

Jackson Demonstration State Forest
PARK GULCH 2014 Timber Sale
SUMMARY OF SALE INFORMATION

Bid Date:	April 17, 2014	Estimated Net Volume:	3,694 MBF
Redwood	\$370.00 /Mbf (min bid)	THP Number:	1-13-121 MEN
Douglas-fir	\$40.00 /Mbf (fixed rate)	Phone:	(707) 964-5674
Whitewoods	\$40.00 /Mbf (fixed rate)	Information:	Erik Wahl
		Date:	1/29/2014

Table 1. Estimated Total Volume to be Harvested (Bf)

Species	Gross	Net	% Defect & Breakage	% Comp.
Redwood	2,705,476	2,461,983	9%	66.6%
Douglas-fir	1,367,298	1,216,895	11%	32.9%
Whitewoods	16,330	15,187	7%	0.4%
Totals	4,089,104	3,694,065		100%

Table 2b. Estimated Volume, Cable and WLPZ (Bf) 41%

Species	Gross	Net
Redwood	1,168,875	1,063,676
Douglas-fir	483,132	429,987
Whitewoods	13,613	12,660
Totals	1,665,619	1,506,323

Table 2c. Estimated Volume, Tractor and ROW (Bf) 59%

Species	Gross	Net
Redwood	1,541,402	1,402,675
Douglas-fir	884,166	786,908
Whitewoods	2,717	2,527
Totals	2,428,285	2,192,110

Table 3. Estimated Acreage

	Plan acres	NSO Buffer	Net Acres
Cable	267	1	266
Tractor/Road ROW	288	2	286
Totals	555		

Table 4. Harvest QMD by Species *(not including estimated cable corridor & ROW)*

Species	DBH (in.)
Redwood	22.6
Douglas-fir	20.8
Whitewoods	21.4

GENERAL INFORMATION

The list below is not intended to be all inclusive and all requirements of the Park Gulch Timber Harvest Plan (1-13-121 MEN) apply. Copies of Sections I and II of the THP are available by request from the State Forest headquarters or available via the internet, ftp://thp.fire.ca.gov/THPLibrary/North_Coast_Region/THPs2013/1-13-MEN/ Park Gulch THP (1-13-121MEN). One complete copy will be provided to the LTO.

TIMBER HARVESTING PLAN

Item 14d

The following are specifications for harvest and retention trees within the SELECTION (single tree) and GROUP SELECTION silviculture areas.

SELECTION – HARVEST TREE DESIGNATION (*Harvest Units A, B, D, E & G*)

Harvest trees shall be marked with blue paint using a horizontal stripe at breast height and a stump mark below the cut line.

GROUP SELECTION – HARVEST TREE DESIGNATION (*Harvest Units A, B, C, D, E & F*)

Group boundaries are identified with red/black striped flagging. Within group boundaries, unmarked conifers shall be harvested and all unmarked hardwoods shall remain standing, with the exception of trees felled for safety and cable corridors. Submerchantable conifers may be selected for retention. For units where harvesting is proposed between group openings, harvest trees shall be marked as described in the SELECTION-HARVEST TREE DESIGNATION described above.

See Item 14(f) below for management of group B species within the GROUP SELECTION silviculture areas.

RETENTION TREES - All areas within THP

Marking of retention trees is not required; however Individual trees may be marked for retention by the RPF or supervised designee with blue or orange paint with a circle at breast height and at the base of the tree. No harvesting of downed trees or old logs from previous operations is proposed. See Item 14(g) below. Trees that are identified for retention may be felled in the following situations:

- 1) To provide safe operating corridors for skyline cable operations. See CABLE CLEARANCE TREES below.
- 2) To provide stumps for cable-rigging purposes.
- 3) Compliance with Title 8 CCR, Logging and Sawmill Safety Orders.
- 4) As described in Item 14(g) below.
- 5) Road Right-of-way, see below.

RETENTION TREES in Class III ELZs within GROUP BOUNDARY [ref 14 CCR 916.9(h)].

- Trees in the ELZ and channel zone which show visible indicators of providing bank or bed stability, excluding sprouting conifers that do not have boles overlapping the channel zone.
- Hardwoods marked for retention shall not be treated with herbicide or felled, except for situations (1-4) discussed above.
- Stocking requirements of 14 CCR 912.7 is discussed in Section III, Item 26 – Class III watercourses.

ROAD RIGHT-OF-WAY

Clearing limits for Proposed Seasonal Roads and segments of Proposed Road Reconstruction are designated on retention trees with two vertical orange painted stripes facing the flagged centerline. All trees between the clearing limits are proposed for harvest. If necessary to provide adequate clearance for road construction/reconstruction, additional trees may be harvested upon approval of the responsible RPF or

designee. Proposed Seasonal Roads are centerline flagged with solid orange Site-Mark® "TRUCK ROAD" in black lettering

Item 14g

CABLE CLEARANCE TREES: Any tree (within the THP area only) may be harvested/felled if necessary for cable clearance, except for trees located within a WPLZ. Trees located within a WLPZ shall not be felled for cable corridors unless they directly impact the safety of cable-yarding operations; trees felled for safety may be harvested. Compliance with all other applicable Forest Practice Rules and requirements in the THP is required.

TREES SUBSTANTIALLY DAMAGED BY LOGGING OPERATIONS: Merchantable young growth trees damaged during timber operations shall be felled as approved and directed by the Plan Submitter. Damaged trees may not be felled if marked for retention if damaged tree has a cavity potentially used for wildlife.

DOWNED TREES: There shall be no cutting or removal of existing unmarked down trees or logs. These logs may be moved if necessary for clearing truck road rights-of-way and as otherwise necessary to harvest the designated timber. If windthrow of merchantable trees occurs in the logging area prior to completion of operations, windthrown trees outside of the WLPZ may be harvested upon approval of the Plan Submitter.

Item 16

With prior approval of the Plan Submitter's designee, the LTO may cable yard any area designated for ground based yarding provided it will afford equal or greater protection to the soil and residual stand.

Item 18

Soil stabilization treatments required under item 18 will be accomplished using weed free straw or slash.

In the THP the coverage rate states at least 90% of the surface to a depth of at least three inches. However, the requirement stated in the Timber Sale Contract shall be met: 95% surface coverage to a depth of at least four inches.

WLPZ roads and areas within the WLPZ where operations expose mineral soil equal to or greater than 100 sq. ft. shall be treated as described in Item # 18 and where otherwise stated.

For areas disturbed from May 1 to October 15, treatment to stabilize soils to be completed prior to:

- Start of any rain that causes overland flow across or along the disturbed surface that could deliver sediment into a Parkcourse in quantities deleterious to the beneficial uses of Park.
- Any day for which a chance of rain of 30 percent or greater is forecast by the National Weather Service or within 10 days, whichever is earlier.

All water breaks shall be installed no later than the beginning of the winter period of the current year of timber operations.

Installation of drainage facilities and structures is required from October 15 to November 15 and from April 1 to May 1 on all constructed skid trails and tractor roads prior to sunset if the National Weather Service forecast is a "chance" (30% or more) of rain within the next 24 hours.

Traveled surfaces of logging roads shall be treated for dust abatement and kept in firm condition.

Item 20

Ground based equipment may be used within the area designated for cable yarding to long-line trees from cable areas with tracks/tires resting in the area designated for ground based equipment including roads.

Item 21

Existing skid trails to be used on the unstable area and slopes over 50% have been pre-flagged by the RPF with solid yellow flagging. The location of ground based equipment to be used on slopes over 50% with high EHR is illustrated on the EHR/Heavy Equipment on Slopes >50% with High EHR Map and the area where ground based equipment to be used on an unstable area is shown as Map Point 48 on the Timber Harvest Map, Section II. Note: New skid trail construction is not proposed on slopes over 50% with high EHR.

Item 25

New road construction, reconstruction and road abandonment is proposed.

Item 26

The distance for Class II WLPZs is 100 feet on all slopes, between 50-75 feet for springs and 50 feet for wet areas. All WLPZ's are identified with blue and white stripe "WLPZ" flagging. With the exception of WLPZ width, all protection measures applicable to Class II's apply to springs and wet areas.

There is a water drafting plan and a 1603 permit. Water drafting sites approved for use include WD sites 7 and a new well site located off JDSF Road 800, adjacent to the CALFIRE/USFS Learning Center . See appurtenant roads map.

Item 30

Slash created and trees knocked down by timber operations within 100 feet of the edge of seasonal JDSF Road 202, 204, 230 and Road 231 within or adjacent to the plan area shall be treated for fire hazard reduction. Treatment shall consist of lopping as defined in 14 CCR 895.1: *Severing and spreading of slash so that no part of it remains more than 30 in. (76.2 cm) above the ground (Ref. Sec. 4551.5, PRC).*

Other than JDSF Roads 202, 204, 230 and Road 231 described above, an alternative to 14 CCR 917.2 (b) is proposed for- Roads 231A-E, Road 230A and associated spur roads within or adjacent to the plan area. The alternative slash treatment is proposed to reduce the treatment distance from the standard of 100 feet to the proposed alternative distance of 50 feet where all other treatment defined in 14 CCR 895.1 described above shall apply.

Item 32

No timber operations shall occur until protocol surveys have been completed for the current, and/or immediately preceding survey period, the results have been provided to CAL FIRE to be evaluated for consistency with the plan and the protocol, and the results have been amended into the plan.

Item 33

The California Logging and Sawmill Safety Orders, Title 8 CCR 6259(a), require that "all ... snags which appear to be dangerous to any operation shall be felled."

All snags within the timber harvest area shall be retained with the exception of snags that pose a fire or safety hazard. If the LTO determines a snag to be a hazard, the LTO has the option to fall the snag for safety purposes.

TIMBER SALE AGREEMENT

<u>Page</u>	<u>Item</u>	<u>Description</u>
3	2D	All timber scaled by "third party" scaling organization, using Revised Scribner Decimal C Log Rule.
3	3A	Unless written extension of time is granted by the Director of Forestry and Fire Protection, at least 1,500,000 board feet, shall be paid for by November 15, 2014. This date may be extended or the required volume may be adjusted mutually by the STATE and the PURCHASER due to unforeseen circumstances. All remaining merchantable timber designated for cutting shall be paid for and felled, and all other timber operations shall be completed by November 15, 2015.
4	3B	Notification and permission is required for operations on weekends or State holidays. Active timber operations within 1,000 feet of the Big River Campground will be limited to the hours between 7:00 a.m. and 7:00 p.m., and shall be entirely prohibited on Saturdays, Sundays, and State holidays.
5	7	Production and cost data with respect to all timber harvesting operations and other forestry activities. Required data includes person-hours and equipment-hours spent on each activity, and applicable rates for employees, machines and supervision, and costs for any materials or services needed for completion of activities.
		Daily water use data with respect to water drafting activities shall be provided.
6	10	The minimum log dimensions for utilization is 10 feet in length and 8 inches in small-end diameter.
		Any log segment presented for scaling shall be scaled as merchantable which has a net volume of at least 10 board feet, providing a net merchantable scale of at least 25 percent of the total volume.
6	11B	Payment for scaling and reporting services performed by the scaling organization shall be made by the Purchaser.
8	11J	Conduct a minimum of one check scale per month per scaler by the scaling organization, during the operating season, to document scaler proficiency.
9	11P	Weekly reports of faller days and volume by unit. This information to be available for collection by the Timber Sale Officer or delivered to State Forest HQ no later than the following Tuesday.
10	13A	All terms, provisions and requirements of the Forest Practice Rules and the Timber Harvesting Plan (1-13-121 MEN) are made part of the Timber Sale Agreement.

On completion of operations satisfactory to the Timber Sale Officer, the operator shall certify by

<u>Page</u>	<u>Item</u>	<u>Description</u>
		letter to the STATE, all operations are complete and comply with Forest Practice Rules and THP.
10	13A1	A pre-work conference to be attended by representatives of the State and the Purchaser, including subcontractors is required before operations can begin. The Purchaser is responsible to ensure all contractors are provided with relevant applicable documentation.
11	13A2	No timber operations shall be conducted after January 31 of any year until the State or the Purchaser has completed required surveys for northern spotted owls, and extension of the No-Take determination has been received from the appropriate reviewing agency.
11	13A3	Flagging of all skid trails required at least two weeks in advance and notify the Timber Sale Officer for approval.
11	13A5	Minimum distance between new skid trails is 100 feet, unless waived by the Sale Officer.
12	13A7	Merchantable trees felled and bucked to log lengths, limbed to the 6-inch top, and the top bucked at the time of felling.
12	13A8	All slash created by timber operations within 100 feet of JDSF Road 202, 204, 230 and 231 shall be lopped to the extent that no portion shall remain over 12 inches above the ground for the first 50 feet and 24 inches above the ground for the remaining 50 feet. Slash created by timber operations within 50 feet of all other seasonal roads (JDSF Roads 231A-E and Road 230A) shall be lopped to the extent that no portion shall remain over 24 inches above the ground.
12	13A9	Maximize the extent of spreading slash to avoid or minimize the need for piling and isolating slash for burning. Logging wastes on landings on permanent and seasonal roads shall be segregated into large materials which can be utilized by firewood cutters. Material at least 8 inches in diameter and 6 feet in length is considered suitable for firewood.
12	13A11	Cable yarding system requirements are given.
13	13A12	Location of cable corridors will be flagged, mapped and approved by Sale Officer prior to rigging. Distance between cable corridors, no less than 200 feet measured from the back of cable road.
13	13A16	No permanent painted messages. Use temporary signs to be removed once their function is complete.
14	13A20	Mulching standard is at least 95% coverage to a minimum depth of four inches.
15	14A	Black and red striped flagging combined with trees marked with yellow vertical striped paint, designate individual group unit boundaries. Specifications for felling and lopping of hardwoods within group selection unit boundaries designated for mechanical and herbicide treatment shall be adhered to.

<u>Page</u>	<u>Item</u>	<u>Description</u>
14	14A	<p>Group boundaries are identified with black and red striped flagging combined with trees marked with yellow vertical striped paint. The PURCHASER shall fell, buck and yard all merchantable conifers within group boundaries, with the exception of any tree marked for retention as described below. All hardwoods are to remain standing, with the exception of trees that need to be felled to allow for safe falling and yarding operations and where elsewhere described in this agreement.</p> <p>The PURCHASER shall slash and lop all created group openings described above. All group openings shall be lopped to a height of 30 inches. Slashing shall be accomplished by felling unmerchantable redwood with a crown ratio less than 30% and all Douglas-fir and grand fir/hemlock that remains after logging which has a stem diameter of at least one inch (stump height) and a height of at least six feet. Slashing of hardwoods is not required. Lopping and slashing shall be complete no later than December 15 of the year that group openings were felled, bucked and yarded.</p>
14	14C	<p>The PURCHASER shall fell all hardwoods within approximately 2 acres composed of a proportion of group E1, Unit E and the DEMO Area, as illustrated on the Timber Sale Agreement Map (Exhibit A, Attachment 2). The area within Group E1 where felling of hardwoods will occur includes generally the lower half of the group unit, where the upper boundary is identified with a combination of solid pink and yellow/white striped flagging. The DEMO area boundary is identified with a combination of solid pink and yellow/white striped flagging. Both areas shall be lopped to a height of 30 inches.</p>
16	17A3	<p>Road width is 14 feet including 1 foot shoulder on each side of a 12 foot traveled surface. Width may be wider on curves.</p>
16	17A5	<p>Full bench road construction on slopes exceeding 50%.</p>
16	17A6	<p>Seasonal roads will be outsloped (2-5%) without a berm or ditch. Rolling dips will be constructed on road grades of 7% or less during road construction at locations proposed by the Purchaser, approved by the Timber Sale Officer. The Sale Officer will specify the location for drainage structures on roads greater than 7% prior to final road grading.</p>
17	17D	<p>All required culvert installations to be complete prior to log hauling on existing roads and concurrent with road construction and prior to use on proposed roads.</p> <p>Dispose culverts at an off-forest public disposal site.</p>
18	17H	<p>Maintenance work to be done within 15 days of end of hauling operation on each road and immediately on completion of hauling on any road after October 15.</p>
19	17M	<p>Provide and install three iron pipe gates, two on JDSF Road 231 and one on JDSF Road 200. Gates installed on Road 231 shall be installed in accordance with the standard gate plan and the gate installed on Road 200 shall be installed with the heavy gate plan (Exhibit A, Attachments 1 & 2). Gate installations for Road 231 shall be completed within 30 days after the start of log hauling on Road 231. Gate installation for Road 200 shall be completed by October 15, 2014.</p>
19	17N	<p>Provide, haul and place 3 pieces of a minimum 36 inch (1 ton) rip rap at two locations. To effectively block vehicles, place two pieces on each side of an existing gate located on Road 230 at the intersection of Road 200 and place one piece on Road 204 just north of the</p>

intersection of Road 202 at a location specified by the Timber Sale Officer. Placement of rip rap shall be performed upon the completion of hauling on Road 204 and no later than November 15, 2015. Road 230A shall be effectively blocked to vehicles by installing a large stump and/or cull log across the traveled surface near the intersection of Road 230 at a location specified by the Timber Sale Officer.

The PURCHASER shall provide, haul, place and compact 1"-3" coarse crushed rock for road stabilization at locations specified in Item 17 (d) and as described in the Additional Specifications (Exhibit A, Attachment1).

- 19 170 Abandon Road 201 and a segment of Road 204. Culverts and other non-native material removed from watercourse crossings shall be disposed of at an off-forest public disposal site. Waterbar locations may be flagged by the Timber Sale Officer. Areas of disturbed soil within the Watercourse and Lake Protection Zone shall be mulched with slash or straw provided by the PURCHASER.

Abandoned roads shall be effectively blocked to vehicles by installing a large berm and/or placement of stump and/or buried log across the traveled surface of Road 201 at the intersection of Road 231. Road abandonment activity shall be complete prior to October 15, 2015.

- 21 20 In addition to required fire tools complement, have available to the sale area for fire suppression purposes a "Park wagon" or similar self-propelled vehicle of at least 1,000 gallon capacity.
- 37 1 A deposit of \$23,000 must be submitted with the bid.
- 38 3 Furnish STATE copies of Timber Yield Tax calculations and reporting forms.
- 42 4 Performance security of \$65,000 required prior to contract approval.

PARK GULCH THP FLAGGING CODE

/ = Striped • = Polka dot ■ = Checkered

DESIGNATED ACTIVITY	FLAGGING COLOR
Proposed Road- grade & centerline	solid orange Site-Mark® "TRUCK ROAD" in black lettering
Timber harvesting boundary	pink-glo Site-Mark® "TIMBER HARVEST BOUNDARY" in black lettering
Class II watercourse (centerline)	blue/white stripe
Wet Area/Seep/Spring	blue/white stripe & white (combination)
Class II/Spring/Seep/Wet Area WLPZ	blue/white stripe Site-Mark® "LAKE AND WATERCOURSE PROTECTION ZONE" in black lettering
Class III watercourse (centerline)	blue•white polka-dot
Tractor/Cable boundary	red/white stripe
Tractor road (skid trail)	solid yellow
Message flag	pink/black stripe & yellow (combination)
Survey stations, Cruise stations	red•white polka-dot
Cable Road	solid red, unless otherwise approved by the RPF
Equipment Limitation Zone (ELZ) & Equipment Exclusion Zone (EEZ)	solid red & solid white (combination)
Group Opening Perimeter	black/red stripe
Silviculture Boundary	green-glo Site-Mark® "SILVICULTURE BOUNDARY" in black lettering
Faller Stripe	solid white
Extent of Excavation	solid pink & solid white (combination)
Timber Stand Improvement/Demonstration	yellow/white stripe