



165 South Fortuna Boulevard, Fortuna, CA 95540

707-725-1897 • fax 707-725-0972

trc@timberlandresource.com

July 21, 2018

Vesuvio Gardens LLC
Attention: Joseph Jacovini
PO Box 520
Redway, CA 95560

Dear Joseph Jacovini,

Re: APN 107-251-003 / Application #:12609

The following is an evaluation of potential timberland conversion on cannabis cultivation sites and associated areas included in Humboldt County Cannabis Permit Application #12609 for APN 107-251-003. Please accept this letter as the RPF's written report required by Humboldt County Code, Ordinance No. 2559 (Commercial Medical Marijuana Land Use), Section 55.4.10 (j), cited below.

"Alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland, if the landowner has not completed a civil or criminal process and/or entered into a negotiated settlement with CALFIRE, the applicant shall secure the services of a registered professional forester (RPF) to evaluate site conditions and conversion history for the property and provide a written report to the Planning Division containing the RPF's recommendation as to remedial actions necessary to bring the conversion area into compliance with provisions of the Forest Practices Act. The Planning Division shall provide CAL-FIRE written Notice of Availability of the RPF's report. If CAL-FIRE takes no action within ten (10) days of the notice of availability, the report recommendations shall become final."

Timberland Resource Consultants (TRC) inspected and evaluated the cultivation site and associated areas contained within the application on July 16, 2018. The RPF exercised due diligence in reviewing all sites and available resources to fully assess potential timberland conversion and consequential impacts. This report evaluates the cultivation sites and associated areas for timber operations only. The scope of this report does not include: all other land alteration (such as grading, construction, and other permit-regulated activities), all property features and sites unrelated to cultivation activities, or any proposed, planned, or absent cultivation-related project sites. All findings are summarized in the report below.

Project Location

APN: 107-251-003

Acreage: 21 acres

Legal Description: SE 1/4 of Section 29

Township 3 South, Range 1 East,

Humboldt Base & Meridian, Humboldt County

Located on USGS 7.5' Quadrangle: Honeydew

Humboldt County Zoning: Forest Recreation

Site Address: 6279 Wilder Ridge Road, Honeydew

Landowner/Timber Owner: Joseph Jacovini

Project Location (Cont.)

The project is located on the east side of Wilder Ridge Road, approximately 1.2 miles north from the intersection of Horse Mountain Road and Wilder Ridge Road.

Parcel Description & Timber Harvest History

Note: The property background has been summarized using personal accounts of the current landowner, digital orthographic quadrangle (DOQ) imagery, Humboldt County Web GIS, CAL FIRE Watershed Mapper v2, and Historic Aerials. To avoid speculation and maintain relevancy, the property background focuses mainly on the past 10-15 years.

The property consists of second growth tanoak and Douglas-fir with a minor component of madrone. Review of 1968 aerial imagery reveals that the eastern portions of the property and surrounding areas were recently harvested (within approximately 10 +/- years) as evidenced by truck roads, skid roads, landings, and distinct timber/vegetation type changes. The extreme western portion of the property abuts natural grasslands and there appears to be an "in-growth" component located between the western grasslands and eastern timber stands. Increment borings of second growth Douglas-fir trees surrounding the conversion area revealed a stand age of approximately 40-50 years old. Review of more recent historic imagery from 1972 to 2016 reveals no signs of additional timber harvest entry except for conversion operations as described below. Moreover, no timber harvesting plans have been recorded by Cal Fire (Watershed Mapper v2 http://egis.fire.ca.gov/watershed_mapper/). The current landowner, Joseph Jacovini, purchased the property from George & Kay Ajimine in April 2002.

Project Description

Two existing cultivation sites and one historic site were inspected during the field assessment within APN 107-251-003. The two existing sites are part of one large converted area, which for the purpose of this report shall be called "Cultivation Site". The following table lists the inspected site and its respective acreage; see detailed site descriptions below.

Cultivation Site/Associated Area	Total Acreage	Converted?	Converted Acreage
Cultivation Site	1.70	Yes	1.70
Restoration Site	0.40	No	0.00
TOTAL	2.10		1.70

Cultivation Site

The cultivation site is comprised of two cultivation areas as seen on the attached aerial drone imagery. The cultivation site encompasses an approximately 1.70-acre graded area consisting of three terraces. The uppermost terrace is the "Storage Site"; consisting of a 65,000-gallon rain catchment tank and two 5,000-gallon plastic tanks. Cultivation Area #1 occupies the middle terrace, which consists of twelve 8-foot by 50-foot wooden dep beds and a metal storage shed. Total cultivation at CA #1 is 4,800 ft². Cultivation Area #2 occupies the eastern-most terrace, which consists of eight 8-foot by 50-foot wooden dep beds. Total cultivation at CA #2 is 3,200 ft².

Review of historic aerial imagery reveals a small clearing (0.15 acres) existed in the southeastern portion of the conversion area prior to the present owner's acquisition of the property. Between 2012 and 2014 this existing clearing was enlarged and expanded to the southwest to an approximate size of approximately 0.25 acres. Between 2014 and 2016 the balance of the site was harvested, graded, and converted to the pre-existing conditions seen today. The cultivation activities observed at this site impede the use of this space for current timber growth and harvesting, and the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Project Description (Cont.)

Restoration Site

The area north of the residence was the original, pre-existing cultivation site. The site is approximately 0.40 acres in size. Cultivation can be seen as far back as 2005. The site remained relatively unchanged until 2014-2015 when it was slight expanded by 20-30% to the west. The site was abandoned in 2016 concurrent with the development of the existing cultivation site. The 1968 and 1993 imagery for this site is excellent and clearly shows that this site was primarily grassland. Unlike the surrounding grasslands that have been taken over, this site has been used and maintained for agriculture, restricting conifer and hardwood encroachment. It's my professional opinion that this site was not converted. However, to minimize loss of timberland this site shall be replanted as described below.

Timberland Conversion Summary

TRC observed approximately 1.70 acres of unauthorized timberland conversion. This total does not exceed the three-acre conversion exemption maximum.

Limitations and Considerations for Timberland Conversion Activities

Watercourses and Water Resources

14CCR 1104.1(a)(2)(F): "No timber operations are allowed within a watercourse and lake protection zone unless specifically approved by local permit (e.g., county, city)."

No conversion areas exist within Watercourse and Lake Protection Zones (WLPZ) or Equipment Exclusion Zones (EEZs) on the property. However, timber harvesting occurred near Class III watercourses and slash is piled and scattered within the 50-foot EEZ. To protect downstream beneficial uses of water, 14CCR 917.3(d) prohibits broadcast burning in the Class III EEZ

Slash, Woody Debris, and Refuse Treatment

14 CCR 914.5(b): "Non-biodegradable refuse, litter, trash, and debris resulting from timber operations, and other activity in connection with the operations shall be disposed of concurrently with the conduct of timber operations."

14CCR 1104.1(a)(2)(D) – Treatment of Slash and Woody Debris

- 1) Unless otherwise required, slash greater than one inch in diameter and greater than two feet long, and woody debris, except pine, shall receive full treatment no later than April 1 of the year following its creation, or within one year from the date of acceptance of the conversion exemption by the Director, whichever comes first.*
- 2) All pine slash three inches and greater in diameter and longer than four feet must receive initial treatment if it is still on the parcel, within 7 days of its creation.*
- 3) All pine woody debris longer than four feet must receive an initial treatment prior to full treatment.*
- 4) Initial treatment shall include limbing woody debris and cutting slash and woody debris into lengths of less than four feet, and leaving the pieces exposed to solar radiation to aid in rapid drying.*
- 5) Full treatment of all pine slash and woody debris must be completed by March 1 of the year following its creation, or within one year from the date of acceptance of the conversion exemption by the Director, whichever comes first.*
- 6) Full slash and woody debris treatment may include any of the following:*
 - a) Burying;*
 - b) Chipping and spreading;*
 - c) Piling and burning; or*
 - d) Removing slash and woody debris from the site for treatment in compliance with (a)-(b). Slash and woody debris may not be burned by open outdoor fires except under permit from the appropriate fire protection agency, if required, the local air pollution control district or air quality management district. The burning must occur on the property where the slash and woody debris originated.*
- 7) Slash and woody debris, except for pine, which is cut up for firewood shall be cut to lengths 24 inches or less and set aside for drying by April 1 of the year following its creation. Pine slash and woody debris which is cut up for firewood shall be cut to lengths 24 inches or less and set aside for drying within seven days of its creation.*

Limitations and Considerations for Timberland Conversion Activities (Cont.)

8) *Any treatment which involves burning of slash or woody debris shall comply with all state and local fire and air quality rules.*

The RPF identified numerous distinct piles/concentrations of untreated slash, woody debris, and logs from the conversion that require treatment as shown on the attached map. There is pretty significant concentration located east of Cultivation Site #2 (below permanent rocky road) that requires treatment. There is additional scattered untreated slash, woody debris, and logs within the vicinity of the mapped locations that require treatment. No broadcast burning shall occur within the Class III EEZ per 14CCR 917.3(d). Piling and burning may occur within the Class III EEZ.

Biological Resources and Forest Stand Health

14 CCR 1104.1 (2)(H): "No sites of rare, threatened or endangered plants or animals shall be disturbed, threatened or damaged and no timber operations shall occur within the buffer zone of a sensitive species as defined in 14 CCR 895.1"

A query of the California Natural Diversity Database (CNDDDB) on June 23, 2018 revealed no observations of sensitive, rare, threatened, or endangered species or species of special concern within a 0.7-mile radius biological assessment area (BAA) surrounding the property. No sensitive, rare, threatened, or endangered species or species of special concern were observed during the TRC field assessment of the project area, though potential habitat may exist on the property. The query of the CNDDDB revealed no known Northern Spotted Owl (NSO) Activity Centers within 0.7 miles of the property. NSO habitat within the property is "non-habitat" and "foraging".

No major forest health issues were observed during the field assessment. Though the property is located within Humboldt County, a Zone of Infestation (ZOI) for Sudden Oak Death (SOD), no symptoms, signs, or evidence of oak mortality were observed (*Oak Mortality Disease Control*). According to UC Berkeley's Mobile SOD Map, no SOD infections are located within a one-mile radius of the property. No risk assessment was made at the property. The conversion activities do not appear to have impacted forest health.

The conversion areas did not include late successional stands, late seral stage forests, or old growth trees. The conversion area did not include any trees that existed before 1800 A.D. and are greater than sixty (60) inches in diameter at stump height for Sierra or Coastal Redwoods, and forty-eight (48) inches in diameter at stump height for all other tree species.

Cultural Resources

14 CCR 1104.1 (2)(I): "No timber operations are allowed on significant historical or archeological sites."

No archeological sites were observed during the TRC field assessment. The RPF conducted pre-field research for the project's geographic location and closely surveyed the converted sites and surrounding undisturbed areas for presence or evidence of prehistoric or historic sites. The archaeological survey was conducted by Chris Carroll, a certified archaeological surveyor with current CALFIRE Archeological Training (Archeological Training Course #575). The survey consisted of examining boot scrapes, rodent disturbances, natural and manmade areas of exposed soils, and road and cultivation site surfaces.

Per 14 CCR 1104.2(2)(I), all required Native American tribes and organizations have been notified of the project location and are encouraged to respond with any information regarding archaeological sites, cultural sites, and/or tribal cultural resources within or adjacent to the project area.

Recommendations

In summary, a total of 1.70 acres of unauthorized timberland conversion has occurred within APN 221-071-037. This total does not exceed the three-acre conversion exemption maximum. The conversion activities conducted on the property do *not* comply with the California Forest Practice Act and the California Forest Practice Rules. The RPF recommends the following measures for the converted areas:

Slash and woody debris: The RPF identified numerous distinct piles/concentrations of untreated slash, woody debris, and logs from the conversion that require treatment as shown on the attached map. There is additional scattered untreated slash, woody debris, and logs within the vicinity of the mapped locations that require treatment. No broadcast burning shall occur within the Class III EEZ per 14CCR 917.3(d). Piling and burning may occur within the Class III EEZ.

Tree Planting: The Restoration Site shall be planted with Group A species (Douglas-fir and/or redwood) at no less than 435 trees per acre density (10-ft by 10-ft spacing). This area is shown on the attached map and equates to approximately 0.40 acres. Planting shall occur per the attached "Restocking Plan".

Sincerely,



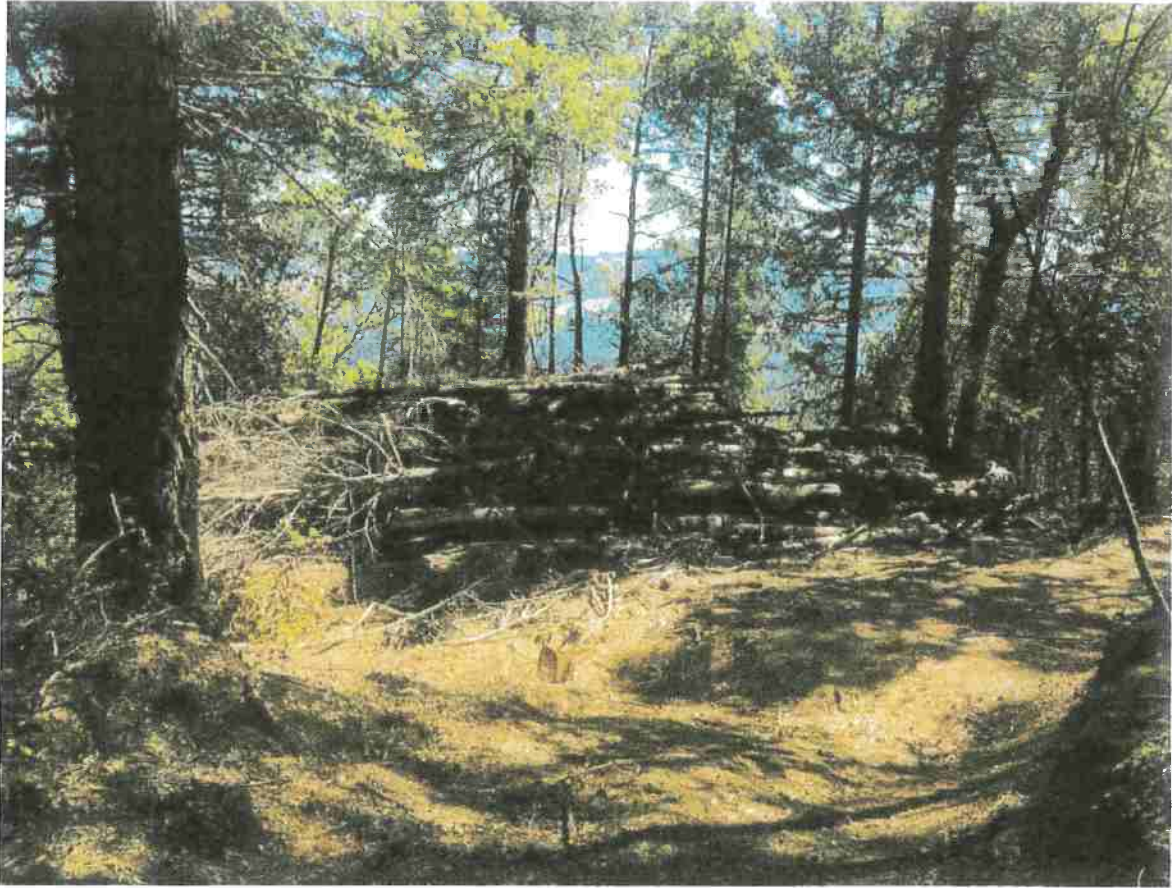
Chris Carroll, RPF #2628
Timberland Resource Consultants

Pictures



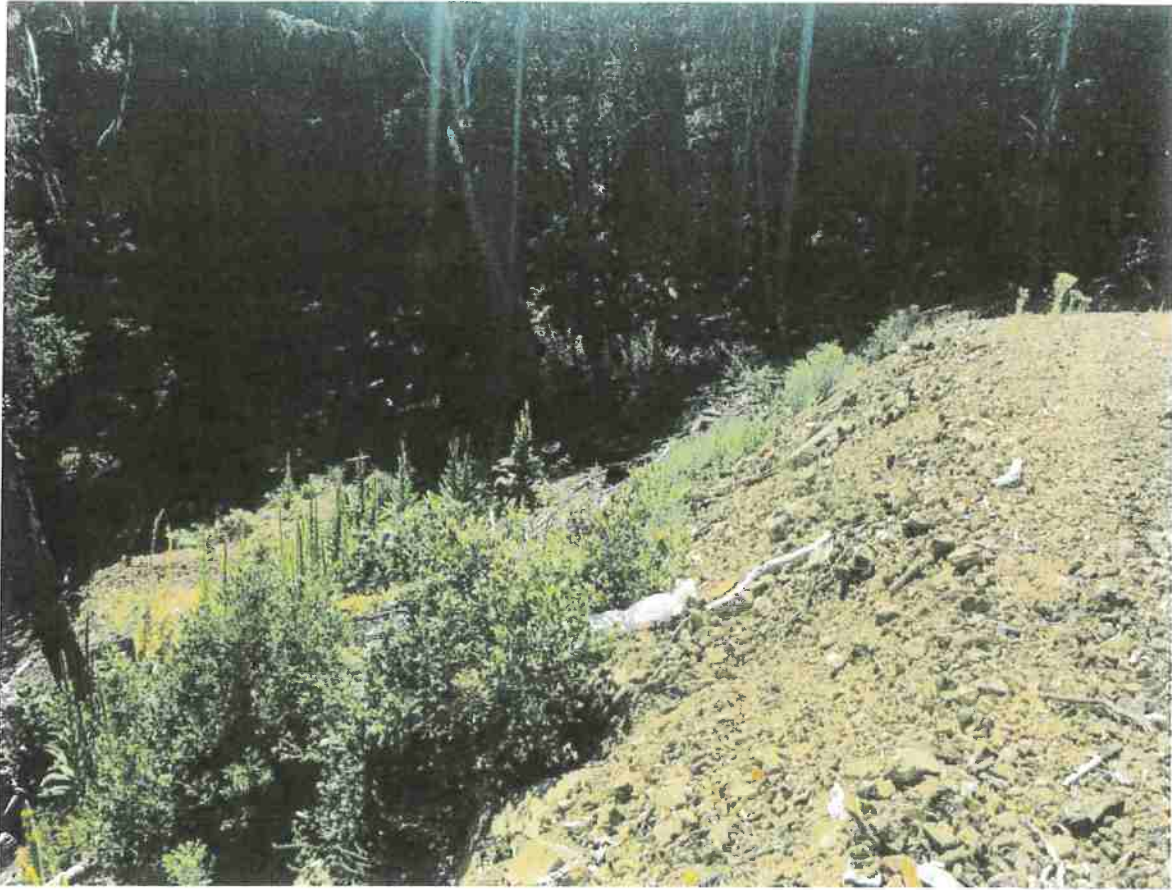
Picture 1: Slash pile located within the southern-most Class III EEZ. Blue flagging in foreground is the head of the Class III watercourse. Photo date 7-16-2018.

Pictures



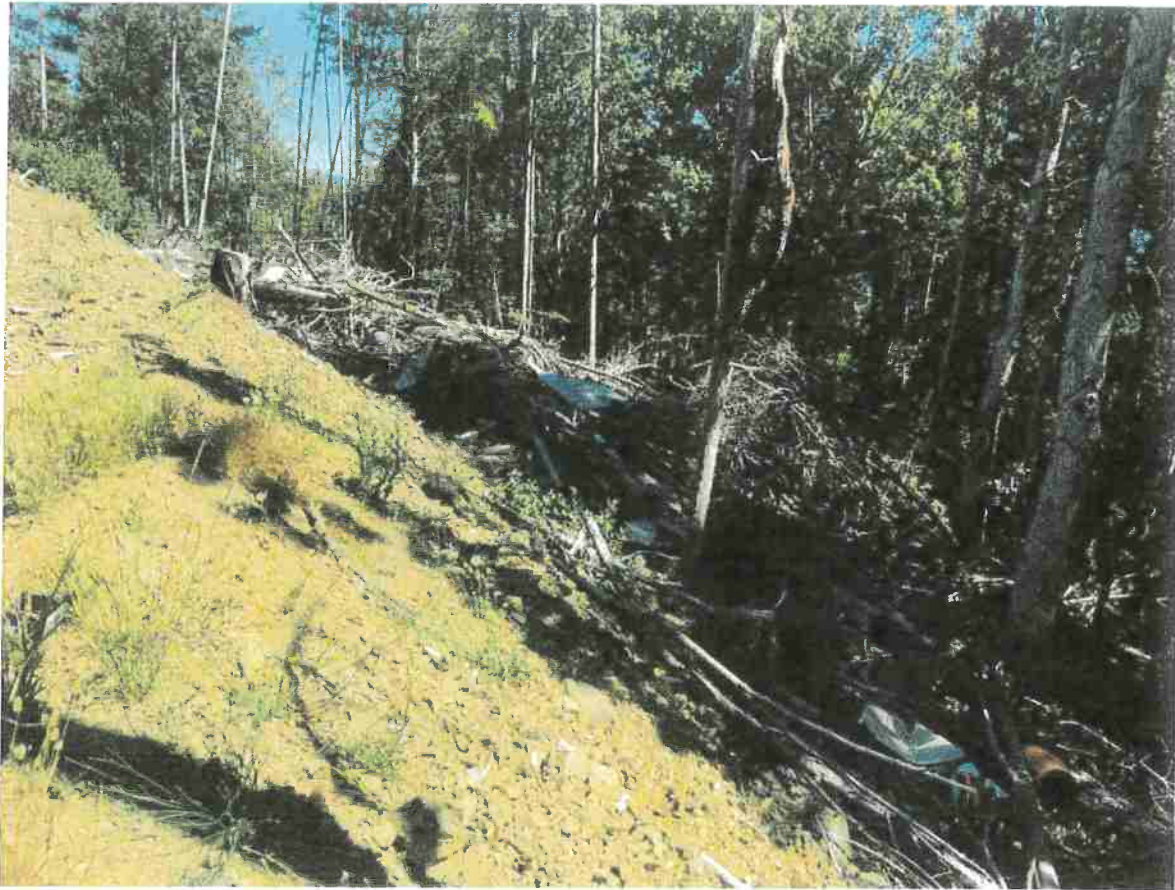
Picture 2: Eastern-most "Slash Treatment" area shown on the attached maps. Log deck located at end of permanent rocky road. Photo date 7-16-2018.

Pictures



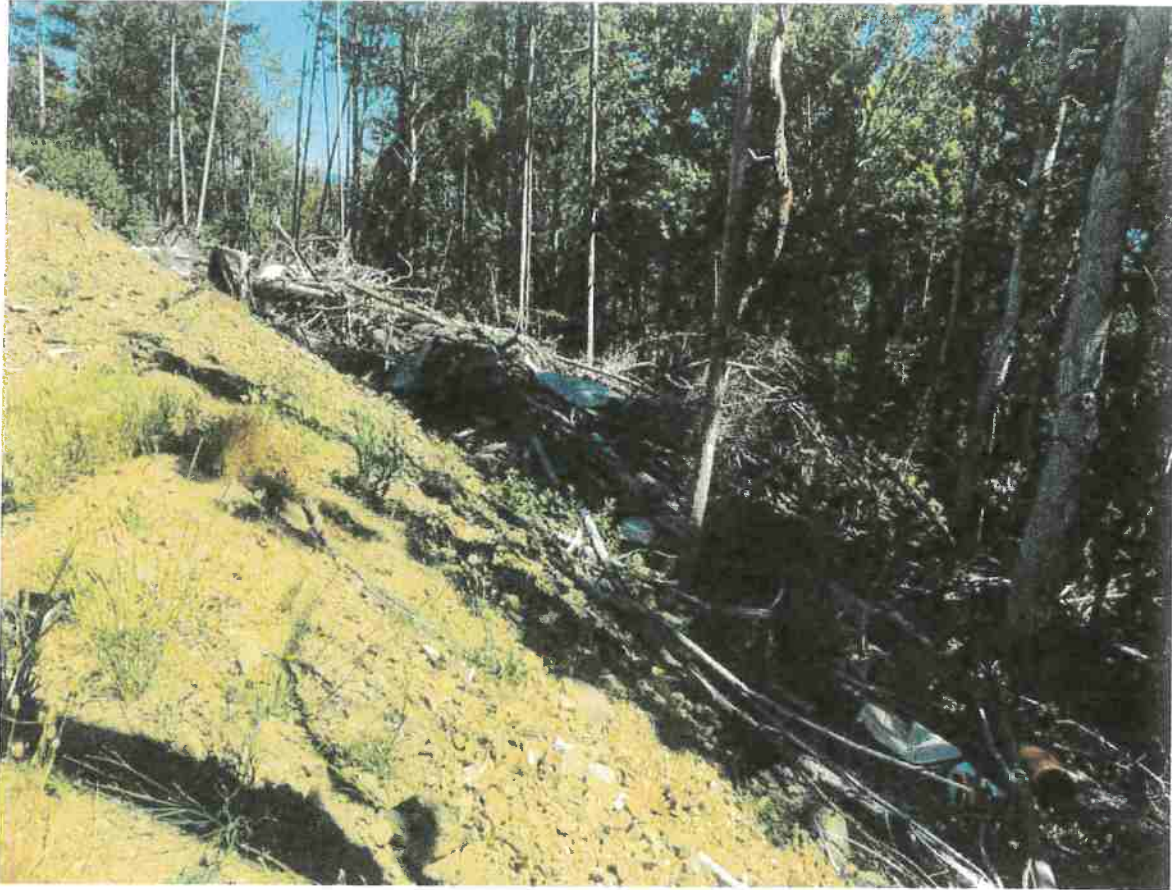
Picture 3: Area harvested east/below the permanent rocky road. Trees were harvested for sunlight but this area is not "converted" and coppice tanoak and madrone are present. This area will regenerate naturally and is expected to be stocked per the stocking standards of 14 CCR § 912.7 within 3 years. Photo date 7-16-2018.

Pictures



Picture 4: Untreated slash located east of Cultivation Site #2 that requires treatment. Photo date 7-16-2018.

Pictures



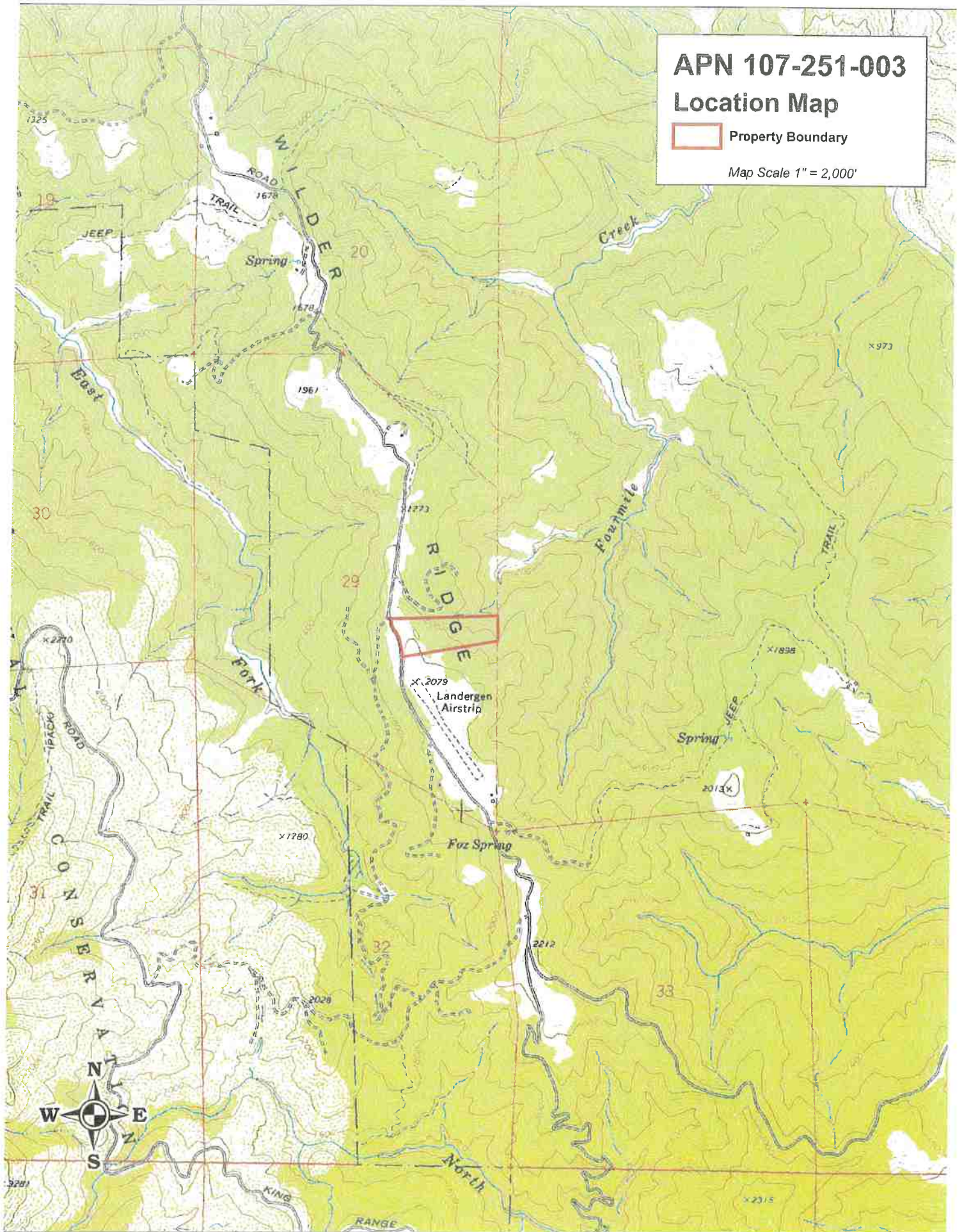
Picture 5: Untreated slash located east of Cultivation Site #2 that requires treatment. Photo date 7-16-2018.

APN 107-251-003

Location Map



















 Property Boundary

Map Scale 1" = 2,000'

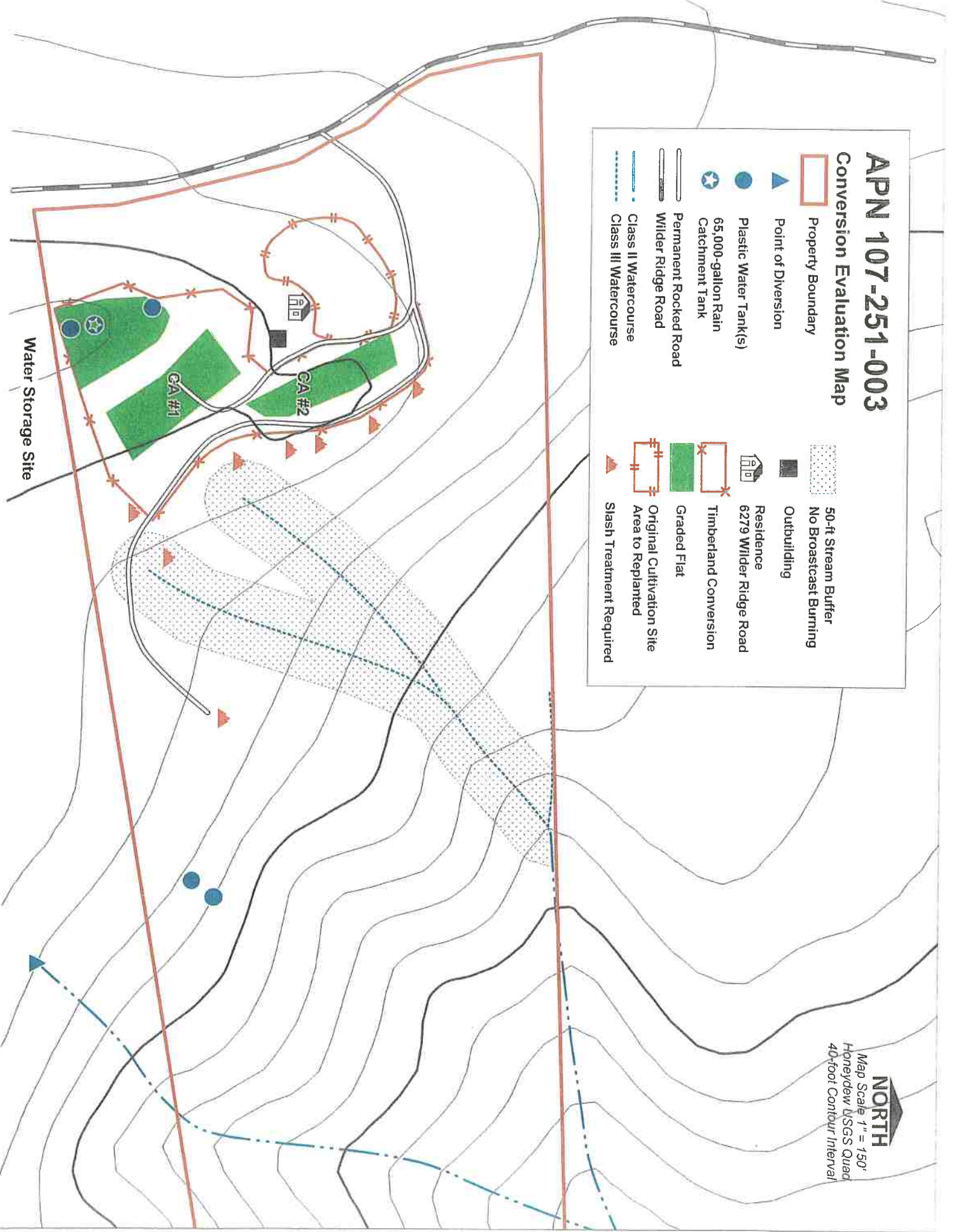


APN 107-251-003

Conversion Evaluation Map

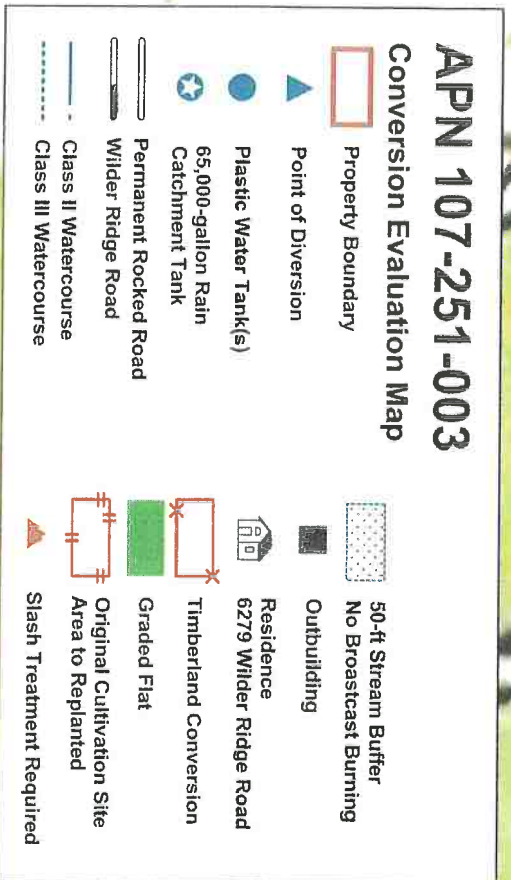
- | | | | |
|-------------------------------------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|---------------------------|
|  | Property Boundary |  | 50-ft Stream Buffer |
|  | Point of Diversion |  | No Broadcast Burning |
|  | Plastic Water Tank(s) |  | Outbuilding |
|  | 65,000-gallon Rain Catchment Tank |  | Residence |
|  | Permanent Rocked Road |  | 6279 Wilder Ridge Road |
|  | Wilder Ridge Road |  | Timberland Conversion |
|  | Class II Watercourse |  | Graded Flat |
|  | Class III Watercourse |  | Original Cultivation Site |
| | |  | Area to Replanted |
| | |  | Slash Treatment Required |

NORTH
 Map Scale 1" = 150'
 Honeydew USGS Quad
 40-foot Contour Interval

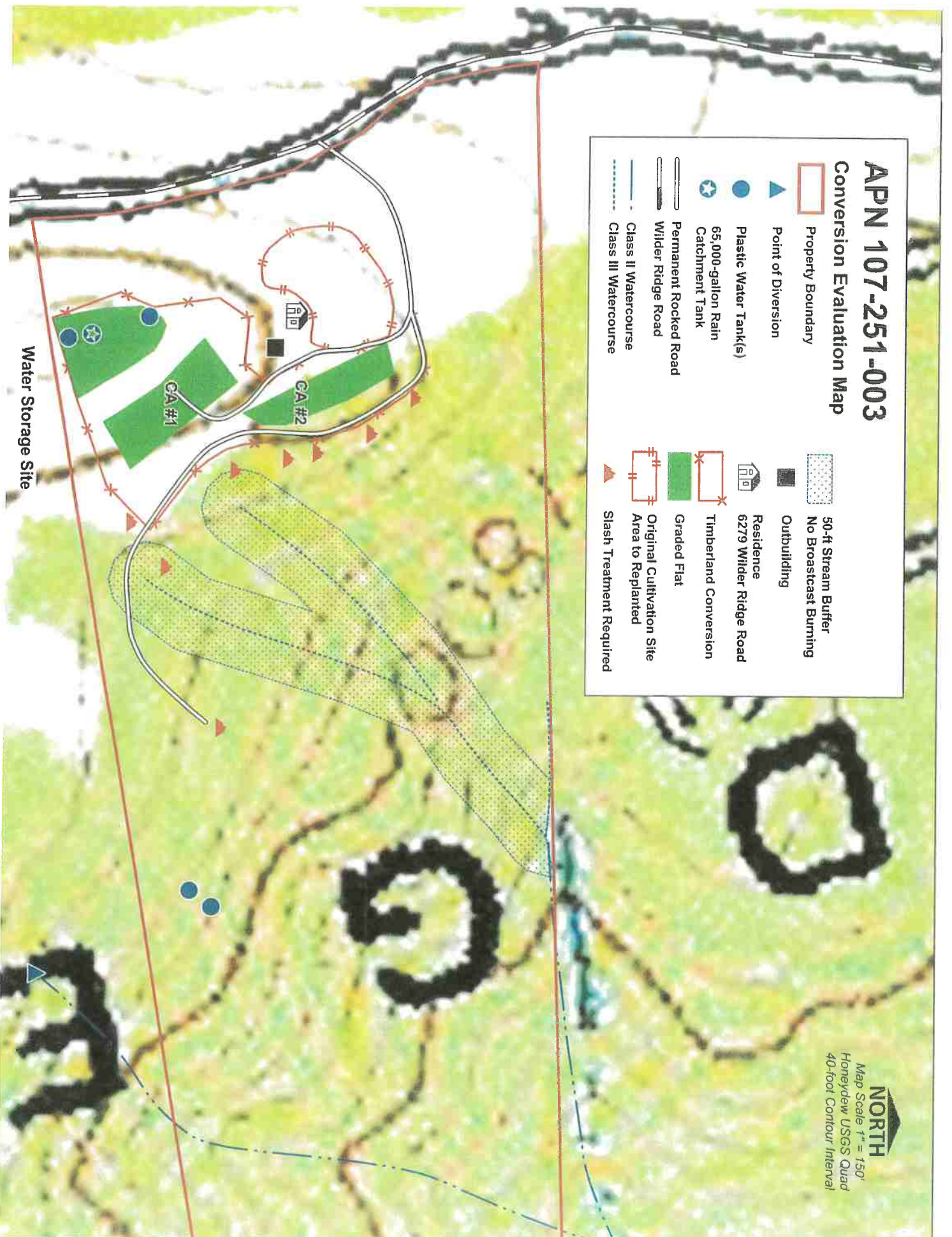


APN 107-251-003

Conversion Evaluation Map



















NORTH
Map Scale 1" = 150'
Honeydew USGS Quad
40-foot Contour Interval



APN 107-251-003

Conversion Evaluation Map

- | | | | |
|-------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------|
|  | Property Boundary |  | 50-ft Stream Buffer
No Broadcast Burning |
|  | Point of Diversion |  | Outbuilding |
|  | Plastic Water Tank(s) |  | Residence |
|  | 65,000-gallon Rain
Catchment Tank |  | 6279 Wilder Ridge Road |
|  | Permanent Rocked Road |  | Timberland Conversion |
|  | Wilder Ridge Road |  | Graded Flat |
|  | Class II Watercourse |  | Original Cultivation Site
Area to Replanted |
|  | Class III Watercourse |  | Slash Treatment Required |

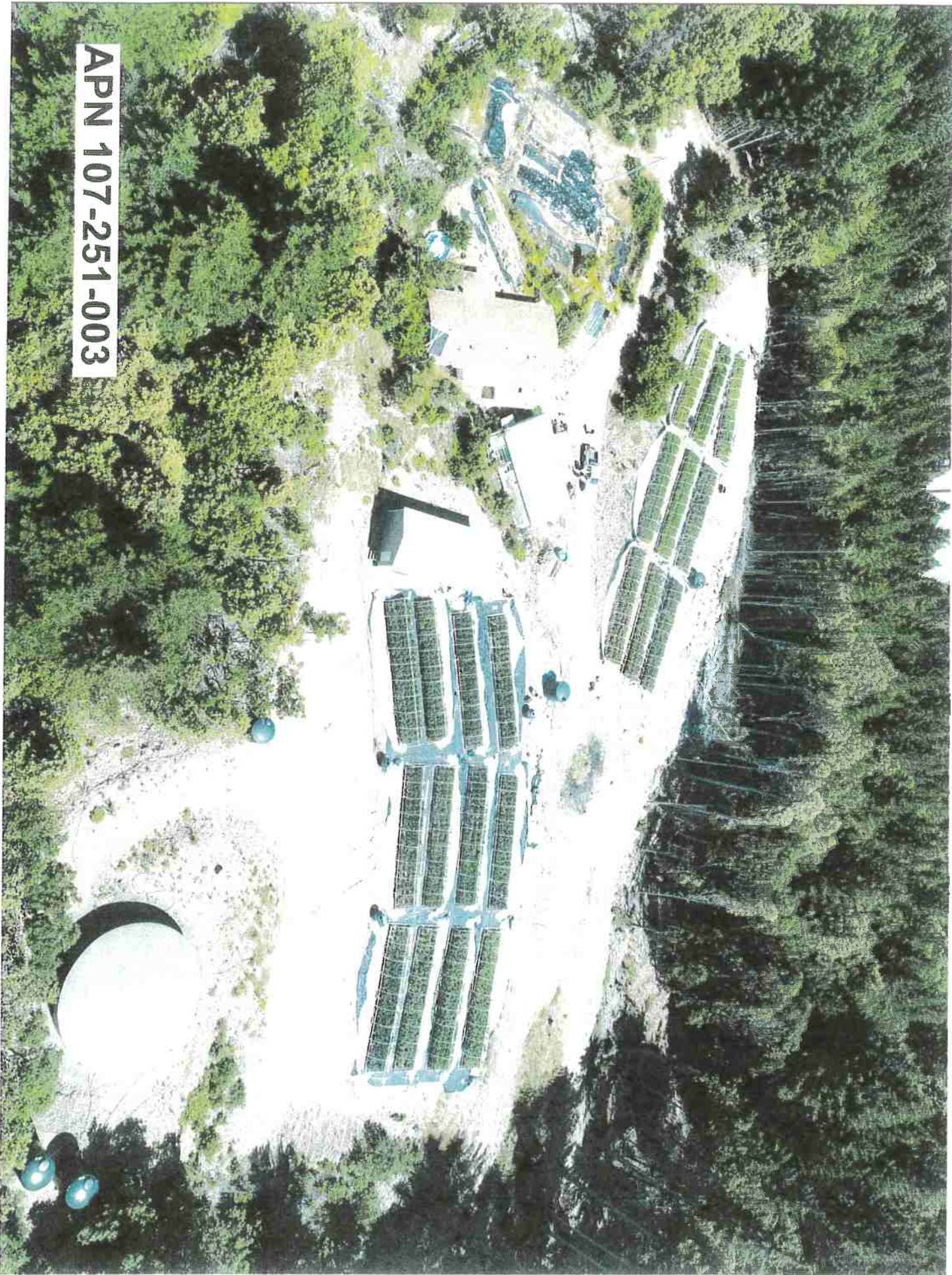
Water Storage Site



APN 107-251-003

APN 107-251-003





APN 107-251-003



**RESTOCKING PLAN
FOR
APN 107-251-003**

July 20, 2018

165 South Fortuna Blvd
Fortuna, CA 95540
707-725-1897
707-725-0972 Fax
trc@timberlandresource.com

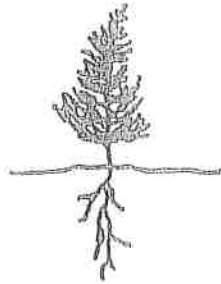
6. The RPF recommends acquiring conifer seedlings from Green Diamond Resource Company's nursery in Korbel. Contact Glen Lehar @ 707-668-4439. Indicate the elevation and geographic area of the planting site and he will recommend the appropriate stock.

Sincerely,



Chris Carroll, RPF# 2628
Timberland Resource Consultants

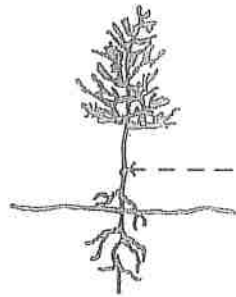
APPENDIX A CORRECT METHOD OF SEEDLING PLANTING



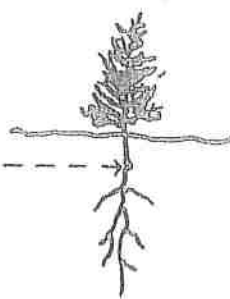
- Soil firmly packed around roots.
- No air pockets.
- Roots straight with no J or L bends.
- Root collar at or slightly below ground level.
- Root not pruned.

ERROR IN PLANTING

Too shallow



Too Deep



Root Collar

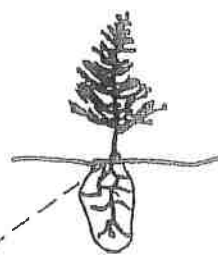
- Hole not deep enough.
- Root collar and upper roots exposed.
- Roots dry out.

- Hole is too deep.
- Root collar buried.

J or L Roots



Air Pockets



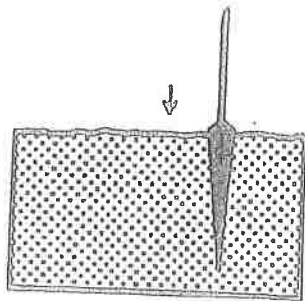
Root Collar

Hole is not deep enough — planting in rocky soil.
Roots cannot effectively take up water.
Tree not wind-firm.

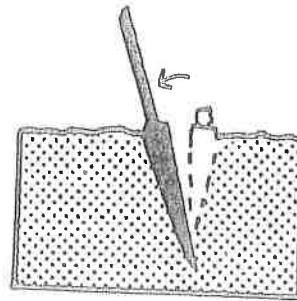
- Soil not firmly packed around roots.
- Air pocket forms.
- Roots dry out.

APPENDIX B
PLANTING WITH A FLAT BAR

1. Insert flat bar straight down.

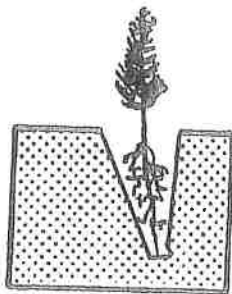


2. Pull flat bar backward to open hole.

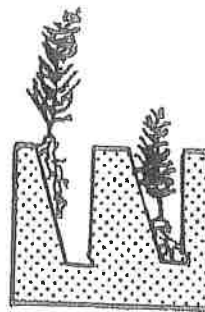


3. Remove flat bar and place seedling at correct depth with root collar at or slightly below ground level.

Correct

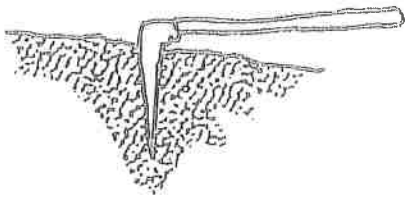


Incorrect

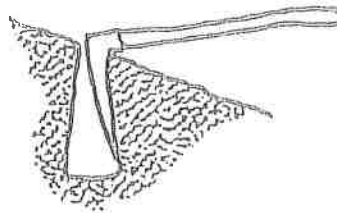


APPENDIX C
PLANTING WITH A HOE

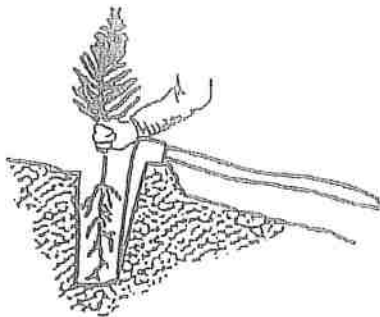
1. Swing hoe to get full penetration.



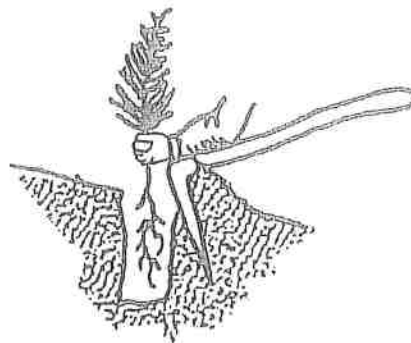
2. Lift handle and pull up to widen hole.



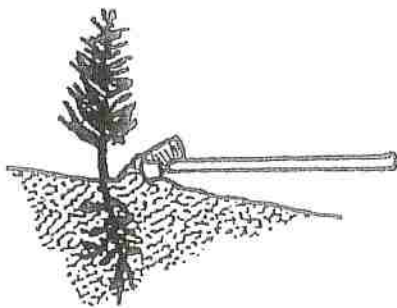
3. Place seedling while using hoe to hold back soil.



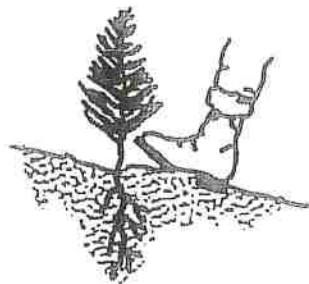
4. Use hoe to pack soil at bottom of hole.



5. Use hoe to pack soil at top hole.



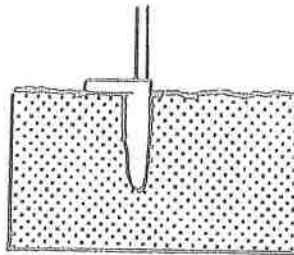
6. Firm soil around seedling with feet.



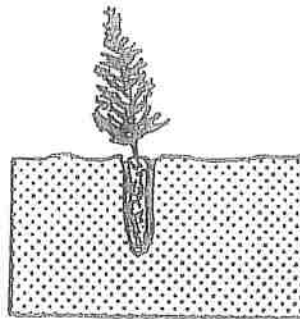
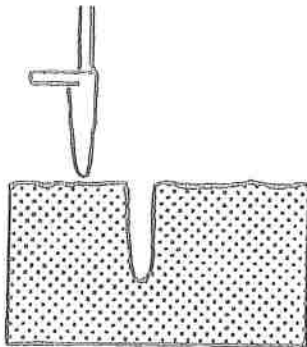
APPENDIX D

PUNTING WITH A PLUG BAR

1. Insert plug bar straight down until plug bar footrest is level with ground.



2. Remove plug bar and place seedling in hole.



3. Firm soil around seedling with heel of boot.

