

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT 701 OCEANSTREET - 4TH FLOOR, SANTA CRUZ, CA 95060 (831)454-2580 Fax. (831)454-2131 TDD: (831)454-2123

TOM BURNS, PLANNING DIRECTOR

October 31,2006

Planning Commission County of Santa Cruz 701 Ocean Street Santa Cruz, CA 95060 Agenda Date: December 13,2006 Time: After 9 AM APNs: 093-26141,093-291-04 Application: 01-0033 Item # 18

Subject: A public bearing to consider a proposal to rezone two lots of record from the Special Use (SU) and Residential Agriculture (RA) zone districts to the Timber Production (TP) zone district.

Members of the Commission:

On January 22,2001, the County Planning Department accepted this application for a rezoning to Timber Production (TP). This is a proposal to rezone two parcels totaling about 14.282 acres from the Special Use (SU) and Residential Agriculture (RA) zone districts to the Timber Production (TP) designation. The uses on the property consist of vacant rural acreage.

Background

The applicant is proposing **to** rezone two parcels, however onlyone of the parcels, APN 093-261-41, meets the minimum 5-acre parcel size. The second parcel proposed for rezoning, APN 093-291-04, is less than the required 5-acre minimum parcel size. Although the applicant proposed to combine the two parcels, they are not contiguous and **thus** not eligible for combination.

APN 093-261-41 qualifies for a rezoning under California Government Code Section 51113. This section allows a property owner to petition the County to rezone land to the TP zone. The requirements for this type of rezoning are listed in Government Code section 51113(c)1. The County may not place any additional

I c) On or before March 1, 1977, the boardor council by ordinance shall adopt a list of criteria required to be met by parcels being considered for zoning as timberland production under this section.

The criteria shall not impose any requirements in addition to those listed in this subdivision and in subdivision (d). The following shall be included in the criteria:

⁽¹⁾ A map shall be prepared showing the legal description or the assessor's parcel number of the property desired to be zoned.

⁽²⁾ A plan for forest management shall be prepared or approved as to content, for the property by a registered professional forester.

The plan shall provide fw the eventual harvest of timber within a reasonable period of time. as determined by the preparer of the plan. (3) (A) The parcel shall currently meet the timber stocking standards as set forth in Section 4561 of the Public Resources Code and the forest practice rules adopted by the State Beard of Forestry and Fire Protection for the district in which the parcel is located. or the owner shall sign an agreement with the board or council to meet those stocking standards and forest practice rules by the fifth anniversary of the signing of the agreement. If the parcel is subsequently zoned as timberland production under subdivision (a). failure to meet the stocking standards and forest practice rules within this time period provides the board or council with a ground for rezoning of the parcel pursuant to Section 51121

⁽B)Upon the **fifthanniversaryofthe signing of an agreement**, **the** board shall **determine** whether the **parcel meets the** timber stocking standards in effect on **the** date that the agreement was signed.

Notwithstanding the provisions of Article 4 (commencing with Section

^{51130),} if the parcel fails to meet the timber stocking standards, the boardor council shall immediately rezone the parcel and specify a new zone for the parcel, which is in conformance with the county general plan and whose primary use is other than timberland.

⁽⁴⁾ The parcel shall be timberland, as defined in subdivision (f) of Section 51104.

⁽⁵⁾ The parcel shall be in compliance with the compatible use ordinance adopted by the board or council pursuant to Section 51111

⁽d) The criteria required by subdivision (c) may also include any or all of the following:

⁽I) The land area concerned shall be in the ownership of one person, as defined in Section 38106 of the Revenue and Taxation Code, and shall be comprised of single or contiguous parcels of a certain number of acres, not to exceed 80 acres.

⁽²⁾ The land shall be a certain site quality class or higher under

requirements on this petition to rezone the property to TP. County Code Section 13.10.375(c) – "Zoning to the TP District" implements Government Code section 51113 and specifies the six criteria which must be met in order to rezone to TP.

In accordance with County Code Section 13.10.375(c), APN 093-261-41 meets the following six criteria for rezoning to Timber Production:

- 1. A map has been submitted with the legal description or assessor's parcel number of the property to be rezoned.
- **2.** A Timber Management Plan, undated, prepared by a registered professional forester has been submitted for the property (Exhibit E).
- 3. The parcel currently meets the timber stocking standards as set forth in Section 4561 of the Public Resources Code and the Forest Practice Rules for the district in which the parcel is located (see Exhibit E).
- **4.** The parcel **is** timberland, as the entire parcel is capable of producing a minimum of 15 cubic feet of timber per acre annually and is almost entirely located within a mapped Timber Resource area.
- 5. The uses on the parcel are in compliance with the Timber Production Zone uses set forth in Section 13.10.372.
- 6. The land area to be rezoned is in the ownership of one person, as defined in Section 38106 of the Revenue and Taxation Code, and is comprised of at least five acres in area.

This project qualifies for a statutory exemption (Exhibit D) in accordance with the California Environmental Quality Act and the County Environmental Review Guidelines (Article 17, Section 1703).

Conclusion

All of the criteria have been met for rezoning this parcel to the Timber Production zoning designation. All required findings can be made to approve this application and the rezoning is consistent with the General Plan policies and land use designations.

Recommendation

Staff recommends that your Commission adopt the attached Resolution (Exhibit A), sending a recommendation to the Board of Supervisors for approval of Application No. 99-0184, as revised to rezone only APN 093-261-41, based on the attached findings (Exhibit B).

Section 434 of the Revenue and Taxation Code. except that the parcel shall not be required to be of the two highest site quality classes.

EXHIBITS

- A. Planning Commission Resolution, with Ordinance/ Findings
- B. APN Map
- C. Location, Current Zoning and General Plan Designation Maps
- D. Notice of Exemption from CEQA
- E. Timber Management Plan by Gerlad M. Garvey, RPF, dated January 19,2001

Robin/Bolster-forant Project Planner

Development Review

Reviewed By: Mark Deming

Assistant Planning Director

BEFORE THE PLANNING COMMISSION OF THE COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA

RESOLUTION NO._____

On the motion of Commissioner duly seconded by Commissioner the following Resolution is adopted:

PLANNING COMMISSION RESOLUTION SENDING RECOMMENDATION TO THE BOARD OF SUPERVISORS ON PROPOSED AMENDMENT TO THE ZONING ORDINANCE

WHEREAS, the Planning Commission has held a public hearing on Application No. **01-0033**, involving **property** located on the west and east sides of Mt. Charlie Creek between Mt. Charlie Rd and Hutchinson Rd, about 1 mile NW of Glenwood Drive, and the Planning Commission has considered the proposed rezoning, all testimony and evidence received at the public hearing, and the attached staff report.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission recommends that the Board of Supervisors adopt the attached ordinance amending the Zoning Ordinance by changing property from the Special Use (SU) zone district to the Timber Production zone district.

BE IT FURTHER RESOLVED, that the Planning Commission makes findings on the proposed rezoning as contained in the Report to the Planning Commission.

PASSED AND ADOPTED by the Planning Commission of the County of Santa Cruz, State of California, this ______ day of _____,2006, by the following vote:

COMMISSIONERS
COMMISSIONERS
COMMISSIONERS
COMMISSIONERS

Chairperson

ATTEST: MARK DEMING, Secretary APPROVED AS AO



ORDINANCE NO.

ORDINANCE AMENDING CHAPTER 13 OF THE SANTA CRUZ COUNTY CODE CHANGING FROM ONE ZONE DISTRICT TO ANOTHER

The Board of Supervisors of the County of Santa Cruz ordains as follows:

SECTION I

The Board of Supervisorsfinds that the public convenience, necessity and general welfare require the amendment of the CountyZoning Regulations to implement the policies of the County General Plan and Local Coastal Program Land Use Plan regarding the timber resource property located on the west and east sides of Mt. Charlie Creek between Mt. Charlie Rd and Hutchinson Rd, about 1 mile NW of Glenwood Drive; finds that the zoning to be established herein is consistent with all elements of the Santa Cruz County General Plan and the Santa Cruz County Code, as modified by the *Big Creek* decision; and finds and certifies that the project is subject to a statutory exemption under the California Environmental Quality Act.

SECTION II

The Board of Supervisorshereby adopts the Zoning Plan Amendment as described in Section III, and adopts the findings in support thereof without modification as set forth below:

- 1. The proposed zone district will allow a density of development and types of uses which are consistent with the objectives and land use designations of the adopted General Plan; and
- 1. The proposed zone district is appropriate for the level of utilities and community services available to the land; and
- 2. The character of development in the area where the land is located has changed or is changing to such a degree that the public interest will be better served by a different zone district; and
- 3. The property meets the requirements of Government Code section 51113 or 51113.5 and County Code Section 13.10.375(c).



SECTION 111

Chapter 13.10 - Zoning Regulations of the Santa Cruz County Code is hereby amended by amending Section 13.10.210 - Zoning Plan to change the following properties from **the** existing zone district to the new zone district as follows:

Assessor's Parcel Number	Existing Zone District	New Zone District
093-261-41	Special Use (SU) and	TP

SECTION IV

This ordinance shall **take** effect on the 31st day after the **date** of final passage.

PASSED AND ADOPTED THIS _____ day of _____ 2006, by the Board of Supervisors of the County of Santa Cruz by the following vote:

AYES:	SUPERVISORS
NOES:	SUPERVISORS
ABSENT:	SUPERVISORS
ABSTAIN:	SUPERVISORS

Chairman of **the** Board of Supervisors

ATTEST:

Clerk of the Board

APPROVED AS TO FORM:

Assistant County Counsel

Exhibit: Rezoning Map

DISTRIBUTION: County Counsel Planning Assessor County GIS



CALIFORNIA ENVIRONMENTAL QUALITY ACT NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 • 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 01-0033 Assessor Parcel Number: 093-261-41 and 093-291-04 Project Location: Property located on the west and east sides of Mt. Charlie Creek between Mt. Charlie Rd and Hutchinson Rd, about 1 mile NW of Glenwood Drive

Project Description: Rezone two parcels from Special Use (SU) and Residential Agriculture (RA) zone districts to the Timber Production (TP) zone district.

Person or Agency Proposing Project: William and Tona Moores

Contact Phone Number: (707) 526-3759

- The proposed activity is not a project under CEQA Guidelines Section 15378.
- A. B. The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060(c).
- C. ____ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.
- D. <u>x</u> Statutory Exemption other than a Ministerial Project (CEQA Guidelines Section 15260to 15285). [Section 1703]

In addition, nong of the conditions described in Section 15300.2 apply to this project.

Date: 1.3-06

Robin Bolster-Grant, Project Planner

FOREST MANAGEMENT PLAN

FOR TPZ REZONING

SANTA CRUZ COUNTY, CA.

AP#'S 093-261-41 + 093-291-04

OWNER: WILLIAM M. MOORES

<u>RPF CERTIFICATION OF LANDOWNER'S</u>

TIMBER MANAGEMENT PLAN

This is to certify that I have reviewed and approved the general Timber Management Plan for the property located in Santa Cruz County, California and described as follows: Santa Cruz AP # 093-261-41 and #093-291-04, located in Section 29, T9S, RIW, MDB&M.

The attached management phn was prepared by the timberland owner, Mr. William M. Moores, as required by state government code section 51113 and Santa Cruz County code section 13.103750 for the rezoning of qualifying timberland to Timberland Preserve Zone (TPZ) status. The Timber Management Phn accurately describes the conditions found on the subject property. The timber management goals and practices detailed in the management plan conform to the general requirements of the California Forest Practice Rules and the Santa Cruz County Rules subsection of the state rules.

annun 19, 2001

Gerald M. Garvey, RPF #1743 Staff Forester Natural Resources Management Corporation 130 Tuttle Lana, PO Box 1270 Willits, CA 95490

701-459-3556

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LANDOWNER

WILLIAM AND TONA MOORES 3880 SLEEPY HOLLOW D R SANTA ROSA, CA. 95404

PROPERTY LOCATION

LOCATED WITHIN USGS *MAP* "LAUREL" **MAP**, IN SECTION 29, T9S, R1W, MDB&M, SANTA CRUZ COUNTY ASSESSOR'S PARCELS 093-261-41 *and* 093-291-04, CONSISTING OF APPROXIMATELY 23 ACRES. THE PROPERTY IS LOCATED ON MOUNTAIN CHARLIE CREEK BETWEEN MTN. CHARLIE ROAD AND HUTCHINSON ROAD, ABOUT 1 MILE NW OF GLENWOOD.

GENERAL DESCRIPTION

The property is presently zoned SU with timber map overlay. Roads to the site: The subject property is in the upper reach of Mtn. Charlie creek about

mid way from the southerly end of Hutchinson Road and Mtn. Charlie Road. The westerly boundary adjoins Cresi Road. The easterly and northerly boundary joins Old Japanese Road over which the property has the benefit of an insured appurtenant easement-but that access right is not proposed as the primary means of log truck transport or equipment access. The property does have access easement rights over the proposed haul road which leads from the southerly end of the property along the course of an existing logging road which connects to Mtn. Charlie Road- see the road shown on map Exhibit A attached. The creek crossing at the northerly extent of this road washed out last year but has been used many times in recent years to access property on the easterly side of the creek and along the road leading from the creek to Mtn. Charlie road. This road was built many years ago, probably before 1940-as part of a large timbering operation of this entire area. The road, except for the crossing, is in very good condition as reported recently to the county by C.E. John Kasunich and Cassady BILL VAUGHAN, RPF# 2685 . Reestablishment of a crossing will be applied for to accommodate the alternative methods of harvesting proposed under this management plan. A primary objective of the plan is to avoid use of the owners easements over Cresi Road, Rudy Road, Mill Pond Road and Hutchinson Road as log haul roads-but the success of that objective depends upon the crossing and skid roads proposed. It is likely that the owner will reestablish the creek crossing as a primary access to his property regardless of which methods of harvesting are subsequently permitted or whether any harvesting is subsequently permitted. The Department of Fish and Game recently issued permit agreement #NN:R3-2000-1167 on 9/15/2000 for reestablishing the crossing. The crossing permitted provides for a small bridge span to replace the prior culvert crossing with earth backfill. The Department of Fish and Game favors this upgraded crossing to the prior culvert crossing.

Roads within the site: This property was logged many years ago-presumably when the existing road leading to Mtn. Charlie Road was originally built. There are significant remnants of old logging roads on the site. There is an existing permanent (as defined by

Forest Practice Rules) entrance road into the site off of Cresi Road whch is planned to be improved with a better turn radius-probably using either a short pressure treated fir and "T" beam retaining wall of about 6 ft. in height and about 60 ft. long or a block retaining wall. This existing entrance dnve is about 200 ft. long. The reworked roadway will maintain the same alignment and roadway area for 80% of it's length. In the southerly half of the site there are old roadways of about 950 ft. in total length. The proposed skid trails under the cat or yarder operations will follow these old roadway alignments in many areas. Extensions of skid trails off of old roadbeds will generally follow ridge lines and involve minimal cross slope traverses.

There are no dwellings **or** other structures on the site. CDF records show that there was a recent timber harvest in **1992** on the Rudy Ranch about ½ mile south of the site subject to this rezone application using this same historic haul access road proposed **as** the main haul road under this management plan. There was a second timber harvest plan operated in **1995** downstream of the Rudy ranch. There have been no other timber harvest plans in recent years upstream of this site.

The elevation of the site ranges from 1,040 ft. to 840 ft.. The topography of the site is quite variable; ranging from IO-15% for the westerly portion of parcel #093-291-04 some of the area on the south end of parcel #093-261-41 and a small ridge which lies along the westerly part of the mid section of this parcel to 75% for most of the draw on the north end of the this parcel and the easterly portion of parcel #093-291-04 and 30-50% for the center of parcel #093-261-41. Parcel 093-261-41 generally tends down slope in an easterly dlrection and there are two significant draws generally running east-west across the parcel resulting from Class III water courses. Parcel # 093-291-04 tends down slope in a easterly dlrection and has no significant east-west draws or water courses. Mountain Charlie Creek runs through the entire site in a north-south dlrection. Mtn. Charlie Creek is a Class I water course. According to the Natural Diversity Database of the Department of Fish and Game, whose records were checked, there are no documented sightings of either Coho Salmon, Steelhead or other threatened or endangered species in this location, but Mtn. Charlie is tributary to the San Lorenzo River which is known to have such sightings and will therefore be treated **as** an anadronomus fish stream.

There are no significant springs on the site, but there is a spring which is domestically used and located about 140 ft. up slope from the site's westerly line identified as assessor's parcel 093-261-62. The Mtn. Charlie private water company used to own and maintain a water diversion at the northerly end of the site subject to this application. The diversion operated from the east side of the creek where Old Japanese Road meets Mtn. Charlie Creek. However, that water system was recently taken over as a public district due to the fact that the system could not provide water quality that meets Health Department requirements. The District has now switched over to using San Jose Water which meets Health Department requirements. There are remnants of abandoned pumps and pipes on the site. There is also one 11/2"-2" diameter pipe running down the course of Mtn. Charlie Creek, mostly on the east side of the creek. The line delivers water from the San Jose Water system source to a tank near Hutchinson Road which serves several

residences. This pipeline lies within the site 20+/- ft. in several locations in the riparian area where CDF rurs restrict or completely prohibit timber falling operations. There are not wells on the site.

The entire site is effectively one vegetation type, best characterized as Redwood Forest Type, as described in "A Guide To Wildlife Habitats of California, October 1988. The understory tree species include tanoak, madrone, and big leaf maple. Shrubs and small herbaceous species include: redwood sorrel, thimbleberry, everygreen blackberry, bracken fern, wild pea, coffee berry, hazelnut, poison oak, honeysuckle, and a variety of forbs and grasses. Using a timber site classification system developed by Lindquist and Palley, "Empirical Growth Tables for Young Growth Redwood, in determining a site's productive potential, the property is designated a Site III. There are no know archaeological or cultural sites within the property, but a site specific survey has not yet been carried out. Any subsequent THP permit process will require such a survey before a harvest permit will be issued. If any archaeological **or** cultural sites are discovered, the permit rules to protect such sites will be applied.

GEOLOGICAND SOILS

The subject property is located in the Santa Cruz Mountains in the central portion of the Coast Range Physiographic Province of California. The Coast Range Province consists of coastal mountain chains paralleling the pronounced northwest-southeast structural grain of central California geology. The property is underlain by Vaqueros Sandstone according to the attached Geologic Survey **maps**, Exhibit G, p. 1 and p.2, supplied by the Department of Interior. There were large earthquakes in 1838,1865, 1906, and most recently in 1989, although none of the most recent earthquakes appear to have impacted the site **or** the proposed access road in any substantial or apparent way. The Cooper-Clark Landslide Map attached as Exhibit H shows a one small suspect landslide along the road route to the site. No new mad construction or other equipment operation is proposed to alter in any way this slide area. This small slide does not extend into the creek or currently interfere with the passage along the existing road. The roadway has remained passable for well over half a century. There are no existing or proposed harvest features which would affect this small slide.

According to the U.S. Natural Resources Conservation Service representative Rixon Rafter the property consists of only one soils type mapped in a 1988 soils survey as Ben Lomand-Felton Complex. This complex consists mainly **of** soils in concave areas near drainage ways. Ben Lomond soil is deep and well drained. Typically the soil has a 2-inch mat of partially decomposed needles and twigs. The surface layer is dark greyish brown, slightly acid and neutral sandy loam about 19 inches thick. The substratum is pale brown, medium acid sandy loam about **16** inches thick. Weathered sandstone is at a depth of **46** inches. Permeability is moderately rapid. Effective rooting is **40** to **60** inches. Runoff is rapid and the hazard of erosion is high. The Felton Complex is deep and well drained. The surface layer is typically an acid sandy **loam** about 11 inches deep. The subsoil is brown, yellowish red, acidic sandy clay loam about 32 inches deep. Weathered sandstone

is at a depth of 63 inches. Permeability of the Felton soil is slow, rooting depth is 40-72 inches. Runoff is rapid and the hazard of erosion is high. These soils are used mainly for timber, recreation, wildlife habitat and as homesites. The complex is well suited to the production of redwood and is capable of producing 13,360 cubic feet or 70,000 Bd. Feet per acre from a fully stocked, even-aged stand of **80** years.

The Moores property faired well through the El Nino winters of the late 1990's with no significant drainage or erosion problems. Continued active maintenance on the part of the owner with emphasis on establishing permanent erosion control features will help protect soil resources on the site and downstream. The property has been assigned a high erosion hazard rating. Following any given timber harvest, waterbars should be installed on trails using the spacing required in CDF quidelines for high erosion soils. Doing so will insure that water is not concentrated in amounts that may cause erosion. Following timber operations, outside road and trail edges should be pulled back and slash and debris spread on disturbed areas to the extent feasible. Upon completion of any given harvest, a Registered Professional Forester or his designated representative shall **flag** all waterbars on all roads. Soil stabilization measures such **as** seeding, straw mulching, tractor packing slash, etc. will be prescribed and implemented on a site-specific basis under any given THP.

TPZ REZONING

Mr. Moores wishes to selectively manage the redwood timber on his property. While the property is only 23 acres, the densely stocked nature of the stand, the highly productive soils of the site and the presence of the existing haul road with virtually no residences along it make this site a viable management option. The site exceeds the stocking standards per PRC Section 4561 and meets the State of California's minimum productivity standards which require that the TPZ lands be capable of producing at least 15 cubic feet/acre/year. All things considered this site makes an excellent candidate for a small but highly productive family tree farm.

TIMBER MANAGEMENT GOALS AND OBJECTIVES

SITE CLASS: As discussed previously this property is a site class III; **PAST, PRESENT AND FUTURE STAND CONDITIONS:** It is estimated that the subject property was harvested in the 1940's at which time it probably contained a high volume per acre of mostly redwood. The current stand is a uneven aged second growth regeneration of redwood and douglas fir with about 90% redwood and 10% douglas fir. There are no other species of conifer on the property. The understory growth is mostly tanoak with some madrone. There are no ancient trees on the site. The property has remained relatively undisturbed since the original harvest with the exception of repeated efforts to keep up or maintain the creek crossing over the years. The stump sprouts which regenerated since the original harvest of the old growth have matured. Periodic stand inventories and selective thinning under the guidance of a Registered Professional Forester, in compliance with Forest Practice Rules, will assist in developing a more

productive, even aged stand with a diversity of age classes and habitat components. Under a selection silvicultural system, trees whose removal will increase the growth of retained trees and promote regeneration by sprouting from the stump are selected for harvest. Trees that exhibit **poor** growth rates **or** display noticeable defect **or** deformity are selected first, followed by a selected trees ability to release adjacent stems, create adequate spacing and produce healthy sprouts. The system requires a balance which retains growing stock for current growth while satisfying light and spacing requirements needed to stimulate regeneration **by** sprouting and maintain healthy growth of smaller trees. The silvicultural objective is to ensure that long-term growth is equal to **or** greater than the long term harvest volume using a cutting regime which knowledgeably integrates cutting intensity and cutting frequency for release growth and regeneration. Achieving and maintaining the desired structure is a methodical, scientific process which may take three **or** four entries spanning 40 years **or** more.

PRESENT AND FUTURE GROWTH MODELS: The existing timber stand is effectively an uneven aged stand of about 50 years. The dominant trees exceeding 3 0 in diameter with a few sprouts and young trees existing under the canopy. There is good stocking with conifers in **those** area of the stand where the density of larger conifers is lighter. Existing basal area (cross sectional area of a tree at its base) is estimated to exceed 150 square feet per acre over about one half of the site. Current annual radial growth within the stand is estimated to be between 1.9% and 2% of inventory, which is fairly typical of Site Class III land containing unentered second growth redwood of this age. Existing stock in much of the site is limiting percent growth on the property, as maturing second-growth sprout stumps are competing for limited resources. Future growth is modeled using a combination of basal area and percent growth. Growth base of the stand will be maintained by setting **a** minimum basal area standard of 75 square feet and maintaining an objective for basal area in the range of **75** square feet **or** higher for this class III site. Maintaining adequate basal area assures good land occupation by trees while permitting establishment and healthy growth of regeneration and small trees during each cutting cycle. Under this regime it is expected that annual growth rates will roughly double at an average of 4% as long as healthy trees are retained as leave trees during each harvest. Harvesting to maintain inventory and growth rates within model parameters must coordinate harvest percentage by size class with cutting cycle length as discussed below under harvest frequency. Since about half of the site has good regeneration in a younger age than recommended for harvest while the balance of the site has dominant trees which are limiting regeneration, it is recommended that 60% of trees over 1 8 in diameter be removed combined with a longer 18+ year reentry cycle to move toward a 4% overall growth rate. Future silvicultural management will thin the dominate and co-dominate trees to generate spacing and encourage sprout development, remove weaker, poorer growing trees regardless of size class and remove selected hardwoods where necessary to release suppressed individual or groups of conifers. Following this prescription and growth model, we anticipate an uneven aged stand structure with significant numbers of trees in all diameter classes will emerge over three or four cutting cycles.

HARVEST CYCLES Special cutting rules within the California Forest Practice Rules govern the nature of selective harvests in Santa Cruz County. Under the rules a landowner may selectively harvest up to **60%** of the trees over 18" in diameter on the first entry. Following the initial entry, percent harvest is based upon the amount of time since the last cut. If reentered in 14 years, then the harvest may remove a maximum of **51-60%** of the trees over 18". Regardless of the reentry period, no more than 40% of the trees between 14" and 1 8 shall be removed. Any entry must also maintain the minimum basal requirements and minimum spacing requirements between leave trees.

MANAGEMENT UNIT: To maintain economics of scale and given the relatively small area, the entire property will need to be harvested at the same time, thus there is only one management unit.

RECOMMENDED LOGGING SYSTEM It is recommended that the property be logged using the most appropriate methods available at the time of harvest given the constraints of access, economics and future changes in harvesting equipment. In the current market helicopter yarding, cat logging and/or Mclelland yarder operating are the most appropriate methods.

FOREST IMPROVEMENT: Timberstand improvement operations (TSI) will be prescribed and implemented **as** needed and feasible to promote stand vigor, the desired age class distribution and species composition. Sprouts which regenerate following harvest may be thinned after five **or** more years *so* that only 3-4 of the healthiest sprouts per stump are left. The number of sprouts left is normally a function of the diameter of the stump, where the thumb rule dictates that the number of retained sprouts equals the diameter **of** the stump in feet. Individual hardwood trees may be removed where doing *so* would release conifer trees which are either directly underneath **or** immediately adjacent to the tree to be removed. Standard hazard mitigation which requires lopping of all material to within **30** inches of the ground **or** less will be followed for all such timber stand improvement operations.

FIRE PROTECTION PLAN: The upper **part** of the property is accessed by a surfaced all weather road suitable for emergency vehicles. The existing seasonal road leading from Mtn. Charlie Creek to Mtn. Charlie road is an important fire exit for residents on the southerly end of Hutchinson Road, Rudy Road, Cresi Road and Mill Pond Road-all of which currently have one way to Hutchinson Road. It is also an important access road for CDF fire fighting vehicles since it is the only road accessing a large area in this Mtn. Charlie canyon basin. It is expected that the reestablished creek crossing will be fully capable **of** accommodating CDF vehicles. There is a large pond **on** Mill Pond road which could provide emergency fire fighting water. Also, Mtn. Charlie creek has **pools** near the crossing from which fire fighting trucks could draw, even in summer. There are also fire hydrants from the Mtn. Charlie water system fed by water storage tanks in the area.

The rules and regulations which address fire prevention and hazard reduction will be brought to the attention of any LTO hired to work on the property. This will insure that

all work is done in a safe manner and conforms with all applicable state and county laws, regulations and contract provisions pertaining to smoking, fire tool requirements and fire in general. Some of the more important items include: regulation of smoking and lunch and warming fires, care in welding, caution in using chain saws and other spark emitters, prohibiting uncovered glass containers, and daily inspections prior to shutting down operations during the fire season.

SNAGS AND DOWNED WOODY DEBRIS: The property has few, if any, snags or large woody debris on the ground. The absence of such debris is testament to the property's ability to produce quality timber, as the lack of decaying old-growth cull logs means that nearly all of the old-growth which was removed was utilized. If deemed appropriate, recruitment of snags or large woody debris may be accomplished by selective girding or felling of larger hardwood trees.

ANCIENT TREE MAPPING There are no ancient trees (200yrs+ old) on the site

FISH AND WILDLIFE

Although the Natural Diversity Database of the Department of Fish and Game shows no confirmed sightings of steelhead or salmon in Mtn. Charlie Creek at this upper reach of it's length, it is tributary to the lower reaches where, historically steelhead and salmon have been **known** to exist. Therefore it is important to insure that there is minimal erosion into the creek. Mitigation in the form of seeding, straw mulching slash packing and water baring **as** well **as** all CDF regulations will be employed to ensure that erosion of significance does not occur. The recent successful completion of the harvest on the Rudy ranch to the **south** which has comparable **slopes** and soils demonstrates the effectiveness of these rules **and** techniques.

Future stand harvests should increase diversity within the stand by promoting a healthy, multi-layered canopy, resulting in improved wildlife habitat. While short term displacements of mammals and birds may occur during active harvest operations, the adjoining lands should be accommodate animals displaced, as many adjacent lands contain large tracts of wildland area. Non-listed species which are likely to be found on the property include: band-tailed pigeon, jay, hawks, quail, owl, raptors, hermit thrush, red-shafted flicker, woodpecker, wild turkey, deer, racoon, coyote, fox, bobcat, **skunk,** rabbit, squirrel, mice, wood rat, salamander, tree frog, lizard, snake and many others. All appropriate biological surveys will be conducted prior to the submission of any harvest plan permit application.

RECREATIONAL AND CULTURAL RESOURCES

Due to the location of this site in the bottom of the canyon far removed from a public road, it is not expected that the harvest will be visible to the public at large. Some neighbors will view the harvest area. Although there is a noticeable change in the character of the site immediately after the harvest, such changes are short-lived, and in

most cases, often unrecognizable three to four years after the harvest is complete. The property itself does not offer any physical recreational opportunity **as** the land is private and trespass is discouraged. Similarly, there are no publicly-owned lands adjacent to the property which offer recreational opportunity. The property does provide small-scale opportunity for owner-approved hiking, bird watching, camping or **just** outdoor relaxation and enjoyment of nature.

There are no know cultural, historic or archaeological resources on the property. If some should be discovered during the permit processing or active operations, the protective regulations will be complied with.

URBAN INTERFACE

There are no residences on the length of haul road which extends from Mtn. Charlie Creek to Mtn. Charlie Road and there is only one home closer than 300 feet to the site. The general area is clearly not urban and contains significant areas of commercial forestland. There is no doubt that existing TPZ zoned parcels in the area will continue to be harvested **as** has occurred in the recent past. There is further no reason to conclude that both residential use and forestland uses can continue to co-exist in this rural area. No new roads are proposed under this timber management plan and no residential construction is proposed. **As part of** the THP review process, the public will be invited to attend a Public Hearing, where issues regarding the nature of the conduct of timber operations will be discussed. Since there is **no** proposed development there is no basis to discuss, on account of such proposed development, the **loss** of harvest area, creation of conflicts along haul routes caused by proposed development (as opposed to harvesting), proposal affects on future harvesting and the extent **of** clustering. The condition of existing haul roads and access roads was discussed earlier in this plan

CONCLUSION

This Timber Management Plan conforms to all State and County requirements. **As** indicated in the Timber Management Section of this plan, the property meets or exceeds all stated requirements for inclusion in the TP zone classification. Unacceptable cumulative impacts on watershed resources, wildlife, recreational resources, publicly viewed visual resources, and traffic resources are unlikely to occur.

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