COUNTY OF SANTA CRUZ PLANNING DEPARTMENT Date: March 10,2004 Agenda Item: No. **9** Time: After 9:00 a.m.

APNs: 089-021-20 and 36

STAFF REPORT TO THE PLANNING COMMISSION

APPLICATION NO.: 01-0174

APPLICANT: Gary Paul

OWNER. Louis Favorito Trust

PROJECT DESCRIPTION Proposal to rezone Assessor's Parcel Numbers 089-021-20 and 36 from the Special Use (SU) zone district to the Timber Production (TP) zone district. Requires a Rezoning.

LOCATION: The property **is** located on the west side of Palm Drive about 0.75 miles west of Deer Creek Road, Boulder Creek.

FINAL ACTION DATE: Exempt from the Permit Streamlining Act (Legislative Action) PERMITS REQUIRED: Zoning Ordinance Amendment

ENVIRONMENTAL DETERMINATION: Statutory exemption from CEQA per section 1703 COASTAL ZONE: ___yes <u>XX_no</u>

PARCEL INFORMATION

PARCEL SIZE: 089-021-20 = 41 acres 089-021-36 = 9 acres EXISTING LAND USE: PARCEL: Timber production

SURROUNDING: Timber production and rural residential PROJECT ACCESS: Private right-of-ways (Palm Drive and Deer Creek Road) to Bear Creek Road PLANNING **AREA** San Lorenzo Valley Planning Area LAND USE DESIGNATION: "R-M' Mountain Residential ZONING DISTRICT: "SU" Special Use SUPERVISORIAL DISTRICT: Fifth

ENVIRONMENTAL INFORMATION

Item	Comments
a. Geologic Hazards	a. None noted
b. Soils	b. Ben Lomond-Felton complex, Lompico-Felton complex, Maymen
	rock
c. Fire Hazard	c. Mapped critical fire
d. Slopes	d. 10 to 75%
e. Env. Sen. Habitat	e. Riparian Habitat – Whalebone Gulch
f. Grading	f. Existing skid trails and timber landings
g. Tree Removal	g. Future Timber Harvest Proposed
h. Scenic	h. Not visible from any designated scenic road.
i. Drainage	i. N/A
j. Traffic	j. N/A
k. Roads	k. Access via private right-of-ways to Bear Creek Road
1. Parks	1.N/A
m. Sewer Availability	m. N/A
n. Water Availability	n. N/A
o. Archeology	o. Mapped within a resource area, no resources evident

SERVICES INFORMATION	N
W/in Urban Services Line:	yes_XX_no
Water Supply:	San Lorenzo Valley Water District - undeveloped
Sewage Disposal:	Septic - undeveloped
Fire District:	California Department of Forestry
Drainage District:	Zone 8

ANALYSIS & DISCUSSION

Background

On April 5, 2001, the County Planning Department accepted this application for rezoning two parcels totaling approximately SO-acres from the Special Use (**SU**) zone district to Timber Production (TP). California State Government Code Section 51113 and County Code Section 13.10.375 (c), zoning to the TP district specifies the six criteria, which must be met in order to rezone to TP. This project qualifies for a statutory exemption (Exhibit B) in accordance with the California Environmental Quality Act and the County Environmental Review Guidelines (Article 17, Section 1703).

Project Setting

The project site is located in the San Lorenzo Valley planning area. The property is approximately 50 acres and is undeveloped. The timber resources are concentrated on the eastern side of Parcel 089-021-20 and most of 089-021-36. The remainder of the property is *oak* and madrone forest with chaparral at the south-facing ridge tops. Whalebone Gulch is an ephemeral to intermittent stream that flows into Bear Creek. Whalebone Gulch crosses the western side of parcel 20. This area, however, is located within an *oak* and madrone forest and is outside of the timber harvest area. A Class III watercourse bisects parcel 36 and terminates on parcel 20. While there is a distinct drainage channel, it is heavily shaded by redwoods, lacks characteristic riparian vegetation and **only** transports water during rainfall events. This channel eventually drains into Deer Creek, a perennial tributary to Bear Creek.

The subject property is bordered on the south by TP zoned parcel and by SU zoned parcels to the north, west and east. The Zoning Map for APNs 089-021-20, 36 and the surrounding parcels is included as Exhibit G.

General Plan & Zoning Consistency

The subject property has a 1994 General Plan land use designation of Mountain Residential. The Special Use and Timber Production zoning districts implement the Mountain Residential General Plan designation, as specified in Section 13.10.170 of the County Code.

The proposed rezoning is consistent with General Plan Objective 5.2 "Riparian Corridors and Wetlands". Specifically, the subject parcels does not contain any streams meeting the definition of a riparian corridor set forth under General Plan Policy 5.2.1 and 5.2.7 within the future timber harvest areas. Moreover, the property does not contain any habitats meeting the definition of a

Sensitive Habitat set forth in General Plan Policy 5.1.2. Therefore, the proposed rezoning to allow future timber harvesting is consistent with the General Plan Objective 5.1 for maintaining biological diversity.

The timber resources are concentrated on about 15 acres of the property, however, according to the forester the property is capable of producing the required 15 cubic feet per acre per year of wood fiber.

In accordance with California State Government Code Section 51113 and County Code Section 13.10.375, Special Standards and Conditions for the Timber Production (TP) District, the project meets the following six criteria for rezoning to Timber Production:

- 1. A map has been submitted with the legal description of the properties to be rezoned (Exhibit F).
- 2. A Timber Management Plan, dated February 2001 with addenda dated 6/01 and **7/01** prepared by a registered professional forester has been submitted for the property (Exhibit J). The Timber Management Plan has been reviewed and accepted by the Planning Department as meeting minimum standards.
- **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.
- **4.** The parcel is timberland, as the property is capable of producing a minimum of 15 cubic feet of timber per acre annually.
- 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.

Conclusion

All of the criteria have been met for rezoning the subject property 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 pursuant to California State Government Code Section 51113 and County Code Section 13.10.375. Please see Exhibit A ("Findings") for a complete listing of findings and evidence related to the above discussion.

<u>RECOMMENDATION</u>:

Staff recommends that your Commission adopt the attached Resolution (Exhibit D), sending a recommendation to the Board of Supervisors for approval **of** Application No. 01-0174 based on the attached findings (Exhibit A), and the approval of the determination that the project is statutorily exempt from CEQA (Exhibit B).

EXHIBITS

Gary Paul for Favorito Trust Application No.: 01-0174 APN: 089-021-20 and 36

- A. Findings
- B. Notice of Exemption from CEQA
- C. Planning Commission Resolution
- D. Location Map
- E. Assessor's Parcel Map
- F. Zoning Map
- G. General Plan Map
- H. Timber Resource Map
- I. Timber Management Plan by Gary Paul dated February 10, 2001 addenda dated 6/01 and 7/01.

SUPPLEMENTARY REPORTS AND INFORMATION REFERRED TO IN THIS REPORT ARE ON FILE AND AVAILABLE FOR VIEWING AT THE SANTA CRUZ COUNTY PLANNING DEPARTMENT, AND ARE HEREBY MADE A PART OF THE ADMINISTRATIVE RECORD FOR THE PROPOSED PROJECT.

Report Prepared By:

athlen

Cathleen Carr Santa Cruz County Planning Department 701 Ocean Street, 4th Floor Santa Cruz CA 95060 Phone Number: (831)454-3225; Email: cathleen.carr@co.santa-cruz.ca.us

Report reviewed by:

Cathy Graves Principal Planner Development Review

REZONING FINDINGS

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,

The rezoning will allow a density of development and types of uses, which are consistent with the objectives and the land use designation of Mountain Residential. The uses will more closely conform with the General Plan as a result of the zoning of a property which contains timber resources meeting the timber stocking and is located in an area of timber harvesting activities.

The property does not contain riparian resources within the timbered areas.

2. THE PROPOSED ZONE DISTRICT IS APPROPRIATE OF THE LEVEL OF UTILITIES AND COMMUNITY SERVICE AVAILABLE TO THE LAND; AND,

The proposed TP zone district is appropriate to the level of utilities and community services available to the parcel. The subject parcel is accessed via a privately maintained roads eventually accessing Bear Creek Road. The parcel is located outside of the Urban Services Line and is, therefore, rural in nature.

3. THE PROPOSED REZONING IS NECESSARY TO PROVIDE FOR A COMMUNITY RELATED USE WHICH WAS NOT ANTICIPATED WHEN THE ZONING PLAN WAS ADOPTED,

The proposed rezoning is necessary to provide for a community related use - timber harvesting and timberland management. Timber harvesting was permitted in the SU zone district in the past in certain circumstances under the jurisdiction of the County and later under the sole authority of the California Department of Forestry. Presently, timber harvesting is only allowed within the Timber Production and Parks and Recreation, Mineral Extraction and Commercial Agriculture (outside of the coastal zone) zone districts. The subject property contains timber stands meeting the timber stocking standards and is located in an area with a history of past and more recent timber harvests. The rezoning will allow the continuation of harvesting and management of the timberlands on the subject property.

NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL OUALITY ACT

The County of Santa Cruz has reviewed the project described below and has determined that it is exempt ftom the provisions of CEQA as specified in Sections 15061 - 15329 of CEQA for the reason(s) which have been checked on this document.

Application No. 01-0174

Assessor Parcel No. 089-021-20 and 36

Project Location: Located on the west side of Palm Drive about 0.75 miles west of Deer Creek Road, Boulder Creek.

Project Description: Proposal to rezone Assessor's Parcel Numbers 089-021-20 and 36 ftom the Special Use (SU) zone district to the Timber Production (TP) zone district. Requires a Rezoning. Person or Agency Proposing Project: Gary Paul, RPF

Phone Number: (831) 440-9125

- A. _____ The proposed activity is not a project under CEQA Guidelines, Sections 1928 and 501.
- B. Ministerial Project involving only the use of fixed standards or objective measurements without personal judgement.
- C. XXX Statutory Exemution other than a Ministerial Project. Specifytype: Article 17, Section 1703, Timberland Preserves
- D. **Categorical Exemption**
- <u>2</u>. Replacement or Reconstruction
- _____ 3. New Construction of Small structure
- 4. Minor Alterations to Land
- _____5. Alterations in Land Use Limitations
- **6.** Information Collection
- 7. Actions by Regulatory Agencies for Protection of the Environment
- 8. Actions by Regulatory Agencies for Protection of Nat. Resources
- <u>9</u>. Inspection
- 10. Loans
- 11. Accessory Structures
- ____ 12. Surplus Govt. Property Sales
- ____ 13. Acquisition of Land for Wild-
- Life Conservation Purposes
- 14. Minor Additions to Schools
- _____15. Minor Land Divisions
- 16. Transfer of Ownership of Land to Create Parks

E. Lead Agency **Other** Than County:

tileen)

Date: 2/11/04

Cathleen Carr, Project Planner

_____17. Open Space Contracts or Easements

- 18. Designation of Wilderness Areas
- _____ 19. Annexation of Existing Facilities/ Lots for Exempt Facilities
- <u>20. Changes in Organization of Local</u> Agencies
 - 21. Enforcement Actions by Regulatory Agencies
- <u>22. Educational Programs</u>
- _____23. Normal Operations of Facilities for Public Gatherings
- _____24. Regulation of Working Conditions
- in Land to Preserve Open Space
- 26. Acquisition of Housing for Housing Assistance Programs
- _____ 27. Leasing New Facilities
- _____ 28. Small Hydroelectric Projects at **Existing Facilities**
- _____ 29. Cogeneration Projects at Existing **Facilities**

В EXHIBIT

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. 01-0174, involving property located on the west side of Palm Drive about **0.75** miles west of Deer Creek Road, Boulder Creek, 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 properties from the "SU Special **Use** zone district to the "TP" Timber Production zone district.

BE IT FURTHER RESOLVED, that the Planning Commission makes findings on the proposed rezoning as contained in Exhibit A of the Report to the Planning Commission dated March 10,2004.

PASSED AND ADOPTED by the Planning Commission of the County of Santa Cruz, State of California, this 10th day of March, 2004, by the following vote:

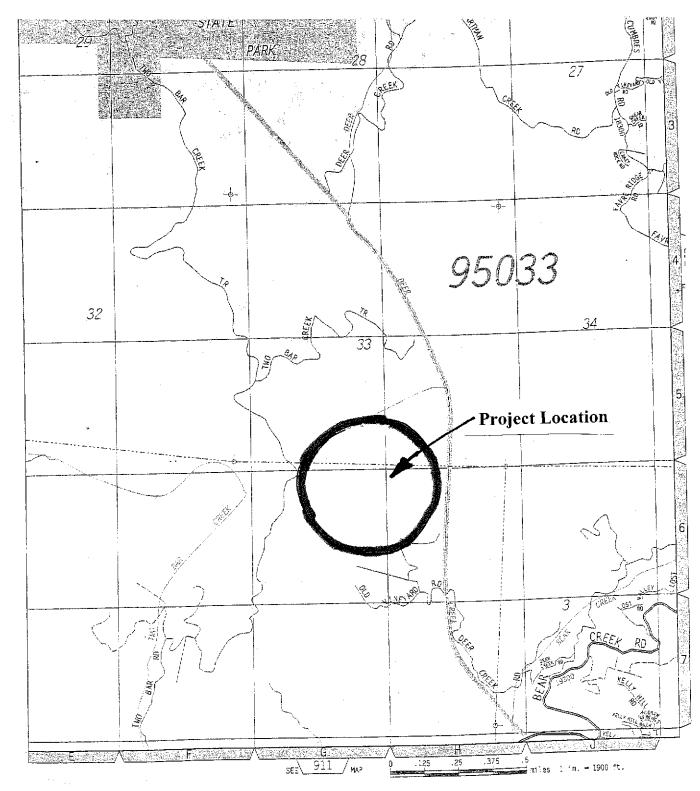
AYES:	COMMISSIONERS
NOES:	COMMISSIONERS
ABSENT:	COMMISSIONERS
ABSTAIN:	COMMISSIONERS

RENEE SHEPHERD, Chairperson

ATTEST __________CATHY GRAVES, Secretary

APPROVED AS TO FORM:

TOUTP COUNTY COUNSEL

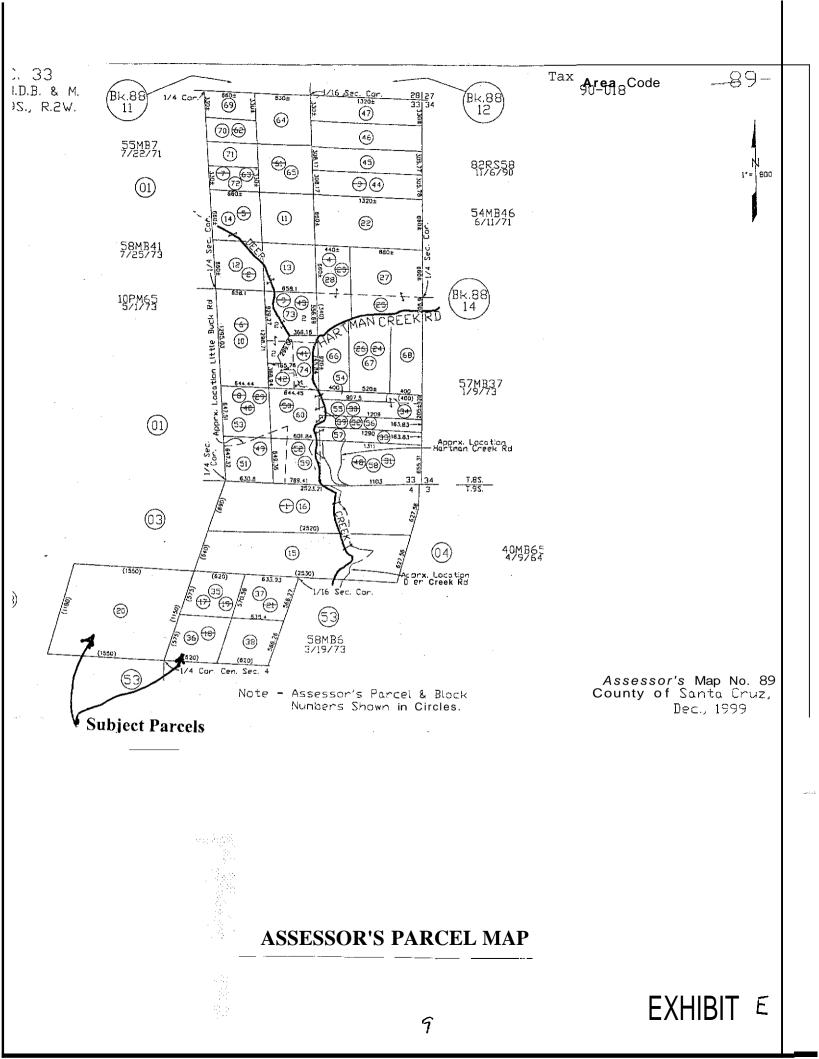


VICINITY MAP

8



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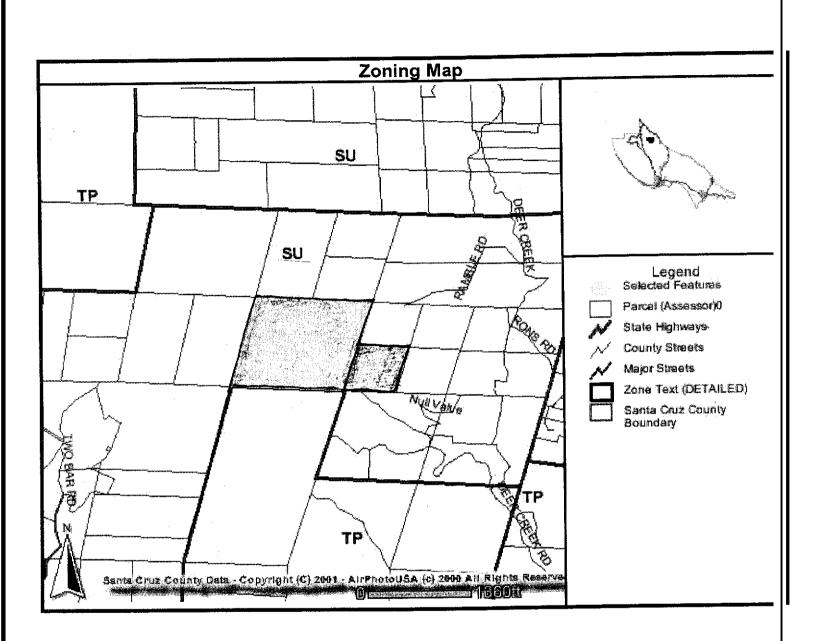


EXHIBIT F

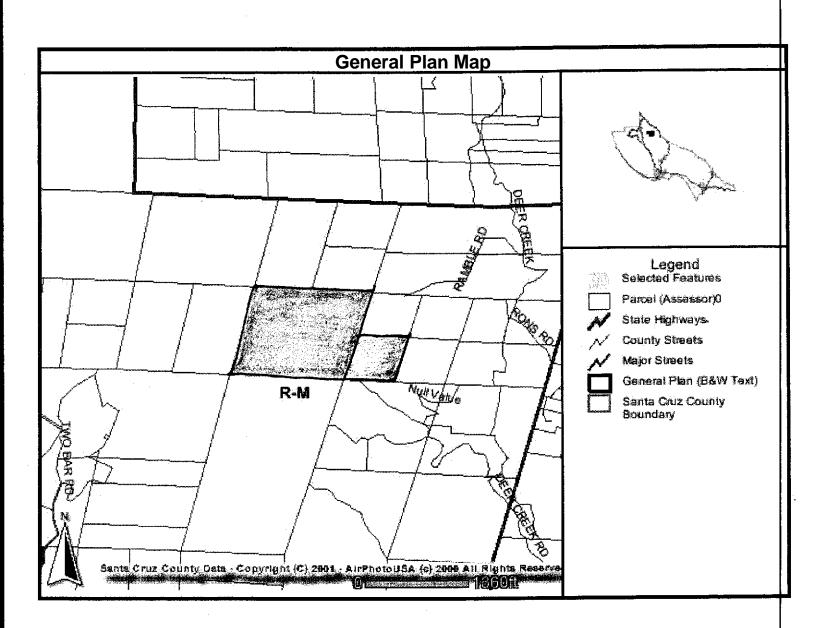
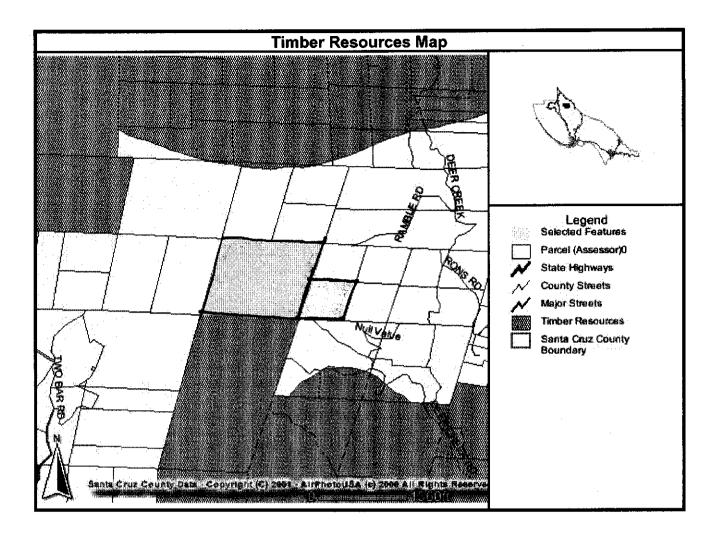


EXHIBIT G



LANDS OF Louise Favorito Trust Santa Cruz County, California

TIMBER MANAGEMENT PLAN

Gary Paul Forestry Consultant

<u>#1829</u> #1829 G<u>ar</u>/ ∕aul

February 10, 2001

EXHIBIT I

Table of Contents	
General Description	2
History	2
Objectives	2
Soils	3
Geology	3
Watershed	4
Cultural	4
Wildlife	4
Rare, Threatened, and Endangered Species	5
Ancient Trees	5
Recreation	5
Timber resource	6
Timber stand summary	7
Roads and trails management	8
Erosion hazards and management	8
Fire protection	8
Recreation and aesthetics	9
Wildlife management	9
Snags and downed wood	9
Timber management, harvest	10
Timber stand improvement	10
Tree planting	11
References	11
Appendix (maps, tables. etc.)	12

Landowner

Louise Favorito Trust 6759 Mason Way San Jose, Ca. 95129

Property Location

Township 9S., R 2W.NW1/4 SEC4. MDM APN #'s 089-021-20; 089-021-36

General Description

The property is located in the lower Deer Creek drainage. It drains directly to Deer Creek which is a major tributary of Bear Creek. Bear Creek drains to the San Lorenzo River approximately 4 miles from its confluence with Deer Creek. Access to the property is made from the Palm Drive which is a private road. Palm drive intersects Deer Creek road approximately ½ mile southeast of the property. There are no residences on the property however there are two mobile homes which have been used in the past. There are other residences in the area.

The total property is approximately 53 acres made up of two contiguous parcels. There is an estimated 15 acres of timberland. This acreage is vegetated with varying densities of older second growth coast redwood with intermixed hardwood species. The balance of the property is vegetated by mixed hardwood forest comprised of an overstory of tan oak, madrone, and coast live oak. Slopes range from 30 to 65 percent and aspect is primarily southeast. Elevation ranges from 1100 to 1600 feet.

History

The property is presumed to have been intensively harvested during the early 1900's. Evidence of earlier logging includes roads, skidtrails, and landings, that have remained relatively stable despite having been constructed prior to the current Forest Practice Act regulations.

The owners have used the property for occasional recreation. No additional harvesting has been done however a preliminary layout has been prepared prior to this plan.

Objectives

The owner's overall objective is to make management a self-sufficient enterprise from a cost standpoint, while preserving the outstanding natural values of the property. All future activities will recognize the sensitive nature of the watershed and biotic diversity on the property. The current objective is to obtain Timber Production zoning which will allow management of



the property consistent with these values. The parcel is presently SU (special use). Future management objectives will bring a primarily even aged timber stand into an un-even aged character promoting growth and regeneration of timberland species while preserving the natural character of the property. Maintenance of existing improvements (roads, trails, clearings) will be given a high priority both to preserve their beneficial use and reduce impacts from their use.

Resources

Soils

Soils are mapped as the Ben Lomond - Felton complex, $50 \sim 75\%$, the Lompico-Felton complex 30 -50% slope, with a lesser amount of what is mapped as the Maymen-Rock outcrop complex 50-758 slopes (USDA, Soil Conservation Service, 1979, see Soils Map).

The Ben Lomond- Felton complex covers approximately 50% of the property. The Ben Lomond soil is the predominate type in this complex and is described as deep and well drained. Weathered sandstone parent material is expected at a depth of 46 inches and rooting depth is typically 40-60 inches. Runoff is rapid and the erosion hazard is listed as **very** high. The Felton is described as being deep and well drained. The parent material is residuum from sandstone and shale. Weathered sandstone is expected at 63 inches and the effective rooting depth is 40 to 70 inches. Runoff is rapid and the erosion hazard is very high.

The Lompico-Felton complex makes up about 30% of the property. The Lompico soil is desribed as moderately deep and well drained. Weathered sandstone is encountered at a depth of 37 inches. The effective rooting depth is 20-40 inches. Runoff is rapid and erosion hazard is high.

The Maymen- Rock outcrop unit makes up about 25% of the property. This soil is described as being very shallow and somewhat excessively drained. Effective rooting depth is over 14 inches and the runoff is very rapid. The parent material is shale, sandstone, and granitic rock. The erosion hazard is given as very high. This unit roughly correlates with the mixed evergreen forest (hardwood) stands on the property.

The Ben Lomond, Felton, and Lompico soils are noted as being well-suited to the production of timber. The Maymen series is not recognized as a timber producing soil with the exception of some production of firewood.

Geology

The property is shown as being an equal mix of the San Lorenzo mudstone and Two Bar shale mapping units (see attached map). These are marine deposits with various inclusions of diatomite, and siltstone. The mudstone is olive gray to reddish-brown and up to 1000 feet thick. The shale is laminated and up to 800 feet thick. The Cooper-Clark landslide maps show a possible ancient landslide trending south from the upper reaches of Starr creek on the western property boundary.

16



Examination of the property shows some signs of soil movement which might be typical of 'inner gorge" topography. The remnant skidtrails on the property appear stable however with the exception of disturbed areas on excessively steep slopes. Undisturbed slopes do not show soil movement.

Watershed

The property lies in the lower Deer Creek watershed which covers roughly 4000 acres. The upper reaches of Starr creek commence from the western side of the property. Starr Creek is Class III watercourse in this area. An un-named watercourse mapped on the eastern side of the property has a well defined channel but does not appear to provide habitat to invertebrate species. It is considered a Class III watercourse also. This watercourse flows southeast about $\frac{1}{2}$ mile to Deer Creek. Starr creek intersects Bear Creek about 2 miles south of the property. Deer Creek is shows evidence of being aggraded and gravel embedded. Large woody and other organic debris is present in moderate amounts. Bank cutting and downcutting were observed. The stream is of moderate to steep gradient and there are afew pools. Streamside vegetation is primarily conifers and hardwoods. Deer Creek road is adjacent to the streamcourse which appears to have caused major impact in terms of ongoing erosion.

The Bear Creek watershed below this point has been heavily impacted by development. There are numerous sources of excessive erosion and disturbances to the watercourse.

Bear Creek is a Class I watercourse and restoration of the fishery and important salmonid habitat is an ongoing concern. The primary threat to this beneficial use is from sedimentation of spawning beds. The roads and trails on the subject property have been established for prior management purposes and were observed to be largely stable. There are no known water uptakes or public uses of water directly downstream from the property.

Cultural

No cultural or archaeological resources were discovered during the timber survey for this plan. No previous survey has been conducted. A check of the Historical Resource Information System also showed no record. Due to the diverse nature of historic and pre-historic sites it can be presumed that some discoveries of historic artifacts might be made in the future. If these are found during any future management activity they should be preserved and the proper records of their discovery should be filed.

Wildlife

Relatively high residential density and impact make this area less attractive as permanent habitat for many species however the presence of abundant water contributes to frequent use during some seasons of the year. Animals typical of the Santa Cruz Mountains frequent the area including deer, bobcat, squirrels, raccoon, and feral pig. The area would fit with the classification of 4D in the wildlife habitat relationship classification system. This type has a high cover percentage and smaller tree sizes. Forest management directed at opening the canopy will improve forage and variety for small and large mammals as well as increase raptor use.



Large raptors may use the property for roosting and nesting with tall, dead topped conifers being particularly attractive. These will be preserved wherever feasible to promote this use.

Fish species do not occur on the property nor do the streams on the property appear to provide habitat or forage for other amphibious species.

Rare, Threatened and Endangered Species

The area has been reviewed for the presence of rare or endangered species by examining the Natural Diversity Database maps and biotic resource maps as well as reviewing the County General Plan for species of special concern. No source consulted indicated any plant species of concern found in the project area.

Coho salmon is considered a recovery species for the San Lorenzo River and Bear Creek. Steelhead trout are found in both these streams. No fish are found in Deer Creek. A cursory examination of Deer creek indicates that potential spawning beds are excessively embedded, shelter rating for pools is low, and the number of pools is low.

The property is within the range of the red-legged frog. There have been no sightings in or around the property however there may be seasonal habitat. The frogs prefer deep, slow moving, pools for breeding. While pools exist on Deer creek the stream flow was fairly rapid during the recent field inventory and frogs were not observed.

There is no known marbled murrelet use of the area and no on-site or nearby suitable habitat has been observed. The age and form class of the existing timber stand does not present suitable nesting habitat as described for this species.

Ancient Trees

 $\ensuremath{\text{No}}$ remnant old growth redwood or Douglas firs appear to remain from the turn of the century logging.

Recreation

Management activities will be designed to provide and maintain habitat diversity. Selective harvesting will be employed to preserve the aesthetics of the existing timber stand.

Management to provide views and overlooks will be employed where possible by improving walking trails and managing vegetation. Vehicle trespass will be prevented by maintaining gates on the major access roads.

EXHIBIT I

Timber

The existing timber stand on the property is dominated by coast redwood. The steeper slopes and shallow soil areas are dominated by tan oak, coast live oak, and madrone. The distribution of conifers and hardwoods on the property is predicated primarily by soil type and slope. The coast redwood occurs in the areas where the soils have developed some depth, and the slopes are less steep.

The property was first harvested roughly 100 years ago. This harvest was typical for the period, with evidence of clearcutting and burning remaining today. Stumps that survived the early harvest show the potential for growth of large diameter trees within the interior drainage of the property. Post harvest management probably included livestock grazing until the area eventually revegetated with brush and trees. The resulting timber stand has a somewhat even-aged character, despite a large variation in diameter, and reflects a long period of suppressed growth. Some of the drier areas have regrown with a predominance of hardwoods.

In January of 2001 a 15% cruise of the timberland area consisting of 1/5 acre plots was conducted to better assess stand conditions and growth. Due to the nature of the vegetation on the property, the survey was stratified, and plots were placed only in the coast redwood area which would be considered timberland. Plot centers were located in a regular grid pattern throughout the timbered area. This should be considered a cursory survey for tree diameter and density and not a complete inventory. Results should therefore be taken only as an estimate of potential yield. The specific plot measurements and tabled results are presented in the Appendix, however the trends will be discussed below.

Measured heights of typical second growth trees varied from 130' to 145', with average estimated site class of Site III . Estimated conifer volumes from these plots would predict an average standing board foot volume of 23,351 per acre. By use of limited increment boring and a stand table projection stand growth is estimated to be roughly 1.5% or 320 board feet per acre per year. Increased growth potential due to the reduction of competition from selective harvest and management could be expected to be 3.0% per year. This is a reasonable expectation for Site III timberland.

The coast redwood stand on this property is characterized by many dense clumps which regrew from the prior harvest. The current stand is somewhat balanced as to size class distribution as can be seen in the following table.

EXHIBIT

Timber Stand Summary (Coast Redwood)

Trees Per Acre by Diameter Class

	<12 "	12-1 6 "	18-24"	26-34"	36+"
Total					
79.8	20.2	20.2	20.2	15.1	4.1
	Poard F	oot Volume Pe	m Agro by D	ismotor Cla	~~
	BOALC FC		ACLE DY D	Tameter CIA	66
	<12"	12-16"	18-24"	26-34"	36+"
Total					
23351	168	1115	4671	11093	6296

Management Practices

Roads and trails

The existing road system of roads and skid trails on the property is mostly stable. The primary access road that enters the property from the south is Palm Drive. The road is suitable for log hauling in its current condition with the possible exception of the last ¼ mile as it approaches the subject property. This area will need to be rocked if used during wet periods and may require minor re-alignment to allow large truck access to the upper end of the property.

Deer Creek Road is a county road and is suitable for hauling. Its access to Bear Creek Road has adequate sight distance and should not require a flag person for log truck access.

Existing skid trails are stable. These would be re-used for any planned future harvest. At least two temporary crossings of the Class III watercourse would have to be installed to make timber harvesting feasible. There are several locations that would be practical for this purpose and impact to the watercourse would be minimal. The existing skid trails follow the streamcourse alignment and should be mulched after use with either straw or slash packing.

Erosion Hazards and management

Soil erosion hazards on the property vary from high to very high based on slope as mentioned above in the soils description. The roads installed for access to the property and skid trail system installed for the historic timber harvest have remained largely stable. Roads are generally outsloped and excessive ongoing erosion within the property was not observed. There is evidence of minor slope failure within a side draw adjacent to the Class III watercourse (Point A on the Soils map). This is associated with a large redwood windfall and it is difficult to determine whether the causal factor was slope failure or the windfall itself. If this area is accessed for the future timber harvest drainage should be directed away from it. No other obvious sources of erosion are noted for the property.

Fire Protection

The property has southerly aspect and is heavily shaded. No major accumulations of flashy fuels are evident. There is some brush and herbaceous development in the understory, however the canopy closure is close to 90% over most of the property. There is very little dead and downed woody fuel due to the relatively young age of the stand.

The major threat to the property from a fire protection standpoint appears to be the possibility of fire spreading to this area from adjacent residential properties or from trespass. The trespass issue can be handled by limiting access. There is an existing gate on the primary access road (Palm Drive) and this appears to be kept locked. Future management activities directed at improving this road will provide better access for firefighting equipment which should enhance fire protection. Overhanging vegetation should be cleared periodically to make access for this equipment easier. If future residential development is considered it will be extremely important to follow the Fire



Marshall's recommendations regarding adequate water storage and connections for fire hose. A minimum 30' clearing should be maintained around any structures to provide protection from wildfires.

Strict adherence to Forest Practice Rules regarding slash lopping and fire hazard reduction should mitigate the fire risk of future harvesting activities to acceptable levels.

Recreation and aesthetics

No major recreational enhancements of the property are planned other than walking trails. The visual aesthetics of the property wili be preserved through careful timber stand management. Occasional use of existing road and trail system is anticipated for hiking. No significant impact to the management of the property is foreseen for this use.

Wildlife

Management practices on the property should be directed at maintaining and enhancing wildlife diversity, while minimizing its impact on other uses. Existing roost trees will be preserved and nest trees will be protected when found. Reliance on natural predators will increase the presence of large mammals and raptors on the property in the short term. An uneven aged timber stand will likewise provide habitat for a wider range of species. Control of browsers and rodents may become necessary if they are found to impact stand regeneration, however this conflict is not anticipated.

Snags and Downed wood

There were a minimal number of snags observed during the timber inventory. Although often seen as a useless part of the landscape and a fire hazard, snags provide important habitat for numerous wild species. Future management schemes should seek to preserve several prominent snags per acre to promote diversity. As mentioned previously the Forest Practice rules require special attention to slash lopping and treatment to reduce fire hazard. There are several large trees on the ground within the Class III watercourse which will be left to provide future recruitment of large woody debris within the stream.

Timber management

Harvest

The timber stand on this property has successfully regrown from the clearcut logging at the turn of the century. The resulting stand has a generally even aged character. An even-aged upper canopy is too dense to permit healthy growth of trees of all sizes. The increased light and growing space that is provided by removal of harvested trees will increase the growth of residual trees and initiate sprouting of a new generation of trees. Annual growth increases from 1.5 to 3.5% are expected. Past harvests have relied completely upon tractor yarding, and as the roads and trails are laid out and stable, it is anticipated that this will be the preferred harvest method for the property in the future. There are no records for timber harvests on the property. A preliminary plan was laid out for the property in 1998 which anticipated using the existing access as well as a landing on the parcel directly to the south. Flagging for this plan still exists on the site and is generally feasible, however a plan was never submitted due to the zoning restriction.

Future selective harvesting to promote an uneven-aged pattern of stocking and growth is expected to occur on a roughly fifteen year cycle. These harvests will be timed to take advantage of market conditions and will be designed to promote a balance of tree size classes throughout the stand. Charts are provided in the Appendix which compare projected stand curves to normalized stand diameter distributions (Q-Factor 1.2 curves for leave stand BA of 75). It is apparent from these charts that a harvest directed at the trees in the 20-34" size class would leave a stand more closely approaching the distribution of an un-even aged forest. An additional benefit is to greatly increase the light and growing space available to the stand which will increase the health and growth of existing trees while providing for recruitment of trees in the smaller size classes. Future harvests should be marked to distribute harvesting across all size classes so that both age and size class distributions become more naturally distributed.

Timber Stand Improvement

Intermediate treatments to foster the health and growth of the stand will include sprout thinning and selected hardwood removal. Multiple sprouts resulting from harvesting will be thinned to an average of 2 to 3 healthy sprouts per stump. This practice will be conducted within 3 to 5 years after harvest. This removal of competition will produce healthier and more vigorous young trees in the understory. During this thinning, dead and unhealthy small trees and sprouts will also be removed to reduce fire hazard and competition. This should be done to further improve spacing and promote the health of remaining trees. The objective will be to achieve a fully stocked stand with an average spacing of 10 to 14 feet between trees. All thinnings will be removed or lopped to within 20" of the ground.

Additional release can be achieved by hardwood removal where needed and practical. This is particularly important for this property due to current abundant oak die-back on the property. During the survey numerous tanoaks were observed that are experiencing the dieback which is prevalent in the area and throughout Santa Cruz County at this time. These trees should be removed as soon as possible for they are clearly harboring other insects which will continue to affect the hardwood stand. This activity will be non-commercial



however it could be combined with a timber harvest if such a plan is initiated in the near future. Removal of the affected tanoaks would be beneficial both to reduce the ongoing infestation and to allow light into the understory and remove competition from regrowing conifers. Resulting hardwood stump sprouts will provide important deer browse.

Where soils appear favorable for conifer growth, areas dominated by hardwoods should be harvested using the group selection method. Hardwoods should be removed and slash treated on site to allow for replanting of conifer species.

Tree planting

Post harvest management calls for planting of conifer seedlings within one year. This should be a mix of coast redwood and Douglas fir. The redwood should be 2-0 stock (or 1-0 redwood inoculated with mycorhizae) and Douglas fir should be either 1-0 or 2-0. Seed sources should be selected to match the seed zone as closely as possible. Plantings should be limited to those areas that have been opened sufficiently to allow for a reasonable chance of establishment and growth. Coast redwood should be planted in only the most moist sites while the plantings closer to the ridges should lean to Douglas fir to take advantage of its higher growth rate on the drier areas. Trees will be planted on an approximate 12' spacing (304 per acre). Browse protection may be necessary due to the large deer population and, although it will increase the cost of the practice, it is likely to increase the chances of seedling survival. This need should be evaluated prior to planting. A "clean and release" around established seedlings should be conducted by hand within the first three years after planting.

References

U.S.D.A. Soil Conservation Service, Soil Survey Santa Cruz county, **1979.**

California Natural Diversity Data Base (Maps and listings)

Arvola, T.F. 1978. California Forestry Handbook. State of California, Dept. of Forestry. 232. pp.

Cooper, Clark, and Associates. Preliminary Map of Landslide Deposits in Santa Cruz County.

24

California Dept.of Forestry. **1985.** Preliminary Geologic Maps of Region 5. Castle Rock quadrangle.

Santa Cruz County Biotic Resource Maps.

11

EXHIBIT I

Appendix

MAP**s**

Plot Data

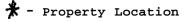
Stand Table

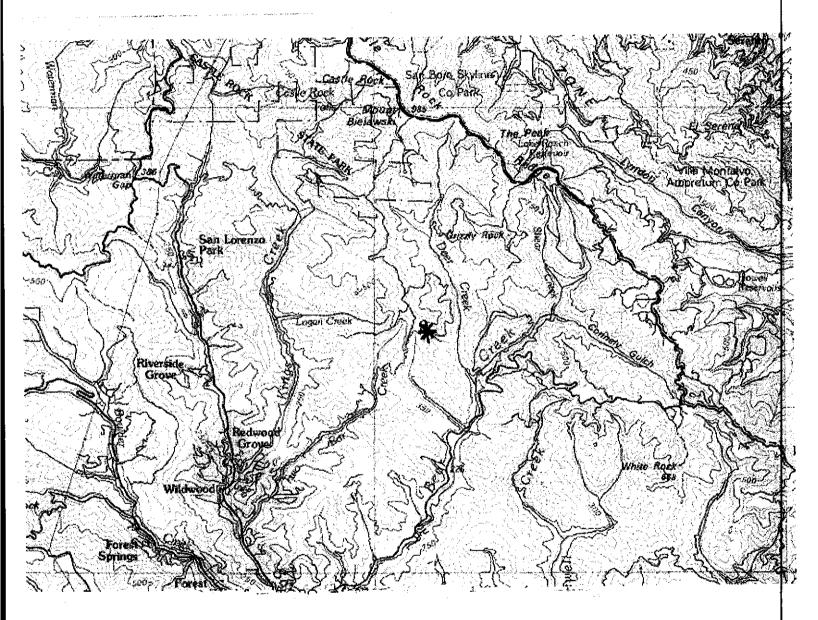
Stand Table Projection

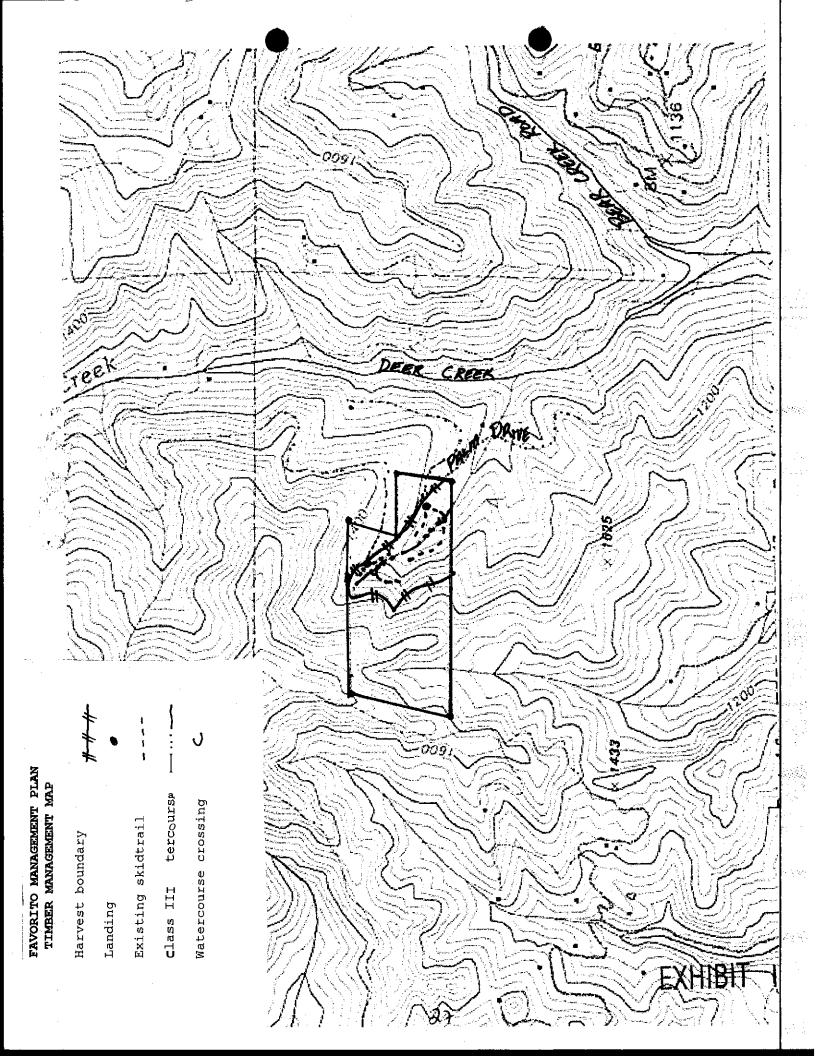
Stand Comparator Table

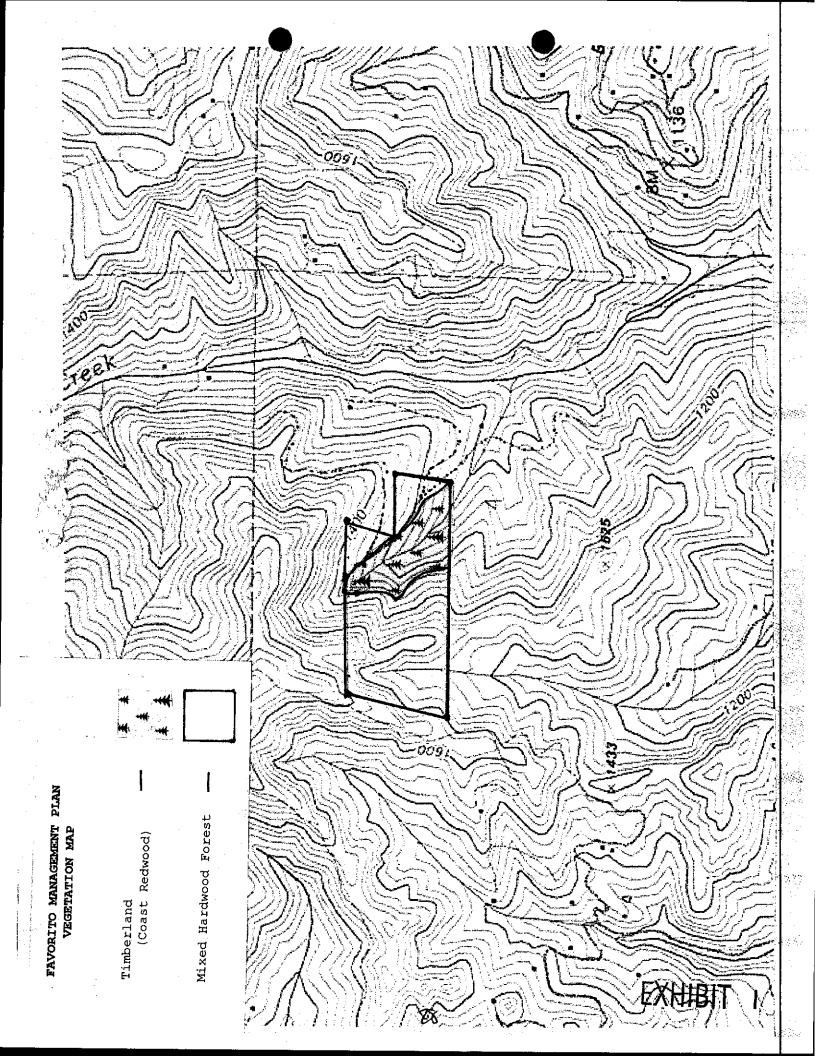
EXHIBIT I

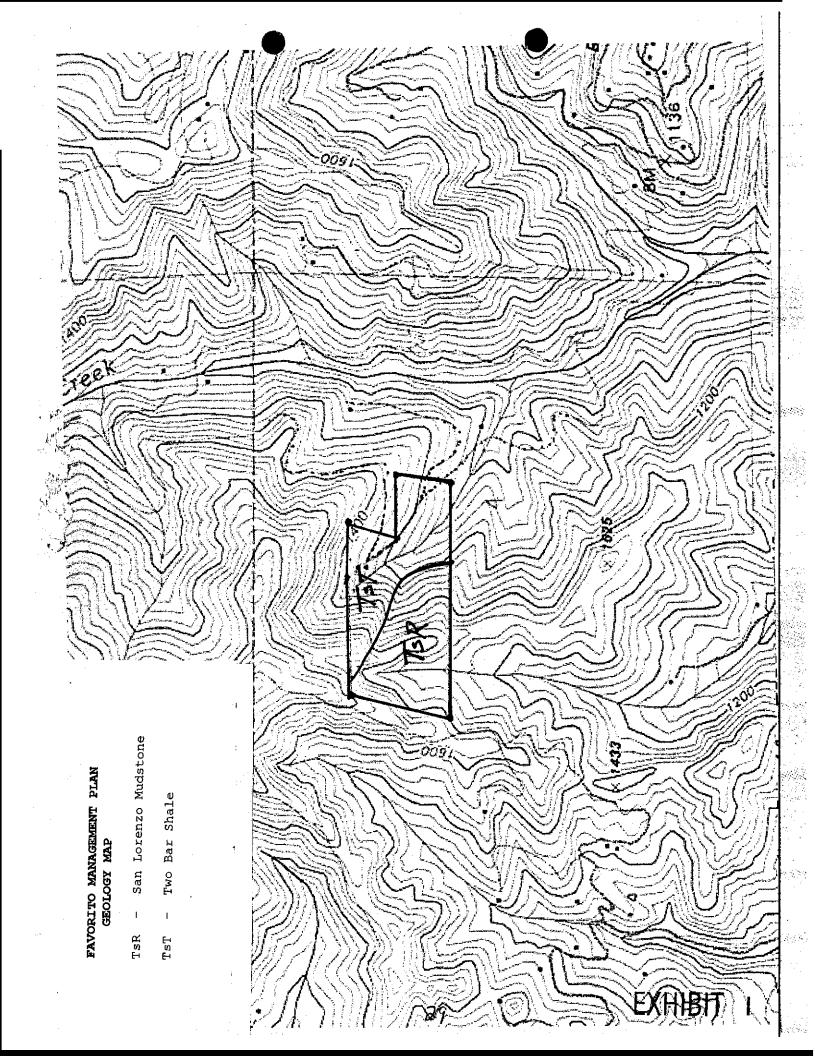
FAVORITO MANAGEMENT PLAN

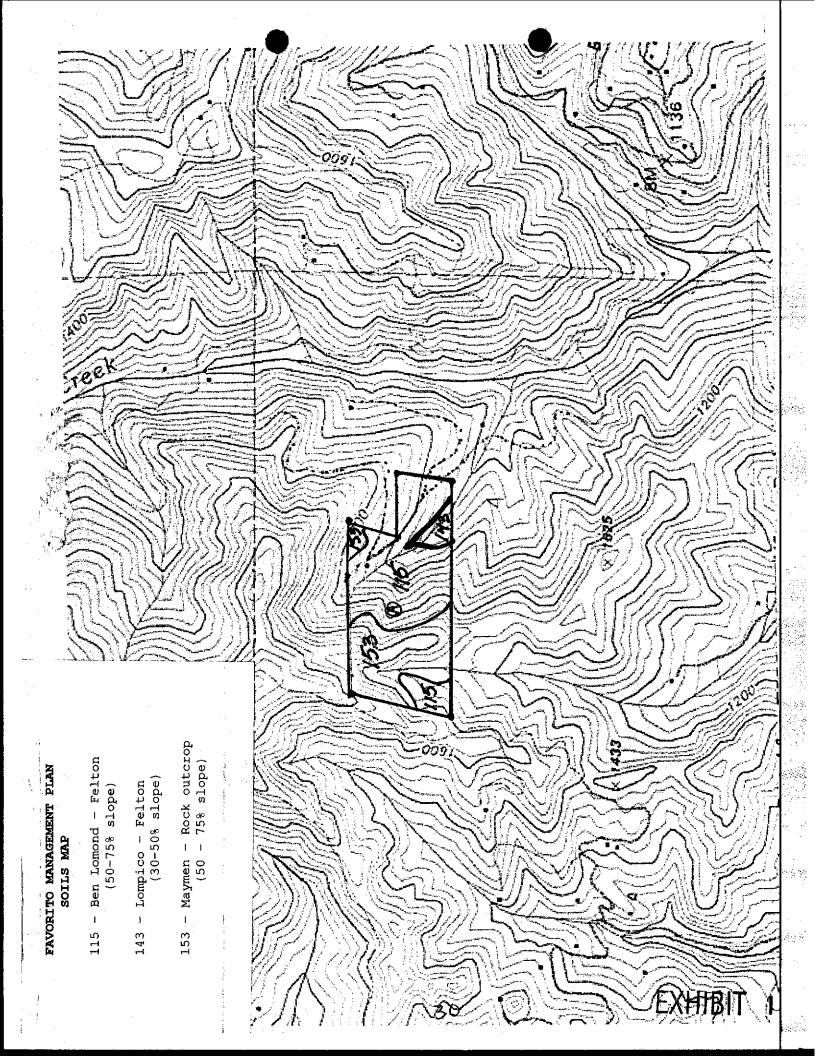












DBH CLASS SUMMARY

LANDS OF FAVOR!TO CRUISE DATA 1/5 AC PLOTS

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plot7	28 27 6 8 12 10 20 24 6 25	14	12 12 10	8	
plot8	24 12 6 36 22 34 6 32 26 22				
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plot10	12 15 15 32			12 10 14	

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plot11	22 28 8 24 38 12 38 14 8 18 20 14 24 32
plot12	12 34 38 36 40 42 6 6 6 6 6 6
plot13	6 34 6 30 32 20 18 24
plot14	38 12 6 14 14 6 8 14 20 22 6 12 14 10 20 12 20 20

EXHIBIT I

Page 4 3 3

plot15

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EXHIBIT I

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	24				
	12				
	25				
	13				
	22				
Total tree	250	1	4	19	

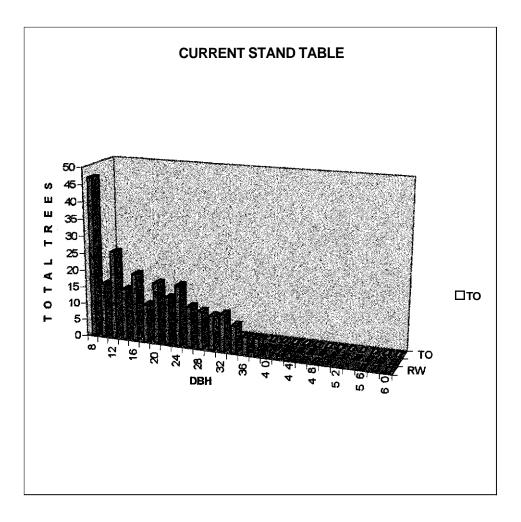


EXHIBIT I

VOLUME AND BASAL AREA CALCULATIONS

	STAND T		BASAL A	REA (sq.	VOLU	ME (SCR	IB BF)
	-CONIFER	S					
	2' Dia.	Number		Per clas		Per class	
	Class (in.)	of trees	Per tree*	(2) x (3)	Per tree	(2) x (5)	
	(1)	(2)	(3)	(4)	(5)	(6)	
		• •					
	2	0	0.0218	0	0.081	0	
	4	0	0.0873	0	0.821	0	
	6	9.6	0.1963	1.885	3.195	30.669	
	8	5.3	0.3491	1.85	8.375	44.387	
	10	5.3	0.5454	2.891	17.69	93.735	
	12	8.6	0.7854	6.754	32.57	280.14	
	14	5	1.069	5.345	54.6	272.98	
	16	6.6	1.3962	9.215	85.39	563.6	
	18	3.6	1.7671	6.362	126.7	456.13	
	20	6	2.1816	13.09	180.3	1082	
	22	4.6	2.6397	12.14	248.2	1141.6	
	24	6	3.1415	18.85	332.2	1992.9	
	26	2	3.6869	7.374	434.3	868.6	
	28	3.6	4.2759	15.39	556.7	2004.1	
	30	3.3	4.9086	16.2	701.4	2314.7	
	32	3.6	5.5849	20.11	870.7	3134.6	
	34	2.6	6.3048	16.39	1067	2773.7	
	36	1.6	7.0684	11.31	1292	2067.1	
	38	1.6	7.8756	12.6	1548	2477.5	
	40	0.6	8.7264	5.236	1839	1103.3	
	42	6.3	9.6209	2.886	2165	649.58	
	44	0	10.559	0	2530	0	
	46	0	11.541	0	2937	0	
	48	0	12.566	0	3387	0	
	50	0	13.635	0	3883	0	
	52	0	14.748	0	4428	0	
	54	0	15.904	0	5025	0	
1							
	TOTAL	79.8		185.9		23351	
	PER ACRE						

×

Basal area per tree = $0.005454 \times DBH^2$ Volume per tree = $0.0079 DBH^3.35$ (1990, SLO·) Crown width = $4.344 + DBH^1.029$ ** ***

Total	56	54	52	ភូ	48	46	44	42	40	38 8	36	34	32	30	28	26	24	22	20	18	16	14	12	10	00	6	(in.)	Class	DBH		STANE
	1.5	1.5	1.5	1.5	1.5	1.3	1.3	1.3	1.3 3	1.2	1.2	1.2	0.8	0.8	0,8	0.8	1.0	1.0	1.0	1.0	1.0	1,3	1.3	1.3	1.3	1.3	(in.)	Increment Ratio	10 yr Radial		STAND TABLE PROJECTION
	0.75	0.75	0.75	0.75	0.75	0.65	0.65	0.65	0.65	0.60	0.60	0.60	0.40	0.40	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.65	0.65	0.65	0,65	0.65	(m)	Ratio	. =		ROJEC
79.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.60	1.60	1.60	2.60	3.60	3.30	3,60	2.00	<u>6.00</u>	4.60	6.00	3.60	6.60	5.00	8,60	5.30	5.30	9.60	per acre	Trees	Current		FION
	5676.19	5025,12	4428.31	3883.08	3386.77	~	2530.43	2165.27	1838.77	1548.47	1291.93	1066.80	870.72	701.43	556.68	434.30	332.15	248.17	180.33	126.70	85.39	54.60	32.57	17.69	8,37	3.19	BDFT	per Tree	Volume	Local vol. 0.0079	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.21	0.64	0.64	1.04	2.16	1.98	2.16	1.20	3.00	2.30	3.00	1.80	ώ	1.75	3.01	1.86	1.86	3.36	0			0.0079 D^	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.39	0.96	0.96	1.56	1.44	1.32	1.44	0.80	<u>з.00</u>	2.30	<u>3.00</u>	1.80	ώ	3.25	5.59	3.45	3.45	6.24	دسو			^3.35	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00	0.00	N				
79.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.60	1.60	1.60	2.60	3.60	3.30	3.60	2.00	6.00	4.60	6.00	3.60	6.60	ភ. 00	8.60	5.30	5.30	9.60	Sum				
0.20 80.0							0.20	0.50	1.17	1.60	2.20	2.48	3.48	3.42	2.96	4.20	5,30	5.30	4.80	5.10	6.55	7.34	6.46	5.30	8.10	3.36	per acre	Trees	Future		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	649.58	1103.26	2477.55	2067.10	2773.67	3134.60	2314.71	2004.05	868.60	1992.90	1141.57	1082.00	456.13	563.60	272.98	280.14	93.74	44.39	30.67		<u>o</u>	Current		
26512.96	0	0.00	0.00	0.00	0.00	0.00	493.43	1071.81	2151.36	2477.55	2842.26	2645.65	3030,11	2398.88	1647.78	1824.05	1760.40	1315,28	865,60	646.19	559.33	400.73	0	93.74	67.79	10.73	(BDft./ac)	Stock Table	Future		
3161.72 F	0.00	0.00	0.00	0.00	0.00	0.00			104				-104.49		-356,28	955.46			-216.40			127.75	-69.87				(BDft.)	Growth	Volume	·	
= Volume Production																															

EXHIBIT I

	Α	В	С	D	E	F	G	Н	1
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2	Target F	Residual BA=	75	Mir	n. Hrvst Vol=	8000hf			
3		imum DBH=		Min. N	lerch. DBH=	18"	<u> </u>		
4		q-factor=					······································	······································	
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6			1			·	· _ · _ · _ · · · _ · _ · _ · _	ł	<u> </u>
_7	DBH	** (Current-TPA	*		Har	vest TPA		+
8	Class	Redwood	Douglas-fir	Total	Target-TPA		DF	Current-BF	Harvest-BF
9	6	9.60		9.6	13.81522			30.67	0.00
10	8	5.30	0	5.3	11.51268	· · · · · · · · · · · · · · · · · · ·	·····	44.39	0.00
11	10	5.30	0	5.3	9.5939			93.74	0.00
12	12	8.60		8.6	7.994917			280.14	0.00
13	14	5.00	0	5	6.662431	— · — · — !	· · · · · · · · · · · · · · · · · · ·	272.98	0.00
14	16	6.60		6.6	5.552025	1.048	<u> </u>	563.60	169.02
15	18	3.60		3.6	4.626688	0		456.13	0.00
16	20	6.00		6	3.855573	2.144		1082.00	629.33
17	_22	4.60		4.6	3.212978	1.387		1141.57	525.65
18	24	6.00		6	2.677481	3.323		1992.90	1590.23
19	26	2.00		2	2.231235	0	—·	868.60	0.00
20	28	3.60		3.6	1.859362	1.741	· · · · · · · · · · · · · · · · · · ·	2004.05	1259.80
21	30	3.30		3.3	1.549468	1.751		2314.71	1524.57
22	32	3.60		3,6	1.291224	2.309		3134.60	2390.86
23	34	2.60		2.6	1.07602	1.524	·····	2773.67	1856.89
24	36	1.60		1.6	0.896683	0.703		2067,10	998.97
25	38	1.60		1.6				2477.55	0.00
26 27	40 42	0.60		0.6				1103,26	0.00
28	42	0.30		0.3	0.896683			649.58	0.00
29		0.00	0	0				0.00	
30								Yield=	10945
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GARY PAUL CONSULTING FORESTER Registered Professional Forester #1829

303 Potrero St. #42-202 Santa Cruz, CA 95060 (831) 426-6415 FAX (831) 426-6485

June 18,2001

Cathleen Carr Planning Dept. County of Santa Cruz 701 Ocean St. Santa Cruz, CA 95060

Re: Application No. 01-0174 Favorito Trust

Dear Ms. Carr:

This is in response to your letter of May 5, 2001 regarding additional information requested by Mr. Clinton. This is to be considered an addendum to the Timber Management Plan.

1. Based on an estimated volume of 23,351 BF per acre the current growth rate of 3161 BF (10 year periodic increment) gives an approximate yearly growth rate of 1.3%. Coast Redwood is widely known to experience a beneficial post-harvest increase in growth rate due to "release" from competition. Experience has shown that yearly growth rates typically increase to 3% or greater (Tunheim and others, personal communication). The expected post harvest growth rate of 3% would yield 700 BDF/acre/year or 10,500 BDF of growth over the 15 year re-entry cycle. This is roughly equivalent to the harvest projected through q-factor anaysis and should be sustainable based on these estimates. These estimates are based on a limited sample and would be verified through extensive pre and post harvest sampling. Adjustments in harvest level and re-entry period would be made as necessary to assure sustainable timber management.

2. Enclosed are copies of the easement agreement for Deer Creek Rd. and Palm Dr.

3. The owners will participate in any neighborhood solution to the concrete ford crossing. It would be unfair to make the Favoritos solely responsible for replacement of this crossing. A flatcar bridge would be an acceptable crossing. This would cost somewhere from \$10,000 to \$20,000. The Favoritos would be willing to use a portion of the timber proceeds to contribute to replacement of the ford. In addition, they will improve erosion control on the roads that are used for hauling, by installing rolling dips following hauling, and are willing to spread rock in areas where the rock is thin or non-existent. Specifics of the ford replacement, rolling dip locations, and



locations and amounts of rock to be spread would **be** stated in any THP to be submitted for the property.

Yours truly,

Jung Paul Gary Paul



GARY PAUL CONSULTING FORESTER Registered Professional Forester #1829

303 Potrero St. #42-202 Santa Cruz, CA 95060 (831) 426-6415 FAX (831) 426-6485

July 24,2001

Cathleen Carr Planning Dept. County of Santa Cruz 701 Ocean St. Santa Cruz, CA 95060

Re: Application No. 01-0174 Favorito Trust

Dear Ms. Carr:

This is in response to Nick Clinton's oral request for clarification regarding growth rates and sustainable level of harvest. This is to be considered an addendum to the Timber Management Plan.

Following a harvest of approximately 10,000 board feet/acre for the first entry, growth rates would be expected to improve to 3% per year. Residual volume would be approximately 13,000 board feet/acre, and annual growth would be expected to be 390 board feet per acre per year and increasing as the stand volume increases. Future harvests would be based on removal of growth only. Thus, for example, under a 15 year cutting cyle, approximately 7000 board feet per acre could be removed, based on the above stand volume and growth estimates. Any future harvest would remove the accrued growth

I hope this explanation meets your needs.

Yours truly,

Gary P**á**u





December 11, 2003

Cathleen Carr Planning Oepi. County of Santa Cruz 701 Ocean St. Santa Cruz. CA 95060

Re: Application No. 01-0174 Favorito Trust

Dear Ms. Carr:

This is in response to your request for clarification of the timber potential of the area of the property that **is** designated as mixed hardwoods.

The predominant species in that area are tanoak and madrone. These are designated as commercial species (Group B) by the Forest Practice Rules.

I certify that the mixed hardwoods area is growing at least 15 cubic feet/acre/year of these species, which satisfies the requirements to be included in TPZ zoning.

Paul Juni





COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT 701 OCEAN STREET, SUITE 310, SANTA CRUZ, CA 95060 (831)454-2580 Fax: (831)454-2131 TDD (831)454-2123 ALVIN JAMES, DIRECTOR

Comments on Louise Favorito Trust TMP, APN 089-021-20,36:

- Verify that the proposed prescription is consistent with 14 CCR §897(b)(1)(A) and 14 CCR §913(a). The data show a projected volume growth of 3161.72 board feet per acre, periodic, 10-year increment. Based on an ideal diminution quotient of 1.2, a harvest of 10,945 board feet per acre is proposed. The discrepancy between growth and harvest should be reconciled through extending the proposed re-entry period, raising the residual stocking levels and/or adjusting the diminution quotient. The proposed harvest does not appear to be sustainable.
- 2. The right of access to the property should be indicated. Rights-of-way or easements over Palm Cut-Off should **be** provided as part of the application.
- 3. The concrete ford crossing of Deer Creek that is currently part of Palm Cut-off has been redtagged by the County of Santa Cruz. It is a barrier to migration of federally listed anadromous salmonids. It is an illegal crossing that has been designated for removal in conjunction with 1-97-045 SCR. The TMP needs to specify how the haul route will cross Deer Creek at this location. In general, the road network in this area, both county and private, is in dire need of maintenance and repair. The TMP should specifically address this issue and state how log hauling will impact an already dilapidated access system.

