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December 9, 2018

Free Range Holdings, LLC  
1632 Broadway, #313  
Eureka, CA 95501

Re: Application #14324

The following is an evaluation of potential timberland conversion on cannabis cultivation sites and associated areas included in the Humboldt County Cannabis Permit Application (Apps #14324) for Free Range Holdings, LLC. Please accept this letter as the RPF's written report required by Humboldt County Code, Ordinance No. 2559 (Commercial Medical Marijuana Land Use), Section 55.4.12.2.4 as cited below.

*"Where existing or proposed operations occupy 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 circulate the report to CAL-FIRE for review and comment."*

Timberland Resource Consultants (TRC) inspected and evaluated the cultivation sites and associated areas on December 3, 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: 104-071-004, 104-071-005, & 104-112-007

Acreage: 409 acres

Legal Description: S ½ of SW ¼ of Section 29 & W ½ of Section 32,

Township 2 South, Range 1 West,

Humboldt Base & Meridian, Humboldt County

Located on USGS 7.5' Quadrangle: Shubrick Peak and Buckeye Mountain

Humboldt County Zoning: TPZ & AG

Site Address: 37773 Mattole Road, Petrolia

Landowner/Timber Owner: Free Range Holdings, LLC

## Project Location (Cont.)

The project is located approximately 6.25 miles southeast of Petrolia and 5 miles west-northwest of Honeydew, on the property known as 37773 Mattole Road. Access to the property is from a private rocky road known locally as "Reynolds 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, madrone, and Douglas-fir, and natural grasslands. Review of 1968 aerial imagery showed clear signs of recent harvesting as evidenced by truck roads, skid roads, landings, and distinct timber/vegetation type changes. The timber harvesting is so fresh that the logged areas blend in with the adjacent natural grasslands making the entire property appear grassy and non-timbered. Field review revealed old growth Douglas-fir stumps which confirms that the stand was regenerated approximately 50-55 years ago following logging of the old growth Douglas-fir. There have been no subsequent commercial harvests per Cal Fire's Watershed Mapper ([http://egis.fire.ca.gov/watershed\\_mapper/](http://egis.fire.ca.gov/watershed_mapper/)). There are visible signs from historic aerial photography, in combination with the RPF's field verification, that conifer and hardwood encroachment into natural grasslands has been occurring for the last 50+ years. The current landowner purchased the property from Timothy Roscoe on 6-26-2014

## Project Description

Two proposed cultivation sites and a proposed off-stream pond site was inspected during the field assessment. The following table lists the inspected sites and their respective acreage; see detailed site descriptions below.

Cultivation Site/Associated Area	Total Acreage	Converted?	Converted Acreage
Cultivation Site 1	2.45	Yes	1.99
Cultivation Site 2	Unknown	No	NA
Off-stream Pond	Unknown	No	NA
TOTAL	2.45 + ?		1.99

### Cultivation Site 1 – APN 104-071-004

The site formally contained approximately 5 greenhouses (2016 NAIP DOQ) of unknown dimensions, which have been removed. The site also contains two structures, which appear to be for storage. Review of historic aerial imagery reveals that this site was initially developed between 1998 and 2005 to its present size and configuration. Approximately 0.46 acres of the site (an amoeba-shaped area as mapped) appears to have been natural grassland based upon review of 1993 and 1998 NAIP DOQ imagery. There's evidence to suggest that portions of the site were used as a log landing based upon the presence of numerous skid roads, coming from all directions, terminating in this little valley. Proposed cultivation activities at this site will impede the use of this space for timber growth and harvesting thus resulting in timberland conversion.

### Cultivation Site 2 - APN 104-112-007

This is a proposed and undeveloped cultivation site located on a grassy ridge known as "Damon Ridge". The RPF, accompanied with Brett Rinehart at Rinehart Engineering, walked the entire area where excavation and grading will occur to development the site to closely inspect the ground to determine presence/absence of conifer/hardwood stocking that may not be otherwise visible from aerial imagery. This proposed site is clearly non-timberland with no signs of conifer and/or hardwood encroachment in the form of small seedlings/saplings. The development of this cultivation site will not result in timberland conversion.



## **Project Description (Cont.)**

### **Off-stream Pond Site - APN 104-071-004**

This is a proposed off-stream pond site located on a grassy ridge known as "Damon Ridge". The RPF, accompanied with Brett Rinehart at Rinehart Engineering, walked the entire area where excavation and grading will occur to develop the site to closely inspect the ground to determine presence/absence of conifer/hardwood stocking that may not be otherwise visible from aerial imagery. The proposed pond site is clearly non-timberland with no signs of conifer and/or hardwood encroachment in the form of small seedlings/saplings. The development of this pond will not result in timberland conversion.

### **Timberland Conversion Summary**

TRC observed approximately 1.99 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 a Watercourse and Lake Protection Zone (WLPZ). However, Cultivation Site 1 is located adjacent to a Class III watercourse in the southwest corner. The Class III intercepts an old skid road, which parallels the site's southwestern boundary. The Class III is severely eroding/downcutting the skid road before discharging back into a native stream channel. Based upon the amount of past disturbance that occurred from 1960's circa logging, it's not entirely clear whether this Class III watercourse has been diverted out of its natural channel, or the skid road was constructed down the Class III's original channel. The RPF walked the western perimeter of the cultivation site for sign/evidence of an old watercourse channel, which would infer a past diversion with no luck. The Class III appears to un-naturally makes an extremely hard turn (greater than 90 degrees) suggesting that its presently outside of its natural channel.

Per the Humboldt County General Plan, the Grading and Open Space Ordinance would not have applied to this project (Timber Production zoning) and County review and signed off would not have been required. Consequently, a Stream Management Area of 50 feet would not have been required on the Class III watercourse. Instead, this project would have required a minimum 50-foot Equipment Limitation Zone (watercourse side-slopes greater than 30%), which would not have prohibited conversion or the harvesting of conifers and hardwoods within the Class III ELZ. The southern edge of the graded flat at Cultivation Site 1 is slightly within the Class III ELZ. Many of the hardwoods harvested within the Class III ELZ have sprouted back via coppice growth and the ELZ is partially stocked per 14CCR 912.7.

Subsequent permitting via Ordinance No. 2559 and State Water Resources Control Board Order WQ 2017-0023-DWQ will require a minimum 50-foot buffer zone along the Class III watercourse. The RPF recommends replanting the entire Class III buffer zone with Douglas-fir and/or redwood seedlings to improve timberland productivity, and to meet the intent of other rules and regulations promulgated to protect the beneficial uses of water. Please note however that this recommendation is not a requirement per the Forest Practice Rules or Act because timberland conversion within a Class III ELZ is not prohibited per 14CCR 1104.1.

## Limitations and Considerations for Timberland Conversion Activities (Cont.)

### 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 (CNDDB) on December 6, 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 CNDDB revealed no known Northern Spotted Owl (NSO) Activity Centers within 0.7 miles of the project area.

No major forest health issues were observed during the field assessment. The property is located within Humboldt County, a Zone of Infestation (ZOI) for Sudden Oak Death (SOD), and symptoms, signs, and evidence of oak mortality were observed in the forested areas surrounding Cultivation Site 1. No risk assessment was made at the property; however, the past 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.

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

Untreated slash, woody debris, and logs were observed along the western periphery of Cultivation Site 1, which require treatment.



## Limitations and Considerations for Timberland Conversion Activities (Cont.)

### 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 surveyed Cultivation Site 1 and surrounding 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.

### Conclusion

In summary, a total of approximately 1.99 acres of unauthorized timberland conversion has occurred at Cultivation Site 1 within APN 104-071-004. 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 following recommendations are required to bring the project into compliance:

### RPF Recommendations

1. Treat all slash, woody debris, and logs located at Cultivation Site 1 per requirements of 14 CCR 914.5(b) on page 4.
2. Re-plant the 50-foot Class III watercourse buffer zone located south of Cultivation Site 1 per the attached Restocking Plan (RPF recommendation not a requirement).

Sincerely,



Chris Carroll, RPF #2628  
Timberland Resource Consultants

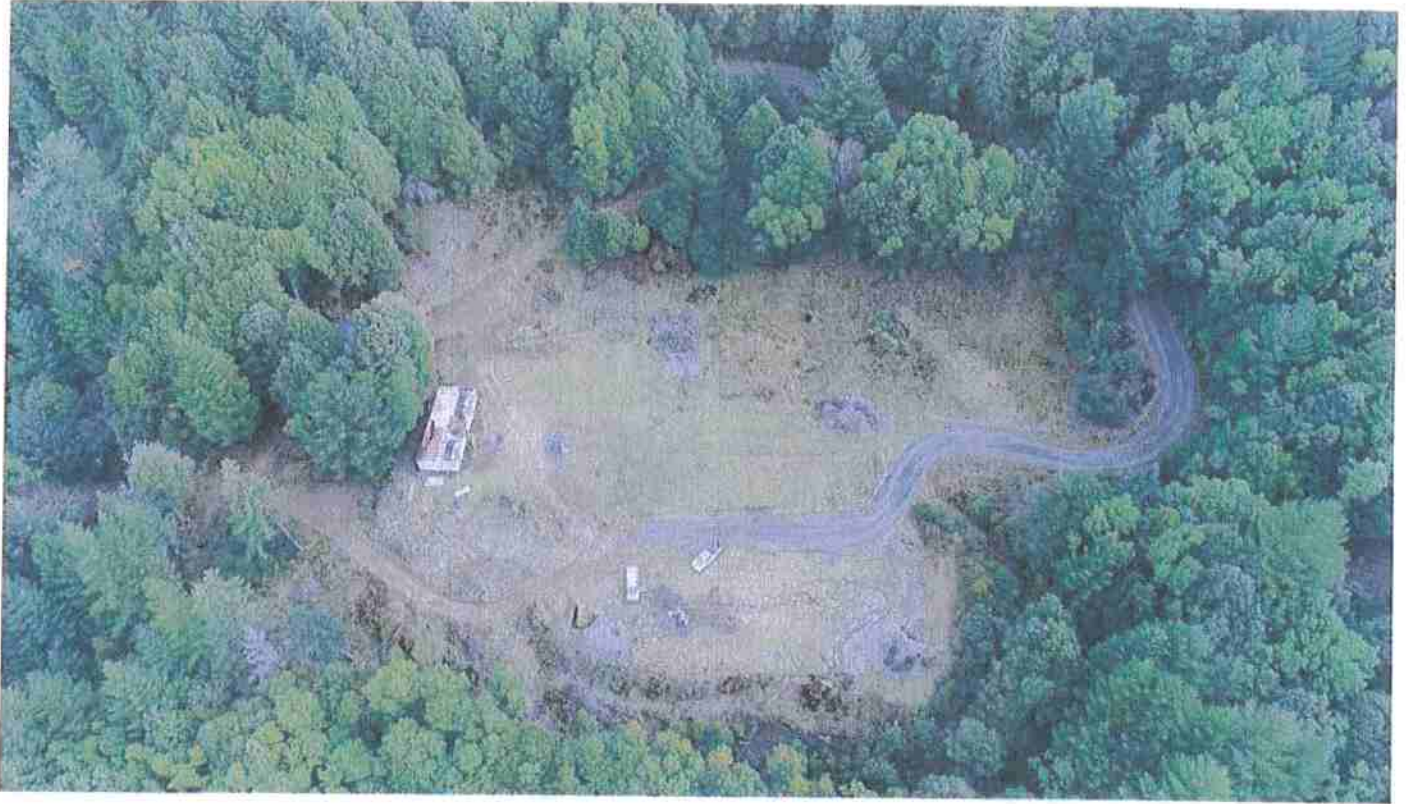
## Pictures



Picture 1: Class III watercourse channel located alongside Cultivation Site 1 on old skid road. Photo date 12-3-2018



## Pictures



Picture 2: Cultivation Site 1. Photo date 12-3-2018.

## Pictures



Picture 3: Cultivation Site 1. Photo date 12-3-2018.



## Pictures



Picture 4: Off-stream Pond Site. Photo date 12-3-2018


## Pictures



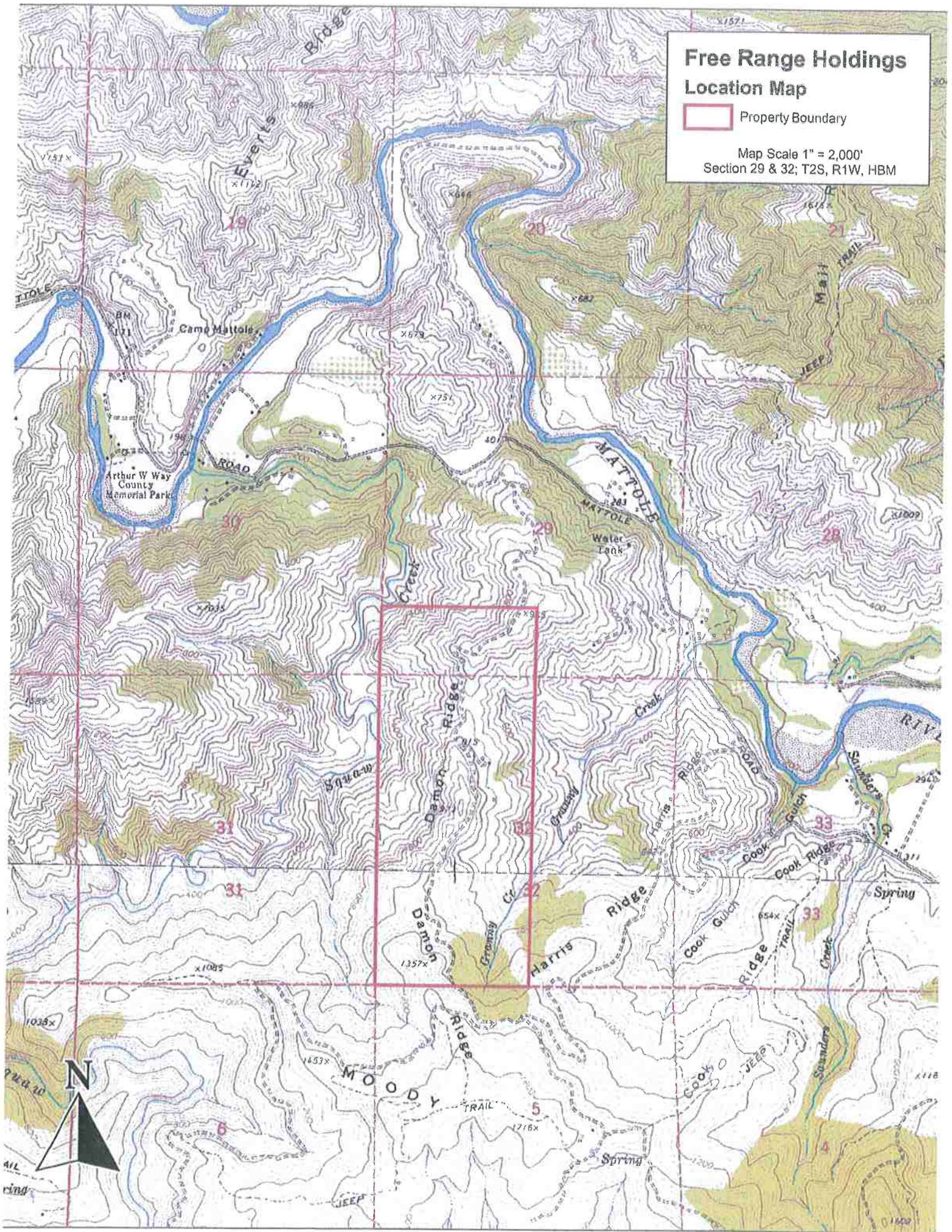
Picture 5: Off-stream Pond Site. Photo date 12-3-2018



# Free Range Holdings Location Map

 Property Boundary





Map Scale 1" = 2,000'  
Section 29 & 32; T2S, R1W, HBM



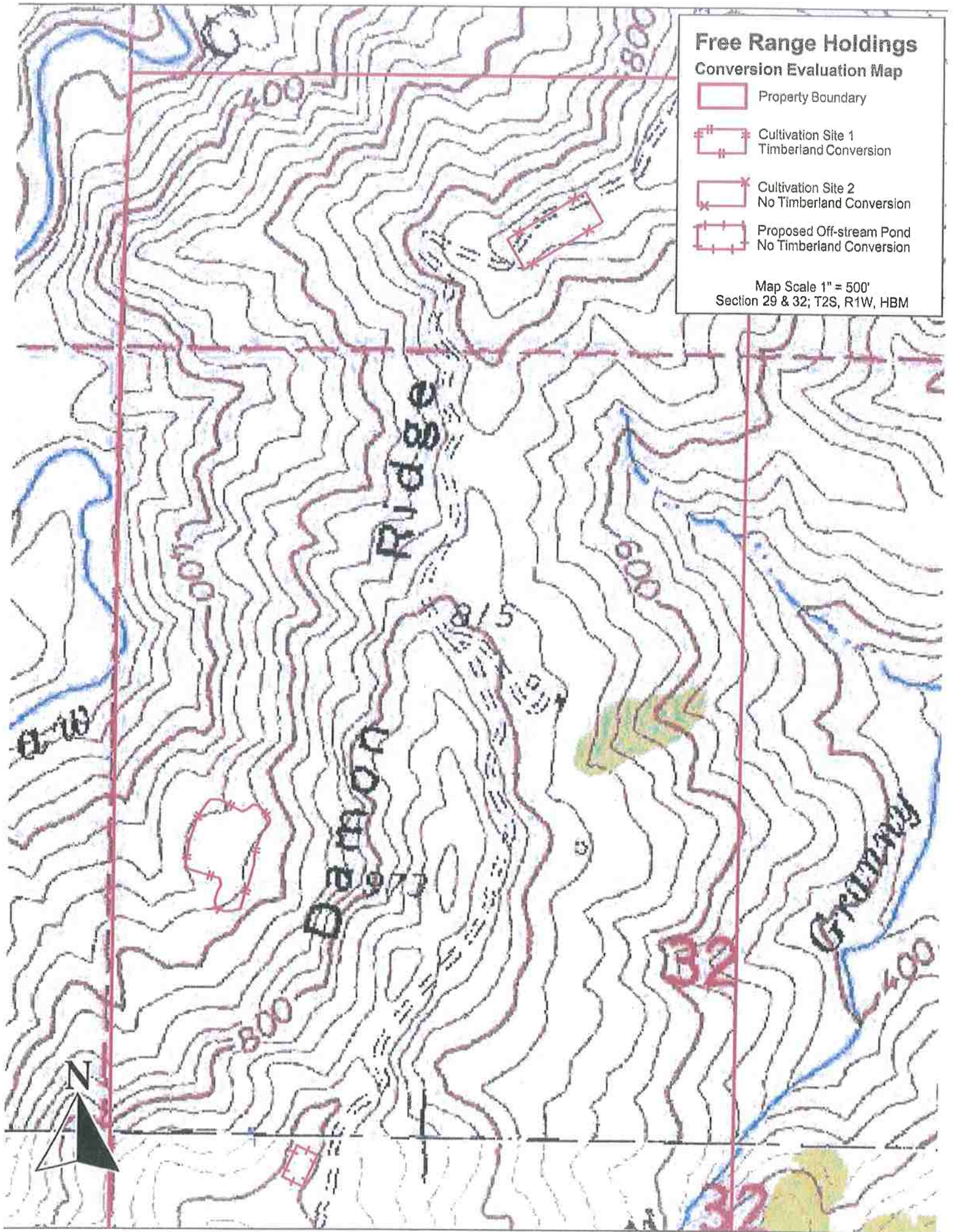


# Free Range Holdings

## Conversion Evaluation Map

-  Property Boundary
-  Cultivation Site 1  
Timberland Conversion
-  Cultivation Site 2  
No Timberland Conversion
-  Proposed Off-stream Pond  
No Timberland Conversion

Map Scale 1" = 500'  
Section 29 & 32; T2S, R1W, HBM



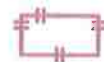


# Free Range Holdings

## Conversion Evaluation Map



Property Boundary



Cultivation Site 1  
Timberland Conversion



Cultivation Site 2  
No Timberland Conversion



Proposed Off-stream Pond  
No Timberland Conversion

Map Scale 1" = 500'  
Section 29 & 32; T2S, R1W, HBM

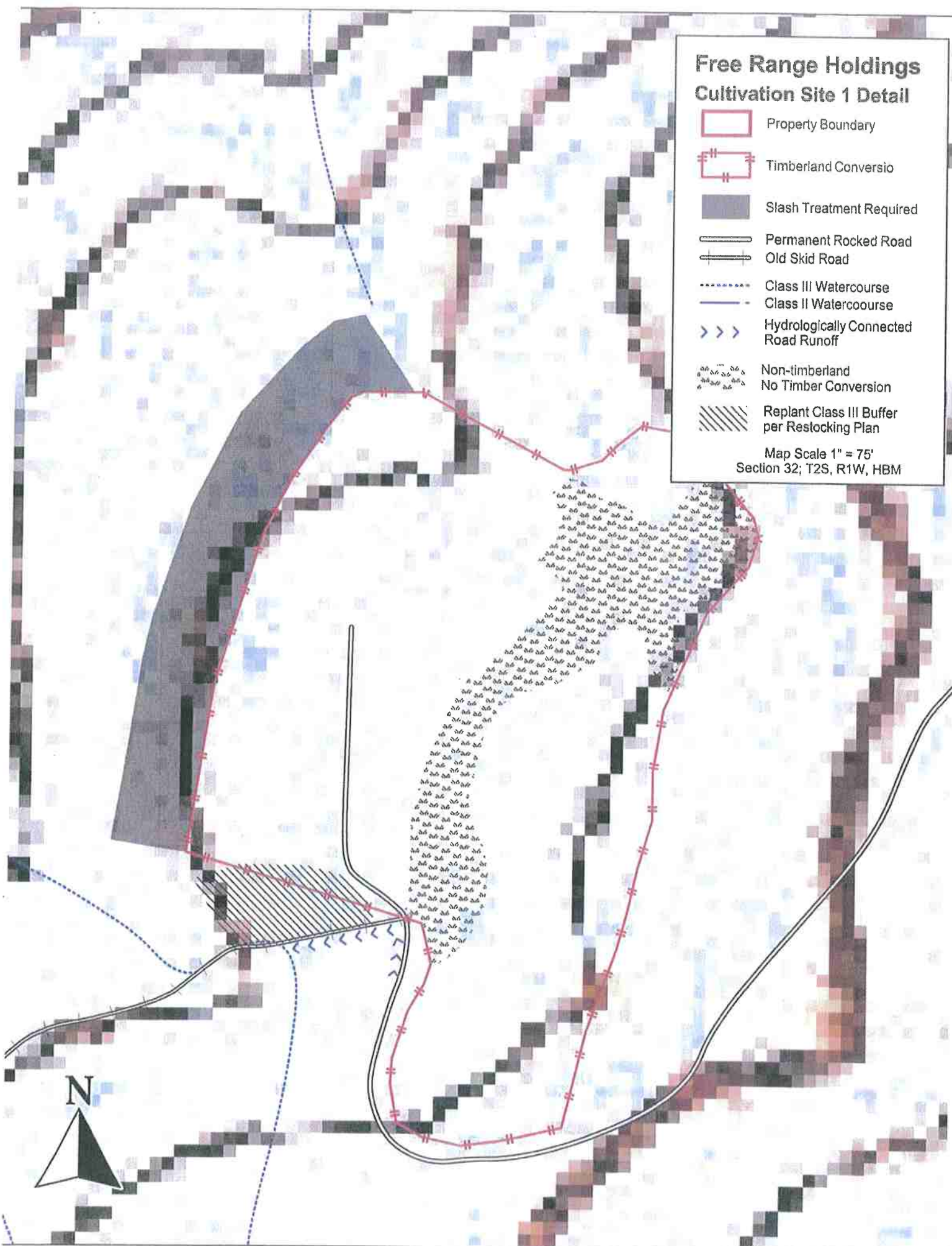




# Free Range Holdings Cultivation Site 1 Detail











- Property Boundary
- Timberland Conversion
- Slash Treatment Required
- Permanent Rocked Road
- Old Skid Road
- Class III Watercourse
- Class II Watercourse
- Hydrologically Connected Road Runoff
- Non-timberland  
No Timber Conversion
- Replant Class III Buffer  
per Restocking Plan

Map Scale 1" = 75'  
Section 32; T2S, R1W, HBM





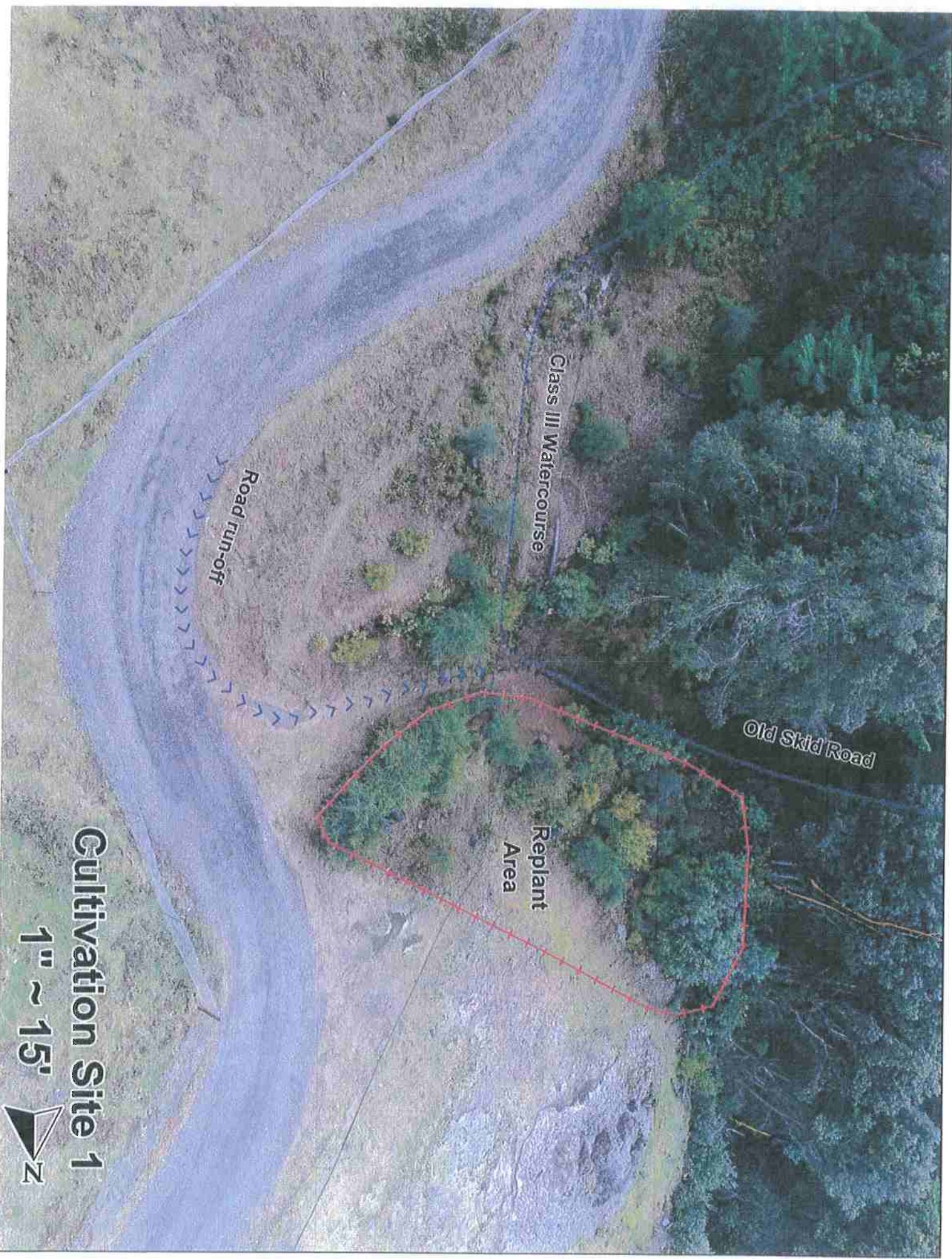
## Free Range Holdings Cultivation Site 1 Detail

-  Property Boundary
-  Timberland Conversio
-  Slash Treatment Required
-  Permanent Rocked Road
-  Old Skid Road
-  Class III Watercourse
-  Class II Watercoourse
-  Hydrologically Connected Road Runoff
-  Non-timberland No Timber Conversion
-  Replant Class III Buffer per Restocking Plan

Map Scale 1" = 75'  
Section 32; T2S, R1W, HBM







Class III Watercourse

Old Skid Road

Replant  
Area

Road run-off





Cultivation Site 1

1" ~ 15'

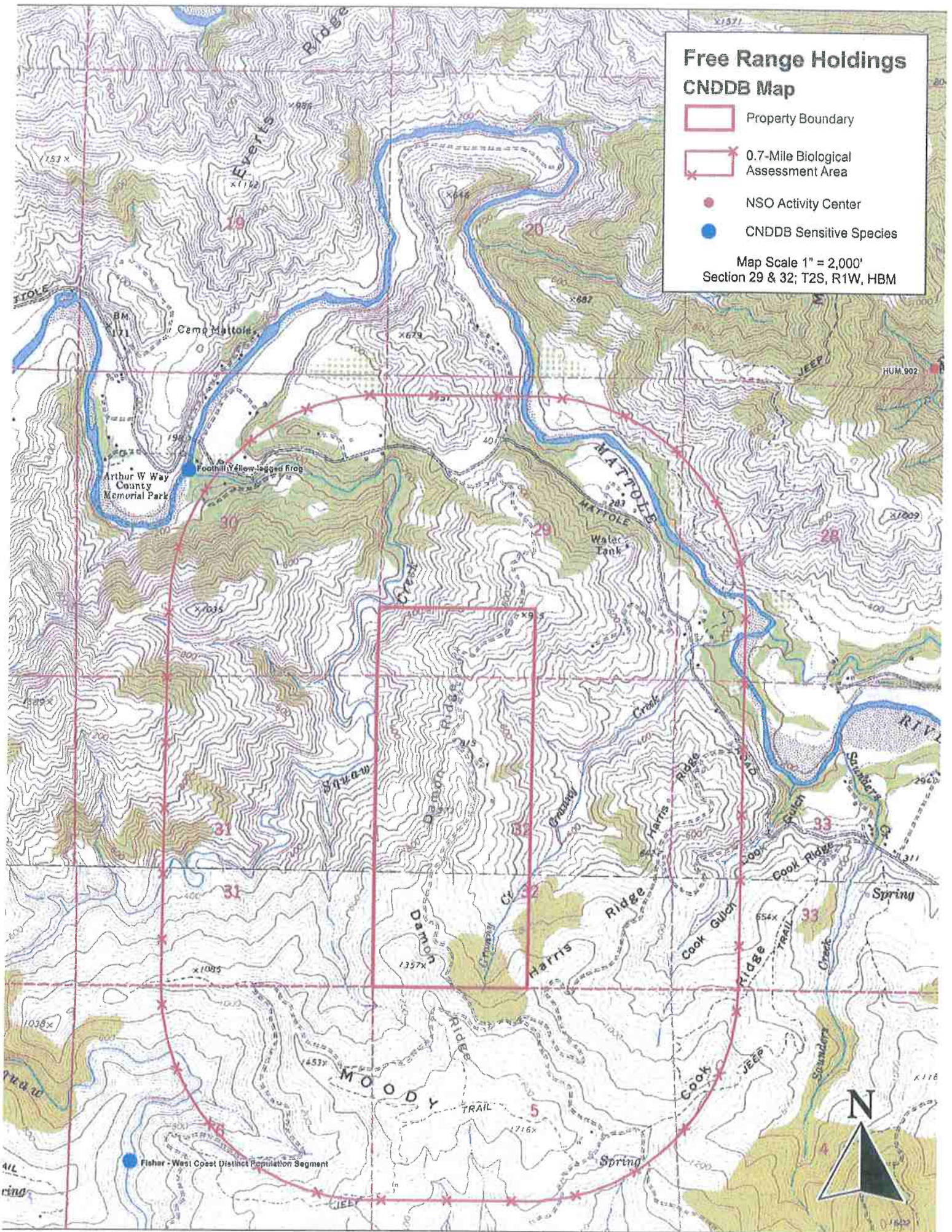




# Free Range Holdings CNDDDB Map

-  Property Boundary
-  0.7-Mile Biological Assessment Area
-  NSO Activity Center
-  CNDDDB Sensitive Species

Map Scale 1" = 2,000'  
Section 29 & 32; T2S, R1W, HBM







## **RESTOCKING PLAN**

**FOR**

**APN 104-071-004**

December 9, 2018

165 South Fortuna Blvd  
Fortuna, CA 95540  
707-725-1897  
707-725-0972 Fax  
[trc@timberlandresource.com](mailto:trc@timberlandresource.com)



## Regeneration Plan

Site Preparation: Site preparation is a widely used method to facilitate the establishment of a desirable stand of trees. Site preparation activities remove or reduce competing vegetation, reduce or remove unwanted trees and logging debris, and prepare the soil to promote the growth and survival of desired tree species. There are many methods of site preparation that fall under either chemical or mechanical site preparation. The primary objective is to have an area suitable for planting and establishing a new stand of trees. Since the area to be planted is located within a watercourse buffer, the RPF recommends no mechanical subsoiling/ripping of the planted site with heavy equipment. Subsoiling/ripping is a mechanical site prep method for heavy soils on cutover or agricultural lands that have a compacted layer at or below the soil surface that limits root growth and development. Subsoiling/ripping increases aeration and water-holding capacity of compacted soils and breaks up root restricting hardpans and/or traffic pans.

Planting: The RPF recommends planting Douglas-fir and/or redwood seedlings at a spacing no less than 10 feet by 10 feet or 435 trees per acre. If deer browsing is expected (landowner's local knowledge), then the density can be slightly increased to account for mortality and/or damage. The area to be planted/inter-planted is approximately 0.10 acres, which would require a minimum 43 tree seedlings.

Seedlings: Most conifer seedlings that come from the nursery are usually available in two forms; bareroot seedlings and containerized seedlings. Bareroot seedlings are essentially stock whose roots are exposed at the time of planting. Bareroot seedlings are grown in nursery seedbeds and lifted from the soil in which they are grown to be planted in the field. Containerized seedlings are grown in a variety of hard-walled vessels or in peat pots from seed. Given the conditions of the site and the higher survival rate associated with containerized stock, the RPF recommends using containerized seedlings if available. Seedling care and handling is extremely important to ensure post planting survival. For long-term storage (more than 3 days) store at 33-36 degrees Fahrenheit. For short-term storage (several hours to less than 3 days) store below 42 degrees Fahrenheit. At the planting site take care to not let the roots dry out and avoid exposure to the sun or warmer temperatures.

### Planting Instructions:

1. Tree planting shall only occur in winter or early spring. Tree planting should not occur if the ground is frozen, or during unusually warm periods.
2. Dig a hole at least one inch deeper and wider than the seedling roots. If planting from a container, dig the hole an inch deeper and wider than the container.
3. Place the seedling into the hole taking care not to bend the taproot, or main vertical root, and cover with soil.
4. Pack the soil down firmly around the seedling to remove any air pockets.
5. See Appendix A-D for illustrations for correct planting techniques.



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,

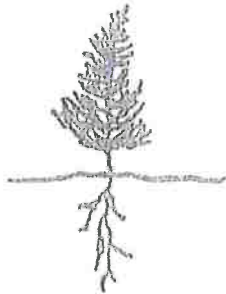


Chris Carroll, RPF# 2628  
Timberland Resource Consultants



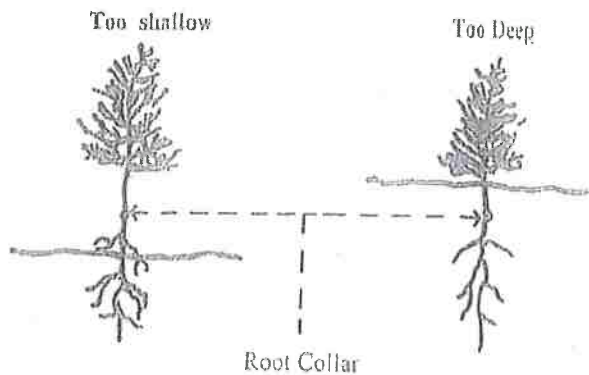
## APPENDIX A

### 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



- 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



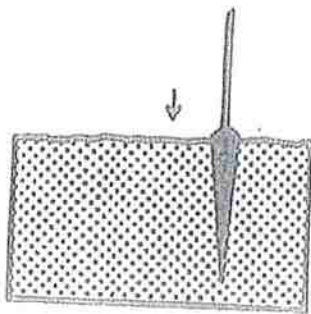
Hole is not deep enough — planting in rocky soil.  
Roots cannot effectively take up water.  
Tree not wind-firm.

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

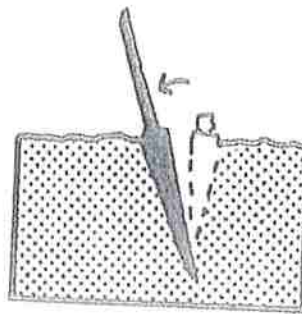


APPENDIX B  
PLANTING WITH A FLAT BAR

1. Insert flat bar straight down.

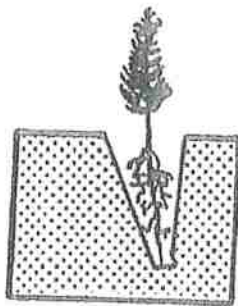


2. Pull flat bar backward to open hole.

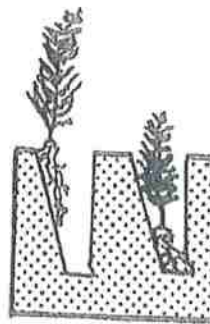


3. Remove flat bar and place seedling at correct depth with root collar at or slightly below ground level.

Correct



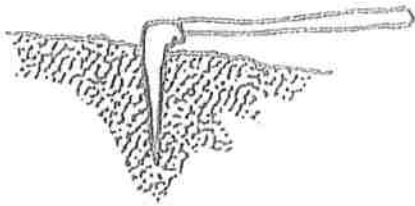
Incorrect



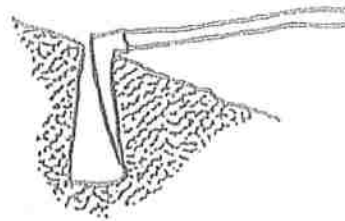


APPENDIX C  
PLANTING WITH A HOE

1. Swing hoe to get full penetration.



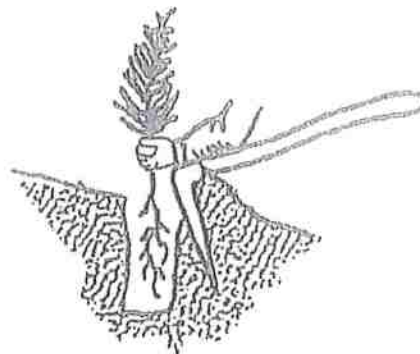
2. Lift handle and pull up to widen hole.



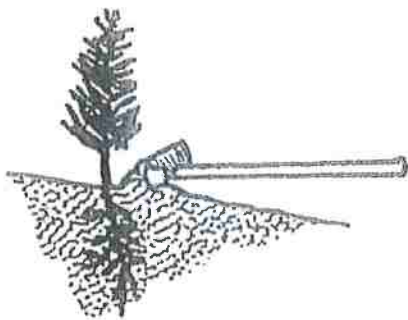
3. Place seedling while using hoe to hold back soil.



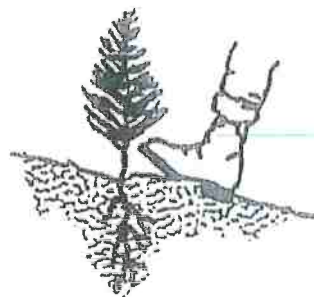
4. Use hoe to pack soil at bottom of hole.



5. Use hoe to pack soil at top hole.



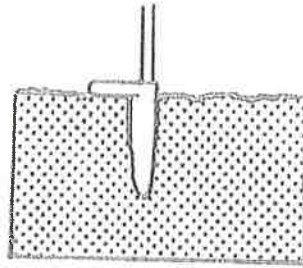
6. Firm soil around seedling with feet.



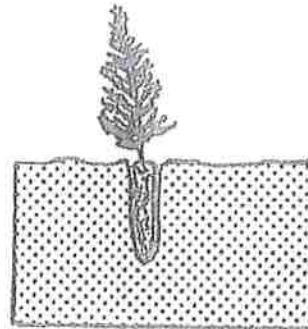
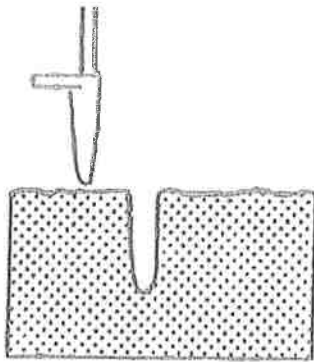


APPENDIX D  
POINTING WITH A PLUG BAR

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.

