



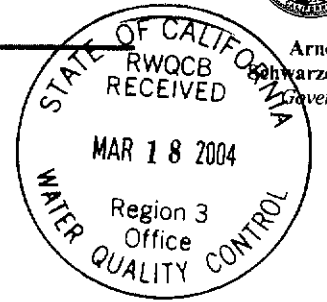
California Regional Water Quality Control Board

Central Coast Region



Terry Tamminen
Secretary for
Environmental
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb3>
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Phone (805) 549-3147 • FAX (805) 543-0397



Arnold Schwarzenegger
Governor

Timber Harvest Information Form

1. Plan or Notice Name:

And Number:

ESTRADA NTMP (Notice #4)

NTMP # 1-98NTMP-022 SCR

2. Landowner's Contact Information:

Name: **RICHARD ESTRADA**

Address: **500 MOUNT MADONNA ROAD**

City: **WATSONVILLE**

State: **CA**

Zip Code: **95076**

Phone: **(831) 724-8108**

E-mail address (optional): **N/A**

3. Name and Phone Number of Contact Person(s):

Name: **RICHARD ESTRADA, LANDOWNER**

Phone:

(831) 724-8108

Name: **CASSADY BILL VAUGHAN, FORESTRY AGENT**

Phone:

(831) 335-1452

4. Registered Professional Forester :

RPF Name/Signature:

RPF Number: **#2685**

Address: **6010 HIGHWAY 9, SUITE #6**

City: **FELTON**

State: **CA**

Zip Code: **95018**

Phone:

(831) 335-1452

E-mail address (optional): **billyv@pacbell.net**

5. Certification:

I, the Landowner named above, hereby certify under penalty of perjury that the CDF-approved plan or CDF-accepted notice and the accompanying fact sheet accurately represent site conditions and I understand that, as the Landowner, I am ultimately responsible for all activities that occur on my property. I also understand that I am ultimately responsible for compliance with all conditions of any Waste Discharge Requirements or Waiver of Waste Discharge Requirements issued for the above-referenced activity.

Signature:

Richard D. Estrada

Date:

3/11/04

Timber Harvest Information Form

Attachments:

Site Map

Fact Sheet

California Environmental Protection Agency



Recycled Paper

TIMBER HARVEST PLAN FACT SHEET

The following supplemental information will be used in the approval process of the above-referenced Timber Harvest activity.

1. Timber Harvest Plan

Name: ESTRADA NTMP (Notice #4)	Number: NTMP # 1-98NTMP-022 SCR
Location: Portion of Rancho Salsipuedes, Projecting as a portion of T 10S, R 2E, MDB&M.	Watershed Name: HUGHES CREEK (3305.100302)

2. Responsible Parties

Land Owner(s): RICHARD ESTRADA		
Address: 500 MOUNT MADONNA ROAD		
City: WATSONVILLE	State: CA	Zip Code : 95076
Phone: (831) 724-8108	E-mail address (optional): N/A	
Timber Owner (if different from Land Owner): SAME		
Address: SAME		
City: SAME	State: SAME	Zip Code : SAME
Phone: SAME	E-mail address (optional): N/A	
Forester: CASSADY BILL VAUGHAN		
Address: 6010 HIGHWAY 9, SUITE #6		
City: FELTON	State: CA	Zip Code: 95018
Phone: (831) 335-1452	E-mail address (optional): billyv@pacbell.net	

3. Timber Harvest Plan Summary

- a) Acreage of NTMP Notice: **114 acres**
- b) Logging Technique (Yarding) (check all applicable):
 - Ground based (skidding, long line)
 - Cable Yard
 - Helicopter

- c) Erosion Hazard (check all applicable): **See attached Yarding Methods and EHR Map**

Medium
 High
 Extreme

- d) Stream Class(es)- (# of each type of stream): **See attached Operations and Text Reference Map.**

1 I
 1 II
 12 III (of the 23 Class III watercourses in Unit 2, 12 are located within Notice #4 Operations Area)

Note: Wilson Creek is a Class I Watercourse as there have been reports of resident trout occupying its lower reaches. The subject Notice of Timber Operations (Notice #4) does not propose use of any skid trails or truck roads within the Wilson Creek Class I WLPZ, nor any tree removal. The upper reach of Wilson Creek is Class II watercourse, as an increase in gradient and decrease in flow yield on non-fish aquatic habitat. The subject Notice of Timber Operations does not propose use of any skid trails or truck roads within the Class II WLPZ, though perhaps as many as a dozen trees may be marked within the Class II WLPZ.

- e) Percent Canopy Retained in the Watershed & Lake Protection Zone (WLPZ): **See Watercourse Protection Measures below**

Class I (No tree removals within Class I WLPZ)
 Class II (75% within 25' of watercourse, 50% thereafter)
 Class III (See General; Protection Measures below)
 NO No-Cut Zone(s)? (YES/NO) If yes, describe

Water Resources and Protection Measures

Classification:

Class I Watercourse: 1) Domestic water supplies, including springs, on-site and/or within 100 feet downstream of the operations area. 2) Fish always or seasonally present on-site, includes habitat to sustain fish migration and spawning.

Class II Watercourse: 1) Fish always or seasonally present off-site within 1000 feet downstream. 2) Aquatic habitat for non-fish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.

Class III Watercourse: No aquatic life present, watercourse showing evidence of being capable of transporting sediment to a higher order stream, i.e. Class I or Class II.

Class IV Watercourse: Man-made watercourse.

General Protection:

There is one **Class I watercourse** (Green Valley Creek and the lowest reach of Wilson Creek) along the western boundary of Unit 2. Standard Class I watercourse protection rules are as follows:

- 1) Prior to filing the Notice of Operations, the RPF or his designee shall clearly identify the WLPZ with flagging. No equipment shall operate within the WLPZ unless explained and justified above.
- 2) All trees to be cut within the WLPZ will be marked by the RPF or his designee prior to filing the Notice of Operations.
- 3) To protect water temperature, filter strip properties, upslope stability, and fish and wildlife values, at least 75% of the total canopy covering the ground within the WLPZ shall be left in a well distributed, multi-storied stand composed of a diversity of species similar to that found before the start of operations. The residual overstory canopy shall be composed of at least 25% of the existing overstory conifers. To heighten protection for steelhead and resident trout, at least 75% of the total canopy within 25' of Class I watercourses shall be left in a well distributed, multi-storied stand composed of a diversity of species similar to that found before the start of operations.
- 4) WLPZ widths shall vary with slope as follows:

% Slope:	<30%	30% -50%	>50%
WLPZ width:	75 feet	100 feet	150 feet

5) Discussions with the California Department of Fish and Game indicate that the Pajaro River and tributaries thereof do not support coho salmon populations. However, given the presence of resident trout populations in Green Valley Creek and the lower portion of Wilson Creek, equivalent coho salmon protection shall be provided as follows: Should timber operations decrease necessary surface protection on any area exceeding 100 sq ft within the Class I WLPZ, protection measures such as seeding, mulching or replanting will be specified and implemented on a site specific basis to maintain or improve the natural ability of ground cover to filter sediment, minimize soil erosion, and stabilize watercourse banks. Where seeding is used, seed shall be applied at a rate of 50 pounds per acre. Where straw mulching is used, mulch will cover the entire bare area to a depth of at least 3 inches. Where such disturbance is foreseeable, protection measures have been specified on a site specific basis within the body of the NTMP. These measures, combined with mitigation provided elsewhere in this NTMP are sufficient to ensure long-term health and of the watercourses on this property. Treatment shall be done prior to October 15th, or immediately upon completion of operations when operating during the winter period.

The upper mainstem and two tributaries of Wilson Creek have been given **Class II watercourse** status. Standard Class II watercourse protection rules are as follows:

- 1) Prior to filing the Notice of Operations, the RPF or his designee shall clearly identify the WLPZ with flagging. No equipment shall operate within the WLPZ unless explained and justified above.
- 2) All trees to be cut within the WLPZ will be marked by the RPF or his designee prior to filing the Notice of Operations.
- 3) To protect water temperature, filter strip properties, upslope stability, and fish and wildlife values, at least 50% of the total canopy covering the ground within the WLPZ shall be left in a well distributed, multi-storied stand composed of a diversity of species similar to that found before the start of operations. The residual overstory canopy shall be composed of at least 25% of the existing overstory conifers. To heighten protection for steelhead and resident trout, at least

75% of the total canopy within 25' of Class II watercourses shall be left in a well distributed, multi-storied stand composed of a diversity of species similar to that found before the start of operations.

4) WLPZ widths shall vary with slope as follows:

% Slope:	<30%	30% -50%	>50%
WLPZ width:	50 feet	75 feet	100 feet

5) Discussions with the California Department of Fish and Game indicate that the Pajaro River and tributaries thereof do not support coho salmon populations. However, given the presence of resident trout populations in Green Valley Creek and the lower portion of Wilson Creek, equivalent coho salmon protection shall be provided as follows: should timber operations decrease necessary surface protection on any area exceeding 100 sq ft within the Class II WLPZ, protection measures such as seeding, mulching or replanting will be specified and implemented on a site specific basis to maintain or improve the natural ability of ground cover to filter sediment, minimize soil erosion, and stabilize watercourse banks. Where seeding is used, seed shall be applied at a rate of 50 pounds per acre. Where straw mulching is used, mulch will cover the entire bare area to a depth of at least 3 inches. Where such disturbance is foreseeable, protection measures have been specified on a site specific basis within the body of this NTMP. These measures, combined with mitigation provided elsewhere in this NTMP are sufficient to ensure long-term health and of the watercourses on this property. Treatment shall be done prior to October 15th, or immediately upon completion of operations when operating during the winter period.

There are twenty-three **Class III watercourses** in Unit 2. Standard Class III watercourse protection rules are as follows:

- 1) Harvest trees within 25 feet of Class III watercourses will be marked by the RPF or his designee prior to commencement of operations in order to ensure retention of filter strip properties and maintain soil stability of the zone.
- 2) At least 50% of the understory vegetation present before timber operations shall be left living and well distributed adjoining Class III watercourses.
- 3) No equipment will be operated within Class III watercourses other than at crossings listed on the Operations Map. Any soil or debris deposited in a Class III watercourse shall be removed or treated before the conclusion of timber operations or before October 15th, whichever comes first.
- 4) A 25' Equipment Limitation Zone (ELZ) shall be observed when operating near Class III watercourses on slopes under 30%. Where slopes adjacent to Class III's are 30% or greater, a 50' ELZ shall be observed. Equipment operations within the ELZ are allowed at designated crossings, and on flagged and mapped skid trails and truck roads. The centerline of all Class III watercourses within tractor yarding portions of Unit 2 will be flagged by the RPF or his designee together with the LTO prior to commencement of operations. It is the responsibility of the LTO to familiarize his crew of the location of these watercourses to ensure compliance with both 25' and 50' ELZ requirements.
- 5) Skid trails which are located within 50' of a Class III watercourse shall be tractor packed with slash or straw mulched to a depth of 4" prior to October 15th, or upon completion of operations, whichever comes first.

f) Roads

Existing Roads (number/length): +/- 4 miles

New Roads (number/length): **NONE**

Reconstructed Roads (number/length): **NONE**

Roads in unstable areas? (YES/NO) If yes, explain: **YES (See discussion of "Existing Road on Slide/Unstable" below.**

Roads in WLPZ? (YES/NO) If yes, explain: **YES (See discussion of "Existing Road within the WLPZ" below.**

Existing Road on Slide Unstable:

Explanation: The **UA** symbol located immediately west of Landing T identifies a small fill failure along the outboard edge of the existing seasonal road. Road surface drainage appears to be the main cause of the instability. No reconstruction is necessary to facilitate passage, but upon completion of operations in this Unit, waterbars shall be installed on either side of the failure, and a small berm built up along the outboard road edge to minimize immediate surface drainage onto the feature. Corrective work as described shall be done prior to October 15th, or immediately upon completion of operations, whichever is first. **Justification:** As improper drainage appears to be the primary cause of the instability, preventing overland flow from draining onto the failure (through the measures provided above), in combination with continued monitoring, should prove adequate for protection. Past and present use of this road has not resulted in significant destabilization of the feature, and use as proposed is unlikely to contribute to future instability. All things considered, the failure is very minor. Allowing passage over this site provides the best means of accessing the northern portions of Unit 2.

Existing Road within WLPZ:

Standard Rule and Difference Proposed: The applicable rule (from 916.4(a)) states that the operator shall not use roads within the WLPZ. The proposed practice differs in seeking use a small section of road within the WLPZ. The proposed practice and mitigations are made in compliance with 916.4(a) which requires the RPF or supervised designee to evaluate sensitive conditions such as the use of roads within the WLPZ, to identify where such conditions may interact with proposed timber operations to significantly and adversely affect the beneficial uses of water, and to describe measures to protect the beneficial uses of water. **Explanation:** A small section of the existing permanent road through X31 falls within the Class II WLPZ. The road is currently surfaced with a combination of rock and asphalt. The road will be used to haul logs from the northern portions of Unit 2. The road provides the only means of access to several in-held properties which form a rectangle in the middle of Unit 2. No additional surfacing requirements or mitigation measures are proposed for this section of road.

Justification: The road does not pose a significant sediment threat to the adjacent Class II watercourse. The existing rock and asphalt surfacing provides a stable running surface with little or no sediment contribution. Use of the road with continued road maintenance and drainage control will not adversely affect water quality.

g) Landings

Existing landings (number): **17**

New Landings (number): **NONE**

Reconstructed Landings (number): **NONE**
 Landings in unstable areas? (YES/NO) If yes, explain: **NO**
 Landings in WLPZ? (YES/NO) If yes, explain: **NO**

h) Skid Trails

Existing skid trails? (number/total length): **+/- 1 mile**
 New Trails (number/total length): **NONE**
 Skid Trails in WLPZ (YES/NO)? If yes, explain: **NO**
 Trails in unstable areas (YES/NO)? If yes, explain: **NO**

i) Mitigation Points (summarize or import from timber harvest plan)

Water Crossings: See discussion of Class III Watercourse Crossings below.
 Roads: See "Non-timber Operation Mitigation" below
 Skid Trails: **NONE**
 Landings: **NONE**
 Soil Stabilization: Note Soil Stabilization requirements imported from the NTMP.

Existing Class III Culvert Crossings (No disturbance):

X17: 12" X 20' CMP
X19: 24" X 20' CMP
X21: 18" X 40' CMP
X22: 18" X 30' CMP
X24: 18" X 30' CMP
X29: 18" X 30' CPP
X31: 18" X 40' CMP
X35: 12" X 30' CMP
X40: 30" X 40' CMP
X43: 18" X 30' CMP

Crossings requiring work as part of Notice #4

X16: Temporary Crossing (See Temporary Crossing specifications below)
X23: Temporary Humboldt (See note below)
X25: Temporary Humboldt (See Humboldt specifications below))
X27: Replace 12" CMP with 18" CMP (See note below)
X28: Temporary Crossing (See note below)
X33: Permanent Rocked Dip (See Permanent Rock Dip specifications below)
X34: Temporary Humboldt Crossing (See note below)
X36: Permanent Rocked Dip (See Permanent Rock Dip specifications below)

X37: Permanent Rocked Dip (See Permanent Rock Dip specifications below)

X38: Mitigation of 18" X 40' CMP (See note below)

X39: Temporary Crossing (See Temporary Crossing specifications below)

X41: Temporary Crossing (See note below)

X42: Temporary Crossing (See Temporary Crossing specifications below)

General Crossing Specifications:

Permanent Rocked Dip: Permanent rocked dips have been prescribed where seasonal roads cross relatively minor Class III watercourses. Where an approach leads downhill away from the crossing, a fail safe waterbar/rolling dip shall be installed immediately downroad from the crossing in native ground. Upon completion of operations, 2"+ drain rock shall be applied to crossing approaches and 4-6"+ shall line the actual watercourse channel. Drain rock surfacing shall extend in both directions to the first waterbar/rolling dip. Each rock dipped crossing shall be individually assessed by the RPF and the landowner with regard to the channels ability to down cut, and where necessary notched brow logs may be keyed in perpendicular to the streamcourse to prevent loss of surface armoring material.

Temporary Crossing: Temporary crossings have been prescribed where skid trails cross relatively shallow Class III channels. Upon completion of operations, all dirt and material generated by skidding activities shall be removed from the general crossing area. 3" of Straw shall be applied to skid trail approaches leading into the crossing up to the first waterbar. Where appropriate, site specific soil stabilization and/or drainage control have been discussed below.

Temporary Humboldt Crossing: Temporary Humboldt crossings have been prescribed where skid trails cross well-defined Class III channels which are expected to be dry during use. Logs shall be placed in the channel flush with the skid trail grade, overlain with 6" of straw, and capped with native soil. In addition, brow logs shall be placed perpendicular to the stream channel on both the upstream and downstream edges of the crossing. Upon completion of operations, soil and straw shall be bladed off and logs removed. 3" of Straw shall be applied to skid trail approaches leading into the crossing up to the first waterbar. Where appropriate, site specific soil stabilization and/or drainage control have been discussed below.

- As per CCR 923.4(n), "Permanent watercourse crossings and associated approaches shall be maintained to prevent diversion of stream overflow down the road should the drainage structure become plugged". Following any year of active operations in Unit 2, the 14 permanent crossings listed above should be checked to ensure that overflow diversion facilities are in place and functional.

- Prior to any given harvest, culverts and catch basins within the proposed harvest area or along the internal haul route shall be reviewed to evaluate their effectiveness, and to determine whether replacement or repair is necessary. Items to consider: trash rack, downspout, condition of culvert (rusted out or bent), condition of fill (subterranean piping or fill saturation), and overflow diversion. The notion is to establish a culvert maintenance and replacement program which will take advantage of the equipment and expertise available during a timber harvest.

Crossings with Specific Requirements:

- X23: An inside ditch discharges directly into X 23. To the extent feasible, this inside ditch should be not be disturbed. Following removal of the temporary Humboldt crossing, the inside from the first uproad waterbar to X23 shall be lined with 3X5" drain rock. The inside ditch should discharge upstream of X23 and absolutely avoid draining onto the crossing approach. The Class III channel at X23 and 15' upstream shall be armored with corduroy logs or large woody debris to slow headwall migration at and above the crossing.
- X27: The existing culvert at this location shall be removed, and replaced with an 18" X 30' CMP. The culvert shall be installed so that it picks up both of the small Class III watercourses which emerge from above the road. A backhoe may be necessary to ensure that drainage from both of the Class III watercourses gets focused to the culvert inlet.
- X28: The skid trail which runs between Landing S and Landing U is a downgraded seasonal road. The existing culvert at X28 shall be removed, and the crossing treated per the temporary crossing specs above.
- X34: If water is present during installation of this crossing, a pipe of sufficient size as determined by the RPF or his designee shall be placed under the Humboldt crossing to allow water to pass. The RPF or his designee shall be on-site during installation and removal of this crossing.
- X34: If water is present during installation of this crossing, a pipe of sufficient size as determined by the RPF or his designee shall be placed under the Humboldt crossing to allow water to pass. The RPF or his designee shall be on-site during installation and removal of this crossing.
- X37: The road junction at X37 is located in the bottom of broad swale, which effectively defines the head of a Class III watercourse. Drainage from the two roads which dive into the junction shall be diverted into the redwood clump just above the ranch road which exits to the northwest. Below this redwood clump, the ranch road shall be dipped and rocked with 1 ½ inch drain rock 25' in either direction from the axis of the dip.
- X38: This crossing will be evaluated during review to determine if it should be pulled, and mitigated per the abandonment specifications outlined above in the Road Abandonment section. Should the crossing be left in place, the inlet will require minor repair.
- X41: X41 locates an area where a small seep emerges from the cutbank, and currently runs down the road and into the unstable area shown on the Operations and Text Reference Map. Upon completion of operations in this area, the seep shall be drained directly across the road, and the outfall armored with native rock. Additional discussion of this area can be found above under Equipment on Slide/Unstable.

Non-timber Operation Mitigation:

The portion of existing seasonal ranch road between Landing V and Landing W which falls within the Wilson Creek Class II WLPZ has been identified as a sediment mitigation candidate. While the ranch road and associated ford crossing will not be used during harvest activities, measures to reduce erosion have been prescribed to off-set potential cumulative effects from harvesting activities in other parts of the NTMP. Waterbars shall be installed on the ranch road approximately 50' in either direction from X32. 3" of 1 ½ inch drain rock shall be applied to the road surface from the edge of the creek, uphill to the newly installed waterbars to a depth of 3". The southern approach to the crossing will require some reshaping to ensure that the waterbar functions, as the road surface is presently in-sloped through this section. Bare dirt associated with mitigation as prescribed shall be seeded and straw mulched to a depth of 3", and waterbar outfalls shall be mulched with straw and/or woody debris.

Soil Stabilization:

The following identifies several general protection measures for soil resources. It is the LTO's responsibility to ensure that the soil stabilization measures outlined below are completed as prescribed. The LTO is only responsible for stabilization of those areas which fall within the operating area defined in the Notice of Operations for any given entry. Unless otherwise stated, the measures prescribed below shall be done immediately upon completion of operations, or prior to the winter period, whichever comes first.

- 1) Slashing of Skid Trails: Where skid trails are located in swale bottoms, or where skid trail gradients exceed 40%, trail surfaces shall be tractor packed with slash and debris to minimize erosion. During the Pre-operational meeting, the RPF and the LTO will discuss which trails need to be treated with slash and debris.
- 2) Where inadequate deflection or proximity to the yarder landing causes skyline yarded logs to drag along the ground and scour a trough, hand waterbars shall be installed a High EHR intervals. Where appropriate, the RPF may also require hand slashing of troughs or bared areas resulting from cable yarding activities.
- 3) Waterbar Spacing: The LTO shall consult the Yarding Methods and EHR Map to identify which spacing requirements apply to the feature being treated.

<u>Road/Trail Gradient:</u>	<10%	11-25%	26-50%	>50%
<u>High EHR Spacing:</u>	150'	100'	75'	50'
<u>Medium EHR Spacing:</u>	200'	150'	100'	75'

- 4) Sidecast material whether generated from construction, reconstruction, or winter maintenance, should not be placed on steep slopes, and should not be left untreated if located in an area where it can potentially reach a watercourse. As a general rule, sidecast should not exceed 12" depth on slopes greater than 40%, and should be straw mulched or seeded if located within 50' of a watercourse.

5) Skid trails with gradients that are 50% or greater with High EHR should be periodically re-evaluated by the RPF and CDF for erosion problems. If significant erosion problems that cannot be mitigated are observed following use, reuse of these trails shall be discontinued on a site specific basis.

j) In Lieu Practices (YES/NO)? If yes please explain reason(s) in lieu practices are utilized: **NO**

k) Water Drafting (YES/NO): **NO**

Drafting location(s): **N/A**

Drafting flow rate (gallons/minute): **N/A**

Other drafting in Watershed (number/total flow rate estimate): **N/A**

l) Winter Operations? (YES/NO): **YES**

If yes, summarize:

Winter Operations:

Winter period operations in compliance with CCR 914.7(c) are proposed for Unit 1: **1)** Equipment operations of all types (except chainsaws used for lopping and falling) shall be done only during dry, rainless periods when soils are not saturated and shall in no case extend beyond **November 15 or 4 inches** of cumulative rainfall (as measured at the Brown's Valley gauge), whichever is earlier. **2)** No road construction shall occur after October 15, and hand dug waterbars and/or rolling dips shall be installed on all constructed skid trails and truck roads prior to the end of the day if the U.S. Weather Service forecast is a "chance" (30% or more) of rain before the next day, and prior to weekend or other shutdown periods, when operating beyond October 15. **3)** Site specific watercourse and unstable area protection per CCR 914.7(c)(3) is provided by the following: **a)** Only one constructed skid trail servicing one landing may be open at any one time after October 15. **b)** Only one temporary crossing may be in use after October 15th. This crossing must be underlain with a pipe sized to accommodate a 50 year storm event. **c)** Log hauling operations are entirely subject to CDF approval during extended fall conditions only (i.e., CDF inspectors may shut operations down at any time during the winter period when in their judgment soil conditions are sufficiently wet that problems might occur). Except for dry fall operations as described above, winter period operations shall be limited to felling outside the WLPZ, lopping, and maintenance of erosion control measures. **NOTE:** Rolling dips shall be installed by October 15 on all haul roads in use during the winter period. On steeper gradients, where installation of rolling dips is not feasible, waterbar locations shall be flagged to be installed by hand prior to weekends or other shut down periods, or when the weather forecast calls for greater than 30% chance of rain. The LTO shall make every effort minimize the amount of road which remains open during the Winter Period by closing out areas completely before moving on to the next.

m) Cumulative Impact Analysis

Percent of Watershed to be harvested: **The project involves 2% of the Hughes Creek Watershed.**

Threatened and Impaired For Steelhead/Coho (YES/NO)?: **YES**

303(d) Listed Watershed (YES/NO)?: **YES**

If yes, what is the impairment (sediment, temperature, etc.)?: **Hughes Creek itself is not a 303(d) listed stream, although it is a sub-watershed of the Pajaro River Watershed, which is 303(d) listed for sediment and nutrients.**

Sources of Cumulative Impacts (briefly describe): **Agriculture, Ranching, Residential Development, Roads and Highways, Quarries, and Urban sprawl are among the leading sources of cumulative impacts in the Pajaro River Watershed. The proposed timber harvest has little if any potential to contribute significantly to overall water quality in the Pajaro River.**

o) Names and addresses of any property owner within 300 feet of the timber harvest area and those that border the harvest area entrance road (from public right of way):

106-201-46

Cunha Enterprises
3175 Corte Cabrillo
Aptos, CA 95003

106-241-10

Jose Ramirez/Mary Ferguson
488 B Hazel Dell Rd.
Watsonville, CA

106-481-04

John & Gina Locatelli
52 Browns Valley Rd.
Watsonville, CA 95076

106-241-11

Marcelle Bona/Matthew Crandell
1234 Silverado Dr.
San Jose, CA 95120

106-481-05

Lorraine Antipas/James Providenza
226 Rogers St.
Watsonville, CA 95076

106-241-04

Charles Franich
832 Virginia St.
Watsonville, CA 95076

106-481-06

James & John Providenza
16 Drakes Cv
San Rafael, CA 94903

106-241-05

James Durkin
488 Hazel Dell Rd.
Watsonville, CA 95076

106-211-26

Jack & Sandra Momii
PO Box 1842
Watsonville, CA 95077

106-241-06

Art & Christina Rodriguez
488 Hazel Dell Rd. Apt. A
Watsonville, CA 95076

106-441-01, 106-241-02

Clara Johns Trust
488 Hazel Dell Rd.
Watsonville, CA 95076

106-241-07

Art Rodriguez
488 Hazel Dell Rd.
Watsonville, CA 95076

106-241-08
Richard Eichinger/Linda Jean
PO Box 896
Watsonville, CA 95077

106-231-22 & 23
Hanuman Fellowship
445 Summit Rd.
Watsonville, CA 95076

106-281-18
La Cima Homeowners Assoc.
c/o Carl Washburn
367 Summit Rd.
Watsonville, CA 95076

Santa Clara County Dept.
of Parks and Recreation
298 Garden Hill Drive
Los Gatos, CA 95030

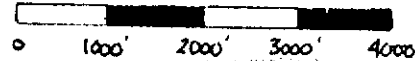
NOTICE OF OPERATIONS #4 (ESTRADA NTMP)

Estrada NTMP
Portion of Rancho
Salsipuedes, T 10 &
11 S, R 2E, MDB&M.

LOCATION MAP

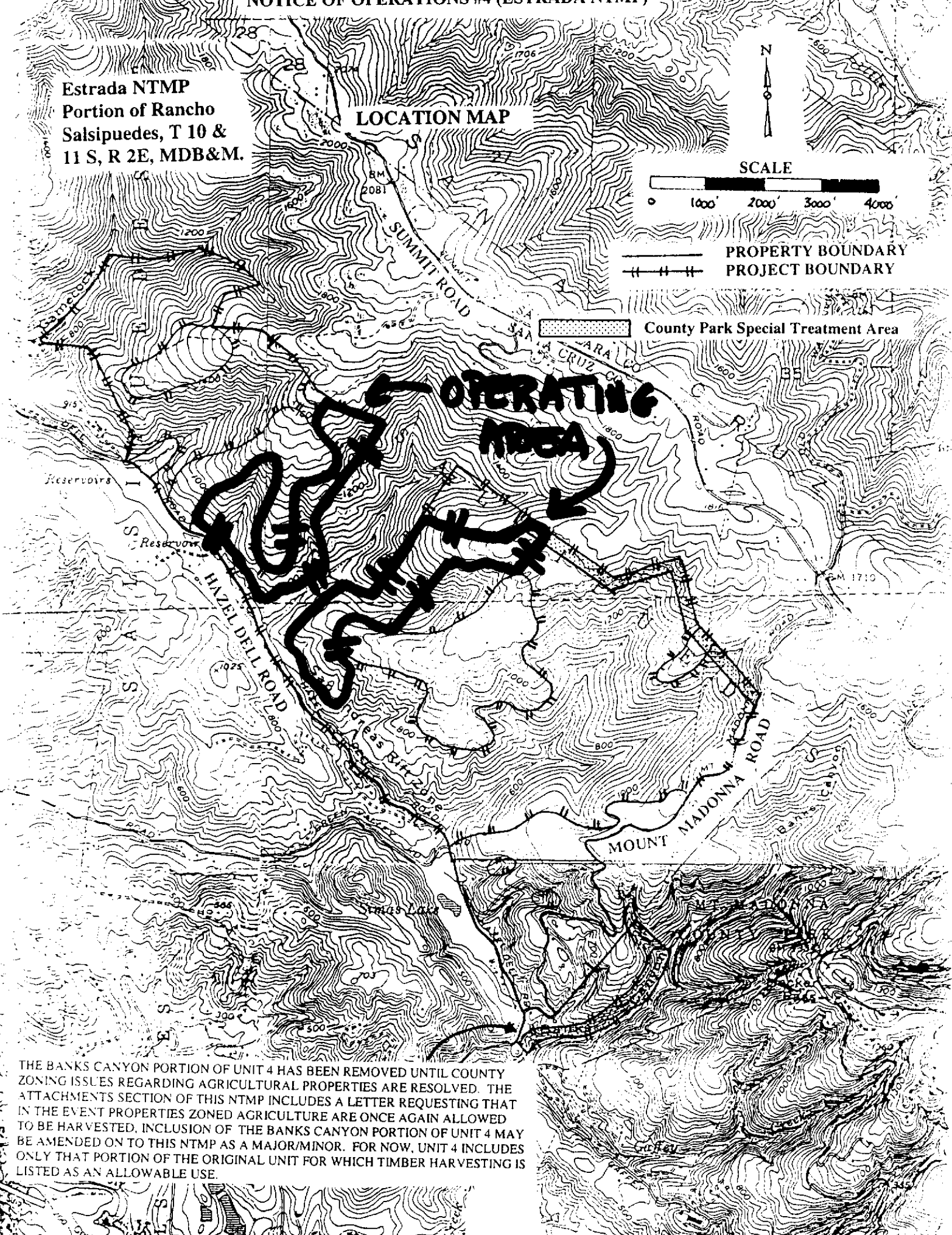


SCALE



— — — — — PROPERTY BOUNDARY
= = = = = PROJECT BOUNDARY

 County Park Special Treatment Area

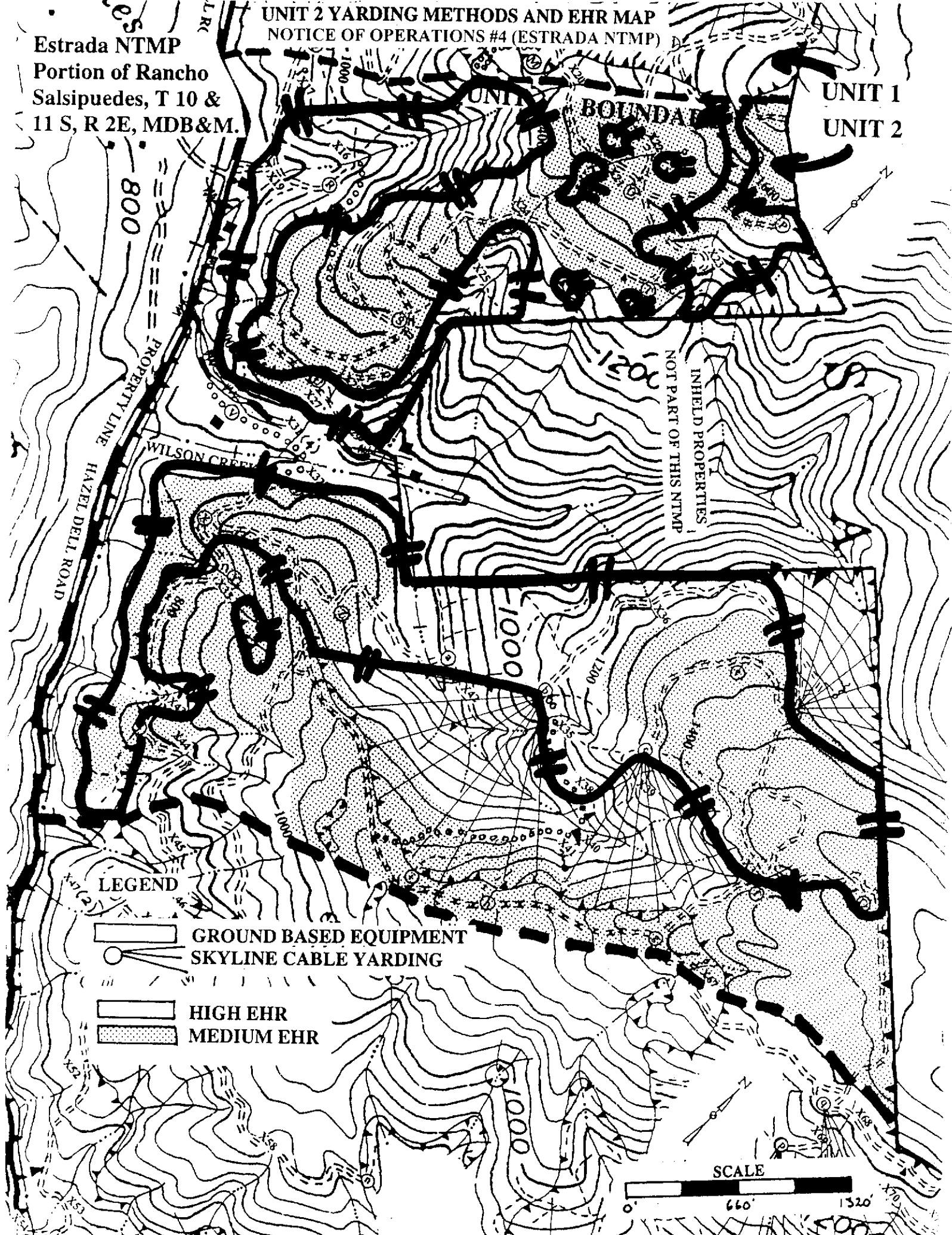


THE BANKS CANYON PORTION OF UNIT 4 HAS BEEN REMOVED UNTIL COUNTY ZONING ISSUES REGARDING AGRICULTURAL PROPERTIES ARE RESOLVED. THE ATTACHMENTS SECTION OF THIS NTMP INCLUDES A LETTER REQUESTING THAT IN THE EVENT PROPERTIES ZONED AGRICULTURE ARE ONCE AGAIN ALLOWED TO BE HARVESTED, INCLUSION OF THE BANKS CANYON PORTION OF UNIT 4 MAY BE AMENDED ON TO THIS NTMP AS A MAJOR/MINOR. FOR NOW, UNIT 4 INCLUDES ONLY THAT PORTION OF THE ORIGINAL UNIT FOR WHICH TIMBER HARVESTING IS LISTED AS AN ALLOWABLE USE.



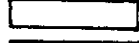

UNIT 2 YARDING METHODS AND EHR MAP
NOTICE OF OPERATIONS #4 (ESTRADA NTMP)

Estrada NTMP
Portion of Rancho
Salsipuedes, T 10 &
11 S, R 2E, MDB&M.

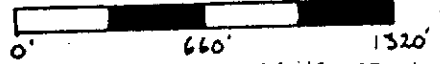
UNIT 1
UNIT 2



LEGEND

-  GROUND BASED EQUIPMENT
-  SKYLINE CABLE YARDING
-  HIGH EHR
-  MEDIUM EHR

SCALE

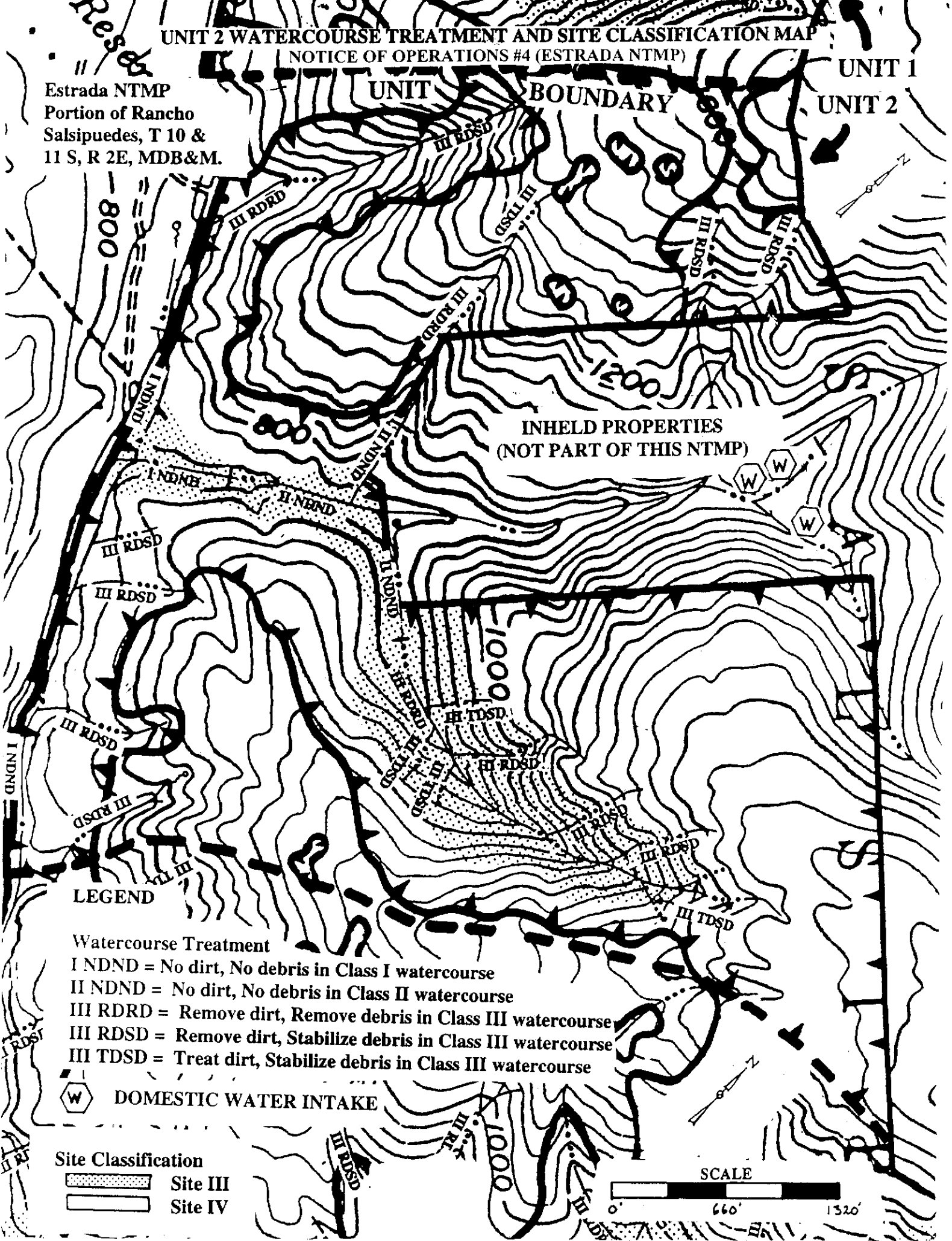


UNIT 2 WATERCOURSE TREATMENT AND SITE CLASSIFICATION MAP
NOTICE OF OPERATIONS #4 (ESTRADA NTMP)

Estrada NTMP
 Portion of Rancho
 Salsipuedes, T 10 &
 11 S, R 2E, MDB&M.

UNIT 1
 UNIT 2

UNIT BOUNDARY



INHELD PROPERTIES
 (NOT PART OF THIS NTMP)

LEGEND

Watercourse Treatment

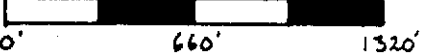
- I NDND = No dirt, No debris in Class I watercourse
- II NDND = No dirt, No debris in Class II watercourse
- III RDRD = Remove dirt, Remove debris in Class III watercourse
- III RDSD = Remove dirt, Stabilize debris in Class III watercourse
- III TDSD = Treat dirt, Stabilize debris in Class III watercourse

W DOMESTIC WATER INTAKE

Site Classification

-  Site III
-  Site IV

SCALE



UNIT 2 OPERATIONS AND TEXT REFERENCE MAP
NOTICE OF OPERATIONS #4 (ESTRADA NTMP) CLEAN MAP

UNIT 1
 BOUNDARY
 UNIT 2

INHELD PROPERTIES
 NOT PART OF THIS NTMP

County Park STA

- LEGEND**
- Property Boundary
 - Harvest Boundary
 - Existing Permanent Road
 - Existing Seasonal Road
 - Proposed Seasonal Road
 - Abandoned Seasonal Road
 - Existing Seasonal Ranch Road
 - Existing Landing
 - Existing Skid Trail
 - Proposed Skid Trail
 - Class I Watercourse
 - Class II Watercourse
 - Class III Watercourse
 - Seep/Wet Area
 - Watercourse Crossing
 - Slide/Unstable Area
 - Dwelling
 - Power Lines
 - Unstable Area Text Reference
 - SS

