

# Memo

To: File – Nonindustrial Timber Management Plan  
1-06NTMP-017 SCR Little Buck

From: Julia Dyer

CC: Chris Adair

Date: July 10, 2007

Re: Preharvest Inspection of Nonindustrial Timber Management Plan  
1-06NTMP-017 SCR Little Buck

## KEY INFORMATION

### CDF PREHARVEST INSPECTION

Inspection Date	<b>August 21, 2006</b>	Persons Present (9)	Affiliation
Property Size (acres)	89	Bill Vaughn	RPF
Plan Size (acres)	56	Victor Smith	Landowner
Harvest Area (acres)	56	Greg Haagenson	Rd. Ass.
Yarding Type	Tractor Rubber Tire Skidder Cable, Skyline	John Martinez	CDF
Watershed	San Lorenzo	Julia Dyer	Water Board
Sub drainages	Deer Creek	Donna Bradford	County, SC
303(d) Listed	Bear Creek and San Lorenzo for Sedimentation / Siltation	C. Michael Huyette	CGS
Landowners	Victor Smith Ann Schwarzmann Grant Codiga	Richard Fitzgerald	DFG
THP Signatory Name	Cassady Bill Vaughan		

### FOCUSED PREHARVEST INSPECTION

Inspection Date	<b>January 18, 2007</b>	Persons Present (3)	Affiliation
		C. Bill Vaughn	RPF
		Julia Dyer	Water Board
		Linda Stone	Water Board

Note: The following report reflects observations from both inspections.

## **HISTORY**

The entire property encompasses 89 acres, 56 of which are forested with redwood and Douglas-fir and 33 are coastal oak woodland. The 56-acre management area is dominated by second-growth redwood timber that regenerated following clear-cut activities that likely took place from 1904-1907, and again in 1935 and 1936. Since then, the property has not been actively managed for timber production, although the landowner filed two fuel-wood exemptions for the property in 2002 and 2003. The forester anticipates future entries at 12-year intervals.

## **LOCATION AND MANAGEMENT**

The private property is located in Santa Cruz County, approximately four air miles northeast of the town of Boulder Creek. The 56-acre NTMP is comprised of a single management unit, although individual harvest operations may not always encompass the entire NTMP area. The harvest area is located within the Deer Creek drainage which flows into Bear Creek, which flows into the San Lorenzo River and to the Pacific Ocean.

Lands surrounding the subject properties are a mix of open space and residential development. The primary use of the permanent roads in the plan area is year-round access to residences north of the property. The permanent roads on this plan area are part of the Deer Creek Road Association.

## **INSPECTIONS**

A year-round, unsurfaced road also services many of the surrounding residences. Overall, the road is in poor condition with a high probability of sediment delivery to Deer Creek. The road shows signs of potential failure such as cracks running along the outside edge of the road parallel to Deer Creek.

A majority of the culverts crossing the haul route and in the plan area are antiquated and all exhibit one or more of the following conditions:

- Overdue for replacement;
- Undersized with high plug potential;
- Improperly placed in relation to the natural stream gradient; or
- Road fill surrounding culvert is failing in one or more places;

All road crossings and other road problems have been evaluated by Pacific Watershed Associated (PWA). In their evaluation, PWA has provided recommended treatments to relieve the failing or potentially failing crossings. Deer Creek Road Association (DCRA) oversees the overall road management. The DCRA has already received grants to upgrade the sites in most immediate need of treatment.

As part of the NTMP, the landowner will upgrade two of the culverted crossings within the plan area and one on the haul route outside the plan. The upgrading of these crossings does not include the full recommendation by PWA. But, Water Board staff sees the upgrades as an improvement to current conditions. Should the NTMP treatments prove to be inadequate, and additional treatment becomes necessary to prevent sediment delivery, Water Board staff will recommend additional treatments at the postharvest inspections.

Due to the high year-round traffic conditions, it is impossible to winterize the roads at the conclusion of timber harvest activities or determine what proportion of sediment delivery can be attributed to residential impacts verses logging impacts.

The forester has committed to conducting pre and postharvest video monitoring of the entire visual inspection route.

### **CROSSING AT PWA SITE #25**

The crossing at PWA Site #25 is a Class III culverted haul road crossing outside the timber harvest area. PWA identified the existing 48 inch culvert as undersized and recommends a culvert upgrade to 84 inches by 70 feet. Additionally, the existing culvert is not fitted to the channel grade. The road drainage at this site currently concentrates runoff at the left side of the downstream end of the culvert, causing destabilization of the road prism in this location. Residents of the Deer Creek Watershed have installed a buttress on the failing road prism in an attempt to control the failing fill.

The discharger will treat this site with the installation of a minimum of four rock gabion baskets in the failing road fill prism without upgrading the size of the existing culvert. The gabion baskets serve as a treatment to stabilize the downstream face of the failing road prism. Water Board staff has concerns regarding the negative impacts to water quality should the crossing fail due to a plugged culvert. When or if the culvert plugs, water and any associated debris will overtop the road and potentially destabilize the gabions. Destabilized gabions could lead to catastrophic failure of the crossing resulting in discharge of wire, rock, sediment, and organic material into the watercourse. Therefore Water Board staff makes the following recommendations to the discharger:

- Add a trash rack per the specifications of the Geotechnical Engineer – John Kasunich, upstream of the crossing.
- Monitor and maintain the site until the MRP is rescinded. The Deer Creek Road Association, including the landowner of the site, will assume responsibility for monitoring and maintenance of the crossing after the MRP is rescinded.
- Install gabion baskets constructed of rust resistant galvanized metal.
- Install and anchor the gabion baskets on the hinge-line of the road fill and native soil and anchor all the gabion baskets into solid earth.

- Stabilize the gabion baskets with 1" rebar.
- Modify the drainage structure of the road currently discharging to the destabilized fill material. Redirect road runoff from discharging at the currently unstable location by installing a critical dip north of the gabion baskets.

## **HAUL ROUTE**

The haul route begins on the west side of the harvest area then travels north to Deer Creek Road. Deer Creek Road then turns south traveling through the eastern portion of the property, after leaving the property, the haul route continues another 1.3 miles until it meets up with Bear Creek Road. At this point the logging trucks can either travel south to Highway 9 or north to highway 17.

## **RAIN GAUGE LOCATION**

Las Cumbres

<http://cdec2.water.ca.gov/cgi-progs/queryFx?LCM>

## **RECOMMENDATIONS**

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Note - Regional Board staff photographed the site: Photos available upon request.

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