for owl sign and continued to broadcast NSO calls. No owls or owl sign was observed/heard.

Species identified: PAWR, WEFL, HETH, CAQU, AMRO, and CORA

NO NORTHERN SPOTTED OWLS OR BARRED OWLS WERE DETECTED

Completed Road Work

Hydrologic Unit All
 Planning Watershed Robinson Creek
 Repair type All
 Priority All
 Road # All From Mi All To Mi All Road Class All
 THP All From Date 01/01/80 To Date 08/07/23

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
0	3002	0.000	Bennett	Bennett	01-298	Stagger Lee	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	3002	0.000	Unk	12/19/06		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
CDF completion inspection. Inspected roads for maintenance.																	
0	3005	0.000	Pehl	Pehl	01-298	Stagger Lee	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	3005	0.000	Unk	01/05/07		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	4929	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	4929	0.000	PW	12/03/08		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Note to file: No timber operations were conducted on this THP during 2008.																	
0	5381	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5381	0.000	Unk	10/20/09		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5382	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5382	0.000	Unk	10/20/09		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5383	0.000	Pehl	Pehl	01-298	Stagger Lee	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5383	0.000	Unk	10/20/09		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings on the south half of the plan. No problems.																	
0	5425	0.000	Bennett	Bennett	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5425	0.000	Unk	03/17/10		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected all roads and watercourse crossings.																	
0	5448	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5448	0.000	Unk	03/30/10		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5433	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5433	0.000	Unk	04/19/10		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings. No problems.																	
0	5449	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5449	0.000	Unk	04/29/10		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5539	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5539	0.000	Unk	11/12/10		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings. No problems.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
0	5541	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5541	0.000	Unk	11/12/10		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5578	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5578	0.000	Unk	01/10/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings to units 3,4,5,6,7,8. No problems.																	
0	5577	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5577	0.000	Unk	01/10/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5580	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5580	0.000	Unk	01/11/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings to units 1 & 2. No problems.																	
0	5764	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5764	0.000	Unk	01/24/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings. No problems.																	
0	5615	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5615	0.000	Unk	03/09/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings. No problems.																	
0	5614	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5614	0.000	Unk	03/11/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5616	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5616	0.000	Unk	03/22/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings while clearing roads for owl surveys. No problems.																	
0	5617	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5617	0.000	Unk	03/23/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings while clearing roads for owl surveys. No problems.																	
0	5645	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5645	0.000	Unk	05/14/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings. No problems.																	
0	5643	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5643	0.000	Unk	06/14/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems. Timber falling in progress. No heavy equipment on site.																	
0	5763	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5763	0.000	Unk	11/15/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings. No problems.																	
0	5798	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5798	0.000	Unk	11/15/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
0	5765	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5765	0.000	Unk	11/16/11		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5766	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5766	0.000	Unk	01/24/12		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5802	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5802	0.000	Unk	04/19/12		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings. No problems. Submitted Final Completion Report to CalFire.																	
0	5800	0.000		Pehl	07-047	Kelp	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5800	0.000	Unk	06/13/12		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5867	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5867	0.000	Unk	10/26/12		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5876	0.000	Pehl	Pehl	07-047	Kelp	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5876	0.000	Unk	01/08/13		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5877	0.000	Pehl	Pehl	06-163	Sage	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5877	0.000	Unk	01/09/13		1B106163MEN	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect roads and watercourse crossings. No problems.																	
0	6040	0.000	Pehl	Pehl	11-043	Rose	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	6040	0.000	Unk	11/14/13		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	6074	0.000	Pehl	Pehl	11-105	Maple	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	6074	0.000	Unk	08/29/14		GWDR 1-11-105 M	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect THP Road Points and Erosion Control. Sent letter to LTO detailing items necessary for completion.																	
0	6087	0.000	Pehl	Pehl	11-043	Rose	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	6087	0.000	Unk	09/03/14		GWDR 1-11-043 Me	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected timber harvest plan and roads. Contacted LTO about work necessary to complete the timber harvesting plan.																	
0	6085	0.000	Pehl	Pehl	11-105	Maple	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	6085	0.000	Unk	09/17/14		GWDR 1-11-105 M	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspect THP Road Points and Erosion Control. LTO has completed all work. Final Completion Report Submitted to CALFIRE.																	
0	5693	0.000	Haschak	Pehl	11-105	Maple	Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	5693	0.000	Unk	09/17/14		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Skid xing on class III. Dip out at close of operations. (Not used)																	
0	6086	0.000	Pehl	Pehl	11-105	Maple	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	6086	0.000	Unk	09/30/14		GWDR 1-11-105 M	No Action	Medium	-	-	0	0	0	0	0	\$0	0

Final Completion Report Inspected by Ken Margiott of CALFIRE. No problems. Maintenance period ends Sept. 18, 2017.

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
0	5619	0.000	Haschak Pehl	11-043	Rose		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	5619	0.000	Unk	10/17/14		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Install 4" or larger temporary pipe if wet at time of operations. Dip out at close.																	
0	5592	0.000	Haschak Pehl	11-043	Rose		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	5592	0.000	Unk	10/17/14		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Existing skid crossing on class III. Install 4" or larger pipe if wet at time of operations. Dip out at close.																	
0	5600	0.000	Haschak Pehl	11-043	Rose		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	5600	0.000	Unk	10/17/14		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out any loose material. LTO should avoid using this crossing if he can reach road by paralleling class III toward the south.																	
0	5606	0.000	Haschak Pehl	11-043	Rose		Other	THP Non-Road	N/A	0	0	0	0	0	0	\$0	0
Existing Skid	5606	0.000	Unk	10/17/14		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
There is a spring east (uphill) of the road used for domestic water supply outside of this plans boundaries. There is a water line that runs thru the unit at this point. Locate the pipe and reconnect and /or repair if it becomes damaged during skidding or falling.																	
0	5647	0.000	Haschak Pehl	11-043	Rose		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$100	100
Existing Skid	5647	0.000	Unk	10/17/14		GWDR 1-11-043 Me	Temp. Crossing	Medium	-	-	0	0	1	0	0	\$1	100
Class III skid crossing. Place very large berm all along south side of watercourse so that it doesn't go down the adjacent skid trails. This road point will be fixed irregardless of yarding method used in this unit.																	
0	6089	0.000	Pehl	Pehl	11-043	Rose	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	6089	0.000	Unk	10/17/14		GWDR 1-11-043 Me	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected THP for Completion Report. All work completed. Completion Report Submitted to CALFIRE.																	
0	6091	0.000	Pehl	Pehl	11-043	Rose	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	6091	0.000	Unk	10/22/14		GWDR 1-11-043 Me	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Notified by Ken Margiott of CALFIRE that he had inspected the THP area for the completion report. No problems.																	
0	6110	0.000	Pehl	Pehl	11-105	Maple	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	6110	0.000	Unk	12/16/14		GWDR 1-11-105 M	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads. No problems.																	
0	6117	0.000	Pehl	Pehl	11-043	Rose	No Problem	THP ECP	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	6117	0.000	Unk	01/26/15		GWDR 1-11-043 Me	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads and watercourse crossings. No problems.																	
0	5736	0.000	Haschak Bennett	12-029	Tulip		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	5736	0.000	Unk	01/01/16		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Class III skid trail crossing. Dip out at close of operations																	
0	5737	0.000	Haschak Bennett	12-029	Tulip		Temp. Crossing	THP Non-Road	Swale	0	0	0	0	0	0	\$0	0
Existing Skid	5737	0.000	Unk	01/01/16		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Swale crossing. Construct large mound on downhill side of crossing to keep water from going down skid trail at close of operations.																	
0	6479	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6479	0.000	Unk	10/15/19		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Skid xing on class III. Dip out at close. Place straw in bottom to help relocate original channel bottom when removing crossing fill.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
0	6429	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6429	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	6430	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6430	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	6431	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	II	0	0	0	0	0	0	\$0	0
Existing Skid	6431	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
If water is present install temp pipe. Dip out at close.																	
0	6432	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6432	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	6433	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6433	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	6428	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6428	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	6482	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Private Seasonal	6482	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
class III crossing on seasonal road. Dip out at close.																	
0	6481	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6481	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Class III crossing., Dip out at close.																	
0	6480	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6480	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	6435	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6435	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	6434	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6434	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	6438	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6438	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	6437	0.000	Haschak Bennett	16-094	Plum		Temp. Crossing	THP Non-Road	III	0	0	0	0	0	0	\$0	0
Existing Skid	6437	0.000	Unk	10/15/19	ECP Not		Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
0	6436	0.000	Haschak	Bennett	16-094	Plum	Temp. Crossing	THP Non-Road	III		0	0	0	0	0	\$0	0
Existing Skid	6436	0.000	Unk	10/15/19		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Dip out skid crossing at close of operations																	
0	1101	2.600		Ghirann	Maintena	Maintenance	Culv.-HDP-Plug	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	6757	0.000	Unk	06/11/19		ECP Not	Culv. Maintenance	Medium	-	-	0	0	0	0	0	\$0	0
inlet completely covered in mud, flow is still getting through.																	
60	24	0.000	Kelly	Kelly	98-147	Doty Ridge	Stream Bank	THP Mitigation	N/A		0	0	0	0	0		0
Private Perm.	24	0.000		09/01/98		ECP Not	Rock Surface	Medium	-	-	0	0	0	0	0	\$0	0
rip rap edge of road to protect from stream.																	
60	4295	0.000	Haschak	Pehl	07-047	Kelp	Surface Drainage	THP App. Rd.	I		0	0	0	8	18	\$4,372	50
Private Seasonal	4295	0.000	R&S	08/27/07		ECP Not	Rock Surface	Medium	-	-	0	0	8	0	0	\$87	50
Rock this segment of road for approximately 100 feet with 6 inches of rock in order to reduce sediment inputs into the North Fork of the Gualala River.																	
60	5249	0.000	Alden		Maintena	Maintenance	No Problem	Storm Proofing	N/A		0	605	0	0	111	\$13,831	0
Storm Proofed	5249	0.000	PW	05/13/09		ECP Not	Other	No Action	-	-	0	0	0	0	0	\$0	0
This is the move in move out costs and the use of a water truck, grader and compactor at various sites. Water truck (97 hours x \$111/Hr), transport truck (14 hours x \$111/Hr), pilot car (11 hours x \$95/Hr), compactor (19 hours x \$95/Hr) and grader (10 hours x \$151/Hr). This also includes 605 Cubic Yards of road base to be used as needed.																	
60	5293	0.000	Alden	Alden	RobRds	Robinson SB271	No Problem	Storm Proofing	N/A		0	605	0	8	7	\$4,360	0
Storm Proofed	5293	0.000	R&S	09/20/12		ECP Not	Other	No Action	-	-	0	0	6	28	0	\$0	0
This is the move in move out costs and the use of a water truck, grader and compactor at various sites. Water truck (87 hours x \$113.84/Hr), transport truck (24 hours x \$113.84/Hr), pilot car (11 hours x \$70/Hr), compactor (19 hours x \$70/Hr) and grader (10 hours x \$113.84/Hr). This also includes 605 Cubic Yards of road base to be used as needed (\$30/Yard).																	
60	2806	2.150	Pehl	Pehl	08-086	Belladonna	Culv.	THP App. Rd.	II		0	100	0	20	8	\$9,156	30
Private Perm.	2806	0.000	PW	08/08/10		Waiver	Culv. Install	THP Low	-	24"	40	0	11	14	30	\$0	0
Watercourse is diverted into ditch. Install culvert at intersection of watercourse and road. Underground utilities in the road. Call Dig USA (1-800-227-2600) 48 hours prior to installation to arrange a locate.																	
Used 9 yards of 5 sack concrete to bed culvert																	
60	2807	2.160	Pehl	Pehl	08-086	Belladonna	Culv.-Ditch Relief	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Perm.	2807	0.000	PW	08/08/10		ECP Not	No Action	No Action	18"	-	0	0	0	0	0	\$0	0
No action. Existing cross drain relieves ditch flow from BRP 1. Leave "as is".																	
60	2730	2.200	Pehl	Pehl	01-298	Stagger Lee	No Problem	THP Maint Insp	N/A		0	0	0	0	0	\$0	0
Private Perm.	2730	6.600	Unk	01/05/06		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
Winter Inspection. Unplugged several culverts. Slide at mi. 6.38. Several trees across road.																	
60	703	2.430	Kelly	Kelly	Maintena	Maintenance	No Problem	Maintenance	II		0	0	0	0	0	\$0	0
Private Seasonal	703	0.000	Unk	02/15/00		ECP Not	No Action	Medium	36"	-	0	0	0	0	0	\$0	0
60	2808	2.440	Pehl	Pehl	08-086	Belladonna	Culv.-HDP	THP App. Rd.	I		0	50	0	47	32	\$51,308	400
Private Perm.	2808	0.000	R&S	10/15/13		Waiver	Bridge - Perm	THP Low	48"	EngBr	60	0	20	93	400	\$128	400
Bridge - \$3,000 Lumber - \$1,000 Concrete - \$1,800.03																	
Undersized culvert. Prone to blockage, overtopping and diversion. Replace with bridge. Install for fish passage as per 1600 Agreement. Possible underground utilities in the road. Call Dig USA (1-800-227-2600) 48 hours prior to installation to arrange a locate.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60	1101	2.600	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	1101	0.000	Unk	12/05/00		ECP Not	Gate	Low	-	-	0	0	0	0	0	\$0	0
60	377	2.650	Haschak	Reynold	16-094	Plum	Culv.	THP App. Rd.	III	0	0	0	0	0	0	\$668	0
Private Perm.	6478	0.000	R&S	11/02/20		ECP Not	Culv. Replace	Medium	18"	24"	20	0	0	2	0	\$0	0
Culvert rusting out. Replace culvert at grade.																	
60	378	2.730	Haschak	Reynold	16-094	Plum	Culv.	THP App. Rd.	III	0	0	0	0	0	0	\$825	0
Private Perm.	6427	0.000	R&S	11/02/20		ECP Not	Culv. Replace	Medium	24"	36"	20	0	0	0	0	\$0	0
Bottom of culvert is rotting out. Replace. Install critical dip.																	
60	378	2.730	Reynold		20-00150	Far North	No Problem	THP ECP	N/A	0	0	0	0	0	0		0
Storm Proofed	7021	0.000		10/26/21		GWDR 1-20-00150	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60	2300	3.120	Alden	Hagans	271 LNF	LNF P01030405A	Culv.	Storm Proofing	II	0	0	0	16	0	0	\$4,857	0
Private Seasonal	2300	0.000	GE	10/30/03		ECP Not	Culv. Replace	Medium	30"	48"	40	0	9	10	60	\$0	0
60	2300	3.120	Alden	Pehl	05-023	Clover	Culv.-Plug	THP ECP	II	0	0	0	4	2	0	\$170	0
Private Seasonal	3973	0.000	JHB	03/22/07		1B105023MEN	Culv. Maintenance	Medium	48"	-	0	0	0	0	10	\$0	0
Debris flow came down the steep class II on March 19th and plugged the culvert. The flow did not originate on GRI. A lot of stored sediment and debris was mobilized and plugged this culvert. Material removed from inlet with excavator.																	
60	2440	3.200	Bennett	Alden	Easement	Easement	No Problem	Other Owner	N/A	0	0	0	0	0	0	\$0	0
Easement	2440	4.400	Unk	08/02/84		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Easements across North Gualala Water Company and annapolis Milling																	
60	19	3.500	Kelly	Kelly	95-131	Little Robinson Cree	Fill - Road	THP Mitigation	N/A	0	0	0	0	0	0	\$1,530	0
Private Perm.	19	0.000	RR	08/25/98		ECP Not	Other	High	-	-	0	0	0	0	0	\$0	0
place rip rap in North Fork Gualala																	
60	2542	4.360	Alden	Alden	Maintena	Maintenance	Surface Drainage	Storm Proofing	N/A	0	0	0	17	0	0	\$3,400	997
Storm Proofed	2542	6.400	ME	05/27/05		ECP Not	Tip and Dip	Medium	-	-	0	0	17	0	0	\$3	997
60	5821	4.600	Alden	Alden	RobRds	Robinson SB271	Culv.-HDP	Assessment	II	0	90	0	16	24	0	\$9,723	50
Storm Proofed	5821	0.000	R&S	09/19/12		ECP Not	Culv. Install	Medium	30"	60"	40	0	20	18	60	\$194	50
Replace undersized pipe with oversized pipe to allow for debris transport																	
60	2716	4.670	Alden	Pehl	Maintena	Maintenance	Culv.-Plug	Maintenance	II	0	0	0	6	0	0	\$380	10
Private Seasonal	2716	0.000	JHB	01/20/06		ECP Not	Culv. Maintenance	High	30"	-	0	0	4	0	0	\$38	10
Open pipe remove fence posts																	
60	2716	4.670	Alden	Alden	RobRds	Robinson SB271	Culv.-HDP	Assessment	II	0	120	0	19	26	0	\$9,408	250
Storm Proofed	5822	0.000	R&S	09/20/12		ECP Not	Culv. Install	Medium	30"	60"	40	0	10	12	300	\$38	250
Replace undersized pipe with oversized pipe to allow for debris transport. Remove bedload backed up behind old culvert and failing banks up to stump in channel.																	
60	2277	5.000	Hagans	Alden	RobRds	Robinson SB271	Surface Drainage	Storm Proofing	N/A	0	140	0	29	39	0	\$10,218	1,083
Storm Proofed	2277	5.170	R&S	09/19/12		ECP Not	Other	Medium	-	-	0	0	30	2	0	\$11	950
Install munchkie block dam with rock armored spillway at 5.0 mile. Back fill to raise road by filling 3' (1,100' x 28' x 3') = 3,400Yds.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60	2277	5.140	Haschak Alden	04-032	Lily		Other	THP Mitigation	N/A	0	0	0	3	8	0	\$1,395	0
Private Seasonal	1211	0.000	Unk	09/19/12		ECP Not	Other	THP Low	-	-	0	0	3	0	0	\$0	0
At this point the road will be permanently raised in order to keep overflow from the river from running down the road. Feather the ends of the road hump in such a way as to allow truck traffic to continue using the road. This was done during the Robinson PW road upgrading project.																	
60	1823	5.280	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	1823	0.000	Unk	10/15/01		ECP Not	Rock Pit	Low	-	-	0	0	0	0	0	\$0	0
60	2276	5.300	Hagans	Alden	RobRds	Robinson SB271	Surface Drainage	Storm Proofing	N/A	0	50	0	13	14	0	\$4,635	44
Storm Proofed	2276	5.390	R&S	09/10/12		ECP Not	Other	Medium	-	-	0	0	17	1	0	\$105	44
Raise road by filling 3' (700' x 22' x 3') = 1,700 Yds.																	
60	6439	5.370	Haschak Bennett	16-094	Plum		Surface Drainage	THP App. Rd.	III	0	0	0	0	0	0	\$0	0
Private Seasonal	6439	0.000	Unk	10/15/19		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
Install a straw wattle or a straw bale barrier in the inside ditch that drains water from the landing at this point prior to the completion of timber operations.																	
60	1233	6.370	Haschak Pehl	06-163	Sage		Channel Scour	THP App. Rd.	II	0	0	0	4	0	0	\$1,292	5
Private Perm.	3113	0.000	PW	11/15/11		ECP Not	Armored Ford	THP Low	-	-	0	0	4	0	0	\$258	5
This existing ford shall receive maintenance such that any loose, unstable debris does not have access to a watercourse from the road prism or road surface. 18" and larger rock will be used to armor the outside edge of the ford and additional rock can be placed on the running surface if necessary to stabilize any loose debris.																	
60	1233	6.370	Haschak Bennett	16-094	Plum		Temp. Crossing	THP App. Rd.	II	0	0	0	0	0	0	\$0	0
Private Seasonal	6423	0.000	Unk	10/15/19		ECP Not	Armored Ford	Medium	-	-	0	0	0	0	0	\$0	0
Rocked ford. Add additional 3" to 6" rock to the surface of the crossing and slope back banks.																	
60	2864	6.390	Alden	Alden	06-163	Sage	No Problem	THP New Con.	II	0	0	0	0	0	0	\$500	0
Water Rights	2864	0.000	Unk	09/14/09		ECP Not	Water Hole	No Action	-	-	0	0	0	10	0	\$0	0
S018684 Slide Tank-2864 S018684 (513213) Slide Tank. One 5,000 gallon plastic tank. In September 2009 there was two gallons per minute flowing into the tank. It took two days to fill. Install intake valve to control flow to the tanks to only take 50% of the flow. The water is used for logging dust abatement. There is no electricity at the site. Usage is infrequent. Estimates are base on water truck loads per day converted into gallons.																	
60	649	6.500	Alden	Bennett	98-147	Doty Ridge	Cut Bank Failure	THP App. Rd.	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	2160	0.000	ME	07/04/03		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
The river is cutting into the road. More Riprap is needed. I told Pam we would do this.																	
60	649	6.500		Pehl	98-147	Doty Ridge	Cut Bank Failure	THP App. Rd.	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	2159	0.000	Unk	10/15/03		ECP Not	Excavate Soil	Medium	-	-	0	0	0	0	0	\$0	0
This is a point on the main appurtenant haul road adjacent to the North Fork Gualala. The road has been undercut the past two winters due to high stream flow. The banks will be reinforced by a series of large boulders and or Monschle blocks to divert water away from this bank. A sletch is included to aid in construction.																	
60	669	6.620	Haschak Pehl	06-163	Sage		Temp. Crossing	Maintenance	I	0	0	0	0	0	0	\$0	0
Private Seasonal	2803	0.000	PW	11/15/11		ECP Not	Bridge - Temp	Important 1600	-	-	0	0	0	0	0	\$0	0
Half pipe on Robinson Creek. Installation involves placing half pipe over wetted channel and building approach ramps on either side using the native gravel from the adjacent banks and channel but not from the wetted channel. If necessary two by fours can be placed in gravel perpendicular to channel so that edges of half pipe do not sink in too far. Also optionally brow logs can be placed on either end of half pipe (but not across wetted channel) to help contain gravel ramps so that less material is needed. The pipe will be removed no later than 11/15 of each year and stored in the forest off of the gravel bar. No riparian vegetation will be disturbed during installation. See 1600 permit requirements for any additional mitigations.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60	669	6.620	Haschak	Bennett	16-094	Plum	Temp. Crossing	THP App. Rd.	I		0	0	0	0	0	\$0	0
Private Seasonal	6418	0.000	Unk	10/15/19		ECP Not	Bridge - Temp	Medium	-	-	0	0	0	0	0	\$0	0
Install temporary railroad bridge or half pipe - see diagrams in section II map section for installation guidelines and in 1600 permit section (also in section II)																	
60	6425	7.370	Haschak	Bennett	16-094	Plum	Inside ditch	THP App. Rd.	Spr.		0	0	0	0	0	\$0	0
Private Seasonal	6425	0.000	Unk	10/15/19		ECP Not	Culv. Ditch Relief	Medium	-	-	0	0	0	0	0	\$0	0
Springy inside ditch. Install a spring drain pipe long enough to take down to flats. 6" pipe 100 feet long.																	
LTO shall install a critical dip along the road grade between map points 380 and 381 when installing the spring drain pipe at Map Point 380 prior to the completion of timber operations.																	
60	6424	7.380	Haschak	Bennett	16-094	Plum	Other	THP App. Rd.	III		0	0	0	2	2	\$430	40
Private Seasonal	6424	0.000	Unk	10/15/19		GWDR 1-16-094 M	Armored Ford	Medium	-	-	0	0	0	0	0	\$11	40
Install rock armored ford crossing prior to the completion of timber operations using 6-12 inch rock. See diagrams on pages 88 and 89.																	
60	667	7.470	Haschak	Bennett	16-094	Plum	Temp. Crossing	THP App. Rd.	I		0	0	0	0	0	\$0	0
Private Seasonal	6420	0.000	Unk	10/15/19		ECP Not	Bridge - Temp	Medium	-	-	0	0	0	0	0	\$0	0
Install temporary railroad bridge or half pipe - see diagrams in section II map section for installation guidelines and in 1600 permit section (also in section II)																	
60	2165	8.080	Alden	Pehl	01-298	Stagger Lee	No Problem	THP Recon.	I		0	0	0	0	0	\$0	0
Water Rights	2165	0.000	Unk	11/15/06		ECP Not	Water Hole	No Action	-	-	0	0	0	0	0	\$0	0
S018681																	
North Fork 5-2165 S018681 (035497) Water hole not used for THP. Upper NF crossing Pool. The water is used for logging dust abatement. There is no electricity at the site. Usage is infrequent. Estimates are base on water truck loads per day converted into gallons.																	
60	607	8.700	Kelly	Kelly	94-564	Miller Tract	Surface Drainage	THP Clean Up	N/A		0	0	0	32	0	\$3,808	636
Deactivated	607	10.000	RB	11/02/99		ECP Not	Remove Crossing	Medium	-	Pull	0	0	0	24	0	\$6	636
60	665	9.200	Alden	Kelly	Maintena	Maintenance	Surface Drainage	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	665	10.300	RR	12/22/99		ECP Not	Waterbar	Medium	-	-	0	0	0	56	0	\$0	0
60.02	5990	0.260	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	5990	0.000	Unk	09/10/13		ECP Not	Building	No Action	-	-	0	0	0	0	0	\$0	0
Watershed house. Was an old mill house. Two bedroom one bath.																	
60.025	5991	0.030	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	5991	0.000	Unk	09/10/13		ECP Not	Building	No Action	-	-	0	0	0	0	0	\$0	0
Bennett house. Was an old mill house.																	
60.0916	5992	0.050	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	5992	0.000	Unk	09/10/13		ECP Not	Building	No Action	-	-	0	0	0	0	0	\$0	0
Gualala Redwoods office building. Five offices downstairs. Two bedroom, two bath apartment upstairs.																	
60.0924	2313	0.000	Pehl	Pehl	99-460	Sugaree	No Problem	THP Maint Insp	N/A		0	0	0	0	0	\$0	0
Private Seasonal	2313	0.000	Unk	12/09/03		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Examined roads used in 2003.																	
60.092402	5993	0.200	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	5993	0.000	Unk	09/10/13		ECP Not	Building	No Action	-	-	0	0	0	0	0	\$0	0
Equipment barn at the Upper Mill.																	
60.092407	524	0.250	McCanl	McCanl	Storm Pro	Storm Proofing	Surface Drainage	Storm Proofing	N/A		0	0	0	18	16	\$4,493	0
Private Seasonal	524	0.550	ME	07/27/99		ECP Not	Dip Rolling	Low	-	-	0	0	20	9	0	\$0	0

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.092407	570	0.250	McCanl	Kelly	Storm Pro	Storm Proofing	Surface Drainage	Storm Proofing	N/A	0	0	0	13	43	2	\$4,665	147
Storm Proofed	570	0.550	ME	10/13/99		ECP Not	Rock Surface	Medium	-	-	0	0	11	4	0	\$32	147
Five Contractors under Scott Kelly																	
60.092407	394	0.250	Heath	Kelly	99-460	Sugaree	Gully	THP App. Rd.	N/A	0	0	0	1	0	0	\$215	0
Private Seasonal	545	0.000	ME	03/30/00		ECP Not	Other	THP Low	-	-	0	0	0	0	0	\$0	0
New culvert installation and road work has been completed. Fresh fill slope and culvert catchment needs erosion protection. Seed and Mulch 60'x40' fill and 10'x70' inside ditch and catchment area. Add additional rock to culvert inlet and outlet fill slope. Approximate volume of rock needed is 20 cubic yards. Add trash rack above culvert inlet. A seasonal road insects the main haul road at the culvert crossing area. Sediment is directed down this road and is deposited into culvert inlet basin. To correct this problem, the seasonal road will be closed by placing a barrier across the road approximately 75 feet from the main road edge and a gate or barrier at the property boundary 1/4 from this location to prevent vehical traffic on the seasonal road. Construct two water bars spaced 75 feet appart above the barrier. Water bar outlets will be directed on slash concentrations. Seed and mulch the area between the barrier and haul road edge for additional erosion protection.																	
60.092407	394	0.260	McCanl	Kelly	Storm Pro	Storm Proofing	Culv.-HDP-Plug	Storm Proofing	III	0	0	0	3	0	0	\$738	237
Private Seasonal	394	0.000	ME	07/21/99		ECP Not	Culv. Replace	High	-	-	0	0	5	5	600	\$3	237
24" CMP on a class III stream CMP is 80% plugged. This site will connect with #5 to right there are two roads on both the left and right above crossing. These are draining onto main road, waterbar both roads																	
60.092407	395	0.270	McCanl	Kelly	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	N/A	0	0	0	0	0	0	\$350	300
Private Seasonal	395	0.000	ME	07/21/99		ECP Not	Excavate Soil	High	-	-	0	0	0	14	319	\$1	270
Excavate potential roadfill failure above class III the two roads draining from above crossing #6 drain down road and has caused a 100 x 6 x 10 = 222 gully 100% del.																	
60.092407	1098	0.360	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	1098	0.000	Unk	12/05/00		ECP Not	Gate	Low	-	-	0	0	0	0	0	\$0	0
60.092407	686	0.420	Kelly	Kelly	Maintena	Maintenance	Culv.-Ditch Relief	Maintenance	N/A	0	0	0	8	2	0	\$1,435	0
Private Seasonal	686	0.000	ME	02/15/00		ECP Not	Culv. Ditch Relief	Medium	18"	18"	0	0	5	5	0	\$0	0
Dug out soft spot and added a second DRP																	
60.092407	396	0.550	McCanl	Kelly	Storm Pro	Storm Proofing	Humboldt	Storm Proofing	II	0	0	0	8	2	0	\$4,979	500
Private Seasonal	396	0.000	ME	07/21/99		ECP Not	Excavate Soil	High	-	48"	60	0	7	9	1,088	\$10	500
Excavate Humb. Install 48" CMP at grade remove perch material on both banks below road.																	
60.092407	396	0.550	Kelly	Kelly	Maintena	Maintenance	Cut Bank Failure	Maintenance	II	0	0	0	7	10	0	\$1,985	0
Private Seasonal	704	0.000	ME	03/20/00		ECP Not	Excavate Soil	Medium	30"	-	0	0	9	2	0	\$0	0
Cut bank failure. Excavate soil and end haul, do not put spoils on newly rockd road!																	
60.092407	396	0.550	Heath	Kelly	99-460	Sugaree	Gully	THP App. Rd.	N/A	0	0	0	1	0	0	\$515	0
Private Seasonal	544	0.000	ME	03/30/00		ECP Not	Other	THP Low	36"	-	0	0	4	0	0	\$0	0
New culvert installation and road work has been completed. Fresh fill slope and culvert catchment needs erosen protection. Seed and Mulch 60'x25' fill and 10'x30' cut and catchment area. Add an additional 10 cubic yards of rock above culvert outlet to road edge. Construct rolling dip uphill of culvert crossing and direct outlet into slash concentration. Add trash rack above culvert inlet.																	
60.092407	396	0.550	McCanl	Alden	Storm Pro	Storm Proofing	Cut Bank Failure	Storm Proofing	II	0	0	0	12	11	0	\$2,715	20
Storm Proofed	2516	0.000	ME	02/15/05		ECP Not	Excavate Soil	High	48"	-	0	0	7	0	20	\$136	20
Right bank cut bank failure. Remove failure rock armor. Increase critical dip and rock armor fill slope in case of culvert failure.																	
60.092407	2728	0.550	Alden	Pehl	05-023	Clover	Cut Bank Failure	THP ECP	N/A	0	0	0	24	25	0	\$4,635	100
Private Perm.	2728	0.000	R&S	02/10/06		1B105023MEN	Excavate Soil	High	-	-	0	0	16	0	3,000	\$93	50
A large bank failure crossed the road and went down the bank. Only a very little entered the creek. A long low culvert prevented more delivery. Excavate and end haul slide material. Slash mulch the fill slope.																	

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.092407	397	0.570	McCanl	Kelly	Storm Pro	Storm Proofing	Cut Bank Failure	Storm Proofing	N/A	0	0	0	1	0	0	\$93	0
Private Seasonal	397	0.000	ME	07/21/99		ECP Not	Excavate Soil	Medium	-	-	0	0	1	0	0	\$0	0
Cutbank failure blocking 80% of road spoil can be pushed down road.																	
60.092407	398	0.580	McCanl	Kelly	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	N/A	0	0	0	1	0	0	\$93	0
Private Seasonal	398	0.000	ME	07/21/99		ECP Not	Other	Low	-	-	0	0	1	0	0	\$0	0
Past roadfill failure 60 x 5 x 15 =166 drain surface runoff away from this site.																	
60.092407	547	0.600	Heath	Pehl	99-460	Sugaree	Dip Rolling	THP App. Rd.	N/A	0	0	0	0	0	0	\$800	0
Private Seasonal	547	0.000	Unk	06/15/03		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	\$0	0
Road reconstrution. Outslope with rolling dips entire road segment starting at intersection.																	
60.092407	548	0.620	Heath	Pehl	99-460	Sugaree	Surface Drainage	THP App. Rd.	III	0	0	0	0	0	0	\$300	0
Private Seasonal	548	0.000	Unk	11/15/03		ECP Not	Culv. Install	THP Low	-	18"	0	0	0	0	0	\$0	0
Road crosses head of Class III draw. Install temp 18" CMP. Remove after operations. Construct dip and seed and mulch bare material before October 15th.																	
60.092407	549	0.750	Heath	Pehl	99-460	Sugaree	Surface Drainage	THP App. Rd.	II	0	0	0	0	0	0	\$300	0
Private Seasonal	549	0.000	Unk	11/15/03		ECP Not	Culv. Install	THP Low	-	12"	0	0	0	0	0	\$0	0
A large slump and sag pond is located uphill from road and landing location. The main skid road form unit #2 crossess the drainage from the sag pond. Install a temp 40' of 12 cmp at this crossing. Remove after operations. Maintain present grade of drainage. Seed and mulch bare soil at crossing.																	
60.092439	571	0.000	McCanl	Kelly	Storm Pro	Storm Proofing	Surface Drainage	Storm Proofing	N/A	0	0	0	16	58	2	\$6,228	196
Storm Proofed	571	0.400	ME	10/13/99		ECP Not	Rock Surface	Medium	-	-	0	0	15	5	0	\$32	196
Contractor under Scott Kelly																	
60.092439	389	0.060	McCanl	Kelly	Storm Pro	Storm Proofing	Culv.	Storm Proofing	II	0	0	0	2	0	0	\$450	0
Private Seasonal	389	0.000	Unk	07/22/99		ECP Not	Culv. Maintenance	Medium	-	-	0	0	2	0	0	\$0	0
Add 20' of 24" to exsisting CMP to widen turn																	
60.092439	390	0.190	McCanl	Kelly	Storm Pro	Storm Proofing	Inside ditch	Storm Proofing	N/A	0	0	0	1	0	0	\$375	0
Private Seasonal	390	0.000	Unk	07/22/99		ECP Not	Culv. Ditch Relief	Medium	-	-	0	0	1	4	0	\$0	0
Install 18' DRL at sink in inside ditch.																	
60.092439	391	0.270	McCanl	Kelly	Storm Pro	Storm Proofing	Inside ditch	Storm Proofing	N/A	0	0	0	1	0	0	\$175	0
Private Seasonal	391	0.000	Unk	07/22/99		ECP Not	Dip Rolling	Medium	-	-	0	0	1	0	0	\$0	0
Excavator needed to clear below road at dip location. Dump needed for rock.																	
60.092439	392	0.320	McCanl	Kelly	Storm Pro	Storm Proofing	Inside ditch	Storm Proofing	N/A	0	0	0	1	0	0	\$225	0
Private Seasonal	392	0.000	Unk	07/22/99		ECP Not	Culv. Ditch Relief	Medium	-	-	0	0	1	0	0	\$0	0
Install 18" DRL																	
60.092439	393	0.380	McCanl	Kelly	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	III	0	0	0	18	0	0	\$3,388	1,037
Private Seasonal	393	0.000	ME	06/29/99		ECP Not	Excavate Soil	High	-	-	0	0	18	6	1,037	\$3	985
Potential roadfill leading into class III stream crossing 80 x10 x35 =1037 yds this include old cars and tires ect. The two of fill failure is in class III																	
60.09243906	550	0.000	Heath	Pehl	99-460	Sugaree	Gully	THP App. Rd.	N/A	0	0	0	0	0	0	\$1,500	0
Private Seasonal	550	0.200	Unk	11/15/03		ECP Not	Excavate Soil	THP Low	-	-	0	0	0	0	0	\$0	0
Reconstruct road segment. Narrow road that is deeply cut into ridge top. Remove a few trees and widen as necessary. Use excavated material to fill in road grade where needed. Install rolling dips where existing water bars are located.																	

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.0926	5530	0.000	Alden	Alden	Maintena	Maintenance	Surface Drainage	Storm Proofing	N/A		0	0	0	0	0	\$0	0
Not Connected	5530	0.193	Unk	08/25/10		ECP Not	Tip and Dip	Medium	-	-	0	0	0	0	0	\$0	0
Old burn pits																	
60.3009	5603	0.150	Haschak	Pehl	11-043	Rose	Temp. Crossing	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	5603	0.000	Unk	10/17/14		ECP Not	Dip Rolling	Medium	-	-	0	0	0	0	0	\$0	0
Class III xing on seasonal road has water bar now but make a larger rolling dip to keep water from going down road to the north.																	
60.3009	5588	0.290	Haschak	Pehl	11-043	Rose	Temp. Crossing	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	5588	0.000	Unk	10/17/14		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Class III seasonal road crossing. Maintain existing low spot. Scrap off any loose material.																	
60.3011	2092	0.000	Pehl	Pehl	99-087	Groshong Ridge	No Problem	THP Maint Insp	N/A		0	0	0	0	0	\$0	0
Private Seasonal	2092	0.000	Unk	01/29/03		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected THP appurtenant roads. One bank slump noted, see road point 2091.																	
60.3011	5696	0.000	Chidlaw	Chidlaw	Maintena	Maintenance	Other	Maintenance	N/A		0	0	0	0	0	\$698	0
Private Seasonal	5696	1.400		08/01/11		ECP Not	Herbicides	Medium	-	-	0	0	0	19	0	\$0	0
60.3011	1710	0.050	Pehl	Pehl	99-087	Groshong Ridge	Surface Drainage	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	1710	0.510	WL	11/15/03		ECP Not	Other	THP Low	-	-	0	0	0	0	0	\$0	0
This section of the road will be improved to reduce sediment production from waterbars by installation of an insloped road with ditch relief culverts on all sustained grades at a distance not to exceed 250 feet. Where existing grade changes in the road make it feasible, rolling dips or culverts shall be installed. Revised: This section of road shall be outsloped and cross-drained with rolling dips, where practical. All outside berms shall be removed. Short segments of through-cut road shall maintain an outslope through the cut and have functional outslopeing or dips upgrade from the through-cut.																	
60.3011	2417	0.050	Pehl	Pehl	Storm Pro	Storm Proofing	Surface Drainage	Storm Proofing	N/A		0	0	0	0	0	\$0	357
Storm Proofed	2417	0.780	Unk	08/03/04		ECP Not	Tip and Dip	Medium	-	-	0	0	0	0	0	\$0	357
Road outsloped and dipped where feasible to disconnect surface drainage from watercourses and to reduce future maintenance needs.																	
60.3011	1804	0.200	Pehl	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	N/A		0	0	0	0	0	\$0	0
Private Seasonal	1804	0.000	WL	11/15/03		ECP Not	Culv. Ditch Relief	THP Low	-	18"	0	0	0	0	0	\$0	0
Approximately 75 feet downgrade from the intersection at map point 1, install an 18" culvert. A ditch shall be constructed along the cut bank and across the intersection with the abandoned road to collect water to the pipe.																	
60.3011	136	0.220	Magnus	Pehl	99-087	Groshong Ridge	Surface Drainage	THP App. Rd.	N/A		0	0	0	0	0	\$472	0
Private Seasonal	136	0.000	WL	11/14/02		ECP Not	Culv. Ditch Relief	THP High	-	18"	40	0	0	0	0	\$0	0
An inside ditch collects water, erosion of the road surface is visible at the discharge end of the waterbar. Install a ditch relief culvert upgrade from the road intersection. Revised: Upon completion of operations, the road and intersection in this vicinity shall be outsloped and dipped to ensure drainage. (Replaced by A4 ID#1805)																	
60.3011	1805	0.260	Pehl	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	N/A		0	0	0	0	0	\$0	0
Private Seasonal	1805	0.000	WL	11/15/02		ECP Not	Culv. Ditch Relief	THP Low	-	18"	0	0	0	0	0	\$0	0
Approximately 200 feet upgrade from map point 1, install an 18" culvert to cross drain surface drainage from the area above the road. In inside ditch shall be constructed to collect water to the pipe.																	
60.3011	1806	0.300	Pehl	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	N/A		0	0	0	0	0	\$0	0
Private Seasonal	1806	0.000	WL	11/15/02		ECP Not	Culv. Ditch Relief	THP Low	-	18"	0	0	0	0	0	\$0	0
Install an 18" culvert to cross drain surface drainage from the area above the road. An inside ditch shall be constructed to collect water to the pipe.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.3011	674	0.350	Kelly	Pehl	99-087	Groshong Ridge	Other	THP Mitigation	IV	0	0	0	0	0	0	\$0	0
Private Seasonal	674	0.000	Unk	07/01/00		ECP Not	No Action	THP Low	-	-	0	0	0	0	0	\$0	0
There is a spring east (uphill) of the road used for domestic water supply. There is a buried wter line on in the road at this point. Do not grade, dig, skid logs etc. without locating the pipe. No equipment ops above or below the road at this point. See THP Item 25 Map Point 2 for a more complete explanation.																	
60.3011	137	0.360	Magnus	Pehl	99-087	Groshong Ridge	Surface Drainage	THP App. Rd.	N/A	0	0	0	0	0	0	\$472	0
Private Seasonal	137	0.000	WL	11/15/02		ECP Not	Culv. Ditch Relief	THP Low	-	18"	40	0	0	0	0	\$0	0
Perennial seep feeds inside ditch. Install a ditch relief culvert.																	
60.3011	138	0.510	Magnus	Pehl	99-087	Groshong Ridge	Other	THP App. Rd.	III	0	0	0	0	0	0	\$736	0
Private Seasonal	138	0.000	WL	11/15/02		ECP Not	Culv. Install	THP Low	-	24"	40	0	0	0	0	\$0	0
Install 24" CMP with down spout. Install an inside ditch uphill for approx 100'. Rock road (minimum depth 10") and ditch 100' above and below the culvert. Revised: Road crosses a class III watercourse. Install a 24 inch culvert. Install clean rock on the road surface to a minimum depth of 10 inches extending at least 100 feet above and below the crossing. Maintain the outsloping of the road surface upgrade from the crossing.																	
60.3011	1740	0.510	Pehl	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	1740	0.650	Unk	10/15/04		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	\$0	0
Re-grade road. Finished road will be outsloped with permanent rolling dips. Reshaping of road surface will be completed prior to commencement of hauling of logs. (From .43 to .65 the road will be drained with permanent rolling dips. The dips are to be rocked and the out flow armored with rock if necessary or hay baled to control sedimentation. Do NOT remove or disturb the outside berm no sidecasting permitted in this area. Also see Road data report # 6. Reference THP map points 4-6 and geology report point 6. Basically you have to improve road drainage without letting any turbid water go off the side of the road do not leave any exposed soil on the outside edge of the road. You are protecting the watershed the spring boxes are in not just the watercourse.)																	
60.3011	1741	0.550	Pehl	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	1741	0.000	Unk	11/15/02		ECP Not	Other	THP Low	-	-	0	0	0	0	0	\$0	0
Domestic water supply below road at this point. No dirt from road opening or maintenance shall be bladed over the downslope edge of the haul road or from the landing in unit 1. Prior to Nov. 15 of any year with operation on this road, the entire road surface that drains into the class III shall be mulched with straw. Discharge points from dips and waterbars will have straw bales or similar devices to trap sediment. No fueling, servicing, or maintenance of heavy equipment shall occur where on this road. This section of road gets rocked rolling dips no sidecasting of material, no berm disturbance. (Not sure where this applies, N/A.)																	
60.3011	677	0.570	Kelly	Pehl	99-087	Groshong Ridge	Dip Rolling	THP Mitigation	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	677	0.000	WL	11/15/02		ECP Not	Rock Surface	High	-	-	0	0	0	0	0	\$0	0
A swale forming the headwaters of a class III watercourse below the haul road that drains into the domestic water source at Map Point 4.2. Install a permanent rocked dip with the rocked road surface extending at least 100 feet above and below the dip. Clean road rock shall be installed to a minimum depth of 10 inches.																	
60.3011	678	0.650	Kelly	Pehl	99-087	Groshong Ridge	Dip Rolling	THP Mitigation	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	678	0.000	WL	11/15/02		ECP Not	Rock Surface	THP High	-	-	0	0	0	0	0	\$0	0
An existing waterbar cuts across the intersection with the road to Unit 2 and discharges into the Class III watercourse in which point 4.5 is located. The tail-out of the waterbar is eroding the road cut bank at the point of discharge. Prior Nov. 15th of the first year operations are conducted on this THP a rolling dip will be installed, the outfall of the dip will be armored with rock or other suitable material to reduce sediment input into the Class III watercourse.																	
60.3011	678	0.650	Haschak	Pehl	11-043	Rose	No Problem	THP App. Rd.	III	0	0	0	0	0	0	\$0	0
Private Seasonal	5601	0.000	Unk	10/17/14		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
Existing class III crossing with rock armored outlet. If fill is put into crossing in order to provide for truck passage a layer of straw will be laid down first in order to help relocate original bottom of crossing. If water is present a 4 " or larger temporary pipe will be installed. Fill, straw and pipe (if used) will be removed at close of operations and rock armored outlet will be retained or repaired if damaged.																	
60.3011	2969	1.200	Pehl	Pehl	Maintena	Maintenance	Surface Drainage	Maintenance	N/A	0	0	0	8	0	0	\$908	0
Private Seasonal	2969	2.600	R&S	06/05/06		ECP Not	Tip and Dip	Medium	-	-	0	0	8	1	0	\$0	0
Cleared windthrows, reworked dips.																	

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Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.3011	4441	1.400	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A		0	0	0	66	0	0	\$21,660	758
Storm Proofed	4441	2.950	R&S	07/26/12		ECP Not	Tip and Dip	Medium	-	-	0	0	71	125	0	\$29	758	
60.3011	4431	1.740	Alden	Alden	RobRds	Robinson SB271	Dip Critical	Assessment	III		0	30	0	2	2	0	\$430	50
Storm Proofed	4431	0.000	R&S	07/26/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	0	0	0	20	\$9	50
High on class III. Rock Ford or 24" culvert.																		
60.3011	4431	1.740	Haschak Pehl		11-043	Rose	Dip Critical	THP App. Rd.	III		0	10	0	4	0	0	\$1,000	50
Private Seasonal	5591	0.000	Unk	10/17/14		ECP Not	Armored Ford	Medium	-	RkFd	0	0	4	2	20	\$20	50	
Class III seasonal road crossing. High on class III. Maintain existing rolling dip.																		
60.3011	139	1.780	Kelly	Pehl	99-087	Groshong Ridge	Temp. Crossing	THP Recon.	III		0	0	0	8	0	0	\$910	0
Private Seasonal	139	0.000	WL	11/15/02		ECP Not	Culv. Install	Medium	-	RkFd	0	0	2	0	0	\$0	0	
THP allows option of installation of a rockford crossing with overside drain. Or Installation of a 30" CMP.																		
60.3011	139	1.780	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III		0	20	0	2	0	0	\$260	0
Storm Proofed	5808	0.000	R&S	07/21/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	0	0	0	\$0	0	
Add rock to rockford																		
60.3011	139	1.780	Haschak Pehl		11-043	Rose	No Problem	THP App. Rd.	II		0	0	0	0	0	0	\$0	0
Private Seasonal	5597	0.000	Unk	10/17/14		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0	
Existing road armored crossing. This was a class III that has been upgraded and was previously stormproofed. Crossing will be used as is. Do not grade this section of road.																		
60.3011	4432	1.860	Alden	Alden	RobRds	Robinson SB271	Culv.	Assessment	II		0	20	0	6	2	0	\$950	75
Storm Proofed	4432	0.000	R&S	07/26/12		ECP Not	Culv. Replace	Medium	12"	RkFd	40	0	0	0	0	\$13	75	
Head of Class II. Water emerges just above the road.																		
60.3011	4432	1.860	Haschak Pehl		11-043	Rose	No Problem	THP App. Rd.	Spr.		0	0	0	0	0	0	\$0	0
Private Seasonal	5590	1.860	Unk	10/17/14		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0	
Clean head of culvert.																		
60.3011	4433	1.880	Alden	Alden	RobRds	Robinson SB271	Dip Critical	Assessment	Swale		0	0	0	0	0	0	\$0	50
Storm Proofed	4433	0.000	R&S	07/26/12		ECP Not	Dip Critical	Medium	-	-	0	0	0	0	0	\$0	50	
Swale crossing. No sign of scour. Rock if available.																		
60.3011	4433	1.880	Haschak Pehl		11-043	Rose	Dip Critical	THP App. Rd.	Swale		0	0	0	2	0	0	\$450	0
Private Seasonal	5607	0.000	Unk	10/17/14		ECP Not	Dip Critical	Medium	-	-	0	0	2	0	0	\$0	0	
Swale crossing. No sign of scour. Maintain rolling dip.																		
60.3011	4434	1.950	Alden	Alden	RobRds	Robinson SB271	Dip Critical	Assessment	N/A		0	10	0	2	1	0	\$345	10
Storm Proofed	4434	0.000	R&S	07/26/12		ECP Not	Dip Critical	Low	-	RkFd	0	0	0	0	0	\$35	10	
Very small draw. Armor if rock is available.																		
60.3011	4434	1.950	Haschak Pehl		11-043	Rose	Dip Critical	THP App. Rd.	Swale		0	0	0	4	0	0	\$900	0
Private Seasonal	5608	0.000	Unk	10/17/14		ECP Not	Dip Critical	Low	-	-	0	0	4	0	0	\$0	0	
Very small draw. Maintain rolling dip.																		
60.3011	4435	2.060	Alden	Alden	RobRds	Robinson SB271	Dip Critical	Assessment	N/A		0	20	0	1	0	0	\$130	10
Storm Proofed	4435	0.000	R&S	07/26/12		ECP Not	Dip Critical	Low	-	RkFd	0	0	0	0	0	\$13	10	
Very small draw. Armor if rock is available.																		

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.3011	4435	2.060	Haschak	Pehl	11-043	Rose	Dip Critical	THP App. Rd.	Swale		0	0	0	2	0	0	\$450	0
Private Seasonal	5609	0.000	Unk	10/17/14		ECP Not	Dip Critical	Medium	-	-	0	0	2	0	0	\$0	0	
Very small draw. Maintain rolling dip.																		
60.3011	4436	2.080	Alden	Alden	RobRds	Robinson SB271	Dip Critical	Assessment	III		0	20	0	1	0	0	\$535	40
Storm Proofed	4436	0.000	R&S	07/26/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	0	9	20	\$13	40	
Small Class III. Signs of scour.																		
60.3011	4436	2.080	Haschak	Pehl	11-043	Rose	Dip Critical	THP App. Rd.	Swale		0	0	0	4	0	0	\$900	0
Private Seasonal	5610	0.000	Unk	10/17/14		ECP Not	Dip Critical	Medium	-	-	0	0	4	0	0	\$0	0	
Very small draw. Maintain rolling dip and rock armor outlet with fractured rock from the cut bank just to the south unless larger rock is available nearby.																		
60.3011	1742	2.100	Pehl	Pehl	99-087	Groshong Ridge	Slide - Shallow	THP Non-Road	N/A		0	0	0	0	0	0	\$0	0
Private Seasonal	1742	0.000	Unk	11/15/02		ECP Not	No Action	THP Low	-	-	0	0	0	0	0	\$0	0	
There is an active slide below the road. The LTO shall take care to avoid locating waterbreaks in the truck road upslope from the slide and in any firelines constructed along the west edge of the unit .																		
60.3011	5804	2.190	Alden	Alden	RobRds	Robinson SB271	No Problem	Maintenance	N/A		0	0	0	0	0	0	\$0	0
Storm Proofed	5804	0.000	R&S	05/12/12		ECP Not	Rock Pit	No Action	-	-	0	0	0	0	0	\$0	0	
This is a good rock pit.																		
60.3011	140	2.200	Magnus	Pehl	99-087	Groshong Ridge	Temp. Crossing	THP Mitigation	III		0	0	0	4	0	0	\$380	0
Private Seasonal	140	0.000	WL	11/15/02		ECP Not	Rock Surface	THP High	-	RkFd	0	0	0	0	0	\$0	0	
This is an existing temporary class III crossing in good condition. THP specifies restoring to natural stream grade on completion of operations or the beginning of the winter period. Make this a rock ford crossing at natural grade for the watercourse. Access is needed to site prep and plant unit.																		
60.3011	140	2.200	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III		0	20	0	0	0	0	\$0	0
Storm Proofed	5809	0.000	R&S	07/22/12		ECP Not	Culv. Install	Medium	-	RkFd	0	0	0	0	0	\$0	0	
Add rock to rockford																		
60.3011	683	2.220	Kelly	Pehl	99-087	Groshong Ridge	Fill - Road	THP Mitigation	N/A		0	0	0	0	0	0	\$200	0
Private Seasonal	683	0.000	Unk	07/01/00		ECP Not	Other	THP Low	-	-	0	0	2	0	0	\$0	0	
Fill slope failure at this point. THP says perched above watercourse but no problem. Outslope the road in this area. Correct drainage on skid trail above the road with waterbars, drain water away from slide.																		
60.3011	5805	2.300	Alden	Alden	RobRds	Robinson SB271	No Problem	Maintenance	N/A		0	0	0	0	0	0	\$0	0
Storm Proofed	5805	0.000	R&S	05/12/12		ECP Not	Rock Pit	No Action	-	-	0	0	0	0	0	\$0	0	
This is a good rock pit.																		
60.3011	141	2.320	Magnus	Pehl	99-087	Groshong Ridge	Culv.-Plug	THP App. Rd.	III		0	0	0	1	0	0	\$170	0
Private Seasonal	141	0.000	WL	11/15/02		ECP Not	Culv. Maintenance	THP High	30"	-	0	0	1	0	0	\$0	0	
Clean culvert inlet. Upgrade from crossing, outslope the road. Install a waterbar where flagged.																		
60.3011	141	2.320	Alden	Alden	RobRds	Robinson SB271	Culv.	Assessment	II		0	30	0	42	7	0	\$15,528	4,000
Storm Proofed	4437	0.000	R&S	07/20/12		ECP Not	Culv. Install	High	30"	36"	60	0	57	23	4,000	\$4	4,000	
Old failing landing. 30" x 20' culvert is set high. Water emrges 100' below landing and goes under 50' up from landing. Excavate top to bottom and replace culvert. End haul right 300' to ridge top.																		

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Road #	GIS#	Mile Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds		
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.3011	142	2.580	Magnus	Pehl	99-087	Groshong Ridge	Culv.	THP Mitigation	II		0	0	0	0	0	\$0	0	
Private Seasonal	142	0.000	Unk	10/15/03		ECP Not	Other	THP Low	30"	-	0	0	0	0	0	\$0	0	
Existing culvert has a "shotgun" outfall. THP specifies cutting culvert end to grade and installing a down spout and/or rock energy disapator at the outfall. Install downspout or large rock to direct outflow into stream channel and dissipate energy of the exiting water.																		
60.3011	142	2.580	Alden	Alden	RobRds	Robinson SB271	Culv.	Assessment	II		0	220	0	103	65	0	\$35,603	4,000
Storm Proofed	4438	0.000	R&S	07/18/12		ECP Not	Culv. Replace	High	30"	48"	120	0	77	47	4,000	\$9	4,000	
Old landing. 30" x 40' CMP with down spout. Small class II enters from right bank. Stored sediment runs from 75' downstream to 200' upstream. The upper end of the stored sediment is vegetated and stable. Excavate 75' downstream and 50' upstream. Rock armor head of cut to stabilized.																		
60.3011	4439	2.590	Alden	Alden	RobRds	Robinson SB271	Culv.	Assessment	II		0	10	0	6	0	0	\$760	50
Storm Proofed	4439	0.000	R&S	07/18/12		ECP Not	Culv. Install	Medium	-	-	60	0	0	1	50	\$15	50	
This is a small class II that enters the landing and will need a separate pipe. It may be possible to bring it in above the larger pipe. In that case increasing site 142's culvert to 48" should carry all the water.																		
60.3011	143	2.640	Magnus	Pehl	99-087	Groshong Ridge	Cut Bank Failure	THP App. Rd.	N/A		0	0	0	0	0	0	\$160	0
Private Seasonal	143	0.000	WL	11/15/02		ECP Not	Other	THP Low	-	-	0	0	2	0	0	0	\$0	0
Remove organic material and incorporate slide material into road prism.																		
60.3011	1736	2.680	Pehl	Pehl	99-087	Groshong Ridge	Culv.	THP App. Rd.	III		0	0	0	0	0	0	\$0	0
Private Seasonal	1736	0.000	Unk	11/15/02		ECP Not	Culv. Maintenance	No Action	24"	-	0	0	0	0	0	0	\$0	0
Existing 24" CMP with downspout in a Class III watercourse. Drainage structure appears to function adequately.																		
60.3011	4440	2.800	Alden	Alden	RobRds	Robinson SB271	Dip Critical	Assessment	N/A		0	0	0	0	0	0	\$210	5
Storm Proofed	4440	0.000	R&S	11/08/11		ECP Not	Dip Critical	Low	-	-	0	0	2	0	0	0	\$42	5
Small draw. Not a Class III. Critical dip.																		
60.3011	4430	2.950	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	0	\$0	0
Not Connected	4430	3.060	Unk	12/11/07		ECP Not	No Action	Medium	-	-	0	0	0	0	0	0	\$0	0
This is the end of the road. There are no draws the road has not been used for at least ten years.																		
60.301104	680	0.000	Kelly	Pehl	99-087	Groshong Ridge	Other	THP Mitigation	N/A		0	0	0	0	0	0	\$0	0
Private Seasonal	680	0.000	WL	11/15/02		ECP Not	Waterbar	Medium	-	-	0	0	0	0	0	0	\$0	0
Turn waterbar into Groshong Gulch away from the clearcut.																		
60.301104	1737	0.020	Pehl	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	N/A		0	0	0	0	0	0	\$0	0
Private Seasonal	1737	0.000	WL	11/15/02		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	0	\$0	0
Install rolling dip to cross drain road near intersection of road and landing.																		
60.301104	1738	0.040	Pehl	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	N/A		0	0	0	0	0	0	\$0	0
Private Seasonal	1738	0.000	WL	11/15/02		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	0	\$0	0
Outslope and Dip to cross drain the road above steep through-cut.																		
60.301104	679	0.200	Kelly	Pehl	99-087	Groshong Ridge	Other	THP Mitigation	N/A		0	0	0	0	0	0	\$0	0
Private Seasonal	679	0.000	WL	11/15/02		ECP Not	Waterbar	THP Low	-	-	0	0	0	0	0	0	\$0	0
Refresh and rebuild waterbars on this section of road (Map Point 1 to 5). Outslope and dip where possible. This road is not to be used for hauling. Upon completion, block road at map points 1 and 5.																		

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.301107	676	0.000	Kelly	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	N/A		0	0	0	0	0	\$0	0
Private Seasonal	676	0.200	WL	11/15/02		ECP Not	Rock Surface	THP Med	-	-	0	0	0	0	0	\$0	0
Re-grade road. Finished road will be outsloped with permanent rolling dips. Reshaping of road surface will be completed prior to commencement of hauling of logs. (This section of road drains into Howdens water collection area. Rocked rolling dips will be installed instead of waterbars. The fill edge will be left untouched and vegetated as much as possible. Outlets to rolling dips will have straw bails to act as sediment trap.)																	
60.301107	4442	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	171
Storm Proofed	4442	0.350	Unk	12/12/07		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	171
This is a little use spur road. Except for the one rocked ford, there is no chance for delivery. It is well drained and water barred.																	
60.301107	675	0.150	Kelly	Pehl	99-087	Groshong Ridge	Other	THP Mitigation	III		0	0	0	0	0	\$0	0
Private Seasonal	675	0.160	Unk	07/01/00		ECP Not	No Action	Medium	-	RkFd	0	0	0	0	0	\$0	0
Domestic water supply below road at this point. No dirt from road opening or maintenance shall be bladed over the downslope edge of the haul road or from the landing in unit 2. Prior to Nov. 15 of any year with operation on this road, the entire road surface that drains into the class III shall be mulched with straw. Discharge points from dips and waterbars will have straw bales or similar devices to trap sediment (unless they have been previously rocked). No fueling, servicing, or maintenance of heavy equipment shall occur where on this road. This section of road gets rocked rolling dips no sidecasting of material, no berm disturbance.																	
60.301107	675	0.150	Haschak	Pehl	11-043	Rose	Other	THP App. Rd.	Spr.		0	0	0	0	0	\$0	0
Private Seasonal	5604	0.160	Unk	10/17/14		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
Domestic water supply below road at this point. No dirt from road opening or maintenance shall be bladed over the downslope edge of the haul road or from the landing in unit 2. Prior to Nov. 15 of any year with operation on this road, the entire road surface that drains into the area below road shall be mulched with straw and discharge points from dips and waterbars will have straw bales or similar devices to trap sediment (unless they have been previously rocked). No fueling, servicing, or maintenance of heavy equipment shall occur when on this road. If falling or skidding damages any water lines they will be repaired immediately.																	
60.301107	1739	0.160	Pehl	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	III		0	0	0	0	0	\$0	0
Private Seasonal	1739	0.000	Unk	10/15/03		ECP Not	Rock Surface	THP Med	-	-	0	0	0	0	0	\$0	0
Minimize grading and disturbance of the road's surface above the domestic water supply, the road approaches to the rolling dip shall be left crowned and the outside edge of the road left undisturbed. The rolling dip shall be rocked on 50 feet of either side of its' axis. Any bare mineral soil along the outside edge of the rolling dip shall be mulched.																	
60.3011191	4428	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	4428	0.200	Unk	12/11/07		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
60.301139	2867	0.000	Alden		Maintena	Maintenance	No Problem	Storm Proofing	N/A		0	0	0	0	0	\$0	244
Storm Proofed	2867	0.500	Unk	10/15/03		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	244
The road is drained and stable. No work necessary.																	
60.301139	4471	0.500	Alden		Maintena	Maintenance	No Problem	Storm Proofing	N/A		0	0	0	0	0	\$0	337
Deactivated	4471	1.190	Unk	10/15/03		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	337
The road is drained and stable and the culverts are pulled. No work necessary.																	
60.301139	144	0.500	Kelly	Pehl	99-087	Groshong Ridge	Temp. Crossing	THP Mitigation	II		0	0	0	0	0	\$0	0
Private Seasonal	144	0.000	Unk	10/15/03		ECP Not	Remove Crossing	THP High	-	Pull	0	0	0	0	0	\$0	0
Two options: 1) If use of this road for access is desired beyond that necessary for execution of this THP, installation of a 30" diameter culvert is required. 2) If the road will be put to bed until the next harvest entry, the LTO shall install a temporary pipe if water is present at time of timber operations. Prior to start the winter period of any year in which operations take place, all fill material shall be removed, the sides sloped back and the stream channel restored to its original grade where it crosses the road.																	
60.301139	145	0.660	Kelly	Pehl	99-087	Groshong Ridge	Surface Drainage	THP Mitigation	Spr.		0	0	0	0	0	\$472	0
Private Seasonal	145	0.000	Unk	10/15/03		ECP Not	Culv. Install	THP Low	-	18"	40	0	0	0	0	\$0	0
Perennial seep. Install a pipe to drain road surface water if water is present at tim of operations. If continued access is desired, installation of an 18 inch culvert or a rocked ford with an overside drain is required.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.301139	146	0.740	Kelly	Pehl	99-087	Groshong Ridge	Surface Drainage	THP App. Rd.	Spr.		0	0	0	4	0	0	\$700	0
Private Seasonal	146	0.000	Unk	11/15/02		ECP Not	Dip Critical	THP Low	-	Pull	0	0	0	4	0	\$0	0	
Perennial seep. Install temporary pipe or 18 inch permanent culvert.																		
60.301139	147	0.830	Magnus	Pehl	99-087	Groshong Ridge	Cut Bank Failure	THP App. Rd.	N/A		0	0	0	0	0	0	\$600	0
Private Seasonal	147	0.000	Unk	10/15/03		ECP Not	Other	THP Low	-	-	0	0	6	0	0	\$0	0	
Cut bank slump. Remove material (end haul) or incorporate material into road prism.																		
60.301139	148	0.860	Magnus	Pehl	99-087	Groshong Ridge	Temp. Crossing	THP Mitigation	II		0	0	0	8	0	0	\$1,000	0
Private Seasonal	148	0.000	Unk	10/15/03		ECP Not	Excavate Soil	THP High	-	-	0	0	0	0	0	\$0	0	
THP specifies removing fill and sloping back banks at existing class II crossing.																		
60.301145	4456	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	0	\$0	0
Not Connected	4456	0.150	PW	12/12/07		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	0	
60.301146	4478	0.000	Alden	Alden	99-087	Groshong Ridge	No Problem	Storm Proofing	N/A		0	0	0	0	0	0	\$0	122
Storm Proofed	4478	0.250	Unk	10/15/03		ECP Not	Tip and Dip	Low	-	-	0	0	0	0	0	\$0	122	
This road was stormproofed as part of the Groshong THP																		
60.301146	5697	0.000	Chidlaw	Chidlaw	Maintena	Maintenance	Other	Maintenance	N/A		0	0	0	0	0	0	\$474	0
Private Seasonal	5697	0.950		08/01/11		ECP Not	Herbicides	Medium	-	-	0	0	0	13	0	\$0	0	
60.3015	2611	2.860	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	Spr.		0	0	0	0	0	0	\$0	0
Private Seasonal	2611	0.000	Unk	09/14/05		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	0	
Wet spot																		
60.3015	871	4.900	McCanl	Alden	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	III		0	0	0	1	0	0	\$190	29
Private Seasonal	871	0.000	ME	06/14/00		ECP Not	Excavate Soil	High	-	-	0	0	0	3	29	\$9	22	
Road crosses headwall swale of class 3 , road spoil was pushed down swale 20'. Treat : excavate fill push to right , recommend rocking this section , add rolling dip 100' to left.																		
60.3015	1204	5.200	Pehl	Pehl	Storm Pro	Storm Proofing	Surface Drainage	Storm Proofing	N/A		0	0	0	5	0	0	\$828	147
Storm Proofed	1204	5.500	ME	12/29/01		ECP Not	Dip Rolling	Medium	-	-	0	0	4	0	0	\$6	147	
Road drainage upgrade on State 40 Loop. Outslope and dip.																		
60.3015	992	5.500	Pehl	Pehl	96-404	Lowery Openings	Other	THP Clean Up	N/A		0	0	0	1	0	0	\$170	0
Private Seasonal	992	0.000	RB	12/05/00		ECP Not	Excavate Soil	THP Low	-	-	0	0	1	0	0	\$0	0	
Removed piles of dirt from the outside edge of the road.																		
60.3015	1420	5.500	McCanl	Alden	Maintena	Maintenance	Surface Drainage	Storm Proofing	N/A		0	0	0	20	0	0	\$3,550	489
Upgraded	1420	6.500	ME	03/07/01		ECP Not	Dip Rolling	Medium	-	-	0	0	19	1	0	\$7	489	
60.3015	993	5.680	Pehl	Pehl	96-404	Lowery Openings	Other	THP Clean Up	III		0	0	0	0	0	0	\$75	0
Private Seasonal	993	0.000	RB	12/05/00		ECP Not	Dip Critical	THP Low	-	-	0	0	1	0	0	\$0	0	
Class III Crossing. Not properly dipped out. Smooth out humps so that area will drain properly.																		
60.3015	2608	5.680	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	III		0	0	0	0	0	0	\$0	0
Private Seasonal	2608	0.000	Unk	09/14/05		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	0	
60.3015	994	5.780	Pehl	Pehl	96-404	Lowery Openings	Other	THP Clean Up	III		0	0	0	0	0	0	\$75	0
Private Seasonal	994	0.000	RB	12/05/00		ECP Not	Dip Critical	THP Low	-	-	0	0	1	0	0	\$0	0	
Class III crossing. Not properly dipped out. Smooth out hump so that it is passable by a 4X4 pickup.																		

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.3015	2607	5.950	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	Spr.	0	0	0	0	0	0	\$0	0
Private Seasonal	2607	0.000	Unk	09/14/05		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	0
Wet spot																	
60.3015	2606	5.970	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	Spr.	0	0	0	0	0	0	\$0	0
Private Seasonal	2606	0.000	Unk	09/14/05		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	0
Wet spot																	
60.301511	5501	0.000	Chidlaw	Chidlaw	Maintena	Maintenance	Other	Maintenance	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5501	1.720	Unk	08/25/09		ECP Not	Herbicides	Medium	-	-	0	0	0	0	0	\$0	0
60.3015114	5994	0.040	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5994	0.000	Unk	09/10/13		ECP Not	Building	No Action	-	-	0	0	0	0	0	\$0	0
Bunkhouse at Log Cabin Ranch. Two bedroom one bath.																	
60.3015114	5995	0.100	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5995	0.000	Unk	09/10/13		ECP Not	Building	No Action	-	-	0	0	0	0	0	\$0	0
Log Cabin Ranch main house. Three bedroom two bath.																	
60.3015114	5996	0.130	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5996	0.000	Unk	09/10/13		ECP Not	Building	No Action	-	-	0	0	0	0	0	\$0	0
Log Cabin Ranch milk barn.																	
60.3015114	5997	0.200	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	5997	0.000	Unk	09/10/13		ECP Not	Building	No Action	-	-	0	0	0	0	0	\$0	0
Log Cabin Ranch hay barn																	
60.301555	4603	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4603	0.470	PW	05/08/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
60.30155507	4606	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4606	0.190	PW	05/08/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
60.3015550745	4606	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4605	0.012	PW	05/08/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
60.30155577	4605	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4604	0.050	PW	05/08/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
60.301557	4603	0.000	Alden		Maintena	Maintenance	Surface Drainage	Assessment	N/A	0	0	0	0	0	0	\$149	0
Not Connected	4602	0.070	PW	08/14/08		ECP Not	Waterbar	Medium	-	-	0	0	1	0	0	\$0	0
60.301565	4610	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4610	0.062	PW	06/02/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Short ridge top road.																	
60.301567	4611	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4611	0.170	PW	06/02/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Short road with no draws.																	
60.301581	4612	0.000	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A	0	0	0	13	0	0	\$3,490	235
Deactivated	4612	0.480	R&S	10/30/11		ECP Not	Tip and Dip	Medium	-	-	0	0	14	9	0	\$15	235
This road hasn't been used in 30 years. No waterbars, but no serious erosion on the road surface.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.301581	4613	0.090	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	III		0	0	0	7	0	0	160
Deactivated	4613	0.000	R&S	10/30/11		ECP Not	Remove Crossing	Medium	-	Pull	0	0	7	7	400	\$15	128
Dry Class III. Pull back spoil locally.																	
60.301581	4614	0.330	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	III		0	0	0	3	0	0	60
Deactivated	4614	0.000	R&S	10/30/11		ECP Not	Remove Crossing	Medium	-	Pull	0	0	6	5	100	\$35	36
Dry Class III. Pull back spoil locally.																	
60.301582	1203	0.000	Pehl	Pehl	Storm Pro	Storm Proofing	Surface Drainage	Storm Proofing	N/A		0	0	0	11	0	0	367
Storm Proofed	1203	0.750	ME	12/29/01		ECP Not	Dip Rolling	Medium	-	-	0	0	10	1	0	\$6	367
Road drainage upgrade on State 40 Loop. Outslope and dip.																	
60.301589	1421	0.000	McCanl	Alden	Maintena	Maintenance	Surface Drainage	Storm Proofing	N/A		0	0	0	18	0	0	733
Upgraded	1421	1.500	ME	03/07/01		ECP Not	Dip Rolling	Medium	-	-	0	0	18	0	0	\$4	733
60.301589	5788	0.140	Alden	Alden	RobRds	Robinson SB271	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Storm Proofed	5788	0.000	R&S	06/25/12		ECP Not	Rock Pit	No Action	-	-	0	0	0	0	0	\$0	0
Rock Pit Good rip rap																	
60.301589	5692	0.250	Alden	Alden	RobRds	Robinson SB271	Fill - Road	Assessment	N/A		0	0	0	2	0	0	100
Storm Proofed	5692	0.000	R&S	12/07/11		ECP Not	Excavate Soil	Medium	-	-	0	0	2	0	100	\$9	50
The outside 4 foot edge of the road has dropped 3'. A couple of small trees are tilted.																	
Remove slipping fill and spread locally.																	
60.30158971	4622	0.000	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A		0	0	0	26	0	0	284
Storm Proofed	4622	0.580	R&S	12/04/11		ECP Not	Tip and Dip	Low	-	-	0	0	415	7	0	\$166	284
The road is drained and stabalized. It is drivable. No work needed.																	
60.30158971	4623	0.580	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A		0	0	0	12	0	0	156
Deactivated	4623	0.900	R&S	06/26/12		ECP Not	Tip and Dip	Low	-	-	0	0	15	0	0	\$19	156
The road surface is drained vegetated. The crossings are pretty good. Improvements can be made at the next entry.																	
60.30158971	4621	0.590	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Storm Proofing	II		0	2	0	0	0	\$623	40
Deactivated	4621	0.000	R&S	06/22/12		ECP Not	Armored Ford	Medium	Pull	RkFd	0	0	6	1	100	\$16	40
Crossing was removed but not down to grade. Not much happening. Could wait untl next logging. Pull crossing down to grade spoil locally. Install rocked ford.																	
60.30158971	4624	0.700	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Storm Proofing	III		0	4	0	3	6	0	100
Deactivated	4624	0.000	R&S	06/23/12		ECP Not	Armored Ford	Medium	Pull	RkFd	0	0	7	0	60	\$16	100
Some cutting. There is a 2' x 2' gully but it is stable. Crossing was removed but not down to grade. Not much happening. Could wait untl next logging. Pull crossing down to grade spoil locally. Install rocked ford.																	
60.30158971	4625	0.770	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Storm Proofing	III		0	8	0	2	0	0	100
Deactivated	4625	0.000	R&S	06/24/12		ECP Not	Armored Ford	Medium	Pull	RkFd	0	0	7	2	0	\$10	100
60' of road fill failure on the right bank. Half the road is gone. It is fixable. It is stable now.																	
Another option is to install a rocked ford. This will take 20 yards of large rocks at the bottom and sixty yards of pit run to backfill.																	
60.30158971	4626	0.850	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Storm Proofing	III		0	0	0	3	0	0	40
Deactivated	4626	0.000	R&S	06/26/12		ECP Not	Remove Crossing	No Action	Pull	Pull	0	0	2	0	50	\$30	20
No problem. Very small class III.																	

Road #	GIS#	Mile Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds		
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.31	2761	0.000	Pehl	Pehl	99-460	Sugaree	No Problem	THP Maint Insp	N/A		0	0	0	0	0	\$0	0	
Private Seasonal	2761	0.950	Unk	01/03/06		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0	
Winter Inspection. Minor cutbank failure at 0.1, small trees block the road.																		
60.31	1100	0.010	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A		0	0	0	0	0	\$0	0	
Private Seasonal	1100	0.000	Unk	12/05/00		ECP Not	Gate	Low	-	-	0	0	0	0	0	\$0	0	
60.31	2809	0.060	Pehl	Pehl	08-086	Belladonna	Culv.-Ditch Relief	THP App. Rd.	N/A		0	0	0	4	5	0	\$1,365	0
Private Seasonal	2809	0.000	R&S	10/19/12		ECP Not	Culv. Maintenance	THP Low	18"	-	0	0	4	0	0	\$0	0	
Culvert drains a bank seep. Clean ditch and culvert inlet.																		
60.31	2810	0.080	Pehl	Pehl	08-086	Belladonna	Culv.-HDP	THP App. Rd.	I		0	30	0	4	0	0	\$3,302	270
Private Seasonal	2810	0.000	PW	10/15/13		Waiver	Armored Ford	THP Low	48"	Pull	0	0	14	10	270	\$12	270	
Pipe undersized. Use crossing "as is" during operation of the plan. Then abandon crossing as per 1600 agreement.																		
60.31	702	0.090	Kelly	Kelly	Maintena	Maintenance	Culv.-Ditch Relief	Maintenance	N/A		0	0	0	0	0	\$0	0	
Private Seasonal	702	0.000	Unk	02/15/00		ECP Not	No Action	Medium	18"	-	0	0	0	0	0	\$0	0	
60.31	2811	0.110	Pehl	Pehl	08-086	Belladonna	Spring	THP App. Rd.	N/A		0	0	0	0	0		0	
Private Seasonal	2811	0.000		10/15/13		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	\$0	0	
Bank seeps in the winter keep this area wet. Cross drain with a rockd rolling dip.																		
60.31	701	0.120	Kelly	Kelly	Maintena	Maintenance	No Problem	Maintenance	N/A		0	0	0	0	0	\$2,184	0	
Private Seasonal	701	0.000	Unk	02/15/00		ECP Not	No Action	Medium	36"	48"	40	0	0	0	0	\$0	0	
60.31	2812	0.190	Pehl	Pehl	08-086	Belladonna	Surface Drainage	THP App. Rd.	N/A		0	0	0	0	0	\$0	0	
Private Seasonal	2812	0.000	PW	10/15/13		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	\$0	0	
Road is wet here during the winter from bank seep. Maintain outslope and install a rockd dip.																		
60.31	2813	0.220	Pehl	Pehl	08-086	Belladonna	Surface Drainage	THP App. Rd.	N/A		0	0	0	4	5	0	\$1,365	0
Private Seasonal	2813	0.000	R&S	10/18/12		ECP Not	Dip Rolling	THP Low	-	-	0	0	4	0	0	\$0	0	
Road is wet here during the winter from bank seep. Maintain outslope and install a rockd dip.																		
60.31	2814	0.260	Pehl	Pehl	08-086	Belladonna	No Problem	THP... Not	N/A		0	0	0	0	0	\$0	0	
Private Seasonal	2814	0.000	PW	10/19/12		ECP Not	Culv. Maintenance	Medium	18"	-	0	0	0	0	0	\$0	0	
No action. Existing culvert recieves flow from diversion at BRP 8. Leave "as is" or remove if necessary, Water will be collected by new culvert installation at BRP8.																		
60.31	2815	0.270	Pehl	Pehl	08-086	Belladonna	Culv.	THP App. Rd.	III		0	30	0	4	5	1	\$3,344	225
Private Seasonal	2815	0.000	R&S	10/19/12		Waiver	Culv. Install	THP Low	-	30"	60	0	4	8	225	\$15	225	
Watercourse is diverted to an undersized pipe. Install 30" culvert at the intersection of draw and road. Install at grade with non-diversion dip at the left hinge of fill.																		
60.31	700	0.320	Kelly	Kelly	Maintena	Maintenance	Culv.-Ditch Relief	Maintenance	N/A		0	0	0	0	0	\$0	0	
Private Seasonal	700	0.000	Unk	02/15/00		ECP Not	No Action	Medium	18"	-	0	0	0	0	0	\$0	0	
60.31	2816	0.330	Pehl	Pehl	08-086	Belladonna	Surface Drainage	THP App. Rd.	N/A		0	0	0	4	5	0	\$1,847	0
Private Seasonal	2816	0.000	PW	10/19/12		ECP Not	Tip and Dip	THP Low	-	-	0	0	4	0	0	\$0	0	
Excavate outside shoulder of road to maintain and improve outslloping to ensure road surface drainage does not accumulate on road edge failure to the north.																		
60.31	699	0.350	Pehl	Pehl	08-086	Belladonna	Culv.	THP App. Rd.	III		0	40	0	18	8	2	\$8,651	400
Private Seasonal	699	0.000	PW	10/19/12		Waiver	Culv. Replace	THP Low	18"	30"	60	0	16	8	400	\$22	400	
Pipe is undersized. Install 30" culvert at grade. Pull road edge on south (right) approach to outslope and improve road surface drainage.																		

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.31	2817	0.390	Pehl	Pehl	08-086	Belladonna	Surface Drainage	THP App. Rd.	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	2817	0.000	PW	10/19/12		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	\$0	0
Road is wet here during the winter from bank seep. Maintain outslope and install a rockdip.																	
60.31	546	0.940	Heath	Pehl	99-460	Sugaree	Slide - Shallow	THP App. Rd.	III	0	0	0	0	0	0	\$1,500	0
Private Seasonal	546	0.000	Unk	11/15/03		ECP Not	Remove Crossing	THP Low	-	Pull	0	0	0	0	0	\$0	0
Road crosses a drainage with small landslide above. Road fill and culvert are lost during severe storms. Pull culvert and excavate road segment over drainage to allow free flow of water. Block off road with barriers to prevent traffic from using this road until an engineered crossing can be designed.																	
60.38	6416	0.080	Haschak	Reynold	16-094	Plum	Temp. Crossing	THP App. Rd.	I	0	0	0	0	0	0	\$0	0
Private Seasonal	6416	0.000	R&S	11/02/20		ECP Not	Bridge - Temp	Medium	-	-	0	0	0	0	0	\$0	0
Install temporary railroad bridge or half pipe - see diagrams in section II map section for installation guidelines and in 1600 permit section (also in section II)																	
60.3907	569	0.000	McCanl	Kelly	Storm Pro	Storm Proofing	Surface Drainage	Storm Proofing	N/A	0	0	0	29	126	4	\$12,257	342
Storm Proofed	569	0.700	ME	10/13/99		ECP Not	Rock Surface	Medium	-	-	0	0	26	9	0	\$36	342
60.3907	2089	0.000	Craig	Craig	99-460	Sugaree	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	2089	0.000	Unk	01/28/03		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Inspected roads cleaned out site 105 of small debris.																	
60.3907	2679	0.000	Pehl	Pehl	99-460	Sugaree	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	2679	0.700	Unk	12/22/05		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
Winter Inspection. No problems.																	
60.3907	2760	0.000	Pehl	Pehl	99-460	Sugaree	No Problem	THP Maint Insp	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	2760	0.700	Unk	01/03/06		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
Winter Inspection. Cutbank failure at 0.7 blocks road.																	
60.3907	404	0.190	McCanl	Kelly	Storm Pro	Storm Proofing	Fill - Landing	Storm Proofing	N/A	0	0	0	1	0	0	\$185	120
Private Perm.	404	0.000	ME	07/23/99		ECP Not	Excavate Soil	High	-	-	0	0	1	0	120	\$2	108
Past landing fill failure with a potential for more. Excavate remaining fill store against cut bank.																	
60.3907	403	0.280	McCanl	Kelly	Storm Pro	Storm Proofing	Other	Storm Proofing	III	0	0	0	10	0	0	\$1,708	210
Private Seasonal	403	0.000	ME	07/23/99		ECP Not	Culv. Install	High	-	-	0	0	7	6	210	\$8	210
A class III stream crossing 80% washed out excavate remaining 210 yds install 36" CMP at grade.																	
60.3907	403	0.280	Kelly	Kelly	Maintena	Maintenance	No Problem	Maintenance	III	0	0	0	0	0	0	\$0	0
Private Seasonal	708	0.000	Unk	02/15/00		ECP Not	No Action	Medium	30"	-	0	0	0	0	0	\$0	0
60.3907	403	0.280	Heath	Kelly	99-460	Sugaree	Gully	THP App. Rd.	N/A	0	0	0	2	0	0	\$585	0
Private Seasonal	540	0.000	ME	03/30/00		ECP Not	Other	THP Low	36"	-	0	0	6	0	0	\$0	0
New culvert installation and road work has been completed. Fresh fill slope, inside ditch to culvert, and culvert drain basin needs erosion protection. Seed and Mulch 100' x 50 fill, 10' x 30' cut, and 5x50' inside ditch. Add additional rock above culvert outlet to protect fill slope. Add rock below culvert out 25 feet from end of pipe and fill for water dissepation. Required rock is estimated to be 30 cubic yards. Add trash rack above culvert inlet. Add a windrow of slash approximately 20 long below fill slope between existing slash and conifers at edge of road. The slash will add additional filtration from possible erosion off fill material. (this is an area of new fill placement approximately 150 feet down the road from the culvert crossing).																	
60.3907	403	0.280	Alden	Pehl	05-023	Clover	Culv.-Plug	THP ECP	II	0	0	0	4	2	0	\$170	0
Private Seasonal	3972	0.000	JHB	03/22/07		1B105023MEN	Culv. Maintenance	Medium	36"	-	0	0	0	0	10	\$0	0
Debris flow came down the steep class II on March 19th and plugged the culvert. The flow did not originate on GRI. A lot of stored sediment and debris was mobilized and plugged this culvert on the new return road and the one below it on the NF river road. Material removed from inlet with excavator.																	

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.3907	402	0.310	McCanl	Kelly	Storm Pro	Storm Proofing	Humboldt	Storm Proofing	III		0	0	0	1	0	0	\$185	0
Private Seasonal	402	0.000	ME	07/23/99		ECP Not	Excavate Soil	Medium	-	-	0	0	1	0	0	\$0	0	
Remove cutbank failure drift spoils up raod Excavator needed to remove large stumps.																		
60.3907	401	0.350	McCanl	Kelly	Storm Pro	Storm Proofing	Other	Storm Proofing	II		0	0	0	11	0	0	\$1,823	65
Private Seasonal	401	0.000	ME	07/23/99		ECP Not	Culv. Install	High	-	-	0	0	7	4	40	\$28	65	
Class III stream crossing 90% washed out. Excavate remaining crossing install CMP at grade.																		
60.3907	401	0.360	Kelly	Kelly	Maintena	Maintenance	No Problem	Maintenance	III		0	0	0	0	0	0	\$0	0
Private Seasonal	707	0.000	Unk	02/15/00		ECP Not	No Action	Medium	36"	-	0	0	0	0	0	\$0	0	
60.3907	401	0.360	Heath	Kelly	99-460	Sugaree	Gully	THP App. Rd.	II		0	0	0	2	0	0	\$265	0
Private Seasonal	541	0.000	ME	03/30/00		ECP Not	Other	THP Low	36"	-	0	0	0	0	0	\$0	0	
New culvert installation and road work has been completed. Fresh fill slope, inside ditch to culvert, and culvert drain basin needs erosion protection. Seed and Mulch 50'x20' fill slope, 10'x50' cut slope and basin, and 10'x50' inside ditch. Add additional rock over fill slope above culvert inlet and outlet. Estimated additional rock is 20 cubic yards. Construct water bar at road edge uphill of culvert crossing approximately 75 where indicated on road surface. Direct water bar outlet into existing slash concentration on fill slope. Add trash rack above culvert inlet.																		
60.3907	400	0.440	Kelly	Kelly	Maintena	Maintenance	Culv.-Ditch Relief	Maintenance	III		0	0	0	0	0	0	\$0	0
Private Seasonal	706	0.000	Unk	02/15/00		ECP Not	No Action	Medium	24"	-	0	0	0	0	0	\$0	0	
Watercourse and ditch relief.																		
60.3907	400	0.440	Heath	Kelly	99-460	Sugaree	Gully	THP App. Rd.	N/A		0	0	0	1	0	0	\$210	0
Private Seasonal	542	0.000	ME	03/30/00		ECP Not	Other	THP Low	24"	-	0	0	0	0	0	\$0	0	
New culvert installation and road work has been completed. Fresh fill slope, inside ditch to culvert, and culvert drain basin needs erosion protecton. Seed and Mulch 50'x50 fill slope, 12'x50' cut slope and basin, and 5'x100' inside ditch. Add additional rock above culvert outlet and inlet fill . Rock estimated to be 10 cubic yards. Add 25 feet of rock below culvert outlet and edge of fill. Add trash rack above culvert inlet.																		
60.3907	400	0.460	McCanl	Kelly	Storm Pro	Storm Proofing	Inside ditch	Storm Proofing	Spr.		0	0	0	3	0	0	\$555	0
Private Seasonal	400	0.000	ME	07/23/99		ECP Not	Culv. Install	Medium	-	-	0	0	3	0	0	\$0	0	
Possible Class III swale above road, nothing below a spring is present inside ditch.																		
60.3907	399	0.530	Heath	Kelly	99-460	Sugaree	Gully	THP App. Rd.	N/A		0	0	0	1	0	0	\$210	0
Private Seasonal	543	0.000	ME	03/30/00		ECP Not	Other	THP Low	36"	-	0	0	0	0	0	\$0	0	
New culvert installation and road work has been completed. Fresh fill slope, inside ditch to culvert, and culvert drain needs erosion protection. Seed and Mulch 20'x60' fill slope and 5'x50' inside ditch and catchment. Add additional rock above culvert outlet and inlet to top at road edge. Additional rock needed is approximately 40 cubic yards. Construct a water bar at road edge to collect surface drainage from out sloped road approximately 100 feet from culvert crossing. Direct water bar outlet onto slash concentration where indirect at road edge. Add trash rack above culvert inlet. Place slash at critical dip outlet.																		
60.3907	399	0.540	McCanl	Kelly	Storm Pro	Storm Proofing	Humboldt	Storm Proofing	III		0	0	0	12	3	0	\$2,198	320
Private Seasonal	399	0.000	ME	07/23/99		ECP Not	Excavate Soil	High	-	-	0	0	9	3	883	\$7	320	
Class III stream crossing possible Humb. There is approximately 272 yds to remove from above crossing.																		
60.3907	399	0.540	Kelly	Kelly	Maintena	Maintenance	No Problem	Maintenance	III		0	0	0	0	0	0	\$0	0
Private Seasonal	705	0.000	Unk	02/15/00		ECP Not	No Action	Medium	30"	-	0	0	0	0	0	\$0	0	
60.3958	5639	0.100	Haschak	Pehl	11-105	Maple	Temp. Crossing	THP New Con.	III		0	0	0	0	0	0	\$0	0
Private Seasonal	5639	0.000	Unk	09/17/14		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0	
Class III xing on new road construction. Install temporary pipe adequate to handle any potential flow. Remove all soil and slope back banks to original grade at close of operations.																		
60.4	378	0.000	Susan		20-00150	Far North	No Problem	THP App. Rd.	II		0	0	0	0	0	0	\$0	0
Private Seasonal	6992	0.000	Unk	09/30/20		GWDR 1-20-00150	No Action	No Action	36"	-	0	0	0	0	0	\$0	0	
36" culvert drains Class II across road. This culvert was replaced in fall 2020 for the Plum THP (16-094MEN)																		

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.402	5784	1.910	Haschak Bennett	12-029	Tulip		Slide - Deep	THP Non-Road	N/A		0	0	0	0	0	\$0	0
Private Seasonal	5784	1.940	Unk	01/01/16		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
LTO shall not place cable yarding corridors below the road within the area designated as Map Point 663. The LTO shall not install erosion controls along the road segment that is above the unstable area at Map Point 663 (except the existing rolling dip can be left in place).																	
60.402	2756	2.080	Pehl	Pehl	99-348	Elk Prairie	Slide - Deep	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	2756	0.000	R&S	08/15/06		ECP Not	Excavate Soil	Current	-	-	0	0	0	0	0	\$0	0
Large slide below the road continues to move. Road edge breaking away. Improve road surface drainage so that water does not flow directly onto slide.																	
60.402	5710	2.100	Chidlaw	Chidlaw	Maintena	Maintenance	Other	Maintenance	N/A		0	0	0	0	0	\$1,318	0
Private Seasonal	5710	4.680		08/01/11		ECP Not	Herbicides	Medium	-	-	0	0	0	36	0	\$0	0
60.402016	2218	0.000	Alden	Alden	271 LNF	LNF P01030405A	Surface Drainage	Storm Proofing	N/A		0	0	0	7	7	\$1,855	244
Storm Proofed	2218	0.500	ME	10/10/03		ECP Not	Tip and Dip	Medium	-	-	0	0	7	0	0	\$8	244
60.402016	366	0.100	Hovland Alden	99-348	Elk Prairie		No Problem	THP App. Rd.	III		0	0	0	3	2	\$730	0
Private Seasonal	366	0.000	ME	08/07/03		ECP Not	Temp. Crossing	Low	-	-	0	0	3	0	0	\$0	0
This is a temporary class III crossing on an existing seasonal road. Currently, this rolling dip can be driven over in a pickup. The road shows no sign of downcutting since it was last used and it has gone through several winters. A minor amount of fill may be placed at this location to improve the grade for hauling. The road will be restored to its current grade prior to the winter period.																	
60.402016	367	0.250	Hovland Alden	99-348	Elk Prairie		No Problem	THP App. Rd.	III		0	0	0	3	0	\$488	0
Private Seasonal	367	0.000	ME	08/07/03		ECP Not	Other	Medium	-	-	0	0	1	4	0	\$0	0
This is a temporary class III crossing on an existing seasonal road. Currently, this rolling dip can be driven over in a pickup. The road shows some back cutting from the water discharging on the outside edge of the road. Rock armor the outside edge of the road to prevent back cutting. Prior to the winter period reinstall the berm on the eastern side of the crossing to keep the water in the channel.																	
60.402016	368	0.300	Hovland Alden	99-348	Elk Prairie		No Problem	THP App. Rd.	III		0	0	0	0	0	\$1,105	0
Private Seasonal	368	0.000	ME	08/07/02		ECP Not	Culv. Install	Medium	-	24"	60	0	0	0	0	\$0	0
This is a class III crossing on an existing seasonal road. Water surfaces where the road crosses the class III. Because this road will be used for reforestation purposes for several years following harvest a permanent 24 inch CMP is being installed at this location.																	
60.402028	5746	0.000	Haschak Bennett	12-029	Tulip		Cut Bank Failure	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	5746	0.000	Unk	01/01/16		ECP Not	Ramp over	Medium	-	-	0	0	0	0	0	\$0	0
Spread cut bank material on road without sidecasting.																	
60.402028	383	0.100	Hovland Alden	99-348	Elk Prairie		Other	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	383	0.113	ME	07/30/03		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
The existing seasonal road crosses an old slide. There is a bank seep associated with the slide. Inslope the road for approximately 70 feet at this point to keep road surface drainage from depositing on the slide.																	
60.402028	383	0.100	Haschak Bennett	12-029	Tulip		Spring	THP App. Rd.	Spr.		0	0	0	0	0	\$0	0
Private Seasonal	5734	0.113	Unk	01/01/16		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
Spring runs down inside ditch for a hundred feet before crossing road. If wet at time of operations install a spring drain (4" or larger pipe) where it crosses road. Pipe can be left in if still functioning at close or removed and the road dipped out to make sure water crosses road. Rock armor the outlet of the spring drain prior to the completion of timber operations.																	
60.402028	369	0.200	Hovland Alden	99-348	Elk Prairie		No Problem	THP App. Rd.	III		0	0	0	3	3	\$795	0
Private Seasonal	369	0.000	ME	08/07/03		ECP Not	Other	Medium	-	-	0	0	3	0	0	\$0	0
The existing road crosses the head of a class III. The outside edge of the road is back cutting from road drainage. This area will be rock armored to prevent further back cutting.																	
60.402028	370	0.250	Hovland Alden	99-348	Elk Prairie		No Problem	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	370	0.000	Unk	07/01/00		ECP Not	No Action	Low	36"	-	0	0	0	0	0	\$0	0

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.402028	372	0.400	Hovland Alden		99-348	Elk Prairie	Other	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	384	0.000	ME	07/01/03		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
Approximately a 10 foot long by 2 feet wide section of road was washed away when the culvert at crossing 7 apparently became partially plugged sometime prior to last winter. The large rock in the fill and the proper shape of the road prevented a larger washout. The culvert is currently open and functioning well. The road width will be reestablished at this point by filling.																	
60.402028	372	0.400	Hovland Alden		99-348	Elk Prairie	No Problem	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	372	0.000	Unk	07/01/03		ECP Not	No Action	Low	36"	-	0	0	0	0	0	\$0	0
60.402028	372	0.400	Alden Alden		Maintena	Maintenance	Culv.-Plug	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	4695	0.000	Unk	09/23/08		ECP Not	Culv. Maintenance	Low	36"	-	0	0	0	0	0	\$0	0
Inlet plugged with sticks and Henry cleaned it out.																	
60.402028	371	0.500	Hovland Alden		99-348	Elk Prairie	No Problem	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	371	0.000	Unk	07/01/00		ECP Not	No Action	Low	36"	-	0	0	0	0	0	\$0	0
60.402028	371	0.500	Haschak Pehl		06-163	Sage	Culv.	Maintenance	III		0	0	0	18	11	\$7,347	400
Private Seasonal	2973	0.000	PW	09/04/09		ECP Not	Culv. Maintenance	Medium	30"	30"	40	0	10	11	0	\$18	400
Culvert end is bent by tree. Culvert capacity shall be restored, either by replacement with a new culvert or repair of the existing culvert. If heavy equipment is brought to the site, unconsolidated debris that have access to the watercourse shall be removed or stabilized to the extent feasible. Ramp over or remove bank failure on road to stable location.																	
60.402028	373	0.950	Hovland Alden		99-348	Elk Prairie	No Problem	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	373	0.000	ME	07/01/03		ECP Not	Temp. Crossing	Low	-	-	0	0	0	0	0	\$0	0
This is a temporary class III crossing on an existing seasonal road. Currently, this rolling dip can be driven over in a pickup. The road shows no sign of downcutting since it was last used and it has gone through several winters. A minor amount of fill may be placed at this location to improve the grade for hauling. The road will be restored to its current grade prior to the winter period.																	
60.40202849	374	0.300	Hovland Alden		99-348	Elk Prairie	No Problem	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	374	0.000	ME	08/07/03		ECP Not	Temp. Crossing	Low	-	-	0	0	0	0	0	\$0	0
The new seasonal road crosses a class III watercourse. The crossing will require a minor amount of fill that can be easily removed prior to the winter period.																	
60.40202849	375	0.350	Hovland Alden		99-348	Elk Prairie	No Problem	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	375	0.000	Unk	09/09/03		ECP Not	Temp. Crossing	Low	-	-	0	0	0	0	0	\$0	0
The new seasonal road crosses a class III watercourse. The crossing will require a minor amount of fill that can be easily removed prior to the winter period. The road stopped.																	
60.40202866	5246	0.000	Alden Alden		Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	5246	0.018	PW	05/08/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
60.40204	5942	0.000	Alden Alden		Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	5942	0.310	Unk	12/12/12		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	0
60.40205	18	0.000	Kelly Kelly		95-131	Little Robinson Cree	Cut Bank Failure	THP App. Rd.	N/A		0	0	0	0	0	\$5,739	0
Private Seasonal	18	0.000	RR	08/17/98		ECP Not	Excavate Soil	Medium	-	-	0	0	0	0	0	\$0	0
60.40205	2075	0.000	Pehl Pehl		98-147	Doty Ridge	Surface Drainage	THP Clean Up	N/A		0	0	0	0	0	\$0	549
Upgraded	2075	1.122	Unk	06/20/03		ECP Not	Dip Rolling	Medium	-	-	0	0	0	0	0	\$0	549
pull berms, outslope road, rebuild rolling dips.																	
60.40205	611	0.380	Lewicki Bennett		98-147	Doty Ridge	Cut Bank Failure	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	611	0.000	Unk	05/27/03		ECP Not	Excavate Soil	Medium	-	-	0	0	0	0	0	\$0	0
Cut bank slumps approximately 20' long by 25' wide by 10' tall. Material from both areas will be removed to a location south of these points on the main ridge.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.40205	612	0.400	Lewicki	Bennett	98-147	Doty Ridge	Cut Bank Failure	THP App. Rd.	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	612	0.000	Unk	05/27/03		ECP Not	Excavate Soil	Medium	-	-	0	0	0	0	0	\$0	0
Cut bank slumps approximately 20' long by 25' wide by 10' tall. Material from both areas will be removed to a location south of these points on the main ridge.																	
60.40205	613	0.450	Lewicki	Pehl	98-147	Doty Ridge	Cut Bank Failure	THP App. Rd.	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	613	0.460	Unk	10/15/03		ECP Not	Excavate Soil	Medium	-	-	0	0	0	0	0	\$0	0
Cut bank/fill slumps approximately 50' of existing haul road is covered with material. The road prism is intact. The fill is cracking but appears to have settled. The material will be removed and placed at location south of this point on the main ridge.																	
60.40205049	615	0.280	Lewicki	Alden	98-147	Doty Ridge	Fill - Road	THP Recon.	III	0	0	0	13	46	0	\$6,406	0
Private Seasonal	615	0.000	ME	07/11/03		ECP Not	Culv. Replace	High	-	24"	40	0	14	0	0	\$0	0
Fill failure at existing CMP. It appears that water is pumping underground and exits through a rock cutbank just north of this location. The water flowed down the road and onto the fill. The road prism is still intact. It is proposed to key in the fill and replace the existing CMP with a minimum 24" pipe and armor the fill slope with a spillway should the culvert plug. A rolling dip will be placed upgrade from this point where flagged. The new fill will be mulched with lopped hardwood slash present in the area and planted with conifer seedlings. If any redwood root wads are available, they will be "planted" along the outside edge of the road fill to serve as a live buttress. A sketch is included to aid in construction. A large waterbar will be placed just downgrade from this location upon completion of operations.																	
Bennett comment: work still needed- rip rap entire fill, rock road throughout crossing, don't drain waterbars into watercourse.																	
60.40205065	614	0.000	Lewicki	Bennett	98-147	Doty Ridge	No Problem	THP Recon.	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	614	0.300	Unk	07/01/00		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Proposed reconstruction. The road proposed for reconstruction is existing and requires only minor dressing for use. The original road continued past the proposed segment down the watercourse to a landing on the main haul road along Robinson Creek. The original road down the watercourse is essentially abandoned																	
60.40205065	2162	0.000	Bennett	Pehl	98-147	Doty Ridge	Dip Rolling	THP Clean Up	N/A	0	0	0	0	0	0	\$0	108
Upgraded	2162	0.220	Unk	06/20/03		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	\$0	108
pull berms, outslope road, touch up rolling dips.																	
Drain landing at 2 mile. Touch up at least first 2 waterbars past landing.																	
60.40205567	5940	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	5940	0.150	Unk	12/12/12		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	0
60.40207	1835	0.000	Alden	Pehl	Storm Pro	Storm Proofing	Surface Drainage	Storm Proofing	N/A	0	0	0	0	0	0	\$1,200	704
Storm Proofed	1835	1.440	RB	11/15/01		ECP Not	Dip Rolling	Medium	-	-	0	0	20	0	0	\$2	704
60.40207	616	0.400	Lewicki	Bennett	98-147	Doty Ridge	Cut Bank Failure	THP Recon.	III	0	0	0	26	53	0	\$8,553	0
Private Seasonal	616	0.000	ME	07/17/03		ECP Not	Excavate Soil	Medium	-	-	0	0	26	0	0	\$0	0
Minor cut bank sloughs. Spoils will be incorporated into the road surface. Class III temporary crossings on existing haul road.																	
Pull crossing to natural grade. Seed and mulch (or rock if rock readily available).																	
60.40207	619	0.500	Lewicki	Bennett	98-147	Doty Ridge	Cut Bank Failure	THP Recon.	III	0	0	0	0	0	0	\$0	0
Private Seasonal	619	0.000	ME	07/17/03		ECP Not	Excavate Soil	Medium	-	-	0	0	0	0	0	\$0	0
Minor cut bank sloughs. Spoils will be incorporated into the road surface. Class III temporary crossings on existing haul road.																	
Pull crossing to natural grade. Seed and mulch (or rock if rock readily available).																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.40207	621	0.700	Lewicki	Alden	98-147	Doty Ridge	Temp. Crossing	THP Recon.	III	0	0	0	0	0	0	\$0	0
Private Seasonal	621	0.000	ME	07/15/03		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Class III temporary crossing on existing haul road.																	
Pull crossing to natural grade. Seed and mulch (or rock if rock readily available).																	
60.40207	622	0.800	Lewicki	Alden	98-147	Doty Ridge	Temp. Crossing	THP Recon.	III	0	0	0	9	10	0	\$2,410	0
Private Seasonal	622	0.000	ME	07/15/03		ECP Not	Temp. Crossing	Medium	-	-	0	0	9	0	0	\$0	0
A spring emerges from the cutbank and flows across the existing haul road.																	
Seed and mulch (or rock if rock is readily available).																	
60.40207	623	1.150	Lewicki	Alden	98-147	Doty Ridge	Temp. Crossing	THP Recon.	III	0	0	0	14	13	0	\$3,845	0
Private Seasonal	623	0.000	ME	07/14/03		ECP Not	Temp. Crossing	Medium	-	-	0	0	17	0	0	\$0	0
Class III temp crossing.																	
Pull crossing to natural grade. Seed and mulch (or rock if rock readily available).																	
60.40207	624	1.250	Lewicki	Kelly	98-147	Doty Ridge	No Problem	THP Recon.	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	624	1.270	Unk	10/15/00		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
Start road construction. From this point to the first ridge past map point 106 the road grade is 15%.																	
60.40207	626	1.270	Lewicki	Kelly	98-147	Doty Ridge	Other	THP New Con.	III	0	0	0	0	0	0	\$0	0
Private Seasonal	626	1.800	Unk	10/15/00		ECP Not	Full Bench	High	-	-	0	0	0	0	0	\$0	0
Swale. The road past this point will be constructed as a full bench cut with spoils echauled to the landing south of Map Point 105. Minimal sidecast equivalent to 1 foot thick at the outside edge of the road feathering out to within 10 feet will not be deposited below the road alignment.																	
60.40207	1836	1.440	Alden	Alden	Storm Pro	Storm Proofing	Surface Drainage	THP Clean Up	N/A	0	0	0	10	0	0	\$1,550	127
Abandoned Fixed	1836	1.700	RB	09/15/00		ECP Not	Dip Rolling	Medium	-	-	0	0	10	0	0	\$12	127
60.40207044	1837	0.000	Alden	Pehl	Storm Pro	Storm Proofing	Surface Drainage	Storm Proofing	N/A	0	0	0	0	0	0	\$720	196
Storm Proofed	1837	0.400	RB	11/15/01		ECP Not	Dip Rolling	Medium	-	-	0	0	12	0	0	\$4	196
60.40207044	620	0.090	Lewicki	Kelly	98-147	Doty Ridge	No Problem	THP Recon.	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	620	0.500	Unk	10/15/00		ECP Not	Keyway Con.	Medium	-	-	0	0	0	0	0	\$0	0
Proposed road construction. The road is aligned on a 10-12% grade with pitches up to 15%. The first 250 feet is aligned on an old skidtrail at 20% grade. There exist no other special features associated with this proposed road.																	
60.54	4729	0.000	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A	0	0	0	27	0	0	\$7,698	342
Storm Proofed	4729	0.700	R&S	08/10/12		ECP Not	Tip and Dip	Medium	-	-	0	0	41	0	0	\$22	342
Tip and dip																	
60.54	4728	0.050	Alden	Alden	RobRds	Robinson SB271	No Problem	Storm Proofing	I	0	130	0	9	6	0	\$2,493	0
Storm Proofed	4728	0.000	R&S	08/10/12		ECP Not	Remove Crossing	See Comments	-	-	0	0	8	2	0	\$0	0
Temporary crossing																	
An excavator will place a 6' boiler half round over wetted channel. Fill material will be placed over the boiler. Equipment will not operate in the wetted channel during installation. Remove after work completion. Try to plan operations for late in the season.																	
60.54	4728	0.050	Haschak	Bennett	16-094	Plum	Temp. Crossing	THP App. Rd.	I	0	0	0	0	0	0	\$0	0
Private Seasonal	6417	0.000	Unk	10/15/19		ECP Not	Bridge - Temp	Medium	-	-	0	0	0	0	0	\$0	0
Install temporary railroad bridge or half pipe - see diagrams in section II map section for installation guidelines and in 1600 permit section (also in section II)																	

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.54	4727	0.250	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	II	0	60	0	15	2	0	\$7,477	400
Storm Proofed	4727	0.000	R&S	08/10/12		ECP Not	Culv. Install	High	-	48"	60	0	14	15	500	\$19	400
Failing Class II Install new culvert.																	
60.54	4726	0.340	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	II	0	20	0	2	1	0	\$555	300
Storm Proofed	4726	0.000	R&S	08/10/12		ECP Not	Armored Ford	Medium	-	RkFd	60	0	2	0	400	\$2	300
Failing Class II crossing Install new culvert. We changed this to a rockford from a 36" culvert.																	
60.54	4723	0.520	Alden	Alden	RobRds	Robinson SB271	Other	Storm Proofing	Spr.	0	20	0	1	1	0	\$320	50
Storm Proofed	4723	0.000	R&S	08/12/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	1	0	50	\$13	25
A spring above a landing is draining across the left side of the landing. Keep the water to the left of the landing. Rock armor down the landing fill.																	
60.54	4724	0.700	Alden	Alden	RobRds	Robinson SB271	Other	Storm Proofing	N/A	0	10	0	0	0	0	\$105	10
Storm Proofed	4724	0.000	R&S	08/12/12		ECP Not	Dip Critical	Medium	-	-	0	0	1	0	50	\$11	10
Landing in dry draw Build a critical dip to the left of the landing. No sign of erosion.																	
60.54	5819	0.720	Alden	Alden	RobRds	Robinson SB271	Other	Storm Proofing	N/A	0	10	0	0	0	0	\$105	10
Storm Proofed	5819	0.000	R&S	08/12/12		ECP Not	Dip Critical	Medium	-	-	0	0	1	0	50	\$11	10
There is a small Class III just left of the landing. Dip to keep it in the channel																	
60.54	5820	0.720	Alden	Alden	Maintena	Maintenance	Marijuana	Marijuana	III	0	0	0	0	0	0	\$0	0
Storm Proofed	5820	0.000	Unk	08/13/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
During Robinson Roads 271 work we came across active drip system which we tore out. Fresh quad tracks were coming in from the west probably the lower North Fork properties.																	
60.5448	4730	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	154
Upgraded	4730	0.315	PW	10/07/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	154
Road is vegetated and drained. Tip and dip at next entry																	
60.5448	4725	0.600	Alden	Alden	Maintena	Maintenance	Temp. Crossing	Storm Proofing	III	0	0	0	0	0	0	\$0	0
Private Seasonal	4725	0.000	PW	10/07/08		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	0
Very small class III. No erosion. Maintain Critical dip.																	
60.58	4731	0.000	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A	0	0	0	9	0	0	\$2,483	230
Storm Proofed	4731	0.470	R&S	08/02/12		ECP Not	Tip and Dip	Medium	-	-	0	0	13	0	0	\$11	230
Tip and dip																	
60.58	4721	0.100	Alden	Alden	RobRds	Robinson SB271	No Problem	Storm Proofing	I	0	0	0	3	3	0	\$1,583	0
Storm Proofed	4721	0.000	R&S	08/02/12		ECP Not	Remove Crossing	See Comments	-	-	0	0	6	8	0	\$0	0
Temporary crossing An excavator will place a 6' boiler half round over wetted channel. Fill material will be placed over the boiler. Equipment will not operate in the wetted channel during installation. Remove after work completion. Try to plan operations for late in the season.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.58	4713	0.260	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	II		0	80	0	13	7	0	\$7,767	50
Storm Proofed	4713	0.000	R&S	08/05/12		ECP Not	Culv. Install	High	-	48"	60	0	12	21	100	\$155	50	
Blown out class II crossing.																		
60.58	4714	0.340	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III		0	50	0	2	2	0	\$910	100
Storm Proofed	4714	0.000	R&S	08/10/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	2	6	0	\$9	100	
No obvious draw upstream. Cutting in down side. Moist road surface. Rock ford																		
60.58	4715	0.380	Alden	Alden	RobRds	Robinson SB271	Cut Bank Failure	Assessment	N/A		0	0	0	2	0	0	\$545	0
Storm Proofed	4715	0.000	R&S	08/10/12		ECP Not	Excavate Soil	Low	-	-	0	0	3	1	0	\$0	0	
Shallow slide 60' ramp over.																		
60.58	5818	0.430	Alden	Alden	RobRds	Robinson SB271	No Problem	Maintenance	N/A		0	0	0	0	0	0	\$0	0
Storm Proofed	5818	0.000	R&S	05/12/12		ECP Not	Rock Pit	No Action	-	-	0	0	0	0	0	0	\$0	0
There is good rock in this area.																		
60.58	4716	0.450	Alden	Alden	RobRds	Robinson SB271	Other	Assessment	III		0	20	0	3	0	0	\$600	50
Storm Proofed	4716	0.000	R&S	08/11/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	2	0	0	\$12	50	
Small Class III crosses left side of landing. Keep it in place dip our and rock armor outlet. This landing is an endhaul spoil site.																		
60.58	4717	0.460	Alden	Alden	RobRds	Robinson SB271	Fill - Road	Assessment	N/A		0	0	0	5	0	0	\$1,385	0
Storm Proofed	4717	0.000	R&S	08/11/12		ECP Not	Keyway Con.	Medium	-	-	0	0	7	0	500	\$0	0	
100' from landing there is a fill failure that is 100' long. The road is gone. Pull right wing. Do not go beyond the big redwood stump.																		
60.58	4731	0.470	Alden	Hagans	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A		0	0	0	0	0	0	\$0	0
Abandoned Lega	5807	0.940	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0	
60.58	4718	0.560	Alden	Hagans	RobRds	Robinson SB271	Fill - Road	Assessment	N/A		0	0	0	0	0	0	\$0	0
Abandoned Lega	4718	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0	
Bank failure frist 50 feet then 150 of road fill failure.																		
60.58	4719	0.650	Alden	Hagans	RobRds	Robinson SB271	Fill - Road	Assessment	N/A		0	0	0	0	0	0	\$0	0
Abandoned Lega	4719	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0	
Failing fill and wet spot																		
60.58	4720	0.770	Alden	Hagans	RobRds	Robinson SB271	Other	Assessment	III		0	0	0	0	0	0	\$0	0
Abandoned Lega	4720	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0	
60.58	4722	0.900	Alden	Hagans	RobRds	Robinson SB271	Humboldt	Storm Proofing	II		0	0	0	0	0	0	\$0	0
Abandoned Lega	4722	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0	
Failing Class II crossing.																		
60.71	1631	0.000	McCanl	Alden	Maintena	Maintenance	Surface Drainage	Maintenance	N/A		0	0	0	115	0	0	\$20,125	2,224
Upgraded	1631	4.550	ME	04/13/99		ECP Not	Dip Rolling	Medium	-	-	0	0	90	6	0	\$9	2,224	
60.71	2111	0.000	Pehl	Pehl	99-088	Dry Creek	No Problem	THP Maint Insp	N/A		0	0	0	0	0	0	\$0	0
Private Seasonal	2111	4.700	Unk	01/31/03		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0	
Winter Inspection. No problems.																		

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Road #	GIS#	Mile Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.71	3140	0.090	Haschak	Pehl	07-047	Kelp	Temp. Crossing	THP App. Rd.	I		0	0	0	0	0	\$2,250	0
Private Seasonal	3140	0.000	PL	06/16/11		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
This watercourse has been called a class II but the grade doesn't appear to inhibit fish from nearby Robinson Creek so I am treating it as a possible class I. This existing ford can be handled in one of two ways. The channel only carries water during wet periods. A 24" or larger half pipe can be temporarily installed and covered with clean rock or a couple of loads of clean rock can be used to raise the bed of the channel and maintain the crossing as a ford for trucking. The second option should only be used if the channel is dry during the logging season which it probably will be since it seems to only flow water during winter storms. In order to minimize the potential for delivery of fine sediment to the watercourse at Map Point 3, the road surface shall be covered with clean, angular, competent rock to a minimum depth of 6 inches on the approaches to the watercourse for 50 feet on either side of the channel or to the first drainage break, whichever is greater. At close of operations remove half pipe and take rock out so that they don't create a gradient barrier to fish. The crossing shall be removed prior to the onset of the winter period. If a half pipe is used it shall be sufficiently sized to span the wetted channel. During removal, care shall be taken to remove all added rock from the channel without modifying the channel. Adding a layer of straw to the channel prior to installation may be useful. Following removal, a waterbar or berm shall be installed on the western approach parallel to and within several feet of the active channel.																	
60.71	3140	0.090	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Storm Proofing	I		0	0	0	0	0	\$0	0
Upgraded	5244	0.000	R&S	08/14/12		ECP Not	Temp. Crossing	See Comments	-	-	0	0	0	0	0	\$0	0
An excavator will place a 6' boiler half round over wetted channel. Fill material will be placed over the boiler. Equipment will not operate in the wetted channel during installation. Remove after work completion. Try to plan operations for late in the season.																	
60.71	1177	0.400	McCanl	Pehl	Storm Pro	Storm Proofing	Other	Storm Proofing	N/A		0	0	0	1	1	\$245	0
Private Seasonal	1177	0.000	ME	05/30/01		ECP Not	Dip Rolling	Medium	-	-	0	0	1	0	0	\$0	0
spring located at IBR, ponding present . Small redwoods 3" to 4" indicate wood or logs in road prism TREAT remove all trees and wood from road install rolling dip to drain spring across road																	
60.71	1178	0.460	McCanl	Pehl	Storm Pro	Storm Proofing	Cut Bank Failure	Maintenance	N/A		0	0	0	1	0	\$225	0
Private Seasonal	1178	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Low	-	-	0	0	1	0	0	\$0	0
small cutbank failure , stumps and large wood present , failureis old and future movement unlikely TREAT remove stumps and logs from failure , use spoil to construct rolling dip and out slope road																	
60.71	1179	0.580	McCanl	Pehl	Storm Pro	Storm Proofing	Humboldt	Storm Proofing	III		0	0	0	20	30	\$10,494	222
Private Seasonal	1179	0.000	Unk	05/30/01		ECP Not	Culv. Install	High	-	36"	75	0	20	4	667	\$47	222
large humb. Crossing showing flows during storm events, TREAT excavate top to bot lay sides back 2 to 1 above inlet and below outlet endhaul spoils 3000' to left to ridge top install 36" cmp to grade , install CD on left hinge. (Note: Road crosses old debris flow. Slope appears to be stable as evidenced by large trees growing in fill. Rather than installing a pipe, a rocked rolling dip was installed.)																	
60.71	1180	0.650	McCanl	Pehl	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	N/A		0	0	0	3	0	\$675	267
Private Seasonal	1180	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Medium	-	-	0	0	3	0	267	\$4	174
potential road fill failure 100' above class 2 stream on 90% slopes, small crack and scarps showing TREAT excavate road fill remove all slash and woody debris use clean spoil to outslope road and construct rolling dips																	
60.71	1181	0.720	McCanl	Pehl	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	N/A		0	0	0	4	0	\$900	225
Private Seasonal	1181	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Medium	-	-	0	0	4	0	225	\$1	1,125
potential road fill failure on 90% slopes llots of organics in fill. TREAT excvate and store spoil on spur road above and use clean spoil to outslope road																	
60.71	1182	0.790	McCanl	Pehl	Storm Pro	Storm Proofing	Fill - Landing	Storm Proofing	N/A		0	0	0	2	0	\$450	150
Private Seasonal	1182	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Medium	-	-	0	0	2	0	150	\$6	75
potential road fill failure on 95% slopes TREAT excavate fill use to outslope road and construct rolling dips																	
60.71	1393	0.810	Pehl	Pehl	Maintena	Maintenance	Bridge	Maintenance	I		0	0	0	0	0	\$0	0
Private Seasonal	1393	0.000	Unk	05/30/01		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
Side by side flat cars bridge with rip rap and log footings. Permanent installation. Deck and footings servicable as of 3/29/01.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.71	1183	0.830	McCanl	Pehl	Storm Pro	Storm Proofing	Bridge	Storm Proofing	I		0	0	0	1	2	0	\$36,505	10
Private Seasonal	1183	0.000	Unk	05/30/01		ECP Not	Dip Rolling	Medium	RBrS2RRBrS		60		0	2	0	0	\$3,651	10
road drainage from left approach draining onto bridge and around right side causing small gully and fill failure maintain stable road surface. Double RR bridges 20' x 60'									TREAT install rolling dip to direct flow from bridge may need to add rock to									
60.71	1184	0.850	McCanl	Pehl	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	N/A		0	0	0	4	0	0	\$900	296
Private Seasonal	1184	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Medium	-	-	0		0	4	0	296	\$10	89
TREAT excavate road fill remove woody debris use clean spoil to outslope road and construct rolling dips																		
60.71	317	1.000	McCanl	McCanl	Maintena	Maintenance	Fill - Landing	THP Clean Up	N/A		0	0	0	2	0	0	\$340	200
Private Seasonal	317	0.000	RB	04/23/99		ECP Not	Excavate Soil	High	-	-	0		0	2	0	200	\$0	0
potential landing fill failure approx. 200 yds excavate fill store on landing against cutbank																		
60.71	316	1.100	McCanl	McCanl	Maintena	Maintenance	Fill - Road	Maintenance	N/A		0	0	0	9	0	0	\$1,530	40
Private Seasonal	316	1.500	RB	04/19/99		ECP Not	Excavate Soil	High	-	-	0		0	9	0	150	\$38	40
removed berm and sidecast from around cmp removed slash that was pushed against trees																		
60.71	1185	1.160	McCanl	Pehl	Storm Pro	Storm Proofing	Cut Bank Failure	Maintenance	N/A		0	0	0	1	1	0	\$315	0
Private Seasonal	1185	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Medium	-	-	0		0	1	0	80	\$0	0
cutbank failure blocking road TREAT excavate failure endhaul to left to ridge top																		
60.71	314	1.700	McCanl	McCanl	Maintena	Maintenance	Cut Bank Failure	Maintenance	N/A		0	0	0	2	2	0	\$300	0
Private Seasonal	314	0.000	RB	04/19/99		ECP Not	Excavate Soil	High	-	-	0		0	0	0	80	\$0	0
a cutbank failuer blocking road spoil has been pushed through with skidder leaving a berm with some sidecast excavate endhaul spoils to stable location																		
60.71	315	2.000	McCanl	McCanl	Maintena	Maintenance	Other	Maintenance	N/A		0	0	0	7	0	0	\$1,190	0
Private Seasonal	315	0.000	RB	04/20/99		ECP Not	Other	Medium	-	-	0		0	7	0	0	\$0	0
re-align switchback to make truckable by lowering and relocating upper approach road																		
60.71	1186	2.300	McCanl	Pehl	Storm Pro	Storm Proofing	Fill - Landing	Storm Proofing	N/A		0	0	0	4	0	0	\$900	341
Private Seasonal	1186	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Medium	-	-	0		0	4	0	341	\$0	0
TREAT excavate landing fill store spoil locally																		
60.71	1187	2.490	McCanl	Pehl	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	N/A		0	0	0	2	4	0	\$810	167
Private Seasonal	1187	0.000	Unk	05/30/01		ECP Not	Excavate Soil	High	-	-	0		0	2	0	167	\$12	67
potential roadfill failure 95' above class 3 TREAT excavate and endhaul to right																		
60.71	1188	2.510	McCanl		Storm Pro	Storm Proofing	No Problem	Maintenance	III		0	0	0	0	0	0	\$0	0
Private Seasonal	1188	0.000	Unk	07/01/00		ECP Not	No Action	No Action	-	-	0		0	0	0	0	\$0	0
18" cmp on class 3 spring OK																		
60.71	1189	2.520	McCanl	Pehl	Storm Pro	Storm Proofing	Culv.-HDP	Storm Proofing	N/A		0	0	0	0	0	0	\$100	0
Private Seasonal	1189	0.000	Unk	05/30/01		ECP Not	Dip Critical	Medium	36"	-	0		0	1	0	0	\$0	0
cmp has DP to right TREAT install critical dip right hinge																		
60.71	1190	2.550	McCanl	Pehl	Storm Pro	Storm Proofing	Cut Bank Failure	Maintenance	N/A		0	0	0	2	2	0	\$630	0
Private Seasonal	1190	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Medium	-	-	0		0	2	0	89	\$0	0
cutbank failure blocking road , mostly large woody debris and stumps TREAT excavate endhaul spoil to right store woody debris on slopes below																		
60.71	1191	2.590	McCanl	Pehl	Storm Pro	Storm Proofing	Culv.-HDP	Storm Proofing	III		0	0	0	0	0	0	\$100	0
Private Seasonal	1191	0.000	Unk	05/30/01		ECP Not	Dip Critical	Medium	-	-	0		0	1	0	0	\$0	0
36" cmp on class 3 has DP to right TREAT install critical dip right hinge																		

Road #	GIS#	Mile Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.71	1195	2.690	McCanl	Pehl	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	N/A	0	0	0	2	0	0	\$450	156
Private Seasonal	1195	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Medium	-	-	0	0	2	0	156	\$0	0
potential road fill failure with no del. Cracks and scarps showing 5' back from OBF TREAT remove organics from fill use spoil to outslope road																	
60.71	149	3.000	Magnus	Pehl	99-088	Dry Creek	Fill - Road	THP Mitigation	N/A	0	0	0	5	2	0	\$735	267
Private Seasonal	149	0.000	RB	04/20/99		ECP Not	Excavate Soil	THP Low	-	-	0	0	2	0	267	\$0	0
For a distance of 80 feet, perched, loose, unsupported fill shall be removed by excavation and incorporated into the existing road surface or removed to a stable location on the nearby ridgeline.																	
60.71	150	3.480	Magnus	Kelly	99-088	Dry Creek	No Problem	THP Recon.	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	150	0.000	Unk	07/01/00		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
This is a three way intersection. Local topography/slopes and road width allows for use of one road only at a time.																	
60.71	152	3.530	Magnus	Pehl	99-088	Dry Creek	Cut Bank Failure	THP Mitigation	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	152	0.000	ME	05/30/01		ECP Not	Other	THP Low	-	-	0	0	0	0	0	\$0	0
Cut-bank slump (10 X15'). Incorporate material into road surface.																	
60.71	151	3.530	McCanl	Pehl	Storm Pro	Storm Proofing	Dip Critical	Maintenance	III	0	0	0	0	1	0	\$190	5
Private Seasonal	1197	0.000	Unk	05/30/01		ECP Not	Other	High	-	-	0	0	1	0	0	\$38	5
a rolling dip on a class 3 stream with cement blocks armouring outlet area , when stream is flow , flow is directed to right of outlet causing minor erosion TREAT re-construct dip and rock.																	
60.71	151	3.530	Magnus	Pehl	99-088	Dry Creek	Surface Drainage	THP Mitigation	N/A	0	0	0	2	2	0	\$320	0
Private Seasonal	151	0.000	ME	05/30/01		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	\$0	0
Nick point at edge of road fill defines the head of a class III watercourse. A rolling dip shall be constructed at this point.																	
60.71	1196	3.555	McCanl	Pehl	Storm Pro	Storm Proofing	Fill - Landing	Storm Proofing	II	0	0	0	2	0	0	\$380	474
Storm Proofed	1196	0.000	ME	04/26/01		ECP Not	Excavate Soil	High	-	-	0	0	2	0	474	\$1	308
potential road fill failure between 2 class 2 streams TREAT excavate and endhaul to landing 500' to right																	
60.71	153	3.580	Magnus	Pehl	99-088	Dry Creek	Fill - Road	THP Mitigation	N/A	0	0	0	1	0	0	\$180	0
Private Seasonal	153	0.000	ME	04/26/01		ECP Not	Other	THP Low	-	-	0	0	1	0	0	\$0	0
THP specifies widening road by excavating additional 2-3 foot into the cutbank and incorporating spoils into the road prism. No side cast.																	
60.71	154	3.590	Magnus	Pehl	99-088	Dry Creek	Fill - Road	THP Mitigation	III	0	0	0	2	2	0	\$320	0
Private Seasonal	154	0.000	ME	05/30/01		ECP Not	Dip Critical	THP Low	-	-	40	0	0	0	0	\$0	0
A portion of the road prism and fill has eroded to the inside of the road surface. A concrete block wall and rockford crossing will be installed, using the design and counstruction details described in the THP.																	
60.71	155	3.600	McCanl	Pehl	Storm Pro	Storm Proofing	Dip Critical	Storm Proofing	III	0	0	0	0	1	0	\$190	4
Private Seasonal	1198	0.000	Unk	05/30/01		ECP Not	Rock Surface	High	-	-	0	0	1	0	0	\$48	4
rock armour rolling dip																	
60.71	155	3.600	Magnus	Pehl	99-088	Dry Creek	Fill - Road	THP Mitigation	N/A	0	0	0	2	2	0	\$320	0
Private Seasonal	155	0.000	ME	05/30/01		ECP Not	Keyway Con.	THP Low	-	-	0	0	0	0	0	\$0	0
A keyway shall be excavated through the failure and new fill compacted in lifts. At the end of operations a rockford rolling dip shall be installed at the swale.																	
60.71	156	3.600	Magnus	Pehl	99-088	Dry Creek	Cut Bank Failure	THP Mitigation	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	156	0.000	ME	05/30/01		ECP Not	Other	THP Low	-	-	0	0	0	0	0	\$0	0
Utilize as fill or lincorporate into the road surface.																	
60.71	157	3.630	Magnus	Pehl	99-088	Dry Creek	Fill - Road	THP Mitigation	N/A	0	0	0	0	0	0	\$0	0
Private Seasonal	157	0.000	ME	05/30/01		ECP Not	Keyway Con.	THP Low	-	-	0	0	0	0	0	\$0	0

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.71	158	3.630	Magnus	Pehl	99-088	Dry Creek	Cut Bank Failure	THP Mitigation	N/A		0	0	0	2	2	0	\$320	0
Private Seasonal	158	0.000	ME	05/30/01		ECP Not	Other	THP Low	-	-	0	0	0	0	0	\$0	0	
Utilize spoils from this feature to incorporated into fill (MP-7) above or incorporated into road surface.																		
60.71	159	3.760	McCanl	Pehl	Storm Pro	Storm Proofing	Dip Rolling	Storm Proofing	III		0	0	0	0	1	0	\$190	0
Private Seasonal	1199	0.000	Unk	05/30/01		ECP Not	Rock Surface	Medium	-	-	0	0	1	0	0	\$0	0	
rock armour rolling dip outlet area with 6" to 12" rock																		
60.71	159	3.760	Magnus	Pehl	99-088	Dry Creek	Surface Drainage	THP Mitigation	N/A		0	0	0	2	2	0	\$320	0
Private Seasonal	159	0.000	ME	05/30/01		ECP Not	Dip Rolling	THP Low	-	-	0	0	0	0	0	\$0	0	
The head of a III watercourse is located at the outside edge of the road prism. Construct rolling dip at this point.																		
60.71	160	3.870	Magnus	Pehl	99-088	Dry Creek	Other	THP Mitigation	III		0	0	0	2	2	0	\$1,056	0
Private Seasonal	160	0.000	ME	05/30/01		ECP Not	Other	THP Low	-	24"	40	0	0	0	0	\$0	0	
Construct a rocked ford crossing using the details described on pages 16-19 in the THP. (Concrete block wall with rocked dip.)																		
60.71	161	3.940	McCanl	Pehl	Storm Pro	Storm Proofing	Culv.-HDP	Storm Proofing	III		0	0	0	0	0	\$100	0	
Private Seasonal	1200	0.000	Unk	05/30/01		ECP Not	Dip Critical	High	36"	-	0	0	1	0	0	\$0	0	
36" cmp on class 3 stream has DP to right TREAT add critical dip to right																		
60.71	161	3.940		Pehl	99-088	Dry Creek	Other	THP Mitigation	III		0	0	0	2	2	0	\$1,414	0
Private Seasonal	161	0.000	ME	05/30/01		ECP Not	Culv. Install	THP Low	-	30"	40	0	1	0	0	\$0	0	
See THP for extensive rambling description and diagram. Specifies reconstruction along inboard portion of alignment with a catch basin at the culvert inlet. A downspout is also specified. From review teams recommendations: "a) At the end of timber operations and before the start of the winter period, a rocked ford crossing shall be installed over the culvert to form a bank-up drainage control structure in case the culvert plugs; b) A large cut-off berm shall be installed downgrade from the crossing; c) A trash rack shall be installed at the catch basin; and d) Geotextile fabric shall not be installed for use as an erosion control blanket. Instead, an erosion control blanket can be installed according to the manufacturer's instructions. As an alternative, clean logging slash can be spread on bare soil surfaces. Conifer seedlings shall be planted where appropriate on the reconstructed crossing. (DMG)"																		
60.71	1201	4.290	McCanl	Pehl	Storm Pro	Storm Proofing	Fill - Road	Storm Proofing	N/A		0	0	0	2	2	0	\$630	117
Private Seasonal	1201	0.000	Unk	05/30/01		ECP Not	Excavate Soil	Medium	-	-	0	0	2	0	117	\$12	53	
potential road fill failure 70' above class 3, showing cracks and scarps 6' back from OBF fill contains lots of organics TREAT excavate and endhaul to left 200'																		
60.7105	4547	0.000	Alden	Kelly	Maintena	Maintenance	Surface Drainage	Assessment	N/A		0	0	0	0	0	\$0	860	
Upgraded	4547	1.760	PW	06/01/97		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	860	
This road has the culverts pulled and is well drained. Outsloping and dipping could be done next time it is used.																		
60.7105	4540	0.200	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Storm Proofing	II		0	0	0	3	0	\$713	50	
Upgraded	4540	0.000	R&S	08/14/12		ECP Not	Remove Crossing	Medium	Pull	Pull	0	0	2	3	0	\$14	50	
Pull back and stabilize fill at crossing and 25' upstream.																		
60.7105	4541	0.270	Alden	Kelly	Maintena	Maintenance	Temp. Crossing	Storm Proofing	II		0	0	0	0	0	\$0	0	
Private Seasonal	4541	0.000	Unk	06/01/97		ECP Not	No Action	No Action	Pull	Pull	0	0	0	0	0	\$0	0	
OK, but could pull back another 20 yards if in the area.																		
60.7105	4542	0.690	Alden	Kelly	Maintena	Maintenance	Temp. Crossing	Storm Proofing	III		0	0	0	0	0	\$0	0	
Private Seasonal	4542	0.000	Unk	06/01/97		ECP Not	No Action	No Action	Pull	Pull	0	0	0	0	0	\$0	0	
60.7105	4543	0.960	Alden	Kelly	Maintena	Maintenance	Temp. Crossing	Storm Proofing	III		0	0	0	0	0	\$0	0	
Private Seasonal	4543	0.000	Unk	06/01/97		ECP Not	No Action	No Action	Pull	Pull	0	0	0	0	0	\$0	0	

Small Class III

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.7105	4544	0.980	Alden	Kelly	Maintena	Maintenance	Temp. Crossing	Storm Proofing	III		0	0	0	0	0	\$0	0
Private Seasonal	4544	0.000	Unk	06/01/97		ECP Not	No Action	No Action	Pull	Pull	0	0	0	0	0	\$0	0
60.7105	5738	1.360	Haschak	Bennett	12-029	Tulip	Temp. Crossing	THP App. Rd.	Swale		0	0	0	0	0	\$0	0
Private Seasonal	5738	0.000	Unk	01/01/16		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Maintain rolling dip in its current location. Nothing else needs to be done at this point.																	
60.7105	4545	1.380	Alden	Kelly	Maintena	Maintenance	Temp. Crossing	Storm Proofing	III		0	0	0	0	0	\$0	0
Private Seasonal	4545	0.000	Unk	06/01/97		ECP Not	No Action	No Action	Pull	Pull	0	0	0	0	0	\$0	0
60.7105	4545	1.380	Haschak	Bennett	12-029	Tulip	Temp. Crossing	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	5732	0.000	Unk	01/01/16		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Place a straw bale at the crossing outlet prior to using this road segment. Shape and remove any fill placed in the watercourse crossing so that the gradient of the inlet matches the gradient of the outlet prior to the completion of timber operations.																	
60.7105	4546	1.460	Alden	Kelly	Maintena	Maintenance	Temp. Crossing	Storm Proofing	III		0	0	0	0	0	\$0	0
Private Seasonal	4546	0.000	Unk	06/01/97		ECP Not	No Action	No Action	Pull	Pull	0	0	0	0	0	\$0	0
Small Class III																	
60.7105	4546	1.460	Haschak	Bennett	12-029	Tulip	Temp. Crossing	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	5733	0.000	Unk	01/01/16		ECP Not	Temp. Crossing	Medium	-	-	0	0	0	0	0	\$0	0
Rolling dip on swale. Scrape off any loose fill at close of operations.																	
60.710518	4535	0.000	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A		0	0	0	0	1	\$500	98
Abandoned Fixed	4535	0.200	R&S	08/14/12		ECP Not	Waterbar	Medium	-	-	0	0	4	2	0	\$5	98
Waterbars every 50'																	
60.710518	4539	0.100	Alden	Alden	RobRds	Robinson SB271	Fill - Road	Storm Proofing	N/A		0	0	0	2	0	\$365	60
Abandoned Fixed	4539	0.000	R&S	08/14/12		ECP Not	Excavate Soil	Medium	-	-	0	0	1	0	0	\$6	60
Perched fill with stress cracks																	
Pull back 30 feet of fill down to the redwood trees.																	
60.710518	4538	0.130	Alden	Alden	RobRds	Robinson SB271	Fill - Road	Storm Proofing	N/A		0	0	0	1	0	\$235	60
Abandoned Fixed	4538	0.000	R&S	08/14/12		ECP Not	Excavate Soil	Medium	-	-	0	0	1	0	0	\$4	60
Perched fill with stress cracks																	
Pull back 60 feet of fill																	
60.710518	4536	0.200	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Abandoned Lega	4536	0.300	PW	04/16/08		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
Let it be.																	
60.710518	4537	0.200	Alden	Alden	RobRds	Robinson SB271	Fill - Road	Storm Proofing	N/A		0	0	0	3	0	\$705	80
Abandoned Fixed	4537	0.000	R&S	08/14/12		ECP Not	Excavate Soil	Medium	-	-	0	0	3	0	80	\$22	32
Perched fill with stress cracks																	
Pull back 40' of fill. From old slide just before the Redwood in the middle of the road.																	
60.7131	1676	0.000	Alden	Alden	98-147	Doty Ridge	Surface Drainage	THP Mitigation	N/A		0	0	0	0	0	\$0	391
Deactivated	1676	0.800	RB	09/03/99		ECP Not	Waterbar	Medium	-	-	0	0	0	0	0	\$0	391
Blocked, pulled culverts and waterbarred.																	

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.7131	1676	0.000	Alden	Pehl	98-147	Doty Ridge	Surface Drainage	THP Mitigation	N/A		0	0	0	0	0	\$0	391
Deactivated	2161	0.800	Unk	11/15/04		ECP Not	Waterbar	Medium	-	-	0		0	0	0	\$0	391
Try to get Danny Hagens to inspect this to see is it is ok.																	
60.7131	528	0.160	Lewicki	Kelly	98-147	Doty Ridge	Humboldt	Storm Proofing	III		0	0	0	4	0	\$508	0
Abandoned Fixed	528	0.000	RB	09/03/99		ECP Not	Remove Crossing	Medium	-	Pull	0		0	0	4	\$0	0
Dip out class III																	
60.7131	529	0.230	Lewicki	Kelly	98-147	Doty Ridge	Culv.	Storm Proofing	III		0	0	0	6	0	\$698	0
Abandoned Fixed	529	0.000	RB	09/03/99		ECP Not	Remove Crossing	Medium	-	Pull	0		0	0	4	\$0	0
Remove culvert and dip out																	
60.7131	530	0.280	Lewicki	Kelly	98-147	Doty Ridge	Humboldt	Storm Proofing	III		0	0	0	4	0	\$508	0
Abandoned Fixed	530	0.000	RB	09/03/99		ECP Not	Excavate Soil	Medium	-	-	0		0	0	4	\$0	0
60.7131	531	0.530	Lewicki	Kelly	98-147	Doty Ridge	Slide - Shallow	Storm Proofing	N/A		0	0	0	0	0	\$0	0
Abandoned Fixed	531	0.000	Unk	12/25/00		ECP Not	Other	Medium	-	-	0		0	0	0	\$0	0
Old landslide on exposed ridge. Water continues to flow down and erode this slide. Portion of this slide which are not hard bedrock will be planted with conifer seedlings the first winter following abandonment.																	
60.7131	532	0.540	Lewicki	Kelly	98-147	Doty Ridge	Humboldt	Storm Proofing	III		0	0	0	4	0	\$508	0
Abandoned Fixed	532	0.000	RB	09/03/99		ECP Not	Excavate Soil	Medium	-	-	0		0	0	4	\$0	0
Dip out crossing																	
60.7131	533	0.600	Lewicki	Kelly	98-147	Doty Ridge	Humboldt	Storm Proofing	III		0	0	0	6	0	\$698	0
Abandoned Fixed	533	0.000	RB	09/03/99		ECP Not	Excavate Soil	Medium	-	-	0		0	0	4	\$0	0
Dip out crossing																	
60.7131	534	0.610	Lewicki	Kelly	98-147	Doty Ridge	Surface Drainage	Storm Proofing	N/A		0	0	0	4	0	\$508	0
Abandoned Fixed	534	0.000	RB	09/03/99		ECP Not	Dip Rolling	Medium	-	-	0		0	0	4	\$0	0
Water from a crossing up the road runs along the inside of the road and crosses at this point onto the fill. A waterbar or dip will be placed at this location.																	
60.7131	535	0.620	Lewicki	Kelly	98-147	Doty Ridge	Humboldt	Storm Proofing	III		0	0	0	4	0	\$508	0
Abandoned Fixed	535	0.000	RB	09/03/99		ECP Not	Excavate Soil	Medium	-	-	0		0	0	4	\$0	0
Dip out corssing																	
60.7131	536	0.700	Lewicki	Kelly	98-147	Doty Ridge	Cut Bank Failure	Storm Proofing	N/A		0	0	0	0	0	\$0	0
Abandoned Fixed	536	0.000	RB	09/03/99		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0
Cut bank slump. This is a stable slump blocking the road. It is proposed to leave this in place rather than remove it and expose more erodable material.																	
60.716	5934	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	5934	0.400	Unk	12/12/12		ECP Not	No Action	Low	-	-	0		0	0	0	\$0	0
60.716055	5935	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	5935	0.060	Unk	12/12/12		ECP Not	No Action	Low	-	-	0		0	0	0	\$0	0
60.7166	22	0.000	Kelly	Kelly	95-367	Brandt-Woodin	No Problem	THP New Con.	N/A		0	0	0	0	0		0
Private Seasonal	22	0.000		08/01/98		ECP Not	Full Bench	Medium	-	-	0		0	0	0	\$0	0
60.7166	23	0.000	Kelly	Kelly	95-367	Brandt-Woodin	No Problem	THP New Con.	N/A		0	0	0	0	0		0
Private Seasonal	23	0.000		09/01/98		ECP Not	Full Bench	Medium	-	-	0		0	0	0	\$0	0

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.7166	5933	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	0	\$0	0
Not Connected	5933	0.400 Unk	12/12/07		ECP Not	No Action	Low	-	-	0		0	0	0	0	\$0	0
60.7169	1651	0.000 Pehl	Pehl	Storm Pro	Storm Proofing	Surface Drainage	Maintenance	N/A		0	0	0	38	0	0	\$6,450	577
Upgraded	1651	1.180 ME	05/03/01		ECP Not	Dip Rolling	Medium	-	-	0		0	29	0	0	\$11	577
60.7169	1392	1.140	Pehl	99-088	Dry Creek	Other	THP Mitigation	N/A		0	0	0	0	0	0	\$0	0
Private Seasonal	1392	1.175 Unk	05/30/01		ECP Not	Waterbar	THP Low	-	-	0		0	0	0	0	\$0	0
End of proposed road. Northwest of this point a skid trail continues up ridgeline at steep grade. This section of road (skid trail) shall be winterized by installing waterbars every 50 feet.																	
60.716949	5936	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	0	\$0	0
Not Connected	5936	0.100 Unk	12/12/12		ECP Not	No Action	Low	-	-	0		0	0	0	0	\$0	0
60.716965	5937	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	0	\$0	0
Not Connected	5937	0.110 Unk	12/12/12		ECP Not	No Action	Low	-	-	0		0	0	0	0	\$0	0
60.716981	5938	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	0	\$0	0
Not Connected	5938	0.070 Unk	12/12/12		ECP Not	No Action	Low	-	-	0		0	0	0	0	\$0	0
60.7176	21	0.000 Kelly	Kelly	95-367	Brandt-Woodin	No Problem	THP New Con.	N/A		0	0	0	0	0	0	\$12,938	0
Private Seasonal	21	0.000 RR	08/26/98		ECP Not	Other	Medium	-	-	0		0	0	0	0	\$0	0
60.7176	1650	0.000 Pehl	Pehl	Storm Pro	Storm Proofing	Surface Drainage	Maintenance	N/A		0	0	0	0	0	0	\$0	196
Upgraded	1650	0.400 ME	04/30/01		ECP Not	Dip Rolling	Medium	-	-	0		0	0	0	0	\$0	196
60.7176	162	0.200 Magnus	Pehl	99-088	Dry Creek	No Problem	THP Mitigation	N/A		0	0	0	0	0	0	\$0	0
Private Seasonal	162	0.000 Unk	07/01/00		ECP Not	No Action	No Action	-	-	0		0	0	0	0	\$0	0
THP specifies no ground based equipment to be used on the road past this (south of) point.																	
60.7176	1202	0.300 McCanl	Pehl	Storm Pro	Storm Proofing	Humboldt	Storm Proofing	III		0	0	0	20	20	0	\$4,603	355
Existing Skid	1202	0.000 ME	04/30/01		ECP Not	Excavate Soil	High	-	-	0		0	13	14	711	\$13	355
fill crossing where 2 class 3 streams join this appears to be large skid trail . Easy access to crossing . TREAT excavate crossing joining both stream at OBF endhaul to left to landing some storage on skid to left																	
60.76	5248	0.000 Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A		0	0	0	0	0	6	\$630	220
Storm Proofed	5248	0.450 PL	09/15/11		ECP Not	Tip and Dip	Medium	-	-	0		0	0	0	0	\$3	220
60.76	2763	0.000 Haschak	Pehl	06-163	Sage	Dip Critical	Maintenance	III		0	0	0	0	0	0	\$0	0
Private Seasonal	2763	0.000 PW	11/12/12		ECP Not	Dip Critical	Medium	24"	-	0		0	0	0	0	\$0	0
Enhance rolling dip that acts as critical dip for culvert higher on the road.																	
60.76	2763	0.000 Susan	Reynold	19-197	Hoodoo	Worn Out Culvert	THP App. Rd.	II		0	0	0	0	0	0	\$1,105	0
Private Seasonal	6912	0.000 ES	11/10/20		GWDR 1-19-00197	Culv. Replace	THP Low	24"	24"	60		0	0	0	0	\$0	0
A 24" diameter galvanized steel culvert drains flow from a Class 2 watercourse across the road at this location. The culvert has perforations from rust and abrasion. Install a 24" diameter culvert. Insure critical dip is in place when this road segment is winterized.																	
60.76	668	0.075 Haschak	Pehl	06-163	Sage	Temp. Crossing	Maintenance	I		0	0	0	0	0	0	\$0	0
Private Seasonal	2804	0.000 PW	11/15/11		ECP Not	Bridge - Temp	Important 1600	- 1RRBr		0		0	0	0	0	\$0	0
Flatbed bridge on North Fork Gualala River. Installation involves placing brow logs on both banks to support the bridge and minor grading to make the surface suitable for log truck traffic. The bridge will be removed no later than 11/15 of each year and stored in the forest off of the gravel bar, the brow logs are saved and reused as necessary. The near bank vegetation is redwood forest with some willows. No riparian vegetation will be disturbed during bridge installation. See 1600 permit requirements for any additional mitigations.																	
60.76	5354	0.450 Alden	Pehl	06-163	Sage	Surface Drainage	Assessment	N/A		0	0	0	13	0	0	\$3,976	147
Storm Proofed	5354	0.750 R&S	08/24/09		ECP Not	Tip and Dip	Medium	-	-	0		0	13	2	0	\$27	147

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.76	2805	0.450	Haschak Pehl	06-163	Sage	Sage	Temp. Crossing	Maintenance	I		0	0	0	0	0	\$0	0
Private Seasonal	2805	0.000	PW	11/15/11		ECP Not	Culv. Install	Medium	-	-	0	0	0	0	0	\$0	0
Class I crossing. Install half pipe at least 36" in diameter and cover with clean rock. Remove half pipe and all fill down to original channel at close of operations. (Note- Although this is a class I xing it is typically dry during the summer) See 1600 permit requirements for any additional mitigations.																	
60.76	2775	0.470	Haschak Pehl	06-163	Sage	Sage	Slide - Deep	Maintenance	N/A		0	0	0	8	0	\$1,730	100
Private Seasonal	2775	0.000	R&S	08/20/09		ECP Not	Excavate Soil	Medium	-	-	0	0	8	0	0	\$17	100
Road crosses 20-30 year old slide. Creek is undermining toe of slide. Maintain inslope and remove waterbar. If necessary widen road for safety but keep road width to a minimum.																	
60.76	2774	0.520	Haschak Pehl	06-163	Sage	Sage	Dip Rolling	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	2774	0.000	PW	11/15/11		ECP Not	Dip Rolling	Medium	-	-	0	0	0	0	0	\$0	0
Maintain existing rolling dip at swale.																	
60.76	5248	0.750	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A		0	0	0	9	0	\$2,928	367
Storm Proofed	5353	1.500	R&S	05/25/12		ECP Not	Tip and Dip	Medium	-	-	0	0	17	2	0	\$8	367
60.76	5783	0.930	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	III		0	0	0	0	0	\$0	0
Private Seasonal	5783	0.000	Unk	06/06/94		ECP Not	No Action	No Action	18"	-	0	0	0	0	0	\$0	0
60.76	2769	1.100	Haschak Pehl	06-163	Sage	Sage	Spring	Maintenance	Spr.		0	0	0	1	0	\$323	50
Private Seasonal	2769	0.000	PW	11/15/11		ECP Not	Culv. Maintenance	Medium	-	-	0	0	1	0	0	\$6	50
Spring drain is filling in. Create catch basin and clean inlet.																	
60.76	2768	1.150	Haschak Pehl	06-163	Sage	Sage	Spring	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	2768	0.000	PW	11/15/11		ECP Not	Culv. Install	Medium	-	-	0	0	0	0	0	\$0	0
Install 6 or 12" spring drain if this spot is still wet at time of operations or rock surface if that will be sufficient to allow passage.																	
60.76	5779	1.160	Alden	Maintena	Maintenance	Maintenance	No Problem	Maintenance	II		0	0	0	0	0	\$0	0
Private Seasonal	5779	0.000	Unk	06/06/94		ECP Not	No Action	No Action	60"	-	0	0	0	0	0	\$0	0
This is well installed 54" x 66" squash pipe																	
60.76	2767	1.240	Haschak Pehl	06-163	Sage	Sage	Culv.-Plug	Maintenance	III		0	0	0	10	10	\$4,340	30
Private Seasonal	2767	0.000	PW	11/15/11		ECP Not	Culv. Maintenance	Medium	-	-	0	0	10	0	0	\$145	30
Reestablish inside ditch and clean head of culvert at class III. Create rock armored critical dip in case culvert plugs again. Remove unstable material on bank above culvert. If extra rock is available at site line inside ditch.																	
60.76	2767	1.240	Haschak Alden	RobRds	Robinson SB271	Sage	Culv.-Plug	Maintenance	III		0	0	0	1	0	\$130	30
Private Seasonal	5782	0.000	R&S	08/22/12		ECP Not	Culv. Maintenance	Medium	18"	RkFd	0	0	0	0	0	\$4	30
Reestablish inside ditch and clean head of culvert at class III. Create rock armored critical dip in case culvert plugs again. Remove unstable material on bank above culvert. If extra rock is available at site line inside ditch.																	
60.76	2766	1.280	Haschak Pehl	06-163	Sage	Sage	Other	Maintenance	III		0	30	0	10	6	\$3,896	33
Private Seasonal	2766	0.000	PW	11/15/11		ECP Not	Armored Ford	Medium	-	-	0	0	10	0	0	\$118	33
Potential for diversion to the left and resulting fill failure. Enhance the dip on the downhill side (left side) by mounding up higher. Install rock ford with rock armor at the outboard edge of the road that is adequately keyed into native material so that it shall remain in place and is able to withstand anticipated traffic and high flow conditions. Loose fill on down slope should be removed prior to keying in rock. Rock armor should extend downslope as far as possible to reach without leaving the road surface. See detail sketch after work order.																	
60.76	2766	1.280	Haschak Alden	RobRds	Robinson SB271	Sage	Other	Maintenance	III		0	60	0	7	8	\$2,523	33
Private Seasonal	5781	0.000	R&S	08/22/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	10	0	0	\$76	33
Potential for diversion to the left and resulting fill failure. Enhance the dip on the downhill side (left side) by mounding up higher. Install rock ford with rock armor at the outboard edge of the road that is adequately keyed into native material so that it shall remain in place and is able to withstand anticipated traffic and high flow conditions. Loose fill on down slope should be removed prior to keying in rock. Rock armor should extend downslope as far as possible to reach without leaving the road surface. See detail sketch after work order.																	

Road #	GIS#	Mile Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.76	2765	1.330	Haschak Pehl	06-163	Sage	Culv.	Maintenance	Spr.	0	0	0	0	6	4	0	\$2,382	26
Private Seasonal	2765	0.000	PW	11/15/11	ECP Not	Culv. Maintenance	Medium	-	-	0	0	0	6	0	0	\$122	20
Install rocked rolling critical dip. Eliminate inside ditch and outslope road between road point #12 and #13. Pull loose fill around outfall of culvert to the extent possible to do so and still maintain road width.																	
60.76	2764	1.370	Haschak Pehl	06-163	Sage	Surface Drainage	Maintenance	Spr.	0	0	0	0	6	6	0	\$2,604	100
Private Seasonal	2764	0.000	PW	11/15/11	ECP Not	Dip Rolling	Medium	-	-	0	0	0	6	0	0	\$104	25
Three rocked rolling dips will be installed along this stretch of road in order to drain the spring/seep areas along the inside ditch between this point and point #13.																	
60.76	2793	1.450	Haschak Pehl	06-163	Sage	Surface Drainage	Maintenance	N/A	0	0	0	0	0	0	0	\$0	0
Private Seasonal	2793	1.520	PW	11/15/11	ECP Not	Waterbar	Medium	-	-	0	0	0	0	0	0	\$0	0
Put in large waterbar or if possible large rolling dip at location of existing waterbar. Put in additional waterbars or rolling dips or enhance existing dips downroad for approximately the next 300 feet .																	
60.76	2763	1.450	Haschak Alden	RobRds	Robinson SB271	Dip Critical	Maintenance	III	0	0	0	0	0	0	0	\$105	0
Private Seasonal	5780	0.000	R&S	05/25/12	ECP Not	Dip Critical	Medium	24"	-	0	0	0	1	0	0	\$0	0
Enhance rolling dip that acts as critical dip for culvert higher on the road.																	
60.76	2946	1.500	Pehl	Maintena	Maintenance	Surface Drainage	Maintenance	N/A	0	0	0	0	0	0	0	\$0	455
Upgraded	2946	2.430	R&S	07/25/06	ECP Not	Tip and Dip	Medium	-	-	0	0	0	0	0	0	\$0	455
60.7601	6419	0.070	Haschak Bennett	16-094	Plum	Temp. Crossing	THP App. Rd.	I	0	0	0	0	0	0	0	\$0	0
Private Seasonal	6419	0.000	Unk	10/15/19	ECP Not	Bridge - Temp	Medium	-	-	0	0	0	0	0	0	\$0	0
Install temporary railroad bridge or half pipe - see diagrams in section II map section for installation guidelines and in 1600 permit section (also in section II)																	
60.7621	5355	0.000	Alden Pehl	06-163	Sage	Surface Drainage	Assessment	N/A	0	0	0	8	0	0	0	\$2,380	98
Storm Proofed	5355	0.200	R&S	08/25/09	ECP Not	Tip and Dip	Medium	-	-	0	0	0	8	0	0	\$24	98
60.7621	4632	0.200	Alden Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A	0	0	0	41	0	0	0	\$11,095	406
Storm Proofed	4632	1.030	R&S	05/16/12	ECP Not	Tip and Dip	Medium	-	-	0	0	42	7	0	0	\$27	406
60.7621	4627	0.480	Alden Alden	RobRds	Robinson SB271	Cut Bank Failure	Maintenance	N/A	0	0	0	9	0	0	0	\$2,085	0
Storm Proofed	4627	0.000	R&S	05/16/12	ECP Not	Excavate Soil	Medium	-	-	0	0	9	1	0	0	\$0	0
Small fill failure and large bank failure (100') ramp over.																	
60.7621	4629	0.800	Alden Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	II	0	0	0	4	0	0	0	\$940	50
Storm Proofed	4629	0.000	R&S	05/16/12	ECP Not	Remove Crossing	Medium	-	Pull	60	0	4	0	0	0	\$19	50
Small class II. Bank failure and slide from 200' left bank. Ramp over and install 24" pipe																	
60.7621	4633	1.030	Alden Alden	Maintena	Maintenance	Surface Drainage	Assessment	N/A	0	0	0	0	0	0	0	\$0	0
Abandoned Lega	4633	1.500	PW	07/29/08	ECP Not	No Action	No Action	-	-	0	0	0	0	0	0	\$0	0
This section of road was probably never there. Or it is gone.																	
60.7621	4628	1.040	Alden Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	II	0	0	0	4	0	0	0	\$1,120	50
Storm Proofed	4628	0.000	R&S	05/16/12	ECP Not	Remove Crossing	Medium	-	Pull	0	0	4	4	0	0	\$22	50
Small class II. Pull. There is no road beyond																	
60.7621	4630	1.120	Alden Alden	Maintena	Maintenance	Humboldt	Storm Proofing	II	0	0	0	0	0	0	0	\$0	10
Abandoned Lega	4630	0.000	PW	07/29/08	ECP Not	No Action	No Action	-	-	0	0	0	0	0	0	\$0	10
Wet class II. Between 4628 and 4630 either the road is gone or more likely there never was a road.																	
60.7621	4590	1.120	Alden Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A	0	0	0	0	0	0	0	\$0	0
Abandoned Lega	4590	2.270	Unk	06/01/12	ECP Not	No Action	No Action	-	-	0	0	0	0	0	0	\$0	0

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.7621	4634	1.240	Alden	Alden	RobRds	Robinson SB271	Cut Bank Failure	Storm Proofing	N/A	0	0	0	0	0	0	\$0	0
Abandoned Lega	4634	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7621	4635	1.460	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	III	0	0	0	0	0	0	\$0	0
Abandoned Lega	4635	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7621	4591	1.550	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	II	0	0	0	0	0	0	\$0	0
Abandoned Lega	4591	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7621	4592	1.630	Alden	Alden	RobRds	Robinson SB271	Cut Bank Failure	Storm Proofing	N/A	0	0	0	0	0	0	\$0	0
Abandoned Lega	4592	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7621	4593	1.740	Alden	Alden	RobRds	Robinson SB271	Gully	Storm Proofing	N/A	0	0	0	0	0	0	\$0	0
Abandoned Lega	4593	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7621	4594	1.840	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	II	0	0	0	0	0	0	\$0	0
Abandoned Lega	4594	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7621	4595	1.900	Alden	Alden	RobRds	Robinson SB271	Fill - Road	Storm Proofing	N/A	0	0	0	0	0	0	\$0	0
Abandoned Lega	4595	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7621	4596	2.080	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	II	0	0	0	0	0	0	\$0	0
Abandoned Lega	4596	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7621	4597	2.090	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	III	0	0	0	0	0	0	\$0	0
Abandoned Lega	4597	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7621	4598	2.140	Alden	Alden	Maintena	Maintenance	Fill - Road	Storm Proofing	N/A	0	0	0	0	0	0	\$0	20
Deactivated	4598	0.000	PW	05/07/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
There is no point in going further.																	
60.7621	4599	2.230	Alden	Alden	Maintena	Maintenance	Humboldt	Storm Proofing	II	0	0	0	0	0	0	\$0	0
Deactivated	4599	0.000	PW	05/07/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
There is no point in fighting through the slide to get here. Almost all of what is going to happen has happened.																	
60.7621	4600	2.260	Alden	Alden	Maintena	Maintenance	Humboldt	Storm Proofing	N/A	0	0	0	0	0	0	\$0	0
Deactivated	4600	0.000	PW	05/07/08		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
This is wash out, but it would do more damage getting to it than sediment saved.																	
60.762106	4683	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4683	0.260	PW	08/14/08		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.76210604	4684	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4684	0.066	PW	08/14/08		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.76217	4579	0.000	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A	0	0	0	0	0	0	\$0	0
Abandoned Lega	4579	0.130	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.76217	4589	0.070	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	II	0	0	0	0	0	0	\$0	0
Abandoned Lega	4589	0.000	Unk	06/01/12		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.76217	4578	0.130	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A	0	0	0	43	0	0	\$10,252	259
Storm Proofed	4578	0.660	R&S	05/30/12		ECP Not	Tip and Dip	Medium	-	-	0	0	31	7	0	\$40	259
Tip and dip out to the switch back landing.																	

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds	
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds	
60.76217	4588	0.130	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	II		0	0	0	14	60	0	\$7,973	400
Deactivated	4588	0.000	R&S	06/27/12		ECP Not	Remove Crossing	High	-	Pull	0		0	10	2	0	\$20	400
Failed class II crossing. 100' of road gone. Pull back and stabilize as much as possible.																		
60.76217	4587	0.380	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	III		0	30	0	4	0	0	\$520	60
Storm Proofed	4587	0.000	R&S	05/30/12		ECP Not	Armored Ford	Medium	-	RkFd	0		0	0	0	0	\$14	36
A class III crosses the road. It has diverted 200' down the road and caused a fill failure. Correct drainage and rebuild the road.																		
60.76217	4586	0.400	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	III		0	30	0	4	1	0	\$605	100
Storm Proofed	4586	0.000	R&S	05/30/12		ECP Not	Armored Ford	Medium	-	RkFd	0		0	0	0	0	\$15	40
A class III crosses the road. It has diverted 50' down the road and caused a fill failure																		
60.76217	4585	0.430	Alden	Alden	RobRds	Robinson SB271	Spring	Storm Proofing	III		0	0	0	4	1	0	\$1,745	20
Storm Proofed	4585	0.000	R&S	05/30/12		ECP Not	Armored Ford	Medium	-	RkFd	0		0	10	2	0	\$873	2
Spring and small gully.																		
60.76217	5690	0.440	Alden	Alden	RobRds	Robinson SB271	No Problem	Maintenance	N/A		0	0	0	12	12	0	\$2,725	0
Storm Proofed	5690	0.000	R&S	10/26/11		ECP Not	Rock Pit	No Action	-	-	0		0	2	0	0	\$0	0
This is a good rock pit.																		
60.76217	4584	0.450	Alden	Alden	RobRds	Robinson SB271	Fill - Road	Storm Proofing	Spr.		0	0	0	4	0	0	\$940	20
Storm Proofed	4584	0.000	R&S	05/30/12		ECP Not	Dip Critical	Medium	-	-	0		0	4	0	0	\$0	0
Spring crosses the road and caused a fill failure.																		
60.76217	4583	0.470	Alden	Alden	RobRds	Robinson SB271	Fill - Road	Storm Proofing	N/A		0	0	0	5	0	0	\$1,175	20
Storm Proofed	4583	0.000	R&S	05/30/12		ECP Not	Dip Rolling	Medium	-	-	0		0	5	0	0	\$196	6
Berm has channeled water down road to weak fill. Get water off the road.																		
60.76217	4582	0.500	Alden	Alden	RobRds	Robinson SB271	Fill - Road	Storm Proofing	III		0	50	0	8	0	0	\$2,282	50
Storm Proofed	4582	0.000	R&S	10/25/11		ECP Not	Armored Ford	Medium	-	RkFd	0		0	11	1	0	\$46	50
Wet class III and fill failure. Rocked ford or 24" culvert.																		
60.76217	4581	0.530	Alden	Alden	RobRds	Robinson SB271	Spring	Storm Proofing	Spr.		0	120	0	2	1	0	\$745	0
Storm Proofed	4581	0.000	R&S	10/25/11		ECP Not	Dip Rolling	Medium	-	-	0		0	4	1	0	\$0	0
Spring runs down the road 50'. No gully. Install dip.																		
60.76217	4580	0.550	Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	III		0	50	0	1	0	0	\$470	20
Storm Proofed	4580	0.000	R&S	10/25/11		ECP Not	Armored Ford	Medium	-	RkFd	0		0	3	2	0	\$47	10
Small Class III. Some surface flow across the road. Small gully. Rock armor the bank.																		
60.76217098	4601	0.000	Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	0	\$0	0
Not Connected	4601	0.040	PW	05/07/08		ECP Not	No Action	Medium	-	-	0		0	0	0	0	\$0	0
60.7638	4711	0.000	Alden	Alden	Maintena	Maintenance	Surface Drainage	Assessment	N/A		0	0	0	0	0	0	\$0	225
Upgraded	4711	0.460	PW	09/30/08		ECP Not	Waterbar	Low	-	-	0		0	0	0	0	\$0	225
This road is essentially not connected. The one road point will be delt with on the Sage THP.																		
60.7638	2762	0.100	Haschak Pehl	06-163		Sage	Temp. Crossing	Maintenance	Spr.		0	0	0	0	0	0	\$0	0
Private Seasonal	2762	0.000	PW	11/15/11		ECP Not	Dip Rolling	Medium	-	-	0		0	0	0	0	\$0	0
Enhance rolling dip so that it drains springy inside ditch. Install 6" drain pipe if wet at times of operations.																		

Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.7642	4699	0.000	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A	0	0	0	17	0	0	\$5,483	264
Storm Proofed	4699	0.540	R&S	05/22/12		ECP Not	Tip and Dip	Medium	-	-	0	0	28	10	0	\$21	264
60.7642	5825	0.050	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	II	0	0	0	0	0	0	\$0	0
Private Seasonal	5825	0.000	Unk	08/05/12		ECP Not	Water Hole	Low	-	-	0	0	0	0	0	\$0	0
Water drafting site on pond developed for sage fire																	
60.7642	2792	0.100	Haschak Pehl	06-163	Sage		No Problem	Maintenance	III	0	0	0	1	0	0	\$323	10
Private Seasonal	2792	0.000	PW	11/15/11		ECP Not	Dip Rolling	Medium	-	-	0	0	1	0	0	\$32	10
Dip out crossing at close of operations. Enhance existing dip by mounding dirt higher on the downhill side so that water is not diverted down the road. Slash pack outside edge of crossing to reduce potential for surface erosion. Waterbar the northeastern approach to this crossing to divert drainage from reaching this crossing.																	
60.7642	4700	0.110	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III	0	20	0	2	2	0	\$755	40
Storm Proofed	4700	0.000	R&S	05/22/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	4	0	0	\$19	40
Small class III that has formed a small pond. Do not lower the road. Rock armor the fill slope.																	
60.7642	4701	0.150	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III	0	50	0	2	3	0	\$1,198	40
Storm Proofed	4701	0.000	R&S	05/22/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	7	0	50	\$30	40
This is a class III that is cutting. Install an armored ford or a 24" culvert.																	
60.7642	4702	0.260	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III	0	30	0	1	15	0	\$1,720	50
Storm Proofed	4702	0.000	R&S	05/22/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	3	0	70	\$34	50
This is a class III that is cutting. Install an armored ford or a 24" culvert.																	
60.7642	4703	0.310	Alden	Alden	RobRds	Robinson SB271	Spring	Assessment	Spr.	0	0	0	2	0	0	\$942	0
Storm Proofed	4703	0.000	R&S	05/22/12		ECP Not	Culv. Install	Low	-	18"	40	0	2	0	50	\$0	0
This is a spring. And 18" culvert will drain it. It is not causing a problem. It would be ok to leave it and use a temporary drain as needed when logging.																	
60.7642	4704	0.370	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III	0	30	0	1	2	0	\$625	60
Storm Proofed	4704	0.000	R&S	05/22/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	4	0	80	\$10	60
This is a class III that is cutting. Install an armored ford or a 24" culvert.																	
60.7642	5785	0.480	Alden	Alden	RobRds	Robinson SB271	No Problem	Maintenance	N/A	0	0	0	16	0	0	\$2,080	0
Storm Proofed	5785	0.000	R&S	05/12/12		ECP Not	Rock Pit	No Action	-	-	0	0	0	0	0	\$0	0
This is a good rock pit.																	
60.7642	4705	0.540	Alden	Alden	RobRds	Robinson SB271	Humboldt	Assessment	II	0	40	0	71	79	0	\$23,483	5,000
Storm Proofed	4705	0.000	R&S	09/02/12		ECP Not	Remove Crossing	High	-	Pull	0	0	59	26	5,000	\$5	5,000
This is an old landing in a class II. It is a wedge 100' long, 60' wide and 15' deep. It needs to be removed and hauled back to flat ground near the intersection.																	
60.764211	4711	0.000	Alden	Alden	Maintena	Maintenance	Surface Drainage	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4712	0.380	PW	09/30/08		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
60.7644	4710	0.000	Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A	0	0	0	7	0	0	\$2,420	137
Storm Proofed	4710	0.280	R&S	05/21/12		ECP Not	Tip and Dip	Medium	-	-	0	0	15	0	0	\$18	137
60.7644	4709	0.120	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III	0	20	0	2	4	0	\$1,030	60
Storm Proofed	4709	0.000	R&S	05/21/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	5	0	100	\$17	60
This is a class III that is cutting. Install an armored ford or a 24" culvert.																	
60.7644	4708	0.150	Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III	0	90	0	1	2	0	\$520	50
Storm Proofed	4708	0.000	R&S	05/21/12		ECP Not	Armored Ford	Medium	-	RkFd	0	0	3	0	100	\$10	50
This is a class III that is cutting. Install an armored ford or a 24" culvert.																	

Road #	GIS#	Mile Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
60.7644	4707	0.220 Alden	Alden	Maintena	Maintenance	Temp. Crossing	Assessment	III		0	0	0	0	0	\$0	0
Storm Proofed	4707	0.000 PW	08/14/08		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0
This is the very top of a class III. No action necessary																
60.7644	4706	0.260 Alden	Alden	RobRds	Robinson SB271	Temp. Crossing	Assessment	III		0	0	0	1	0	\$235	30
Storm Proofed	4706	0.000 R&S	05/21/12		ECP Not	Remove Crossing	Low	-	Pull	0		0	1	0	\$8	30
This is a small class III. Removing the fill would be ok.																
60.7647	4691	0.000 Alden	Alden	RobRds	Robinson SB271	Surface Drainage	Assessment	N/A		0	0	0	2	0	\$470	114
Storm Proofed	4691	0.110 R&S	05/05/12		ECP Not	Tip and Dip	Medium	-	-	0		0	2	0	\$3	168
60.7647	4690	0.070 Alden	Alden	RobRds	Robinson SB271	Humboldt	Storm Proofing	III		0	0	0	13	5	\$3,285	60
Storm Proofed	4690	0.000 R&S	09/02/12		ECP Not	Remove Crossing	Medium	-	Pull	0		0	9	5	\$55	60
This is a class III crossing with no culvert that was partially dug out. There is a hole developing in the lower end. Spoil soil locally																
60.7659	4689	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	4689	0.100 PW	08/14/08		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0
60.766	4688	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	4688	0.160 PW	08/14/08		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0
60.767	4687	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	4687	0.060 PW	08/14/08		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0
60.7681	4686	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	4686	0.100 PW	08/14/08		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0
60.768167	4692	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	4692	0.050 PW	08/14/08		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0
60.7689	4685	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	4685	0.080 PW	08/14/08		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0
60.85	2108	0.000 Alden	Alden	01-298	Stagger Lee	No Problem	THP Maint Insp	N/A		0	0	0	0	0	\$0	0
Private Seasonal	2108	0.000 Unk	10/16/02		ECP Not	No Action	Medium	-	-	0		0	0	0	\$0	0
60.85	2131	0.600 Alden	Pehl	01-298	Stagger Lee	No Problem	THP New Con.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	2131	0.800 Unk	11/15/06		ECP Not	Other	THP Low	-	-	0		0	0	0	\$0	0
Inspect the new construction once per year through the maintenance period. (Road segment never constructed.)																
60.8519	5939	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0
Not Connected	5939	0.360 Unk	12/12/12		ECP Not	No Action	Low	-	-	0		0	0	0	\$0	0
60.8632	1422	0.000 McCanl	Alden	Maintena	Maintenance	Surface Drainage	Storm Proofing	N/A		0	0	0	8	0	\$1,440	147
Upgraded	1422	0.300 ME	03/07/01		ECP Not	Dip Rolling	Medium	-	-	0		0	8	0	\$10	147
80.4071	1457	0.650 Lewicki	Kelly	98-147	Doty Ridge	Other	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	648	0.000 ME	07/21/99		ECP Not	Other	Medium	-	-	0		0	0	0	\$0	0
Class III permanent crossing. A rock-lined ford will be constructed utilizing 6 inch or larger rock.																
80.4071	1456	0.690 Lewicki	Kelly	98-147	Doty Ridge	Other	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	647	0.000 ME	07/21/99		ECP Not	Other	Medium	-	-	0		0	0	0	\$0	0
Class III permanent crossing. A blanket drain will be constructed at this point. The drain will consist of needle punched filter fabric overlaid by 6 inch lifts of clean drain rock with the finished running road surface material placed upon the upper layer of fabric. An 18" CMP with armored spillway is an alternative at this location.																

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
80.4071	1455	0.720	Lewicki	Bennett	98-147	Doty Ridge	Other	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	646	0.000	ME	06/02/03		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
Class III permanent crossing. A rock-lined ford will be constructed utilizing 6 inch or larger rock.																	
This point not done. Do map point 1455 instead																	
80.4071	627	1.450	Lewicki	Alden	98-147	Doty Ridge	Slide - Shallow	THP App. Rd.	N/A		0	0	0	3	0	\$600	0
Private Seasonal	627	0.000	ME	06/19/03		ECP Not	Excavate Soil	Medium	-	-	0	0	3	0	0	\$0	0
Small slide which settled on and flowed across the road. The road prism is still intact. This slide was ramped over during the summer of 1997. It is proposed to remove the remaining jack-strawed trees and outslope and widen the road to a maximum width and slope back the cutbank. A waterbar will be installed immediately upgrade from the slump upon completion of operations. Any live redwood root wads developed during reconstruction will be "planted" along the outside edge of the road to form a live buttress. (COMMENT: THE SLIDE IS DONE, BUT MAKE SURE TO MAINTAIN THE WATERBAR)																	
80.4071	1464	1.750	Lewicki	Hagans	98-147	Doty Ridge	Surface Drainage	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	628	0.000	ME	08/08/03		ECP Not	Dip Rolling	Medium	-	-	0	0	0	0	0	\$0	0
Head of a Class III which flows only during peak storm events. There is little evidence of erosion present on the road surface. It is proposed to place a rolling dip at this point.																	
80.4071	629	1.800	Lewicki	Bennett	98-147	Doty Ridge	Other	THP App. Rd.	Spr.		0	0	0	0	0	\$0	0
Private Seasonal	629	0.000	Unk	06/02/03		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
Spring emerges from the cutbank at this point.																	
80.4071	630	1.850	Lewicki	Bennett	98-147	Doty Ridge	Other	THP App. Rd.	Spr.		0	0	0	0	0	\$0	0
Private Seasonal	630	0.000	Unk	06/02/03		ECP Not	Other	Medium	-	-	0	0	0	0	0	\$0	0
Spring emerges from the cutbank at this point.																	
80.4071	1465	1.900	Lewicki	Bennett	98-147	Doty Ridge	Fill - Road	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	631	0.000	ME	06/02/03		ECP Not	Culv. Ditch Relief	Medium	-	-	0	0	0	0	0	\$0	0
Head of Class III which is eroding the fill. A rock-lined dry ford will be constructed utilizing 12 inch or larger rock for the facing.																	
This point not done. Do map point 1465 instead.																	
80.4071	632	2.100	Lewicki	Bennett	98-147	Doty Ridge	Cut Bank Failure	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	632	0.000	Unk	06/02/03		ECP Not	Excavate Soil	Medium	-	-	0	0	0	0	0	\$0	0
Cut bank slump which was pushed through the summer of 1997. It is proposed to arch over the slide and widen and outslope the road to a maximum of fifteen feet to provide minimum road width. Spoils created will be spread out on the road surface or deposited on the first ridge to the north.																	
80.4071	1474	2.150	Lewicki	Bennett	98-147	Doty Ridge	Fill - Road	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	633	0.000	ME	06/02/03		ECP Not	Culv. Ditch Relief	Medium	-	-	0	0	0	0	0	\$0	0
Head of a Class III. A rock-lined dry ford will be constructed utilizing 12 inch or larger rock for the facing. A sketch is included to aid in construction.																	
This point not done. Do map point 1474 instead.																	
80.4071	634	2.200	Lewicki	Bennett	98-147	Doty Ridge	No Problem	THP App. Rd.	Spr.		0	0	0	0	0	\$0	0
Private Seasonal	634	0.000	ME	07/01/00		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Spring.																	
80.4071	635	2.220	Lewicki	Bennett	98-147	Doty Ridge	No Problem	THP App. Rd.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	635	0.000	Unk	07/01/00		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	0
Old slide partially revegetated.																	

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
80.4071	1475	2.290	Lewicki	Bennett	98-147	Doty Ridge	No Problem	THP App. Rd.	III		0	0	0	0	0	\$0	0
Private Seasonal	636	0.000	Unk	07/01/00		ECP Not	No Action	Medium	18"	-	40		0	0	0	\$0	0
Existing 18" CMP.																	
80.4071	1476	2.310	Lewicki	Bennett	98-147	Doty Ridge	Humboldt	THP Recon.	III		0	0	0	0	0	\$736	0
Private Seasonal	637	0.000	Unk	06/02/03		ECP Not	Culv. Install	Medium	-	24"	40		0	0	0	\$0	0
Class III crossing. This is an old Humboldt crossing which failed and is eroding the fill. The road prism narrows to six feet at this point. There exists a small slide just past this point. It is proposed to key in the fill at the crossing in approximate on foot compact lifts and install a 24 inch CMP at this point. An armored spillway will be installed to protect the fill in case the culvert fails. An excavator will be necessary to pull back the fill and remove the slide materials. Spoils will be used at the crossing or deposited on the ridge between Map Points 131 and 132. A sketch is included to aid in construction.																	
80.4071	638	2.610	Lewicki	Alden	98-147	Doty Ridge	Surface Drainage	THP Recon.	N/A		0	0	0	3	5	\$925	0
Private Seasonal	638	0.000	ME	06/30/03		ECP Not	Waterbar	Medium	-	-	0		0	3	0	\$0	0
Spring runoff settling on landing. The landing will be properly drained upon completion of operations.																	
80.4071	639	2.620	Lewicki	Alden	98-147	Doty Ridge	Other	THP Recon.	N/A		0	0	0	2	5	\$725	0
Private Seasonal	639	4.000	ME	06/30/03		ECP Not	Other	Medium	-	-	0		0	2	0	\$0	0
The road beyond this point has not been opened for at least 15 years.																	
80.4071	640	2.650	Lewicki	Alden	98-147	Doty Ridge	Cut Bank Failure	THP Recon.	III		0	0	0	5	10	\$1,650	0
Private Seasonal	640	2.720	ME	06/30/03		ECP Not	Excavate Soil	Medium	-	-	0		0	5	0	\$0	0
Between these points there exists approximately 150 feet of cutbank slumps. The road prism is still intact. Side slopes range from 60-80 % along this stretch. To the extent possible spoils will be spread along the road surface. The majority will have to be removed and deposited at Map Point 138.																	
80.4071	641	2.720	Lewicki	Alden	98-147	Doty Ridge	Temp. Crossing	THP Recon.	III		0	0	0	0	0	\$0	0
Private Seasonal	641	0.000	ME	07/03/03		ECP Not	Temp. Crossing	Medium	-	-	0		0	0	0	\$0	0
Class III temporary crossing. This is a narrow, shallow watercourse approximately two to three feet wide and on foot deep. Side slopes are 40% uphill and 65% downhill at the crossing.																	
80.4071	642	2.800	Lewicki	Bennett	98-147	Doty Ridge	Cut Bank Failure	THP Recon.	N/A		0	0	0	10	20	\$3,300	0
Private Seasonal	642	2.850	ME	06/02/03		ECP Not	Excavate Soil	Medium	-	-	0		0	10	0	\$0	0
The road is gone along the first 60 feet of this segment. Cutbank slumps exist along the next 100 feet. It is proposed to rebuild this section of road utilizing an excavator to key in the fill in approximate on foot compacted lifts sloping slightly towards the cutbank. There will be no cut along this section. Reinforced fill construction will be utilized. A back drain consisting of 4" perforated leach pipe wrapped in fabric will be installed at the base of the fill for drainage. Spoils created will be endhauled to Map Point 138. A sketch is included to aid construction.																	
80.4071	643	2.850	Lewicki	Bennett	98-147	Doty Ridge	Other	THP Recon.	N/A		0	0	0	0	10	\$650	0
Private Seasonal	643	0.000	ME	07/01/00		ECP Not	No Action	Medium	-	-	0		0	0	0	\$0	0
Swale.																	
80.4071	644	2.900	Lewicki	Alden	98-147	Doty Ridge	Cut Bank Failure	THP Recon.	N/A		0	0	0	0	0	\$0	0
Private Seasonal	644	0.000	ME	07/02/03		ECP Not	Excavate Soil	Medium	-	-	0		0	0	0	\$0	0
Cutbank slump. Spoils will be spread out upon the road surface.																	
80.4071	645	3.000	Lewicki	Alden	98-147	Doty Ridge	Cut Bank Failure	THP Recon.	N/A		0	0	0	10	10	\$2,550	0
Private Seasonal	645	0.000	ME	07/02/03		ECP Not	Excavate Soil	Medium	-	-	0		0	10	0	\$0	0
Cutbank slump/debris ravel. The road will be widened at this point and the spoils spread out upon the road surface. The resulting cutbank will be approximately 25 feet high.																	
80.7	1092	0.010	Alden	Alden	Maintena	Maintenance	No Problem	Maintenance	N/A		0	0	0	0	0	\$0	0
Private Seasonal	1092	0.000	Unk	12/05/00		ECP Not	Gate	Low	-	-	0		0	0	0	\$0	0
80.7	608	1.600	Alden	Kelly	94-564	Miller Tract	Surface Drainage	THP Clean Up	N/A		0	0	0	71	0	\$9,610	1,076
Deactivated	608	3.800	RB	11/15/99		ECP Not	Remove Crossing	Medium	-	Pull	0		0	0	91	\$9	1,076

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Road #	GIS#	Mile	Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds
80.706	4487	0.000	Alden	Kelly	98-106	Woodson	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	880
Storm Proofed	4487	1.800	Unk	06/06/98		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	880
This road is well drained and has no problems. Additional dips would be helpful.																	
80.706	4481	0.190	Alden	Kelly	98-106	Woodson	Culv.	Assessment	III	0	0	0	0	0	0	\$0	0
Storm Proofed	4481	0.000	Unk	06/06/98		ECP Not	No Action	Low	18"	-	0	0	0	0	0	\$0	0
There is an existing 18" culvert with a downspout. It is fine.																	
80.706	4483	1.490	Alden	Kelly	98-106	Woodson	Culv.	Assessment	III	0	0	0	0	0	0	\$0	0
Storm Proofed	4483	0.000	Unk	06/06/98		ECP Not	No Action	No Action	24"	-	0	0	0	0	0	\$0	0
24" Culvert With a downspout. It is fine.																	
80.706	4484	1.570	Alden	Kelly	98-106	Woodson	Culv.	Assessment	II	0	0	0	0	0	0	\$0	0
Storm Proofed	4484	0.000	Unk	06/06/98		ECP Not	No Action	No Action	36"	-	0	0	0	0	0	\$0	0
36" Culvert With a downspout. It is fine.																	
80.706	4485	1.670	Alden	Kelly	98-106	Woodson	Temp. Crossing	Assessment	III	0	0	0	0	0	0	\$0	0
Storm Proofed	4485	0.000	Unk	06/06/98		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
The crossing is pulled																	
80.706032	4482	0.000	Alden	Kelly	98-106	Woodson	No Problem	Assessment	N/A	0	0	0	0	0	0	\$0	0
Not Connected	4482	0.026	Unk	06/06/98		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
Short spur road																	
80.706032	1373	0.180	McCanl	McCanl	Storm Pro	Storm Proofing	Culv.	Storm Proofing	III	0	0	0	0	0	0	\$0	0
Private Perm.	1373	0.000	Unk	02/21/01		ECP Not	No Action	No Action	18"	-	0	0	0	0	0	\$0	0
no treat																	
80.706032	1367	1.650	McCanl	McCanl	Storm Pro	Storm Proofing	No Problem	Storm Proofing	III	0	0	0	0	0	0	\$0	0
Deactivated	1367	0.000	Unk	02/21/01		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	0
pulled crossing will to install temp crossing to do site #1																	
80.70606	4510	0.000	Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	N/A	0	0	0	0	0	0	\$0	230
Upgraded	4510	0.470	Unk	02/06/98		ECP Not	No Action	No Action	-	-	0	0	0	0	0	\$0	230
80.70606	4513	0.000	Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	II	0	0	0	0	0	0	\$0	0
Deactivated	4513	0.000	Unk	02/06/98		ECP Not	No Action	No Action	Pull	Pull	0	0	0	0	0	\$0	0
80.70606	4506	0.000	Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	III	0	0	0	0	0	0	\$0	93
Storm Proofed	4506	0.190	Unk	02/26/98		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	93
Small class III. Dip																	
80.70606	4505	0.130	Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	III	0	0	0	0	0	0	\$0	0
Storm Proofed	4505	0.000	Unk	02/26/98		ECP Not	No Action	Low	-	-	0	0	0	0	0	\$0	0
Small Class III, no diversion potential, no erosion rocky soil.																	
80.70606	4511	0.470	Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	N/A	0	0	0	0	0	0	\$0	318
Deactivated	4511	1.120	Unk	02/06/98		ECP Not	No Action	Medium	-	-	0	0	0	0	0	\$0	318
80.70606	4508	0.650	Alden	Alden	98-106	Woodson	Slide - Shallow	Storm Proofing	N/A	0	0	0	0	0	0	\$0	15
Storm Proofed	4508	0.680	Unk	02/06/98		ECP Not	Rock Pit	Low	-	-	0	0	0	0	0	\$0	15
This is an old rock pit that was used for road surface rock. Weak rock so no rip rap. It is also a series of bank failure that will need to be ramped over.																	

Road #	GIS#	Mile Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds		
Road Class	ID#	End Crew	Done	Rd Pt	ECP Number	Solution	Priority/Shedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD	FSD Yds		
80.70606	4509	0.810 Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	N/A		0	0	0	0	0	\$0	0		
Deactivated	4509	0.000 Unk	02/06/98		ECP Not	No Action	No Action	Pull	Pull	0		0	0	0	\$0	0		
80.70606	4512	0.870 Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	II		0	0	0	0	0	\$0	0		
Deactivated	4512	0.000 Unk	02/06/98		ECP Not	No Action	No Action	Pull	Pull	0		0	0	0	\$0	0		
80.70606	4514	1.100 Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	III		0	0	0	0	0	\$0	0		
Deactivated	4514	0.000 Unk	02/06/98		ECP Not	No Action	No Action	Pull	Pull	0		0	0	0	\$0	0		
80.70606049	4503	0.000 Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	N/A		0	0	0	0	0	\$0	0		
Not Connected	4503	0.035 Unk	02/26/98		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0		
Ridge top spur																		
80.70606085	4504	0.000 Alden	Alden	98-106	Woodson	No Problem	Storm Proofing	N/A		0	0	0	0	0	\$0	0		
Not Connected	4504	0.031 Unk	02/26/98		ECP Not	No Action	Medium	-	-	0		0	0	0	\$0	0		
Ridge top spur																		
80.706091	4486	0.000 Alden	Kelly	98-106	Woodson	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0		
Not Connected	4486	0.050 Unk	06/06/98		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0		
Short Spur road																		
80.7066	4488	0.000 Alden	Kelly	98-106	Woodson	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0		
Not Connected	4488	0.170 Unk	06/06/98		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0		
80.9076	4880	2.920 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0		
Not Connected	4880	3.000 Unk	11/04/08		ECP Not	No Action	Medium	-	-	0		0	0	0	\$0	0		
80.907694	4881	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0		
Not Connected	4881	0.520 Unk	11/04/08		ECP Not	No Action	No Action	-	-	0		0	0	0	\$0	0		
92.1096	5941	0.000 Alden	Alden	Maintena	Maintenance	No Problem	Assessment	N/A		0	0	0	0	0	\$0	0		
Not Connected	5941	0.510 Unk	12/12/12		ECP Not	No Action	Low	-	-	0		0	0	0	\$0	0		
Grand Total All Sites										564		3,334	0	1,874	1,225	48	\$715,915	45,929
													0	2,029	976	29,788		44,451

Road #	GIS#	Mile Plan	Final	THP#	THP Name	Problem	Repair Type	Cr. Class	DRCs	Rock	Left D	Exca.	Truck	Gra.	Cost	Total Yds
Road Class	ID#	End	Crew	Done	Rd Pt	ECP Number	Solution	Priority/Schedule	Old Dia	New Dia	Ln	Right D	Cat	Labor	Yds	\$/FSD FSD Yds

Road Work

- Road # – This is unique road ID number for each road segment on the property.
- Road Class – This is the type of road.
 - Upgraded – Outsloped and dipped
 - Storm proofed – Outsloped, dipped and culverts repaired.
 - Deactivation – Outsloped, dipped, culverts pulled, and the road will be reused.
 - Abandoned Fixed – Outsloped, dipped, culverts removed and the road will not be reused.
 - Abandoned Legacy – It will do more damage than good to work on the road. The road will not be reused.
- GIS# - Each existing site in the field (like a culvert) has a unique GIS number, usually the first visit ID#. It appears on the road maps. A new visit to an existing site will reference the GIS#. You can look up the history of visits to a particular site by calling up all the records with the same GIS#.
- ID# - Each "new" road site visit has a unique ID number. It is generated when the record is entered into the database.
- Mile – Each numbered road has mileage ticks from 0 to the end of the road. "Mile" is the distance out the road to the site.
- End – If the site is along a length of road, like tipping and dipping, there is a start point (Mile) and "end" mileage.
- Insp. – The name of the inspector that identified the site and made the prescription is listed here. The inspectors are trained to identify potential sediment sources and make prescriptions in accordance with the Handbook for Forest and Ranch Roads, Weaver and Hagans, 1992. Estimates of sediment production and delivery are made by the inspector.
- Crew – These are the initials of contractor that did the work.
- Planned – Date of site identification.
- Done – Date site work was completed.
- THP# - THP Number
- Rd Pt - This is the working number (THP road point) created by the inspector in the field. It is often found on field flagging.
- THP Name – The THP or program the work is associated with.
- ECP Name – The Erosion Control Plan the site is associated with.

- Problem – The type of problem.
- Solution – The type of solution.
- Repair type – Why was the work done.
- Priority – This reflects the urgency of the problem. A high priority site is one that is likely to deliver a significant amount of sediment during the next 5 year storm event. Medium and low priority sites need upgrading, but are unlikely to deliver significant amounts of sediment in the next several years. High priority sites will be scheduled for completion prior to a low or medium priority site.
- Stream Class – As per the Forest Practice Rules
- Old Dia – The diameter of the old culvert.
- New Dia Ln – The diameter and length of the new culvert if any.
- DRCs – Number of ditch relief culverts needed for the site.
- Rock – Yards of rock needed at the site – rip rap, rock surface, etc.
- Right and Left Ditch – Feet of road to the right and left of the site that is connected and needs treatment.
- Equipment Hours
 - Exca. – Excavator
 - Cat – Caterpillar tractor
 - Labor – Hand labor
 - Truck – Dump truck or water truck
 - Gra. – Grader
- Yds - This is the total yardage of soil that must be moved at the site.
- Cost – All the equipment costs, other costs and culvert costs. This does not include administration or logistic costs.
- \$/FSD – This is the total cost divided by the yards of soil prevented from delivery (FSD) to the watercourses.
- Total Yds – This is the estimate of yardage that will be mobilized in a failure if the work is not done.
 - FSD (Future Sediment Delivery) – This is the amount of soil that will be prevented from being delivered into the watercourses if the project is completed. It is the relative potential for sediment delivery (RPSD). This yardage only appears if the inspector has been trained to estimate this.

Unstable Areas in the Mouth of the Gualala PWS

Map Sheet 1 of 4

August 18, 2011



HYDROGRAPHY

—●—●—●— Class I

TRANSPORTATION

—+—+—+—+— EXISTING PAVED PUBLIC

— — — — — EXISTING PRIVATE PERMANENT

==== EXISTING PRIVATE SEASONAL

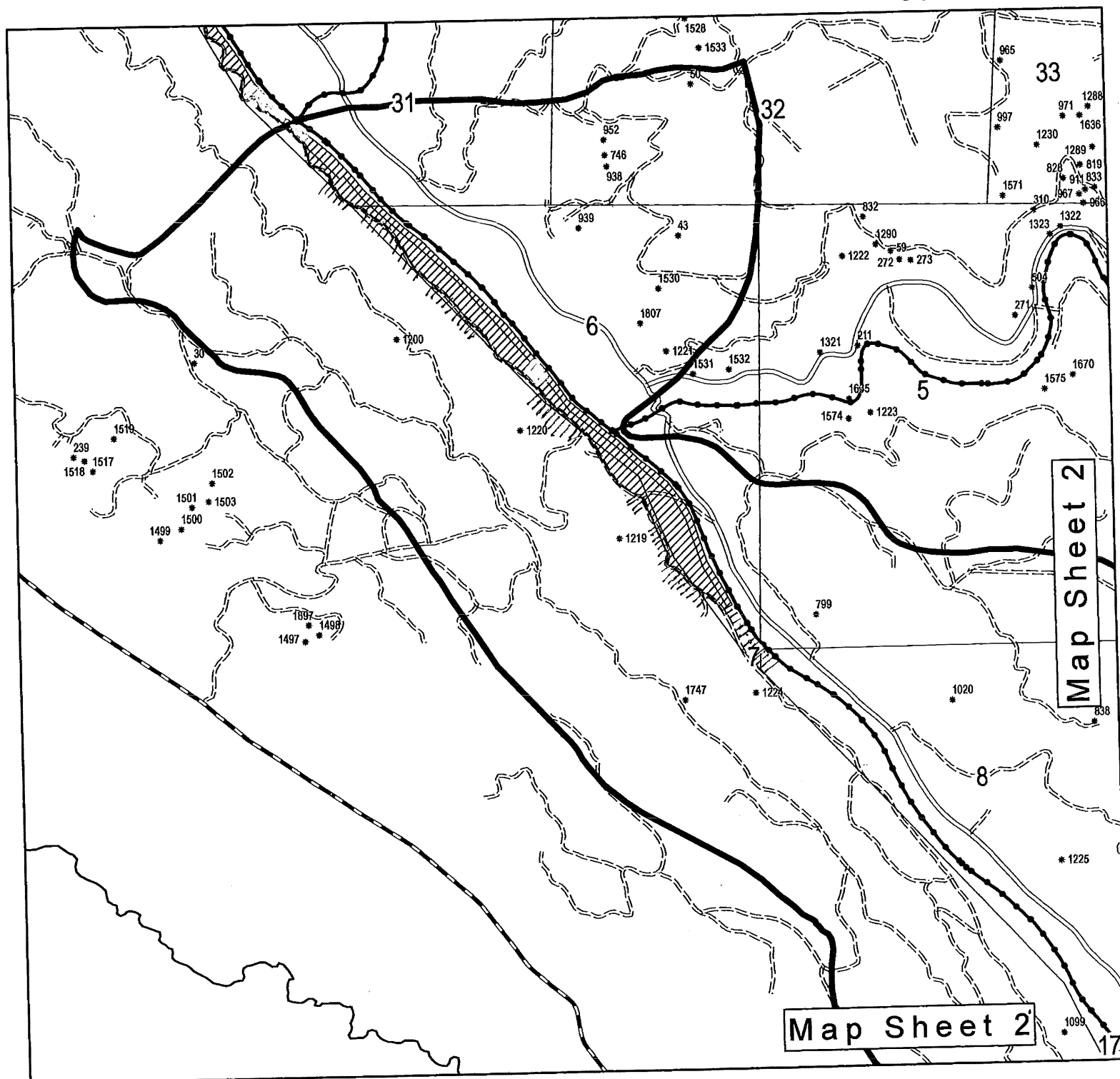


Mouth of the Gualala PWS

Card THP

0 500 1,000 1,500 2,000 Feet

SCALE 1:20000



Unstable Areas in the Mouth of the Gualala PWS

Map Sheet 2 of 4

August 18, 2011



HYDROGRAPHY

—●—●—●— Class I

TRANSPORTATION

— — — — — EXISTING PAVED PUBLIC

— — — — — EXISTING PRIVATE PERMANENT

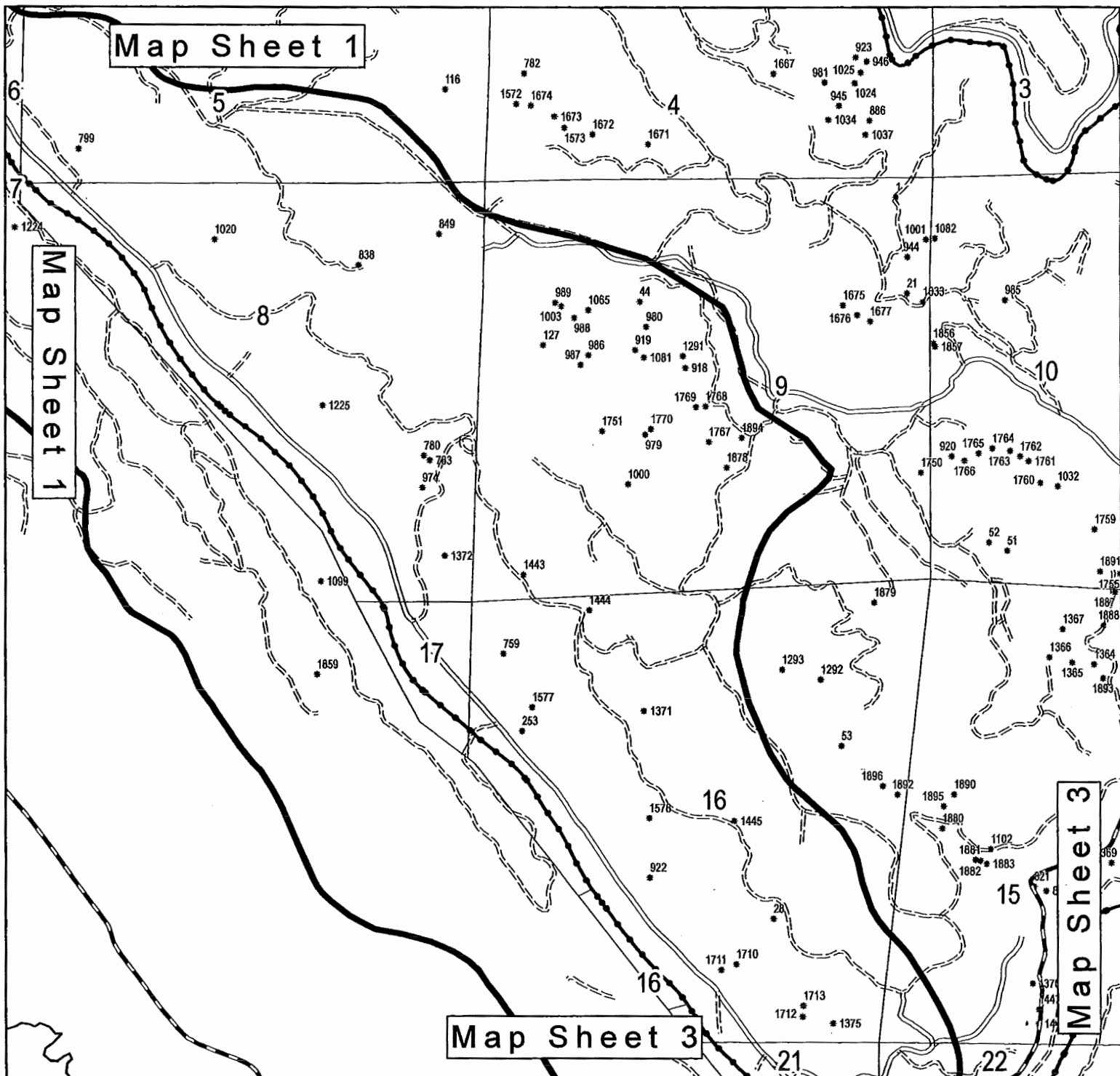
— — — — — EXISTING PRIVATE SEASONAL



Mouth of the Gualala PWS

0 500 1,000 1,500 2,000 Feet

SCALE 1:20000



411.2

Unstable Areas in the Mouth of the Gualala PWS

Map Sheet 3 of 4

August 18, 2011



HYDROGRAPHY

—•—•—•— Class I

TRANSPORTATION

—+—+—+— EXISTING PAVED PUBLIC

==== EXISTING PRIVATE PERMANENT

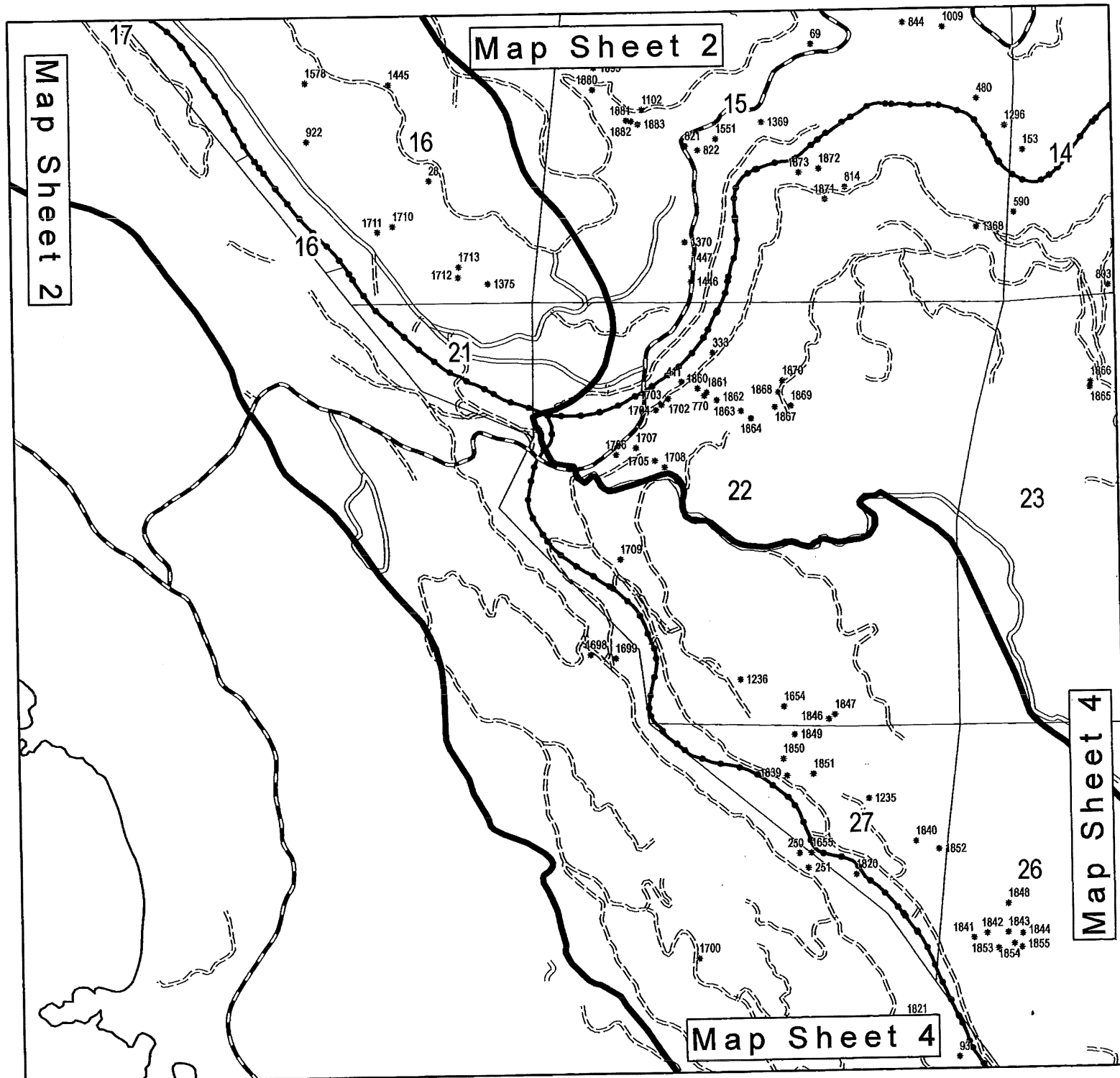
===== EXISTING PRIVATE SEASONAL



Mouth of the Gualala PWS

0 500 1,000 1,500 2,000 Feet

SCALE 1:20000



Unstable Areas in the Mouth of the Gualala PWS

Map Sheet 4 of 4

August 18, 2011



HYDROGRAPHY

—●—●—●— Class I

TRANSPORTATION

— — — — — EXISTING PAVED PUBLIC

— — — — — EXISTING PRIVATE PERMANENT

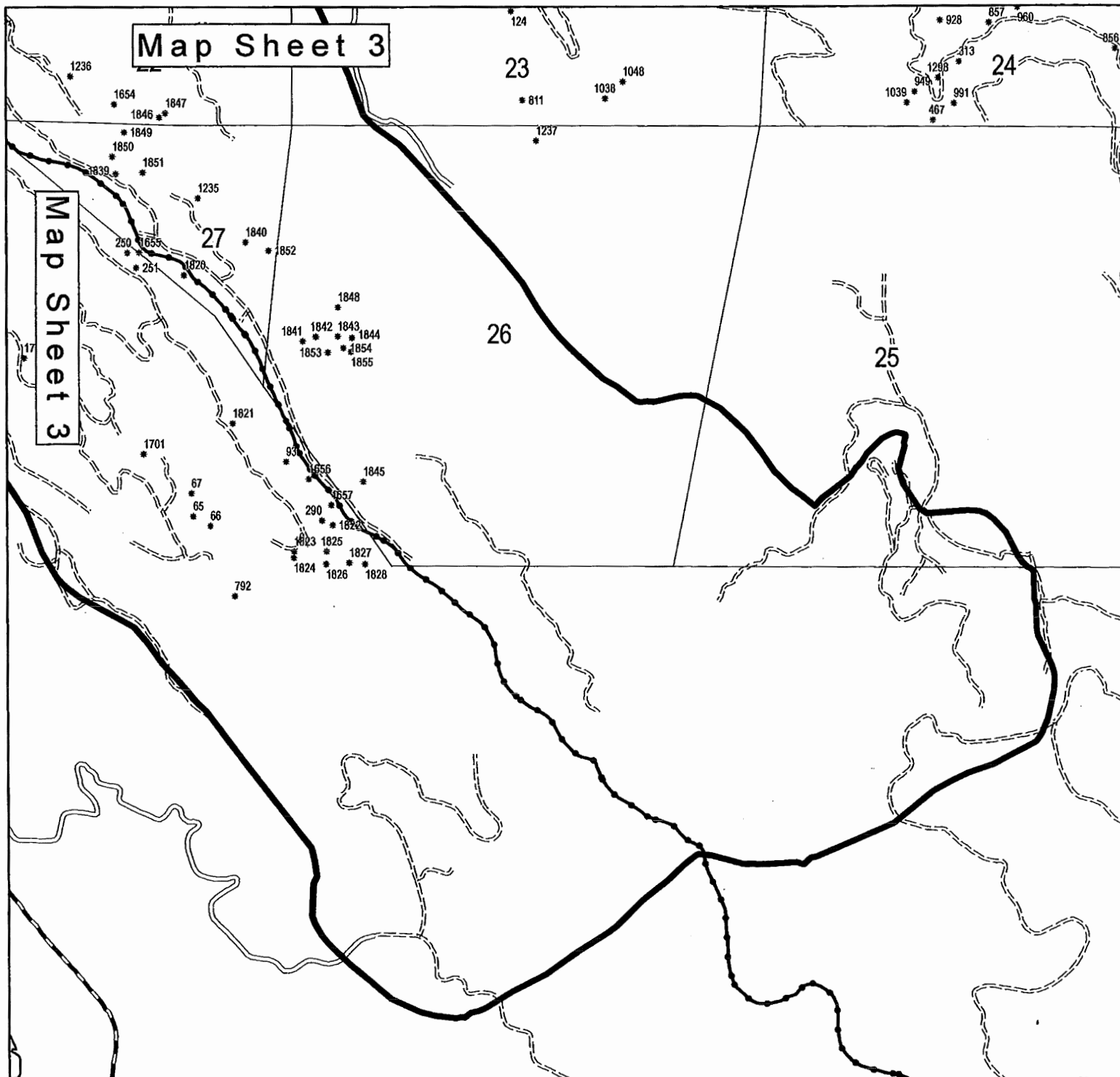
— — — — — EXISTING PRIVATE SEASONAL



Mouth of the Gualala PWS

0 500 1,000 1,500 2,000 Feet

SCALE 1:20000



411.4

Unstable Areas in the Big Pepperwood Creek PWS

Map Sheet 1 of 3

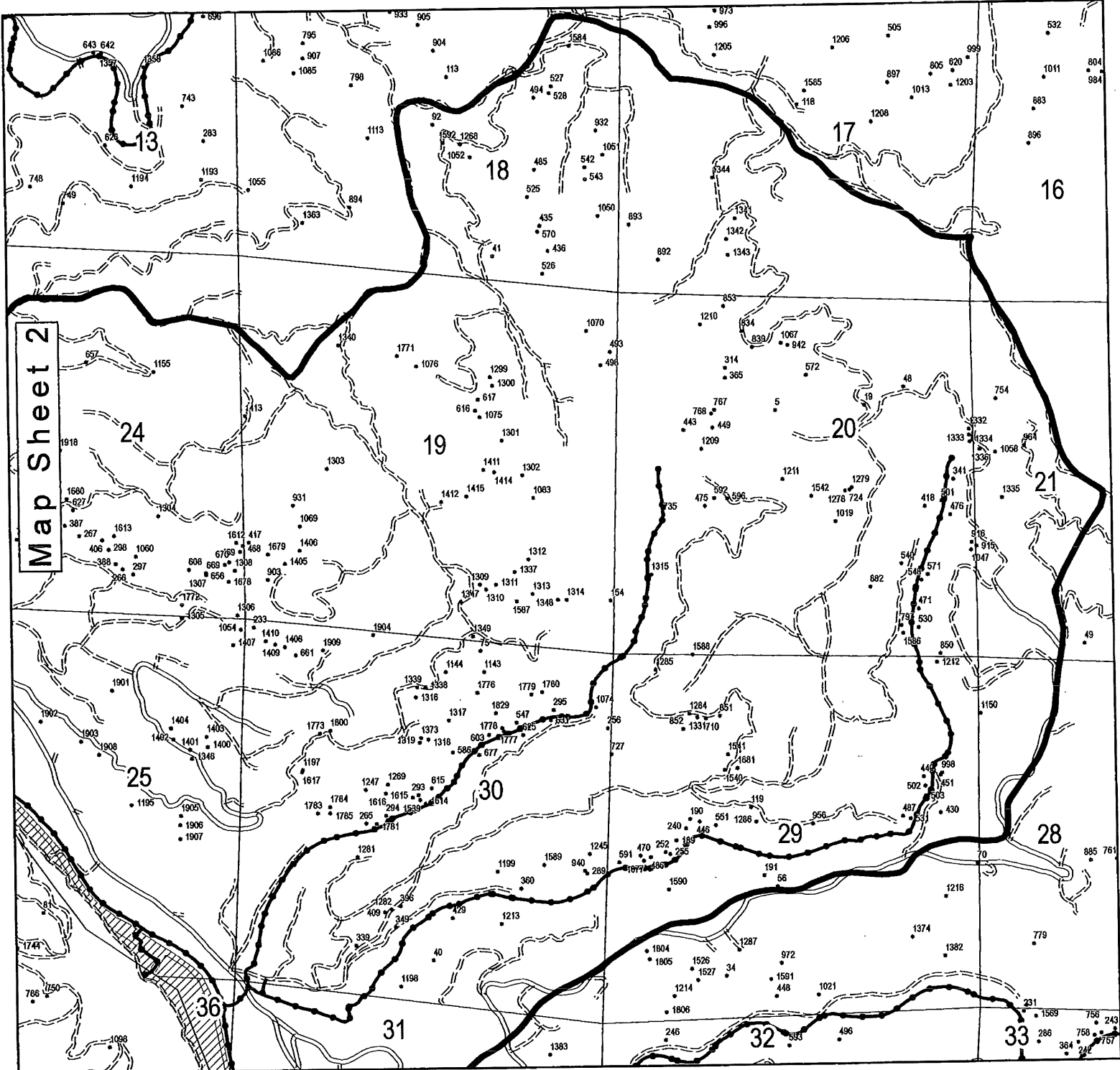
August 18, 2011



- INSTABILITY
- HYDROGRAPHY
- Class I
- TRANSPORTATION
- EXISTING PAVED PUBLIC
- EXISTING PRIVATE PERMENANT
- EXISTING PRIVATE SEASONAL

 Big Pepperwood Creek PWS

 Card THP



Unstable Areas in the Big Pepperwood Creek PWS

Map Sheet 2 of 3

August 18, 2011



• INSTABILITY

HYDROGRAPHY

—•—•—•— Class I

TRANSPORTATION

— — — — — EXISTING PAVED PUBLIC

===== EXISTING PRIVATE PERMANENT

===== EXISTING PRIVATE SEASONAL

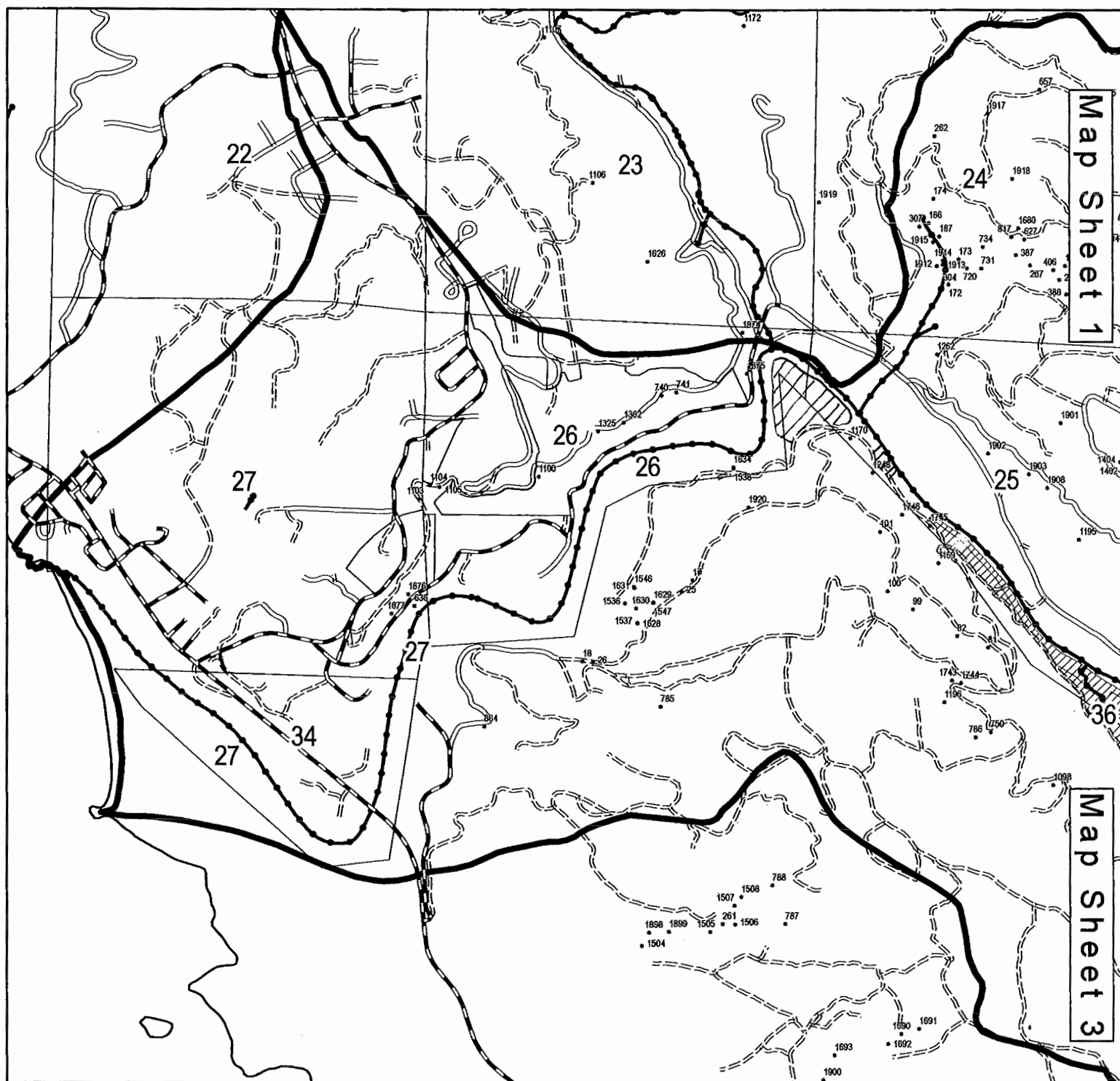


Big Pepperwood Creek PWS



CardTHP

0 4,000 Feet



411.6

Unstable Areas in the Big Pepperwood Creek PWS

Map Sheet 3 of 3

August 18, 2011



INSTABILITY

HYDROGRAPHY

Class I

TRANSPORTATION

EXISTING PAVED PUBLIC

EXISTING PRIVATE PERMANENT

EXISTING PRIVATE SEASONAL

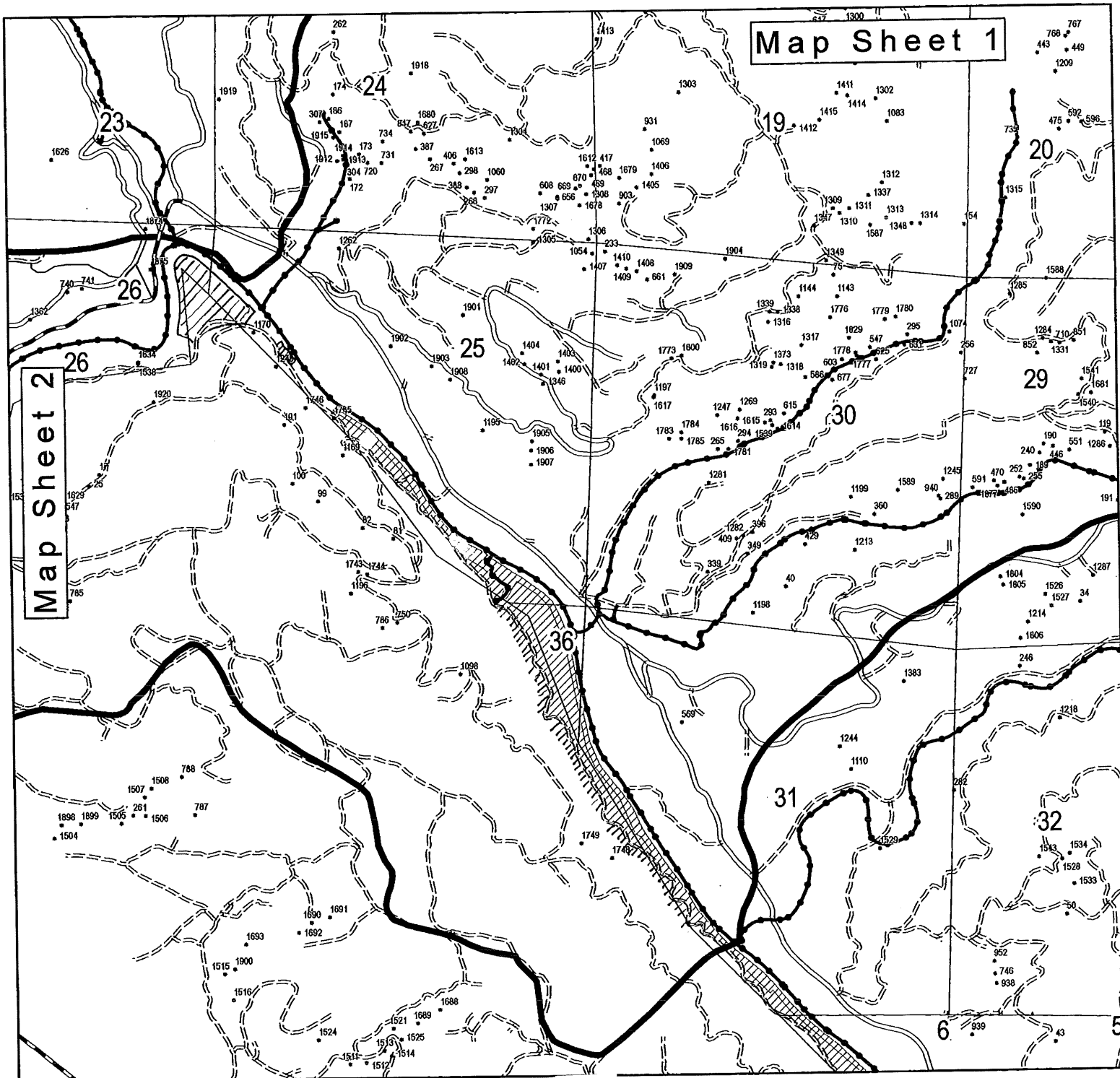


Big Pepperwood Creek PWS



Land THP

0 4,000 Feet



411.7

Landslides - Total Yards

Planning Watershed Big Pepperwood Creek

<i>Source</i>	<i>ancient</i>	<i>1930**</i>	<i>1947</i>	<i>1959</i>	<i>1970</i>	<i>1984</i>	<i>1998</i>	<i>2004</i>
Natural	20,013,544	33,185	1,648	31,019	48,350	6,703	64,837	2,235
Mgt. Related				45,148	67,944	55,967	41,852	256
Sum Big Pepperwood Creek	20,013,544	33,185	1,648	76,167	116,295	62,670	106,689	2,491
			Per Year	6,347	10,572	4,476	7,621	415

**** Translational Slides ** Slides that were old on the 1947 photos***

Thursday, August 18, 2011

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Landslides - Delivery to Watercourses (Yards)

Planning Watershed Big Pepperwood Creek

<i>Photo year observed</i>		<i>1900*</i>	<i>1930**</i>	<i>1947</i>	<i>1959</i>	<i>1970</i>	<i>1984</i>	<i>1998</i>	<i>2004</i>	<i>Total</i>
Natural		0	24,886	1,041	20,425	23,145	4,763	36,818	942	112,021
Mgt. Related					32,662	41,655	35,100	27,501	63	136,981
Big Pepperwood Creek	Sum	0	24,886	1,041	53,087	64,800	39,863	64,319	1,005	249,002
	Per Year				4,424	5,891	2,847	4,594	168	
	Percent	0.0%	10.0%	0.4%	21.3%	26.0%	16.0%	25.8%	0.4%	100.0%

**** Historic Translational Slides ** Slides that were old on the 1947 photos***

Thursday, August 18, 2011

Page 1 of 1

411.9

Landslides*

Planning Watershed Big Pepperwood Creek

Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
5	5	Best CEG	1984	Photos	Skid Trail	Headwall Swale	Divergent	Mgt. Relate	85+	NA	389	97
17	17	Best CEG	1984	Photos	Road	Headwall Swale	Convergent	Mgt. Relate	75-84	NA	889	222
18	18	Best CEG	1984	Photos	Road	Headwall Swale	Convergent	Mgt. Relate	65-74	NA	889	222
19	19	Best CEG	1984	Photos	Road	Headwall Swale	Convergent	Mgt. Relate	30-49	NA	389	194
25	25	Best CEG	1984	Photos	Road	Headwall Swale	Convergent	Mgt. Relate	65-74	NA	889	222
26	26	Best CEG	1984	Photos	Road	Headwall Swale	Convergent	Mgt. Relate	65-74	NA	889	222
40	40	Best CEG	1970	Photos	Skid Trail	Headwall Swale	Convergent	Mgt. Relate	50-64	NA	389	97
41	41	Best CEG	1970	Photos	Skid Trail	Headwall Swale	Convergent	Mgt. Relate	30-49	NA	889	222
48	48	Best CEG	1959	Photos	Skid Trail	Headwall Swale	Convergent	Mgt. Relate	65-74	NA	4,074	3,055
56	56	Best CEG	1998	Photos	Road	Headwall Swale	Convergent	Mgt. Relate	0-29	NA	7,778	5,833
75	75	Best CEG	1984	Photos	Hill Slope	Headwall Swale	Convergent	Natural	50-64	NA	222	55
81	81	Best CEG	1930	Photos	Hill Slope	Headwall Swale	Convergent	Natural	0-29	NA	1,481	1,110
82	82	Best CEG	1930	Photos	Hill Slope	Headwall Swale	Convergent	Natural	0-29	NA	1,481	1,110
92	92	Best CEG	1947	Photos	Hill Slope	Headwall Swale	Convergent	Natural	0-29	NA	648	486
99	99	Best CEG	1930	Photos	Hill Slope	Headwall Swale	Convergent	Natural	0-29	NA	6,519	4,888
100	100	Best CEG	1930	Photos	Hill Slope	Headwall Swale	Convergent	Natural	0-29	NA	11,852	8,889
101	101	Best CEG	1930	Photos	Hill Slope	Headwall Swale	Convergent	Natural	0-29	NA	11,852	8,889
119	119	Best CEG	1970	Photos	Skid Trail	Headwall Swale	Convergent	Mgt. Relate	30-49	NA	6,519	1,629
154	154	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	0-29	Ukn	1,481	1,110
172	172	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	30-49	NA	1,481	740
173	173	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	50-64	NA	648	324
174	174	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	50-64	NA	1,481	1,110
186	186	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	75-84	NA	11,852	8,889
187	187	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	65-74	NA	18,519	13,888
189	189	Best CEG	1998	Photos	Stream Bank Failure	Inner Gorge	Convergent	Natural	65-74	NA	222	166
190	190	Best CEG	1998	Photos	Stream Bank Failure	Inner Gorge	Convergent	Natural	85+	NA	389	292
191	191	Best CEG	1998	Photos	Road	Headwall Swale	Convergent	Mgt. Relate	65-74	NA	1,778	1,333
233	233	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Convergent	Natural	85+	NA	67	49
240	240	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Convergent	Natural	65-74	NA	222	111
252	252	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Divergent	Natural	85+	Ukn	4,074	3,055
255	255	Best CEG	1984	Photos	Hill Slope	Inner Gorge	Divergent	Natural	75-84	Ukn	222	166
256	256	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Divergent	Natural	65-74	NA	67	16
262	262	Best CEG	1970	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural	75-84	Ukn	648	486
265	265	Best CEG	1970	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural	50-64	Ukn	1,481	1,110
266	266	Best CEG	1959	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural	0-29	Ukn	2,370	1,777
267	267	Best CEG	1959	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural	65-74	Ukn	6,519	4,888
289	289	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Plannar	Natural	30-49	NA	1,481	1,110
293	293	Best CEG	1970	Photos	Stream Bank Failure	Inner Gorge		Natural	65-74	Ukn	648	486
294	294	Best CEG	1970	Photos	Stream Bank Failure	Inner Gorge		Natural	50-64	Ukn	648	486
295	295	Best CEG	1959	Photos	Stream Bank Failure	Inner Gorge		Natural	85+	Ukn	648	486
297	297	Best CEG	1947	Photos	Hill Slope	Inner Gorge		Natural	0-29	Ukn	389	292
298	298	Best CEG	1947	Photos	Hill Slope	Inner Gorge		Natural	30-49	NA	389	97
304	304	Best CEG	1970	Photos	Landing	Inner Gorge	Plannar	Mgt. Relate	0-29	Ukn	4,074	3,055
307	307	Best CEG	1970	Photos	Hill Slope	Inner Gorge	Plannar	Natural	30-49	Ukn	1,481	1,110
314	314	Best CEG	1984	Photos	Road	Inner Gorge	Convergent	Mgt. Relate	65-74	Ukn	370	277
339	339	Best CEG	1970	Photos	Road	Inner Gorge	Convergent	Mgt. Relate	0-29	NA	1,481	370
341	341	Best CEG	1959	Photos	Road	Inner Gorge	Convergent	Mgt. Relate	50-64	Ukn	648	486
349	349	Best CEG	1984	Photos	Road	Inner Gorge	Convergent	Mgt. Relate	65-74	NA	1,037	777
360	360	Best CEG	1959	Photos	Road	Inner Gorge	Divergent	Mgt. Relate	50-64	NA	389	292

411.10

Planning Watershed Big Pepperwood Creek

Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
365	365	Best CEG	1998	Photos	Road	Inner Gorge	Divergent	Mgt. Relate	50-64	NA	389	194
387	387	Best CEG	1984	Photos	Road	Inner Gorge	Plannar	Mgt. Relate	75-84	Ukn	14,444	10,833
388	388	Best CEG	1984	Photos	Road	Inner Gorge	Plannar	Mgt. Relate	0-29	Ukn	12,963	9,722
396	396	Best CEG	1970	Photos	Road	Inner Gorge	Plannar	Mgt. Relate	75-84	NA	389	97
406	406	Best CEG	1984	Photos	Road	Inner Gorge	Plannar	Mgt. Relate	75-84	Ukn	1,481	1,110
409	409	Best CEG	1970	Photos	Road	Inner Gorge	Plannar	Mgt. Relate	50-64	NA	4,074	2,037
417	417	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	30-49	Ukn	389	292
418	418	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	50-64	NA	67	49
429	429	Best CEG	1984	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	50-64	Ukn	370	277
430	430	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	75-84	NA	370	92
435	435	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	50-64	Ukn	1,037	777
436	436	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	65-74	Ukn	2,370	1,777
440	440	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	50-64	Ukn	222	166
443	443	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	85+	Ukn	222	166
446	446	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	50-64	Ukn	389	292
449	449	Best CEG	1984	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	75-84	NA	389	292
451	451	Best CEG	1998	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	85+	NA	389	97
468	468	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	85+	Ukn	1,481	1,110
469	469	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	85+	Ukn	1,481	1,110
470	470	Best CEG	1984	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	75-84	Ukn	370	185
471	471	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	85+	Ukn	370	277
475	475	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	50-64	Ukn	648	324
476	476	Best CEG	1984	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	75-84	Ukn	4,074	3,055
485	485	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	30-49	Ukn	2,370	1,185
486	486	Best CEG	1984	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	50-64	Ukn	67	49
487	487	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	50-64	NA	222	111
493	493	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	65-74	Ukn	1,481	1,110
494	494	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	50-64	Ukn	648	486
498	498	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	30-49	Ukn	389	292
501	501	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	0-29	Ukn	222	166
502	502	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	50-64	Ukn	222	166
503	503	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	0-29	Ukn	222	166
525	525	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	30-49	Ukn	648	486
526	526	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	65-74	Ukn	648	486
527	527	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	75-84	Ukn	1,481	1,110
528	528	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	30-49	Ukn	1,481	1,110
530	530	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	50-64	Ukn	370	277
531	531	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	30-49	Ukn	648	486
540	540	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	65-74	NA	222	166
542	542	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	50-64	Ukn	648	486
543	543	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	50-64	Ukn	648	324
547	547	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	50-64	NA	889	444
548	548	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	30-49	Ukn	222	166
551	551	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	75-84	Ukn	389	292
569	569	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	0-29	NA	1,481	370
570	570	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	30-49	Ukn	648	486
571	571	Best CEG	1959	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	65-74	Ukn	648	486
572	572	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	65-74	Ukn	1,481	1,110
586	586	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Convergent	Natural	50-64	Ukn	4,074	3,055
591	591	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Convergent	Natural	50-64	Ukn	889	444
592	592	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Convergent	Natural	75-84	NA	2,444	611
596	596	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Convergent	Natural	50-64	NA	1,481	740
603	603	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Divergent	Natural	50-64	Ukn	1,481	1,110
608	608	Best CEG	1970	Photos	Hill Slope	Inner Gorge	Plannar	Natural		Ukn	16,898	8,448

Planning Watershed Big Pepperwood Creek

Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
615	615	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Plannar	Natural	50-64	Ukn	1,481	1,110
616	616	Best CEG	1970	Photos	Hill Slope	Inner Gorge		Natural	0-29	Ukn	222	166
617	617	Best CEG	1970	Photos	Hill Slope	Inner Gorge		Natural	50-64	Ukn	222	166
625	625	Best CEG	1984	Photos	Road	Inner Gorge	Convergent	Mgt. Relate	30-49	Ukn	389	292
627	627	Best CEG	1984	Photos	Road	Inner Gorge	Convergent	Mgt. Relate	50-64	NA	648	486
631	631	Best CEG	1984	Photos	Road	Inner Gorge	Divergent	Mgt. Relate	0-29	Ukn	370	277
636	636	Best CEG	1984	Photos	Road	Inner Gorge	Plannar	Mgt. Relate	0-29	Ukn	389	292
645	645	Best CEG	1984	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate		Ukn	1,527	763
656	656	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	65-74	Ukn	1,481	1,110
657	657	Best CEG	1984	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	50-64	NA	648	486
661	661	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	50-64	Ukn	2,370	1,185
669	669	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	30-49	Ukn	648	486
670	670	Best CEG	1970	Photos	Skid Trail	Inner Gorge	Divergent	Mgt. Relate	65-74	Ukn	648	486
677	677	Best CEG	1984	Photos	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	85+	Ukn	222	166
710	710	Best CEG	1998	Photos	Road		Divergent	Mgt. Relate	65-74	NA	67	16
720	720	Best CEG	1959	Photos	Skid Trail		Convergent	Mgt. Relate	65-74	NA	648	486
724	724	Best CEG	1998	Photos	Stream Bank Failure		Convergent	Natural	50-64	NA	67	16
727	727	Best CEG	1998	Photos	Stream Bank Failure		Divergent	Natural	85+	NA	67	16
731	731	Best CEG	1959	Photos	Stream Bank Failure		Plannar	Natural	65-74	NA	1,481	740
734	734	Best CEG	1959	Photos	Stream Bank Failure		Plannar	Natural	0-29	NA	2,370	1,185
735	735	Best CEG	1970	Photos	Stream Bank Failure			Natural	0-29	Ukn	6,519	4,888
740	740	Best CEG	1970	Photos	Road		Convergent	Mgt. Relate	50-64	NA	389	97
741	741	Best CEG	1970	Photos	Road		Convergent	Mgt. Relate	50-64	NA	222	55
750	750	Best CEG	1984	Photos	Skid Trail		Plannar	Mgt. Relate	50-64	NA	222	55
754	754	Best CEG	1947	Photos	Hill Slope		Convergent	Natural	50-64	Ukn	222	166
767	767	Best CEG	1998	Photos	Hill Slope		Convergent	Natural	50-64	NA	67	33
768	768	Best CEG	1998	Photos	Hill Slope		Convergent	Natural	30-49	NA	67	33
785	785	Best CEG	1984	Photos	Stream Bank Failure		Plannar	Natural	0-29	Ukn	648	486
786	786	Best CEG	1984	Photos	Stream Bank Failure		Plannar	Natural	30-49	Ukn	648	486
797	797	Best CEG	1998	Photos	Hill Slope		Plannar	Natural	85+	NA	67	16
817	817	Best CEG	1984	Photos	Road		Convergent	Mgt. Relate	85+	NA	389	97
834	834	Best CEG	1984	Photos	Road		Divergent	Mgt. Relate	50-64	NA	389	194
839	839	Best CEG	1984	Photos	Road		Divergent	Mgt. Relate	50-64	NA	889	222
850	850	Best CEG	1984	Photos	Road		Divergent	Mgt. Relate	50-64	NA	1,481	740
851	851	Best CEG	1984	Photos	Road		Divergent	Mgt. Relate	50-64	NA	1,481	370
852	852	Best CEG	1984	Photos	Road		Divergent	Mgt. Relate	50-64	NA	648	162
853	853	Best CEG	1984	Photos	Road		Divergent	Mgt. Relate	75-84	Ukn	648	324
864	864	Best CEG	1984	Photos	Road		Plannar	Mgt. Relate	30-49	NA	2,444	611
882	882	Best CEG	1959	Photos	Skid Trail		Convergent	Mgt. Relate	30-49	NA	67	49
892	892	Best CEG	1970	Photos	Skid Trail		Convergent	Mgt. Relate	30-49	NA	648	486
893	893	Best CEG	1970	Photos	Skid Trail		Convergent	Mgt. Relate	65-74	Ukn	648	486
903	903	Best CEG	1970	Photos	Skid Trail		Convergent	Mgt. Relate	50-64	Ukn	6,519	4,888
915	915	Best CEG	1998	Photos	Skid Trail		Convergent	Mgt. Relate	85+	NA	67	33
916	916	Best CEG	1998	Photos	Skid Trail		Convergent	Mgt. Relate	75-84	NA	67	49
931	931	Best CEG	1970	Photos	Skid Trail		Convergent	Mgt. Relate	65-74	NA	1,481	740
932	932	Best CEG	1970	Photos	Skid Trail		Convergent	Mgt. Relate	75-84	Ukn	648	486
940	940	Best CEG	1984	Photos	Skid Trail		Convergent	Mgt. Relate	30-49	NA	648	324
942	942	Best CEG	1984	Photos	Skid Trail		Convergent	Mgt. Relate	85+	NA	648	486
956	956	Best CEG	1970	Photos	Skid Trail		Divergent	Mgt. Relate	50-64	NA	389	97
964	964	Best CEG	1959	Photos	Skid Trail		Divergent	Mgt. Relate	30-49	NA	222	55
998	998	Best CEG	1984	Photos	Skid Trail		Divergent	Mgt. Relate	30-49	NA	648	324
1019	1019	Best CEG	1970	Photos	Skid Trail		Plannar	Mgt. Relate	65-74	NA	389	194
1047	1047	Best CEG	1984	Photos	Skid Trail		Plannar	Mgt. Relate	30-49	NA	648	324
1050	1050	Best CEG	1970	Photos	Skid Trail			Mgt. Relate	30-49	Ukn	2,444	1,833

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Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
1051	1051	Best CEG	1970	Photos	Skid Trail			Mgt. Relate	30-49	Ukn	2,444	1,833
1052	1052	Best CEG	1970	Photos	Skid Trail			Mgt. Relate	50-64	Ukn	2,444	1,833
1054	1054	Best CEG	1970	Photos	Skid Trail			Mgt. Relate	0-29	Ukn	1,481	1,110
1058	1058	Best CEG	1998	Photos	Hill Slope		Convergent	Natural	85+	NA	67	33
1060	1060	Best CEG	1970	Photos	Hill Slope		Convergent	Natural	30-49	Ukn	648	486
1067	1067	Best CEG	1970	Photos	Hill Slope		Plannar	Natural	65-74	NA	389	292
1088	1088	Best CEG	1970	Photos	Stream Bank Failure		N/A	Natural		Ukn	6,471	4,853
1098	1098	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	9,010,298	0
1100	1100	Best CEG	1959	Photos	Road		Convergent	Mgt. Relate	30-49	Ukn	67	33
1103	1103	Best CEG	1959	Photos	Road		Plannar	Mgt. Relate	50-64	Ukn	889	444
1104	1104	Best CEG	1959	Photos	Road		Plannar	Mgt. Relate	65-74	Ukn	67	16
1105	1105	Best CEG	1959	Photos	Road		Plannar	Mgt. Relate	50-64	Ukn	67	16
1143	1143	Best CEG	1970	Photos	Hill Slope		Convergent	Natural	50-64	NA	5,926	0
1144	1144	Best CEG	1970	Photos	Hill Slope		Convergent	Natural	30-49	NA	5,926	0
1150	1150	Best CEG	1970	Photos	Hill Slope		Plannar	Natural	65-74	NA	222	166
1169	1169	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	119,194	0
1170	1170	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	169,366	0
1195	1195	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	2,125,677	0
1196	1196	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	590,261	0
1197	1197	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	224,662	0
1198	1198	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	184,370	0
1199	1199	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	339,888	0
1209	1209	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	208,882	0
1210	1210	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	75,912	0
1211	1211	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	181,924	0
1212	1212	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	200,166	0
1213	1213	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	1,092,839	0
1245	1245	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	215,941	0
1247	1247	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	387,987	0
1248	1248	Best CEG	1900	Photos	Translational Slide		N/A	Natural	30-49	NA	29,630	0
1249	1249	Best CEG	1984	Photos	Stream Bank Failure		N/A	Natural		NA	4,399	3,299
1262	1262	Best CEG	1998	Photos	Road	Headwall Swale	Plannar	Mgt. Relate		NA	648	324
1268	1268	Best CEG	1998	Photos	Road	Inner Gorge	Plannar	Mgt. Relate		NA	389	97
1269	1269	Best CEG	1998	Photos	Hill Slope		Convergent	Natural		NA	2,370	1,777
1277	1277	Best CEG	1998	Photos	Stream Bank Failure		Convergent	Natural		NA	14,052	10,538
1278	1278	Best CEG	1998	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural		NA	222	111
1279	1279	Best CEG	1998	Photos	Road	Inner Gorge	Plannar	Mgt. Relate		NA	222	111
1280	1280	Best CEG	1998	Photos	Road	Headwall Swale	Convergent	Mgt. Relate		NA	19,641	14,731
1281	1281	Best CEG	1998	Photos	Landing		Convergent	Mgt. Relate		NA	867	433
1282	1282	Best CEG	1998	Photos	Landing		Convergent	Mgt. Relate		NA	119	0
1283	1283	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Convergent	Natural		NA	3,804	1,902
1284	1284	Best CEG	1998	Photos	Road	Headwall Swale	Convergent	Mgt. Relate		NA	648	324
1285	1285	Best CEG	1998	Photos	Road		Plannar	Mgt. Relate		NA	222	111
1286	1286	Best CEG	1998	Photos	Stream Bank Failure		Divergent	Natural		NA	33	8
1299	1299	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Plannar	Natural		NA	222	111
1300	1300	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Plannar	Natural		NA	222	111
1301	1301	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Plannar	Natural		NA	648	324
1302	1302	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Plannar	Natural		NA	648	324
1303	1303	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Convergent	Natural		NA	1,481	740
1304	1304	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Plannar	Natural		NA	33	0
1305	1305	Best CEG	1998	Photos	Road	Headwall Swale	Convergent	Mgt. Relate		NA	648	324
1306	1306	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Plannar	Natural		NA	370	185
1307	1307	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Plannar	Natural		NA	3,223	1,611
1308	1308	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Plannar	Natural		NA	7,152	3,575

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Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
1309	1309	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Convergent	Natural		NA	222	66
1310	1310	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Convergent	Natural		NA	222	66
1311	1311	Best CEG	1998	Photos	Stream Bank Failure	Inner Gorge	Convergent	Natural		NA	389	292
1312	1312	Best CEG	1998	Photos	Stream Bank Failure		Plannar	Natural		NA	33	0
1313	1313	Best CEG	1998	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural		NA	370	185
1314	1314	Best CEG	1998	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural		NA	67	33
1315	1315	Best CEG	1998	Photos	Hill Slope	Inner Gorge	Plannar	Natural		NA	370	185
1316	1316	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Convergent	Natural		NA	222	55
1317	1317	Best CEG	1998	Photos	Skid Trail	Headwall Swale	Convergent	Mgt. Relate		NA	370	185
1318	1318	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Convergent	Natural		NA	648	162
1319	1319	Best CEG	1998	Photos	Stream Bank Failure		Plannar	Natural		NA	222	55
1320	1320	Best CEG	1998	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural		NA	11,740	2,935
1325	1325	Best CEG	1998	Photos	Road	Inner Gorge	Convergent	Mgt. Relate		NA	2,370	1,777
1331	1331	Best CEG	1998	Photos	Road			Mgt. Relate		NA	111	0
1332	1332	Best CEG	1984	Photos	Hill Slope			Natural		NA	22	11
1333	1333	Best CEG	1998	Photos	Hill Slope			Natural		NA	15	7
1334	1334	Best CEG	1998	Photos	Hill Slope			Natural		NA	15	7
1335	1335	Best CEG	1984	Photos	Hill Slope			Natural		NA	222	199
1336	1336	Best CEG	1984	Photos	Hill Slope			Natural		NA	44	0
1337	1337	Best CEG	1900	Photos	Translational Slide			Natural		NA	336,633	0
1338	1338	Best CEG	1998	Photos	Road		Convergent	Mgt. Relate		NA	104	0
1339	1339	Best CEG	1998	Photos	Road		Convergent	Mgt. Relate		NA	89	0
1340	1340	Best CEG	1998	Photos	Road		Convergent	Mgt. Relate		NA	370	296
1341	1341	Best CEG	1984	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural		NA	4	4
1342	1342	Best CEG	1984	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural		NA	4	4
1343	1343	Best CEG	1984	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural		NA	267	53
1344	1344	Best CEG	1984	Photos	Road	Headwall Swale	Convergent	Mgt. Relate		NA	556	277
1346	1346	Best CEG	1984	Photos	Road		Convergent	Mgt. Relate		NA	67	33
1347	1347	Best CEG	1984	Photos	Skid Trail		Convergent	Mgt. Relate		NA	67	33
1348	1348	Best CEG	1998	Photos	Stream Bank Failure	Inner Gorge	Plannar	Natural		NA	44	22
1349	1349	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	0	0
1362	1362	Best CEG	1998	Photos	Road	Inner Gorge	Convergent	Mgt. Relate		NA	4,074	1,018
1373	1373	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	4,519,913	0
1377	1377	Haschak	1984	Field	Road	Headwall Swale	Convergent	Mgt. Relate	75-84	NA	556	0
1378	1378	Haschak	1900	Field	Hill Slope	Headwall Swale	Convergent	Natural	65-74	III	2,222	555
1379	1379	Haschak	1984	Field	Hill Slope	Headwall Swale	Plannar	Natural	65-74	NA	417	0
1380	1380	Haschak	1984	Field	Hill Slope	Headwall Swale	Plannar	Natural	65-74	NA	417	0
1381	1381	Haschak	1984	Field	Road	Inner Gorge	Convergent	Mgt. Relate	75-84	I	778	0
1400	1400	Haschak	1970	Field	Hill Slope	Inner Gorge	Plannar	Natural	50-64	III	46	41
1401	1401	Haschak	1984	Field	Road		Plannar	Mgt. Relate	50-64	NA	1,736	173
1402	1402	Haschak	1984	Field	Road		Plannar	Mgt. Relate	50-64	NA	23	0
1403	1403	Haschak	1970	Field	Hill Slope		Plannar	Natural	30-49	NA	23	0
1404	1404	Haschak	1947	Field	Hill Slope		Plannar	Natural	30-49	NA	30	0
1405	1405	Haschak	1984	Field	Skid Trail	Inner Gorge	Convergent	Mgt. Relate	50-64	III	625	437
1406	1406	Haschak	1984	Field	Hill Slope		Convergent	Natural	50-64	III	417	291
1407	1407	Haschak	1900	Field	Hill Slope		Plannar	Natural	50-64	II	417	208
1408	1408	Haschak	1984	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	65-74	II	119	119
1409	1409	Haschak	1998	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	65-74	II	93	93
1410	1410	Haschak	1984	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	65-74	II	119	119
1411	1411	Haschak	1998	Field	Hill Slope	Inner Gorge	Plannar	Natural	65-74	II	1,333	1,199
1412	1412	Haschak	1900	Field	Hill Slope		Divergent	Natural	50-64	III	1,481	296
1413	1413	Haschak	1998	Field	Road		Plannar	Mgt. Relate	50-64	III	278	278
1414	1414	Haschak	1970	Field	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	65-74	II	111	55
1415	1415	Haschak	1947	Field	Hill Slope		Plannar	Natural	50-64	NA	400	0

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Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
1441	1441	Fisher	1998	Field	Road	Inner Gorge		Mgt. Relate	30-49	II	200	200
1442	1442	Fisher	1998	Field	Road	Inner Gorge		Mgt. Relate	30-49	II	200	200
1496	1496	Best CEG	1998	Photos	Stream Bank Failure		Plannar	Natural			434	216
1538	1538		0		Unknown			Natural			0	0
1539	1539		0		Unknown			Natural			0	0
1540	1540		0		Unknown			Natural			0	0
1541	1541		0		Unknown			Natural			0	0
1542	1542	Best CEG	1998	Photos	Hill Slope		Convergent	Natural			14,052	10,538
1546	1546		0		Unknown			Natural			0	0
1547	1547		0		Unknown			Natural			0	0
1584	1584	Best CEG	1998	Photos	Road		Plannar	Mgt. Relate			426	212
1586	1586	Best CEG	2004	Photos	Road		Plannar	Mgt. Relate			256	63
1587	1587	Best CEG	2004	Photos	Hill Slope		Plannar	Natural			50	0
1588	1588	Best CEG	2004	Photos	Hill Slope		Plannar	Natural			50	0
1589	1589	Best CEG	2004	Photos	Hill Slope		Plannar	Natural			1,185	592
1590	1590	Best CEG	2004	Photos	Hill Slope		Plannar	Natural			144	0
1592	1592	Best CEG	2004	Photos	Hill Slope		Plannar	Natural			50	0
1612	1612	Best CEG	1998	Photos	Hill Slope		Plannar	Natural			144	0
1613	1613	Best CEG	2004	Photos	Stream Bank Failure		Plannar	Natural			144	108
1614	1614	Best CEG	2004	Photos	Stream Bank Failure		Plannar	Natural			256	102
1615	1615	Best CEG	2004	Photos	Hill Slope		Plannar	Natural			50	0
1616	1616	Best CEG	2004	Photos	Hill Slope		Plannar	Natural			50	12
1617	1617	Best CEG	2004	Photos	Hill Slope		Plannar	Natural			256	127
26	1627		0		THP Site, no data			No Info.			0	0
1628	1628		0		THP Site, no data			No Info.			0	0
1629	1629		0		THP Site, no data			No Info.			0	0
1630	1630		0		THP Site, no data			No Info.			0	0
1631	1631		0		THP Site, no data			No Info.			0	0
25	1632		0		THP Site, no data			No Info.			0	0
17	1633		0		THP Site, no data			No Info.			0	0
1634	1634		0		THP Site, no data			No Info.			0	0
1678	1678		0		THP Site, no data			No Info.			0	0
1679	1679		0		THP Site, no data			No Info.			0	0
1680	1680		0		THP Site, no data			No Info.			0	0
1681	1681		0		THP Site, no data			No Info.			0	0
1743	1743		0		THP Site, no data			No Info.			0	0
1744	1744		0		THP Site, no data			No Info.			0	0
1745	1745		0		THP Site, no data			No Info.			0	0
1746	1746		0		THP Site, no data			No Info.			0	0
1748	1748		0		THP Site, no data			No Info.			0	0
1749	1749		0		THP Site, no data			No Info.			0	0
1771	1771		0		THP Site, no data			No Info.			0	0
1772	1772		0		THP Site, no data			No Info.			0	0
1773	1773	Haschak	2010	Field	Road		Convergent	Mgt. Relate	50-64	III	444	444
75	1774	Haschak	1984	Field	Translational Slide		Convergent	Natural	50-64	III	5,556	4,444
1143	1775	Haschak	1901	Field	Hill Slope		Plannar	Natural	65-74	II	333	267
1776	1776	Haschak	1998	Field	Stream Bank Failure		Convergent	Natural	50-64	II	556	556
1777	1777	Haschak	1998	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	75-84	II	67	67
1778	1778	Haschak	1998	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	75-84	II	222	222
1779	1779	Haschak	1959	Field	Hill Slope		Plannar	Natural	75-84	NA	2,222	1,111
1780	1780	Haschak	1959	Field	Translational Slide		Plannar	Natural	75-84	NA	8,889	4,444
1781	1781	Haschak	1959	Field	Translational Slide	Inner Gorge	Plannar	Natural	65-74	I	2,500	2,500
1783	1783	Haschak	1984	Field	Translational Slide		Plannar	Natural	50-64	II	1,111	1,111
1784	1784	Haschak	1984	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	50-64	II	0	0

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Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
1785	1785	Haschak	1984	Field	Stream Bank Failure	Inner Gorge		Natural	50-64		0	0
1800	1800	Haschak	2010	Field	Road		Convergent	Mgt. Relate	50-64	III	625	0
1829	1829	Haschak	2010	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	75-84	II	556	556
1875	1875	Pehl	1901	Field	THP Site, no data			No Info.			0	
1901	1901	Haschak	1984	Field	Unknown		Plannar	Natural	65-74	NA	333	0
1902	1902	Haschak	1984	Field	Skid Trail		Plannar	Mgt. Relate	50-64	NA	278	83
1903	1903	Haschak	1900	Field	Translational Slide		Plannar	Natural	75-84	III	1,111	0
1904	1904	Haschak	1984	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	50-64	II	333	167
1905	1905	Haschak	1984	Field	Hill Slope	Inner Gorge	Plannar	Natural	65-74	II	185	185
1906	1906	Haschak	1959	Field	Hill Slope	Inner Gorge		Natural	65-74		625	438
1907	1907	Haschak	1930	Field	Hill Slope	Inner Gorge	Plannar	Natural	65-74	II	1,250	1,125
1908	1908	Haschak	1998	Field	Hill Slope		Plannar	Natural	50-64	NA	296	0
1909	1909	Haschak	1984	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	85+	II	556	556
1910	1910	Haschak	1970	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	75-84	I	417	417
1911	1911	Haschak	1998	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	75-84	I	278	278
1912	1912	Haschak	1984	Field	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	65-74	I	556	444
1913	1913	Haschak	1984	Field	Skid Trail	Inner Gorge	Plannar	Mgt. Relate	65-74	I	556	444
1914	1914	Haschak	1959	Field	Unknown	Inner Gorge	Convergent	Natural	75-84	I	556	556
1915	1915	Haschak	1998	Field	Unknown	Inner Gorge		Natural	65-74		222	222
1917	1917	Haschak	1984	Field	Unknown	Inner Gorge	Plannar	Natural	75-84	II	1,875	1,500
1918	1918	Haschak	1998	Field	Unknown	Inner Gorge	Convergent	Natural	65-74	III	185	185
1920	1920	Haschak	2010	Field	Road	Headwall Swale	Convergent	Mgt. Relate	50-64	III	400	360

Summary for 'PW Name' = Big Pepperwood Creek (341 detail records)

Delivery **Avg** 812 **Min** 0 **Max** 14,731 **Sum** 275,948

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**Tim Best, CEG analyzed six sets of aerial photos to identify landslides (1947, 1959, 1970, 1984, 1998 and 2004). The year in this report is usually the year of the photos on which the slide was first observed. If the year is 1900 it means the slide is ancient. If the year is 1930 means the slide was old in the 1947 photos. If the year is 2010 it means the slide occurred after the most recent photos in 2004.

Landslides - Total Yards

Planning Watershed Mouth of the Gualala River

<i>Source</i>	<i>ancient</i>	<i>1930**</i>	<i>1947</i>	<i>1959</i>	<i>1970</i>	<i>1984</i>	<i>1998</i>	<i>2004</i>
Natural	127,060,820			1,685	4,722	2,944	1,004	1,441
Mgt. Related				222	3,963	8,659	222	
Sum	Mouth of the Gualala River	127,060,820		1,907	8,685	11,604	1,226	1,441
			Per Year	159	790	829	88	240

**** Translational Slides ** Slides that were old on the 1947 photos***

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Landslides - Delivery to Watercourses (Yards)

Planning Watershed Mouth of the Gualala River

<i>Photo year observed</i>		<i>1900*</i>	<i>1930**</i>	<i>1947</i>	<i>1959</i>	<i>1970</i>	<i>1984</i>	<i>1998</i>	<i>2004</i>	<i>Total</i>
Natural		0			1,167	1,504	1,799	411	359	5,240
Mgt. Related					55	1,620	3,044	166		4,885
Mouth of the Gualala River	Sum	0			1,222	3,124	4,843	578	359	10,126
	Per Year				102	284	346	41	60	
	Percent	0.0%			12.1%	30.8%	47.8%	5.7%	3.5%	100.0%

**** Historic Translational Slides ** Slides that were old on the 1947 photos***

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Landslides*

Planning Watershed Mouth of the Gualala River

Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
28	28	Best CEG	1984	Photos	Road	Headwall Swale	Convergent	Mgt. Relate	50-64	NA	648	162
43	43	Best CEG	1970	Photos	Skid Trail	Headwall Swale	Convergent	Mgt. Relate	0-29	NA	222	55
44	44	Best CEG	1970	Photos	Skid Trail	Headwall Swale	Convergent	Mgt. Relate	30-49	NA	389	97
50	50	Best CEG	1970	Photos	Skid Trail	Headwall Swale	Convergent	Mgt. Relate	30-49	NA	1,481	370
65	65	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Convergent	Natural	75-84	NA	67	16
66	66	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Divergent	Natural	50-64	NA	67	16
67	67	Best CEG	1998	Photos	Stream Bank Failure	Headwall Swale	Divergent	Natural	85+	NA	222	55
93	93	Best CEG	1984	Photos	Hill Slope	Headwall Swale	Convergent	Natural	30-49	NA	648	324
127	127	Best CEG	1984	Photos	Skid Trail	Headwall Swale	Convergent	Mgt. Relate	65-74	NA	648	324
250	250	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Convergent	Natural	30-49	Ukn	648	486
251	251	Best CEG	1959	Photos	Hill Slope	Inner Gorge	Convergent	Natural	65-74	Ukn	648	486
253	253	Best CEG	1984	Photos	Hill Slope	Inner Gorge	Divergent	Natural	50-64	NA	67	16
290	290	Best CEG	1984	Photos	Hill Slope	Inner Gorge	Plannar	Natural	30-49	Ukn	1,481	1,110
746	746	Best CEG	1959	Photos	Skid Trail		Divergent	Mgt. Relate	30-49	NA	222	55
759	759	Best CEG	1984	Photos	Hill Slope		Convergent	Natural	50-64	NA	67	16
780	780	Best CEG	1959	Photos	Hill Slope		Divergent	Natural	50-64	NA	389	194
783	783	Best CEG	1970	Photos	Hill Slope		Divergent	Natural	85+	NA	648	486
792	792	Best CEG	1998	Photos	Hill Slope		Plannar	Natural	50-64	NA	648	324
799	799	Best CEG	1970	Photos	Hill Slope		Plannar	Natural	30-49	NA	4,074	1,018
838	838	Best CEG	1984	Photos	Road		Divergent	Mgt. Relate	0-29	NA	2,370	592
849	849	Best CEG	1984	Photos	Road		Divergent	Mgt. Relate	50-64	NA	648	324
918	918	Best CEG	1970	Photos	Skid Trail		Convergent	Mgt. Relate	30-49	NA	222	111
919	919	Best CEG	1970	Photos	Skid Trail		Convergent	Mgt. Relate	50-64	Ukn	389	292
922	922	Best CEG	1984	Photos	Skid Trail		Convergent	Mgt. Relate	0-29	NA	222	55
938	938	Best CEG	1984	Photos	Skid Trail		Convergent	Mgt. Relate	65-74	NA	648	486
939	939	Best CEG	1984	Photos	Skid Trail		Convergent	Mgt. Relate	85+	NA	648	324
952	952	Best CEG	1984	Photos	Skid Trail		Divergent	Mgt. Relate	30-49	NA	67	33
974	974	Best CEG	1998	Photos	Skid Trail		Divergent	Mgt. Relate	50-64	NA	222	166
979	979	Best CEG	1970	Photos	Skid Trail		Divergent	Mgt. Relate	50-64	NA	389	97
980	980	Best CEG	1970	Photos	Skid Trail		Divergent	Mgt. Relate	75-84	NA	222	111
986	986	Best CEG	1984	Photos	Skid Trail		Divergent	Mgt. Relate	0-29	NA	222	55
987	987	Best CEG	1984	Photos	Skid Trail		Divergent	Mgt. Relate	75-84	NA	222	55
988	988	Best CEG	1984	Photos	Skid Trail		Divergent	Mgt. Relate	65-74	NA	222	111
989	989	Best CEG	1984	Photos	Skid Trail		Divergent	Mgt. Relate	50-64	NA	389	97
1000	1000	Best CEG	1970	Photos	Skid Trail		Divergent	Mgt. Relate	50-64	Ukn	648	486
1003	1003	Best CEG	1984	Photos	Skid Trail		Divergent	Mgt. Relate	65-74	NA	1,481	370
1020	1020	Best CEG	1984	Photos	Skid Trail		Plannar	Mgt. Relate	30-49	NA	222	55
1065	1065	Best CEG	1984	Photos	Hill Slope		Divergent	Natural	30-49	NA	648	324
1099	1099	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	28,885,683	0
1200	1200	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	3,999,571	0
1219	1219	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	2,625,584	0
1220	1220	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	1,240,194	0
1221	1221	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	271,840	0
1224	1224	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	643,376	0
1225	1225	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	1,432,993	0
1235	1235	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	1,795,857	0
1236	1236	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	2,428,156	0
1291	1291	Best CEG	1984	Photos	Stream Bank Failure		Plannar	Natural		NA	33	8
1371	1371	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	41,994,496	0

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Planning Watershed Mouth of the Gualala River

Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
1372	1372	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	3,339,083	0
1375	1375	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	5,709,893	0
1376	1376	Best CEG	1900	Photos	Translational Slide		N/A	Natural		NA	32,694,094	0
1384	1384	Haschak	1984	Field	Hill Slope		Plannar	Natural	50-64	NA	139	0
1392	1392	Haschak	1984	Field	Stream Bank Failure	Inner Gorge	Convergent	Natural	65-74	III	833	749
1393	1393	Haschak	1984	Field	Landing		Convergent	Mgt. Relate	50-64	II	556	416
1394	1394	Haschak	1984	Field	Road		Plannar	Mgt. Relate	65-74	II	1,111	555
1395	1395	Haschak	1984	Field	Road	Inner Gorge	Convergent	Mgt. Relate	50-64	III	278	0
1443	1443	Haschak	1970	Field	Road	Inner Gorge	Convergent	Mgt. Relate	30-49	III	1,111	277
1444	1444	Haschak	1984	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	50-64	II	667	667
1445	1445	Haschak	1900	Field	Hill Slope		Convergent	Natural	50-64	NA	741	74
1530	1530	Haschak	1998	Field	Hill Slope	Inner Gorge	Convergent	Natural	75-84	III	694	347
1577	1577	Best CEG	2004	Photos	Hill Slope		Convergent	Natural			256	63
1578	1578	Best CEG	2004	Photos	Hill Slope		Convergent	Natural			1,185	296
1654	1654		0		THP Site, no data			No Info.			0	0
1655	1655		0		THP Site, no data			No Info.			0	0
1656	1656		0		THP Site, no data			No Info.			0	0
1657	1657		0		THP Site, no data			No Info.			0	0
1698	1698		0		THP Site, no data			No Info.			0	0
1699	1699		0		THP Site, no data			No Info.			0	0
1700	1700		0		THP Site, no data			No Info.			0	0
1701	1701		0		THP Site, no data			No Info.			0	0
1709	1709		0		THP Site, no data			No Info.			0	0
1710	1710		0		THP Site, no data			No Info.			0	0
1711	1711		0		THP Site, no data			No Info.			0	0
1712	1712		0		THP Site, no data			No Info.			0	0
1713	1713		0		THP Site, no data			No Info.			0	0
1747	1747		0		THP Site, no data			No Info.			0	0
1751	1751		0		THP Site, no data			No Info.			0	0
1767	1767		0		THP Site, no data			No Info.			0	0
1768	1768		1998	Field	Road	Headwall Swale	Convergent	Mgt. Relate	65-74	III	667	333
1769	1769		0		THP Site, no data			No Info.			0	0
1770	1770		0		THP Site, no data			No Info.			0	0
1807	1807	Haschak	1998	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	65-74	III	15	15
1820	1820	Haschak		Field	THP Site, no data			No Info.		I	0	
1821	1821	Haschak		Field	THP Site, no data			No Info.			0	
1822	1822	Haschak		Field	THP Site, no data			No Info.			0	
1823	1823	Haschak		Field	THP Site, no data			No Info.			0	
1824	1824	Haschak		Field	THP Site, no data			No Info.			0	
1825	1825	Haschak		Field	THP Site, no data			No Info.			0	
1826	1826	Haschak		Field	THP Site, no data			No Info.			0	
1827	1827	Haschak		Field	THP Site, no data			No Info.			0	
1828	1828	Haschak		Field	THP Site, no data			No Info.			0	
1839	1839	Haschak	1959	Field	Road	Inner Gorge	Plannar	Mgt. Relate	75-84	I	333	100
1840	1840	Haschak	1959	Field	Hill Slope		Convergent	Natural	65-74	III	333	267
1841	1841	Haschak	1930	Field	Hill Slope	Inner Gorge	Plannar	Natural	65-74	II	167	150
1843	1843	Haschak	1959	Field	Hill Slope	Inner Gorge	Convergent	Natural	75-84	II	125	125
1844	1844	Haschak	1930	Field	Hill Slope	Inner Gorge	Convergent	Natural	65-74	II	2,222	2,222
1845	1845	Haschak	1970	Field	Hill Slope		Convergent	Natural	65-74	I	74	0
1846	1846	Haschak	1998	Field	Stream Bank Failure	Inner Gorge	Plannar	Natural	50-64	II	556	389
1847	1847	Haschak	1901	Field	Stream Bank Failure		Plannar	Natural	30-49	II	278	250
1848	1848	Haschak	1901	Field	Hill Slope		Plannar	Natural	75-84	NA	1,111	0
1849	1849	Haschak	1930	Field	Hill Slope	Inner Gorge	Plannar	Natural	75-84	II	56	56
1850	1850	Haschak	1930	Field	Hill Slope	Inner Gorge	Plannar	Natural	75-84	II	111	111

Planning Watershed Mouth of the Gualala River

Map#	ID #	Inspector	Year**	Source	Slide Type	Slope Type	Slope Form	Association	Slope	Stream	Total Yds	Delivered
1851	1851	Haschak	1930	Field	Hill Slope	Inner Gorge	Plannar	Natural	75-84	II	116	116
1852	1852	Haschak	1930	Field	Hill Slope	Inner Gorge	Plannar	Natural	65-74	II	222	222
1853	1853	Haschak	1959	Field	Hill Slope	Inner Gorge	Plannar	Natural	65-74	II	33	30
1854	1854	Haschak	1900	Field	Hill Slope	Inner Gorge	Plannar	Natural	65-74	II	583	583
1855	1855	Haschak	1901	Field	Hill Slope	Inner Gorge	Plannar	Natural	65-74	II	389	389
1859	1859	Haschak	1900	Field	Unknown	Inner Gorge	Convergent	Natural	65-74	II	778	622
1878	1878	Haschak	1970	Field	Road	Headwall Swale	Convergent	Mgt. Relate	50-64	III	1,111	556
1894	1894	Haschak	1998	Field	Skid Trail		Convergent	Mgt. Relate	65-74	III	67	50

Summary for 'PW Name' = Mouth of the Gualala River (111 detail records)

Delivery Avg 194 Min 0 Max 2,222 Sum 19,797

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