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January 23, 2019

GLG, LLC
c/o Higrade, LLC
920 Samoa Blvd
Arcata, CA 95521

Dear GLG, LLC:

The following is an evaluation of potential timberland conversion on the cannabis cultivation sites and associated areas included in the Humboldt County Cannabis Permit Application (Apps #11881) for APN 210-071-013. 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, 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 contained within the application on October 17th, 2018. The RPF and his designees have 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: 210-071-013

Acreage: 45.0 assessed lot size/ 46.3 GIS acres

Legal Description: W ½ of SW ¼ of Section 26;

Township 1 North, Range 4 East,

Humboldt Base & Meridian, Humboldt County

Located on USGS 7.5' Quadrangle: Larabee Valley

Humboldt County Zoning: Unclassified

Site Address: None

Landowner/Timber Owner: HiGrade LLC, 920 Samoa Blvd, Arcata, CA 95521

Project Location Description: The project area is located approximately 1.6 air miles southwest of the intersection of Highway 36 and China Mine Road and 6.4 air miles southwest of Dinsmore, CA. To access the property from eastbound Highway 36, turn right on to China Mine Road; continue for approximately 2 miles to arrive at the property through a locked gate.

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 aerial imagery.

The property consists of a single 45.0-acre parcel known as APN 210-071-013. The parcel consists of Douglas-fir-dominated timber stands with minor components of hardwoods, including tanoak and Pacific madrone, as well as oak woodland and natural grasslands. The Douglas-fir and tanoak stands average approximately 50-60 years old. The parcel contains four segments of unnamed Class III watercourses and a segment of Class I Mule Creek, all tributary to the Little Van Duzen River. The property's road network consists of rock permanent roads and dirt ATV trails.

The parcel has experienced logging entries in the last century as evidenced by historic skid roads and reduced canopy cover in aerial imagery. Harvesting occurred in the early to mid-1960s. CALFIRE has not documented any commercial timber harvesting on the parcel in the past 25 years (*CALFIRE Watershed Mapper v2*). Parcel ownership as well as timber ownership was sold to HiGrade LLC from David Cranmer on May 17, 2018 (*Parcel Quest*).

Project Description

Five cultivation sites and four associated areas were inspected during the field assessment within APN 210-071-013. See detailed site descriptions below.

Cultivation Sites/Associated Areas	Total Acreage
Cultivation Site 1	0.15
Cultivation Site 2	0.75
Cultivation Site 3	0.20
Cultivation Site 4	0.03
Cultivation Site 5	0.12
Water Storage Area	0.06
Drying and Storage Building	0.07
Drying and Processing Building, Generator Shed, Fuels Storage Area, and Materials Storage Area 1	0.18
Materials Storage Area 2	0.01
TOTAL	1.57

Cultivation Site 1

Cultivation Site 1 is a 0.15-acre area located in the central portion of the property (see Photo 1). Cultivation-related activities observed included one greenhouse and several outdoor-grown cannabis plants. Review of aerial imagery from 1968 reveals that the site does not occupy a historic log landing. The site was cleared of trees, stumps, and vegetation between 2016 and 2017. No remnant slash or woody debris from the conversion activities was observed. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the current landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Cultivation Site 2

Cultivation Site 2 is a 0.75-acre area located in the central portion of the property (see Photos 1, 2, & 3). Cultivation-related activities observed included five greenhouses and numerous outdoor-grown cannabis plants. Review of aerial imagery from 1968 reveals that the site occupies a historic log landing. The site was cleared of remaining trees, stumps, and vegetation between 2005 and 2009. The site was expanded to its current size between 2014 and 2016. Remnant slash and woody debris from the conversion activities was observed along the western and southeastern edges of the site. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the current landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Project Description cont'd

Cultivation Site 3

Cultivation Site 3 is a 0.20-acre area located in the central southern portion of the property (see Photo 4). Cultivation-related activities observed included two greenhouses and numerous outdoor-grown cannabis plants. Review of aerial imagery from 1968 reveals that the site does not occupy a historic log landing. The site was cleared of trees, stumps, and vegetation between 2016 and 2017. No remnant slash or woody debris from the conversion activities was observed. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the current landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Cultivation Site 4

Cultivation Site 4 is a 0.03-acre area located in the central southern portion of the property (see Photo 5). Cultivation-related activities observed included numerous outdoor-grown cannabis plants. Review of aerial imagery from 1968 reveals that the site occupied a historic log landing. The site was cleared of remaining trees, stumps, and vegetation between 2014 and 2016. Remnant slash and woody debris from the conversion activities was observed along the seasonal road south of the site. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the current landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Cultivation Site 5

Cultivation Site 5 is a 0.12-acre area located in the central portion of the property (see Photo 3). Cultivation-related activities observed included numerous outdoor-grown cannabis plants. Review of aerial imagery from 1968 reveals that the site occupies a historic log landing. The site was cleared of remaining trees, stumps, and vegetation between 2005 and 2009. The site was expanded to its current size between 2014 and 2016. Remnant slash and woody debris from the conversion activities was observed along the northern and southeastern edges of the site. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the current landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Water Storage Area

The Water Storage Area is a 0.06-acre area located in the central portion of the property (see Photos 1, 6 & 7). This associated area consists of three separate flats along two terraces and contains several large, plastic water storage tanks used for cultivation irrigation. Review of aerial imagery from 1968 reveals that the site does not occupy a historic log landing. The site was cleared of trees, stumps, and vegetation between 2016 and 2017. Remnant slash and woody debris from the conversion activities was observed along the ATV trail south of the site. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the current landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Drying and Storage Building

The Drying and Storage Building is a 0.07-acre area located in the central southern portion of the property and contains the framework for a building that will be used for cultivation product drying and project materials storage (see Photo 8). Review of aerial imagery from 1968 reveals that the site does not occupy a historic log landing. This associated area was cleared of trees, stumps, and vegetation between 2015 and 2016. Remnant slash and woody debris from the conversion activities was observed along the seasonal road south of the site. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the current landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Project Description cont'd

Drying and Processing Building, Generator Shed, Fuels Storage Area, & Materials Storage Area 1

The Drying and Processing Building, Generator Shed, Fuels Storage Area, and Materials Storage Area 1 is a 0.18-acre area located in the southern portion of the property (see Photos 9, 10, & 11). This associated area contains one large outbuilding used for cultivation product drying and processing; a small shed housing a generator used to power cultivation activities; a structure housing fuels used to power cultivation activities; and several structures (industrial shipping containers, tents, etc.) used to store cultivation project materials. These features are combined into one site due to their close proximity and small, individual footprints. Review of aerial imagery from 1968 reveals that the site occupies a historic log landing. This associated area was cleared of remaining trees, stumps, and vegetation between 2005 and 2009. No remnant slash or woody debris from the conversion activities was observed; however, woody debris from recently removed hazard trees was being processed into firewood along the southern edge of the site during the field assessment (see Photo 15). The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the current landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Materials Storage Area 2

Materials Storage Area 2 is a 0.01-acre area located in the southern portion of the property (see Photo 12). This associated area contains a structure used to store cultivation project materials. Review of aerial imagery from 1968 reveals that the site occupies a historic log landing. It is unclear from aerial imagery when the site was cleared of remaining trees, stumps, and vegetation, but was likely cleared concurrently with the Drying and Processing Building, Generator Shed, Fuels Storage Area, & Materials Storage Area 1 between 2005 and 2009. No remnant slash or woody debris from the conversion activities was observed. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the current landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Other Mapped Features

The Overview Map shows the location of a house (see Photo 13). This cabin-style house was built in 1983 and is used exclusively for personal and recreational purposes, not for cultivation activities (*Parcel Quest*). Therefore, it falls outside of the scope of this report and is addressed no further.

The Overview Map also shows the locations of multiple water storage tanks used for cultivation water storage (see Photo 13). Though minor tree and vegetation clearing may have occurred to install these features, the surrounding timber stand still meets the stocking standards of the California Forest Practice Rules (CFPRs). Ultimately, the water storage tanks do not impede the use of the land for current or future timber growth and harvesting; therefore, they do *not* constitute timberland conversion.

Timberland Conversion Summary

In total, TRC observed approximately 1.57 acres of unauthorized timberland conversion for cultivation-related purposes within APN 210-071-013. 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)."
- Humboldt County General Plan, Appendix G Housing Element, G-118: "The County maintains Streamside Management Areas (SMAs) to protect sensitive fish and wildlife habitats and to minimize erosion, runoff, and other conditions detrimental to water quality...The width of the SMA depends on whether or not the stream is perennial or intermittent and whether the area is inside or outside of Urban Development and Expansion Areas. In urban areas, the SMA width is 50 feet on each side of perennial streams and 25 feet for intermittent streams; outside of urban areas, the width is 100 feet for perennial streams and 50 feet for intermittent streams. Development within the SMAs is very restricted and is subject to implementation of numerous mitigation measures designed to protect the habitat quality of the SMA."
- State Water Resources Control Board Order WQ 2017-023-DWQ, Cannabis Cultivation Policy: Attachment A, Pg. 24: "Cannabis cultivators shall comply with the minimum riparian setbacks described below for all land disturbance, cannabis cultivation activities, and facilities (e.g. material or vehicle storage, petroleum powered pump locations, water storage areas, and chemical toilet placement)."

REGULATION		TYPE OF WATERCOURSE/FEATURE						
		Class I watercourse or Perennial watercourses or waterbodies	Class II watercourse or Intermittent watercourses or wetlands	Class III watercourse or Ephemeral watercourses	Class IV watercourse or Man-made irrigations canals, water supply reservoirs, or hydroelectric canals, etc.	Spring	Perennial wet area or wetland	Seasonal wet area or wetland
California Forest Practice Rules & Act Equipment Limitation Zone (ELZ) or Watercourse and Lake Protection Zones (WLPZ) ¹	<30% slope	75-Foot WLPZ ¹	50-Foot WLPZ	25-Foot ELZ	See 916.4(c)	50-Foot WLPZ	50-Foot WLPZ	25-Foot ELZ
	30-50% slope	100-Foot WLPZ ¹	75-Foot WLPZ	50-Foot ELZ	See 916.4(c)	75-Foot WLPZ	75-Foot WLPZ	50-Foot ELZ
	>50% slope	150-Foot WLPZ ¹	100-Foot WLPZ	50-Foot ELZ	See 916.4(c)	100-Foot WLPZ	100-Foot WLPZ	50-Foot ELZ
Humboldt County General Plan, Conservation and Open Space Ordinance (non-TPZ parcels only) Streamside Management Areas (SMA) ²		100-Foot SMA	50-Foot SMA	50-Foot SMA	None	None	50-Foot SMA (begins at edge of the delineated wetland)	50-Foot SMA (begins at edge of the delineated wetland)
Humboldt County Ordinance No. 2559/ State Water Resources Control Board Order WQ 2017-0023-DWQ Riparian Setbacks (RS) ³		150-Foot RS	100-Foot RS	50-Foot RS	Established Riparian Vegetation Zone	150-Foot RS	100-Foot RS	100-Foot RS

¹ 14CCR 916.4(b)(3): "The width of the WLPZ shall be measured along the surface of the ground from the watercourse or lake transition line or in the absence of riparian vegetation from the top edge of the watercourse bank." Width of WLPZ varies with characteristics of Class I watercourse (i.e. confined channel, migrating channel, within coastal anadromy zone, etc.) and yarding method. See 14CCR 916.5 Table 1.

² measured as the horizontal distance from the top of bank or edge of riparian drip-line whichever is greater on either side of the watercourse; the width may be extended to 200 feet, measured as a horizontal distance from the top of bank, to include slides, or areas with visible evidence of slope instability. These widths apply to areas "outside of urban areas."

³ measured from the waterbody's bankfull stage (high flow water levels that occur every 1.5 to 2 years) or from the top edge of the waterbody bank in incised channels, whichever is more conservative.

Limitations and Considerations for Timberland Conversion Activities cont'd

Watercourses and Water Resources cont'd

Drying and Processing Building, Fuels Storage Area, Generator Shed, and Materials Storage Area 1 near Class III watercourse

Explanation: The Drying and Processing Building, Fuels Storage Area, Generator Shed, and Materials Storage Area 1 is located adjacent to an unnamed Class III watercourse to the east. This watercourse requires the following protections:

- 25-Foot ELZ per California Forest Practice Rules & Act - Because this site occupies productive timberland, the California Forest Practice Rules (CFPRs) would have applied to the construction of this site. Therefore, a minimum 25-foot ELZ (watercourse side-slopes less than 30%) would have been required surrounding this Class III watercourse. Timberland conversion or the harvesting of conifers and hardwoods is not prohibited within the Class III ELZ, so this project meets the watercourse protection standards of the CFPRs.
- 50-Foot SMA per Humboldt County General Plan, Grading and Open Space Ordinance – Because the parcel is zoned non-TPZ, the Humboldt County General Plan's Grading and Open Space Ordinance would have applied to the construction of this site, and County review and approval would have been required. Therefore, a minimum 50-foot SMA would have been required surrounding the Class III watercourse.
- 50-Foot riparian setback per the Humboldt County Ordinance No. 2559/State Water Resources Control Board Order WQ 2017-0023-DWQ - Ultimately, subsequent permitting via Ordinance No. 2559 and State Water Resources Control Board Order WQ 2017-0023-DWQ will require a minimum 50-foot riparian setback surrounding the Class II watercourse.

Drying and Processing Building, Fuels Storage Area, Generator Shed, and Materials Storage Area 1 near Class III watercourse cont'd

Recommendation: The RPF recommends removing all cultivation-related project materials The Drying and Processing Building, Fuels Storage Area, Generator Shed, and Materials Storage Area 1 within the most protective watercourse buffer (50-foot riparian setback) of the Class III watercourse in order to comply with the aforementioned regulations (Recommendation #1). Additionally, the RPF recommends replanting the area with conifer seedlings to improve timberland productivity and meet the intent of other rules and regulations promulgated to protect the beneficial uses of water (Recommendation #2).

Drying and Processing Building, Fuels Storage Area, Generator Shed, Materials Storage Area 1, and Materials Storage Area 2 near Mule Creek (Class I watercourse)

Explanation: The Drying and Processing Building, Fuels Storage Area, Generator Shed, and Materials Storage Area 1 as well as Materials Storage Area 2 lie adjacent to Mule Creek (a Class I watercourse) to the south. This watercourse requires the following protections:

- 75-Foot WLPZ per California Forest Practice Rules & Act - Because this site occupies productive timberland, the California Forest Practice Rules (CFPRs) would have applied to the construction of this site. Therefore, a minimum 75-foot WLPZ (watercourse side-slopes less than 30%) would have been required surrounding the Class I watercourse. Although limited conifer and hardwood harvesting may occur in the WLPZ, the CFPRs prohibit timber operations (including timberland conversion) within this zone unless approved by local permit.
- 100-Foot SMA per Humboldt County General Plan, Grading and Open Space Ordinance – Because the parcel is zoned non-TPZ, the Humboldt County General Plan's Grading and Open Space Ordinance would have applied to the construction of this site, and County review and approval would have been required. Therefore, a minimum 100-foot SMA would have been required surrounding the Class I watercourse.
- 150-Foot riparian setback per the Humboldt County Ordinance No. 2559/State Water Resources Control Board Order WQ 2017-0023-DWQ - Ultimately, subsequent permitting via Ordinance No. 2559 and State Water Resources Control Board Order WQ 2017-0023-DWQ will require a minimum 100-foot riparian setback surrounding the Class II watercourse.

Limitations and Considerations for Timberland Conversion Activities cont'd

Watercourses and Water Resources cont'd

Drying and Processing Building, Fuels Storage Area, Generator Shed, Materials Storage Area 1, and Materials Storage Area 2 near Mule Creek (Class I watercourse) cont'd

Recommendation: However, the RPF recommends removing all cultivation-related project materials from the Drying and Processing Building, Fuels Storage Area, Generator Shed, Materials Storage Area 1, and Materials Storage Area 2 within the 150-foot riparian setback of the Class I watercourse in order to comply with the aforementioned regulations (Recommendation #3). Additionally, the RPF recommends replanting the area with conifer seedlings to improve timberland productivity and meet the intent of other rules and regulations promulgated to protect the beneficial uses of water (Recommendation #4).

No other cultivation sites or associated areas exist within WLPZs or EEZs on the property. Overall, no conversion activities appear to have negatively impacted water resources.

Erosion Control for Logging Roads and Landings

- 14CCR 923.5(b): "Drainage facilities and structures shall be installed along all logging roads and all landings that are used for timber operations in sufficient number to minimize soil erosion and sediment transport and to prevent significant sediment discharge."
- 14CCR 923.5(q)(2): "In addition to the provisions listed under 14 CCR § 923.2(d)(2), all permanent and seasonal logging roads with a grade of 15 percent or greater that extend 500 continuous feet or more shall have specific erosion control measures stated in the plan."

New road construction and/or road maintenance associated with timberland conversion in question should (at a minimum) meet or exceed requirements stated in the California Forest Practice Rules despite its non-timber use. Compliance with Humboldt County's grading ordinance, Regional Water Board Order No. 2015-0023, and other regulations may require even higher standards. Therefore, this report shall assess the road system connecting cultivation sites and associated areas to the standards of logging roads and landings.

It does not appear that any new permanent or seasonal road construction or noticeable maintenance occurred concurrently with timberland conversion. TRC prepared a Lake and Streambed Alteration Agreement for the landowner which addresses all watercourse crossings on the property and prescribes erosion control measures according to best management practices. The RPF did not identify any *Significant Existing or Potential Erosion Sites* per 14CCR 895.1.

Design and Location of Logging Roads and Landings

- 14CCR 923.2(a)(2): "All logging roads and landings shall avoid unstable areas and connected headwall swales to the extent feasible and minimize activities that adversely affect them."
- 14CCR 923.2(a)(5): "All logging roads and landings shall be hydrologically disconnected from watercourses and lakes to the extent feasible to minimize sediment delivery from road runoff to a watercourse and reduce the potential for hydrologic changes that alter the magnitude and frequency of runoff delivery to a watercourse."
- 14CCR 923.2(a)(6): "All logging roads and landings shall include adequate drainage structures and facilities necessary to avoid concentrating and diverting runoff, to minimize erosion of roadbeds, landing surfaces, drainage ditches, sidecast and fills, to minimize the potential for soil erosion and sediment transport, and to prevent significant sediment discharge."
- 14CCR 923.4(h): "Waste organic material, such as uprooted stumps, cull logs, accumulations of limbs and branches, and unmerchantable trees, shall not be buried in logging road or landing fills. Wood debris or cull logs and chunks may be placed and stabilized at the toe of fill to restrain excavated soil from moving downslope."
- 14CCR 923.4(j), which states: "Where constructed fills will exceed three feet in vertical thickness, fill slopes shall be inclined no greater than 65 percent."
- 14CCR 923.5(l): "Bare soil on logging roads or landing cuts, fills, transported spoils, or sidecast that is created or exposed by timber operations shall be stabilized to the extent necessary to minimize soil erosion and sediment transport and to prevent significant sediment discharge."
- 14CCR 923.5(o): "Soil stabilization treatments shall be in place upon completion of operations for the year of use or prior to the extended wet weather period, whichever come first. An exception is that bare areas created during the extended wet weather period shall be treated prior to the start of rain that generates overland flow, or within 10 days of the creation of the bare areas(s), whichever is sooner, or as agreed to by the Director."

While its recognized that the cultivation sites and associated areas are not used as log landings, the design and location of the graded flats should (at a minimum) meet or exceed similar requirements stated in the California Forest Practice Rules for log landings. Compliance with Humboldt County's grading ordinance, Regional Water Board Order No. 2015-0023, and other regulations will require even higher standards.

Limitations and Considerations for Timberland Conversion Activities cont'd

Design and Location of Logging Roads and Landings cont'd

Therefore, this report shall assess the cultivation sites and associated areas' graded flats to the standards of a log landing.

Review of CGS-CDF's Geomorphic Features Map (North Coast Watersheds Mapping, DMG CD 99-002, 1999) and McLaughlin's geology quadrangles shows no landsliding or geologic concerns near the project area. Based upon the California Licensed Foresters Association's "Guidelines to Determining the Need for Input from a Licensed Geologist During THP Preparation", the RPF determined that the timberland conversion areas would not have necessarily required consultation with a licensed geologist. Additionally, it does not appear that any cultivation sites or associated areas are located within close proximity to unstable areas or connected headwall swales.

Cultivation Site 2

Explanation: The southwestern fillslope of Cultivation Site 2 is more than three feet in vertical thickness and exceeds the maximum incline of 65% (1.5:1, horizontal to vertical) required by the CFPRs. It appears the graded flat lacks proper drainage structures as stormwater runoff has concentrated on the western end of Cultivation Site 2 resulting in erosion of the southwestern fill material. Approximately 30 feet of the fillslope is failing and sliding toward its angle of repose. The fillslope surrounding the slide has not been properly treated for erosion control. Though the site is well outside of the required watercourse protection buffers, continued fillslope failure may deliver sediment downslope toward the Class III watercourse below.

Recommendations: The RPF recommends pulling back the southwestern fillslope surrounding the slide to no more than 65% slope, or, alternatively, consulting with a licensed engineer or geologist to inspect and assess the fillslope in its existing condition and determine appropriate mitigations if needed (Recommendation #5). If the fillslope is laid back, it should be outsloped to avoid further runoff concentration. Due to the potential threat of sediment transport to the watercourse below, the RPF also recommends seeding and mulching any bare soil along the southwestern fillslope to stabilize erodible fill, minimize soil erosion and sediment transport, and prevent significant sediment discharge per 14CCR 923.5(l) and (o) (Recommendation #6).

All other fillslopes appear stable. All other fillslopes appear devoid of organic materials and employ proper erosion control measures. All other cultivation sites and associated areas exhibit proper erosion control treatments including seeding, mulching, straw wattle placement, jute netting, rock armored buttressing, etc.

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."

Limitations and Considerations for Timberland Conversion Activities cont'd

Slash, Woody Debris, and Refuse Treatment cont'd

Most slash and woody debris generated from the conversion activities has been effectively treated; however, remnant slash and woody debris still exist along the western and southeastern edges of Cultivation Site 2, the seasonal road south of Cultivation Site 4, the ATV trail south of the Water Storage Area, along the seasonal road south of the Drying and Storage Building, and the southern edge of the Drying and Processing Building, Fuels Storage Area, Generator Shed, and Materials Storage Area 1 (see Photos 15& 16). All remaining slash shall be treated according to the CFPRs (see Recommendation 5).

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"
- 14 CCR 1038 (i): "No tree that existed before 1800 AD and is 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 shall be harvested unless done so under the conditions or criteria set forth in subsection 1038(h).

A query of the California Natural Diversity Database (CNDDDB) on November 5th, 2018, showed observations of five (5) sensitive, rare, threatened, or endangered species or species of special concern within a 1.3-mile radius biological assessment area (BAA) surrounding the cultivation sites and associated areas. These species include *Rhyacotriton variegatus* (southern torrent salamander), *Ascaphus truei* (Pacific tailed frog), *Falco peregrinus anatum* (American peregrine falcon), *Pekania pennanti* (fisher – West Coast DPS), and *Gilia capitata ssp. pacifica* (Pacific gilia). See details in the "Multiple Occurrences per Page" CNDDDB List. All observations are more than 1,600 feet away from the nearest cultivation site or associated area though habitat exists for all five species within the property. Please note that the observation of the American peregrine falcon, which covers the entirety of the Larabee Valley USGS 7.5' Quadrangle, is *not* a concern to the project. This polygon is widely extended to protect the sensitive location of the species observation. The RPF has reviewed the true location and concludes that the conversion activities caused no negative impact to this species. No individuals or evidence of these five species were observed during the TRC field assessment of the project area. Additionally, no individuals of other sensitive, rare, threatened, or endangered species or species of special concern were observed either.

A query of the CNDDDB revealed no (0) known Northern Spotted Owl Activity Center (NSO AC) within a 1.3-mile radius BAA surrounding the cultivation sites and associated areas. No evidence of NSO individuals was observed during the TRC field assessment though habitat exists on the property.

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 definitive symptoms, signs, or evidence of oak mortality were observed (*Oak Mortality Disease Control*). According to UC Berkeley's Mobile SOD Map, in 2014, one "Bay/Other" tree known as HUCE14422 tested negative for SOD infection within a one-mile radius of the cultivation sites and associated areas. No risk assessment was made at the property. The conversion activities do not appear to have impacted forest health. No other major forest health issues were observed during the field assessment.

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 or historical sites were observed during the TRC site visit. The RPF's designee 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 Brita Rustad, a certified archaeological surveyor with current CALFIRE Archeological Training (Archeological Training Course #161). The survey consisted of examining boot scrapes, rodent disturbances, natural and manmade areas of exposed soils, and road and cultivation site surface.

Limitations and Considerations for Timberland Conversion Activities cont'd

Cultural Resources cont'd

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 (see attached Tribal Contacts List and Example Native American Notification Letter).

Recommendations

In summary, a total of 1.57 acres of unauthorized timberland conversion has occurred within APN 210-073-013 for cultivation-related purposes. This total does not exceed the three-acre conversion exemption maximum. The conversion activities conducted on the property do *not* comply with the standards set forth in the California Forest Practice Act and the California Forest Practice Rules. The RPF recommends the following measures for the converted areas:

- 1) Remove cultivation activities from Drying and Processing Building, Generator Shed, Fuels Storage Area, and Materials Storage Area 1 within 50-Foot Riparian Setback/25-Foot ELZ of unnamed Class III watercourse: Remove all cultivation infrastructure, materials, and waste (including all cannabis plants, structures, soils spoils, fence line, and any other cultivation-related project materials) within 50 feet of the bank of the unnamed Class III watercourse east of the site.
- 2) Replant Drying and Processing Building, Generator Shed, Fuels Storage Area, and Materials Storage Area 1 within 50-Foot Riparian Setback/25-Foot ELZ of unnamed Class III watercourse: Replant native trees to CFPR stocking standards (14 CCR 1071) within 50 feet of the unnamed Class III watercourse east of the site. Though restoration methods may vary, the RPF recommends the following:
 - i) Replant locally-sourced Group A commercial species (Douglas-fir seedlings, CA Seed Zone 340, Elevation 2,700-3,000 feet recommended) at a level of 450 trees per acre (approximately 10-foot uniform spacing between seedlings). Follow planting techniques in Appendices A-D. Replanting approximately **0.11 acres** at this site requires approximately **50 seedlings**.
 - ii) Monitor growth and success of planted seedlings to ensure a 300-point count stocking level (i.e. 300 trees per acre) is maintained 2-3 years after planting.
 - (1) If seedling success is less than 55%, repeat the replanting process.
 - (2) Consider consulting an RPF for continued timber management in this area.
- 3) Remove cultivation activities from Drying and Processing Building, Generator Shed, Fuels Storage Area, and Materials Storage Area 1, and from Materials Storage Area 2 within 150-Foot Riparian Setback/75-Foot WLPZ of Mule Creek: Remove all cultivation infrastructure, materials, and waste (including all cannabis plants, structures, soils spoils, fence line, and any other cultivation-related project materials) within 150 feet of the bank of the Class I Mule Creek south of the site and within 150 feet of the Mule Creek (Class I watercourse) south of the site.
- 4) Replant Drying and Processing Building, Generator Shed, Fuels Storage Area, and Materials Storage Area 1, and from Materials Storage Area 2 within 150-Foot Riparian Setback/75-foot Class I WLPZ of Mule Creek: Replant native trees to CFPRs stocking standards (14 CCR 1071) within 150 feet of Class I Mule Creek south of the site. Though restoration methods may vary, the RPF recommends the following:
 - i) Replant locally-sourced Group A commercial species (Douglas-fir seedlings, CA Seed Zone 340, Elevation 2,700-3,000 feet recommended) at a level of 450 trees per acre (approximately 10-foot uniform spacing between seedlings). Follow planting techniques in Appendices A-D. Replanting approximately **0.02 acres** at this site requires approximately **10 seedlings**.
 - ii) Monitor growth and success of planted seedlings to ensure a 300-point count stocking level (i.e. 300 trees per acre) is maintained 2-3 years after planting.
 - (1) If seedling success is less than 55%, repeat the replanting process.
 - (2) Consider consulting an RPF for continued timber management in this area.

Recommendations cont'd

- 5) Stabilize Cultivation Site 2 Fillslope: The RPF recommends either of the following measures to stabilize the southwestern fillslope of Cultivation Site 2:
 - i) Pull back approximately 100 feet of the southwestern fillslope of Cultivation Site 2 (surrounding the 30-foot slide) to a 2:1 horizontal to vertical ratio (less than 65% slope) to prevent further erosion. Ensure the new pulled back fillslope employs outsloped drainage to prevent further concentration of stormwater runoff in the western portion of the graded flat.

or
 - ii) Consult with a licensed engineer or geologist to inspect and assess the fillslope in its existing condition and determine appropriate mitigations if needed.
- 6) Apply erosion control to the southwestern fillslope of Cultivation Site 2: Seed and mulch any bare soil along the southwestern fillslope to stabilize erodible fill, minimize soil erosion and sediment transport, and prevent significant sediment discharge" per 14CCR 923.5(l) and (o).
- 7) Slash and Woody Debris Treatment: Nearby Cultivation Site 2; Cultivation Site 4; Cultivation Site 5; the Water Storage Area; the Drying & Storage Building; and the Drying & Process Building, Generator Shed, Fuels Storage Area, and Materials Storage Area 1, treat all slash piles and woody debris as soon as possible (and during an appropriate time of year) using one of the following methods: burying, chipping and spreading, piling and burning, or removal from site.

Sincerely,



Chris Carroll, RPF #2628
Timberland Resource Consultants
165 South Fortuna Blvd, Suite 4
Fortuna, CA 95540
(707) 725-1897
trc@timberlandresource.com

Enclosures:

- General Location Map
- Overview Map
- DOQ Map
- LSA Map
- Recommendations Map
- GLG, LLC – CNDDDB Map
- GLG, LLC – NSO Map
- "Multiple Occurrences per Page" CNDDDB Species List
- Tribal Contacts List
- Example Native American Notification Letter
- Appendices A-D: Planting Techniques
- Photos
- References

GLG, LLC - Timberland Conversion Evaluation

General Location Map

APN: 210-071-013

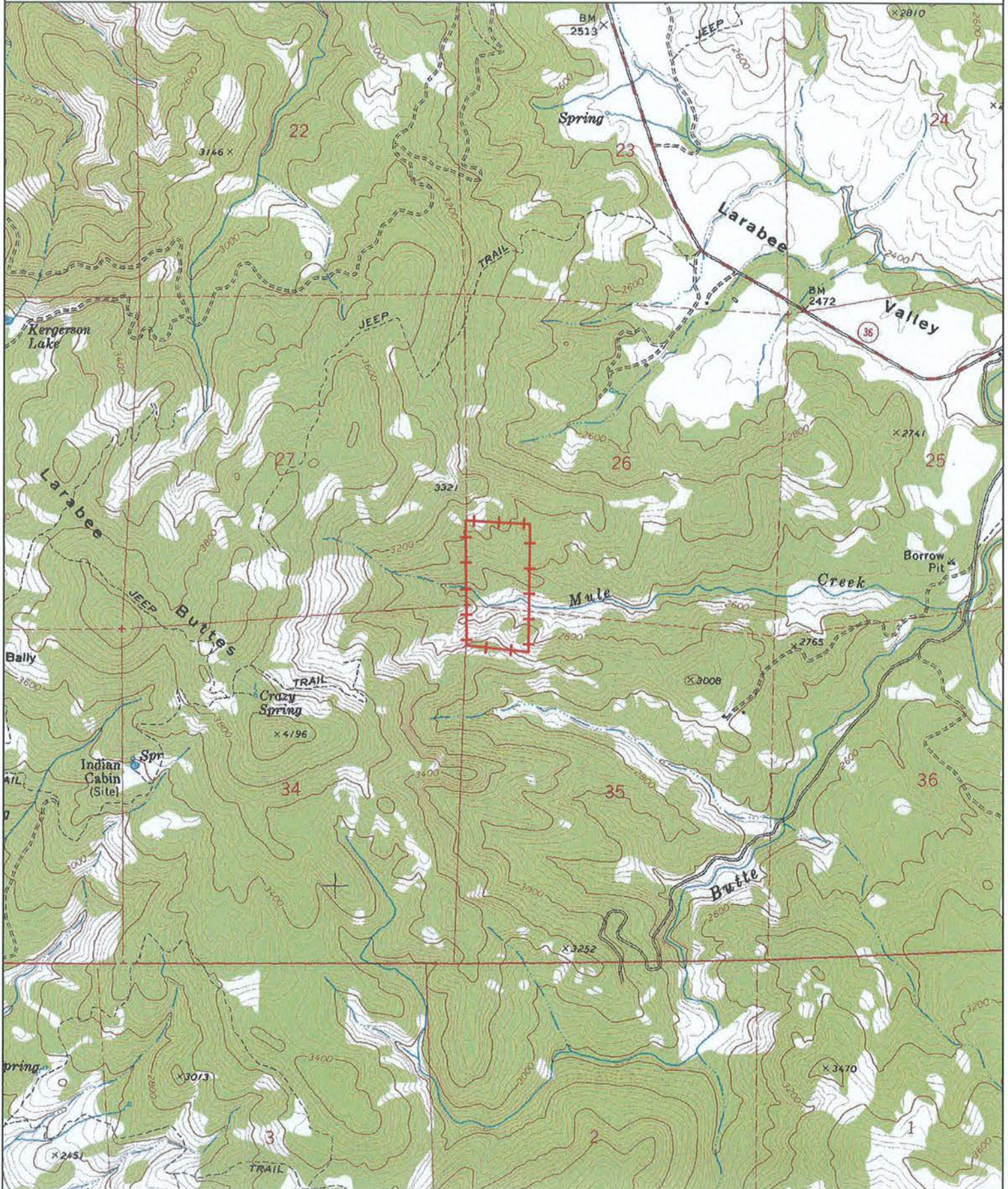
Revised: 01/08/18



W 1/2 of SW 1/4 of Sec. 26; T1N, R4E;
HB&M, Humboldt County
USGS 7.5' Quad: Larabee Valley
Map Scale: 1" = 2,000'



*The property boundary depicted is adapted from the Humboldt County Assessor's Parcel Map and the LSA Site Map. The property has been adjusted approximately 600 feet to the south. This mapped boundary may not precisely align with the geographic boundary on the ground. The RPF is not responsible for surveying property boundaries.



GLG, LLC - Timberland Conversion Evaluation Overview Map

APN: 210-071-013

W 1/2 SW 1/4 of Sec. 26, T1N, R4E;
 HB&M, Humboldt County
 USGS 7.5' Quad: Larabee Valley
 Map Scale: 1" = 150'
 Contour Intervals = 40'



Revised: 12/05/18

Property Features

- Property Boundary*
- Cultivation Sites & Associated Areas

Watercourses

- Class I
- Class III

Roads

- Permanent Road
- ATV Trail

Other Features

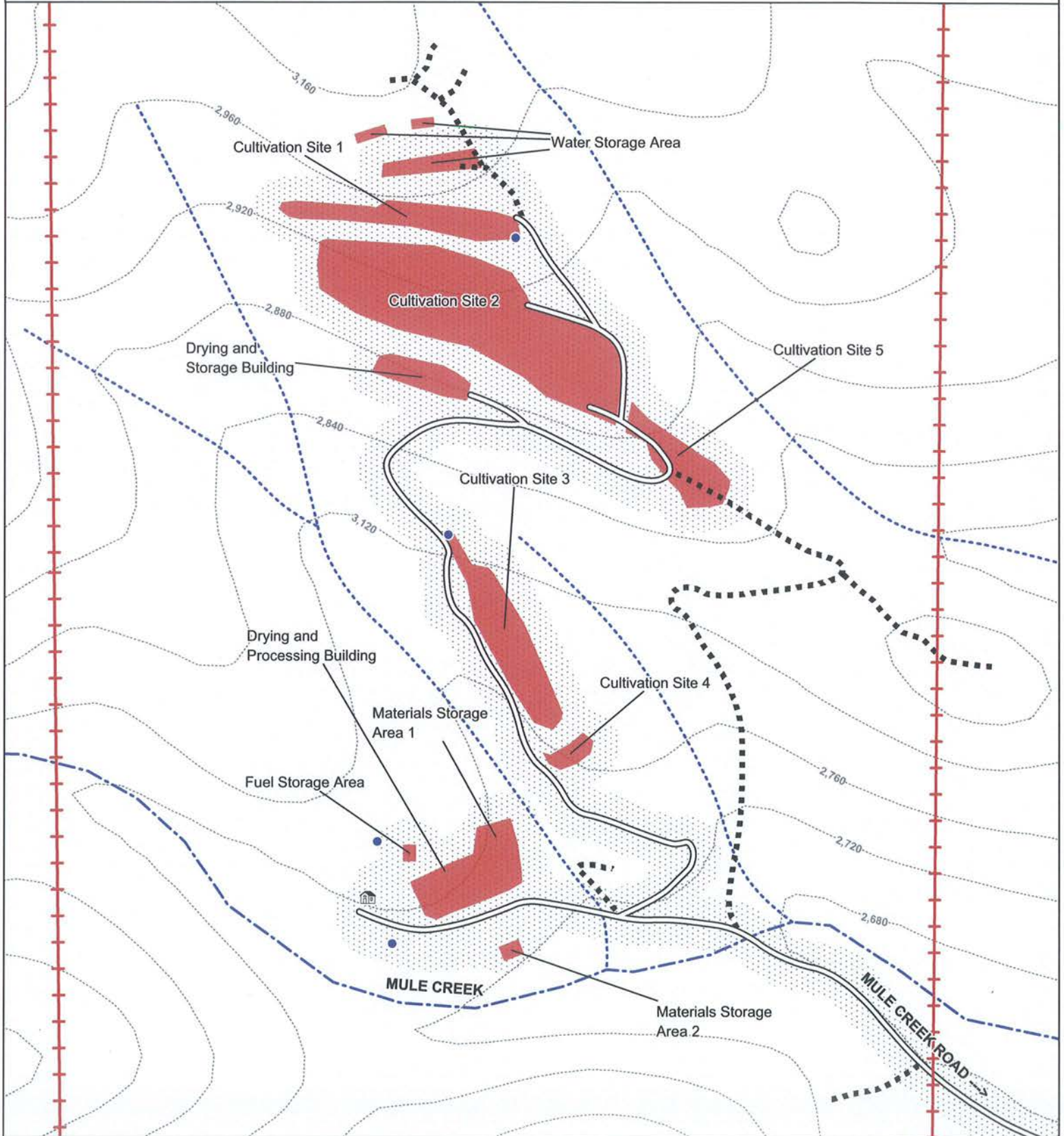
- House
- Water Storage Tank(s)

Inspected Area**



*The property boundary depicted is adapted from the Humboldt County Assessor's parcel map and LSA Map. This mapped boundary may not precisely align with the geographic boundary on the ground. The RPF is not responsible for surveying property boundaries.

**The shaded area represents the extent of the inspected area. All watercourses and landscape features within the shaded area are mapped to the best of the RPF's ability. All features mapped outside of the inspected area are adapted from the Quadrangle and WRPP Site Map; accuracy may vary.



GLG, LLC - Timberland Conversion Evaluation

DOQ Map

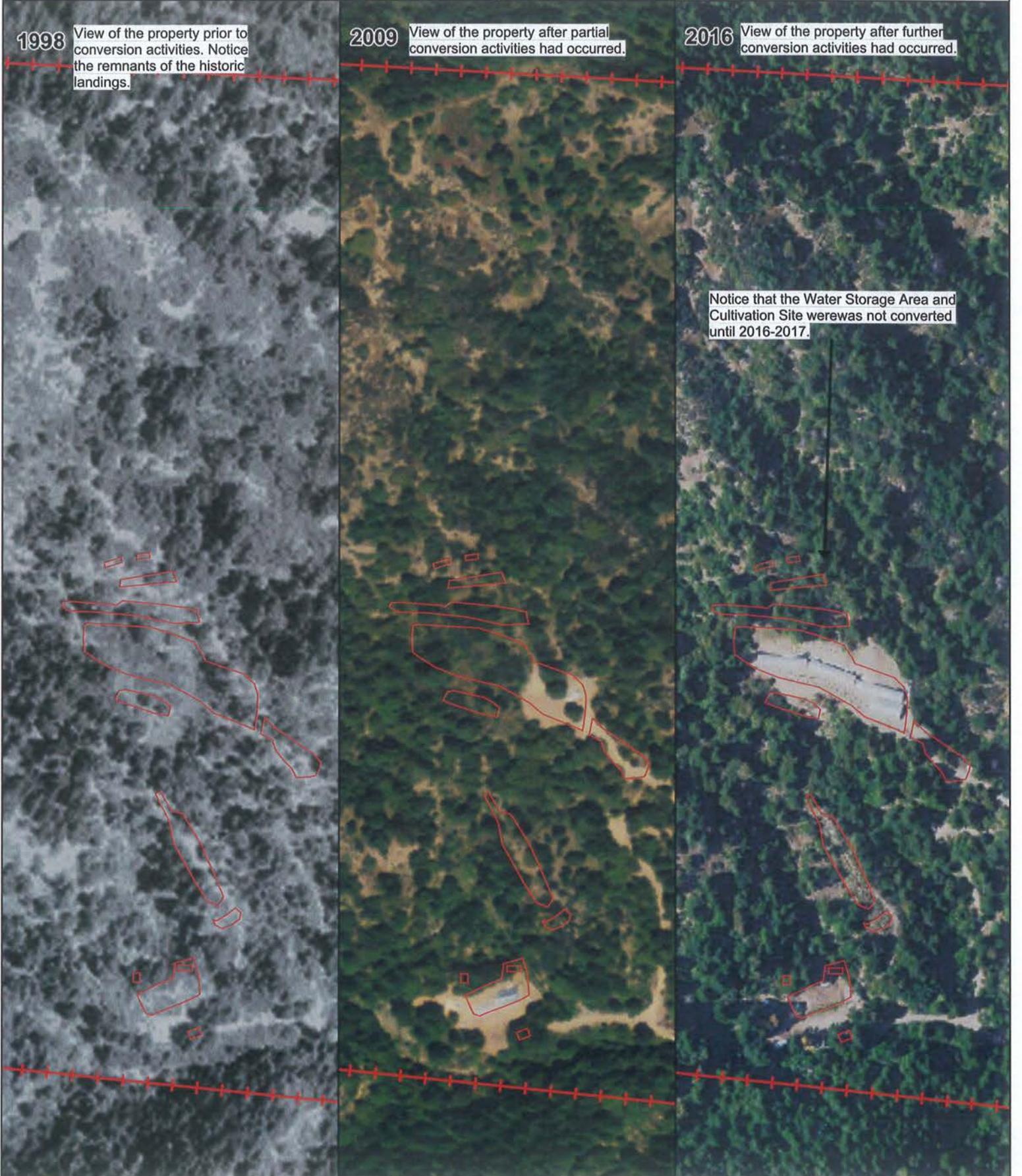
APN: 210-071-013

W 1/2 of SW 1/4 of Sec. 26, T1N, R4E;
HB&M, Humboldt County
USGS 7.5' Quad: Larabee Valley
Map Scale: 1" = 250'



Revised: 12/06/18



















*The property boundary depicted is adapted from the Humboldt County Assessor's parcel map and LSA Map. This mapped boundary may not precisely align with the geographic boundary on the ground. The RPF is not responsible for surveying property boundaries.



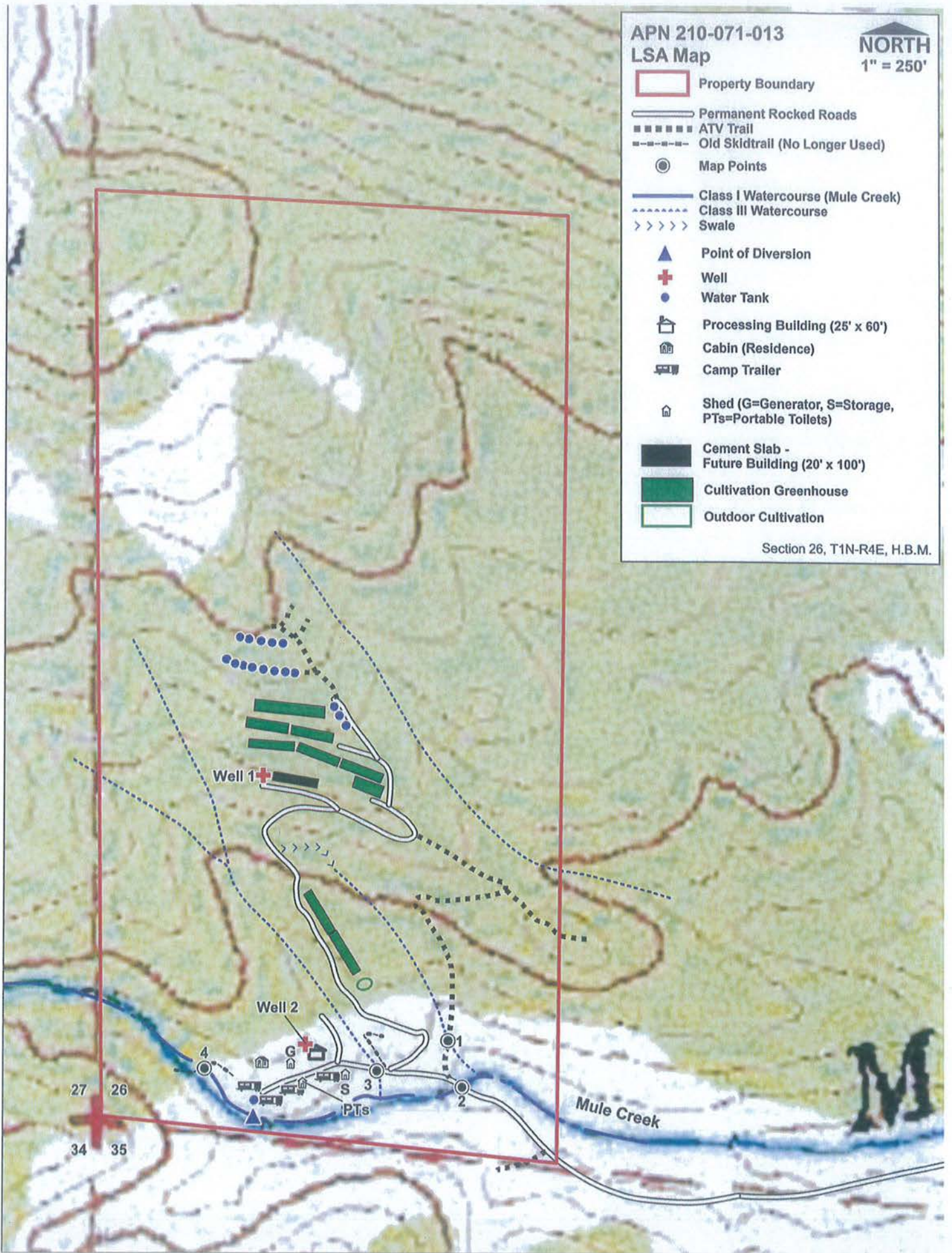
APN 210-071-013

LSA Map

NORTH
1" = 250'

-  Property Boundary
-  Permanent Rocked Roads
-  ATV Trail
-  Old Skidtrail (No Longer Used)
-  Map Points
-  Class I Watercourse (Mule Creek)
-  Class III Watercourse
-  Swale
-  Point of Diversion
-  Well
-  Water Tank
-  Processing Building (25' x 60')
-  Cabin (Residence)
-  Camp Trailer
-  Shed (G=Generator, S=Storage, PTs=Portable Toilets)
-  Cement Slab - Future Building (20' x 100')
-  Cultivation Greenhouse
-  Outdoor Cultivation

Section 26, T1N-R4E, H.B.M.



GLG, LLC - Timberland Conversion Evaluation Recommendations Map

APN: 210-071-013

W 1/2 SW 1/4 of Sec. 26, T1N, R4E;
 HB&M, Humboldt County
 USGS 7.5' Quad: Larabee Valley
 Map Scale: 1" = 150'
 Contour Intervals = 40'
 Revised: 01/02/19

Watercourses

- Class I
- Class III

Roads

- Permanent Rocked
- ATV Trail



Property Features

- Property Boundary*
- Cultivation Sites & Associated Areas

Other Features

- House
- Water Storage Tank(s)

Watercourse Buffers

- Riparian Setback (per Humboldt County Ordinance No. 2559/State Water Resources Control Board)
- ELZ/WLPZ (per CFRPs)

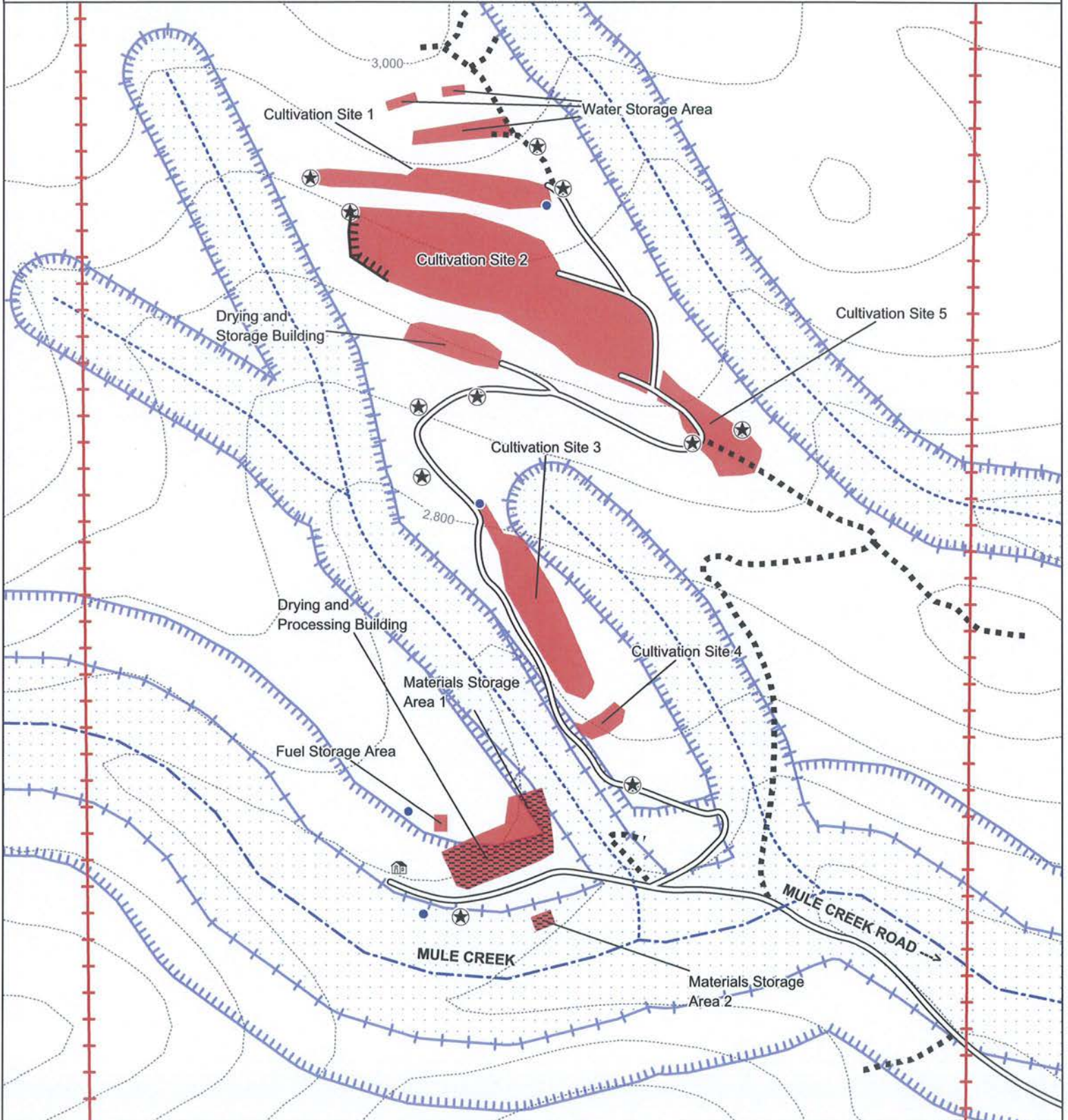
Recommendations

- Treat slash/woody debris
- Remove cultivation activities & replant seedlings
- Pull back fillslope & apply erosion control or consult geologist/engineer



*The property boundary depicted is adapted from the Humboldt County Assessor's parcel map and LSA Map. This mapped boundary may not precisely align with the geographic boundary on the ground. The RPF is not responsible for surveying property boundaries.

**The shaded area represents the extent of the inspected area. All watercourses and landscape features within the shaded area are mapped to the best of the RPF's ability. All features mapped outside of the inspected area are adapted from the Quadrangle and WRPP Site Map; accuracy may vary.



GLG, LLC - NSO Map

Unprocessed Data from
 CNDDDB Online Field
 Survey Form [ds1002]

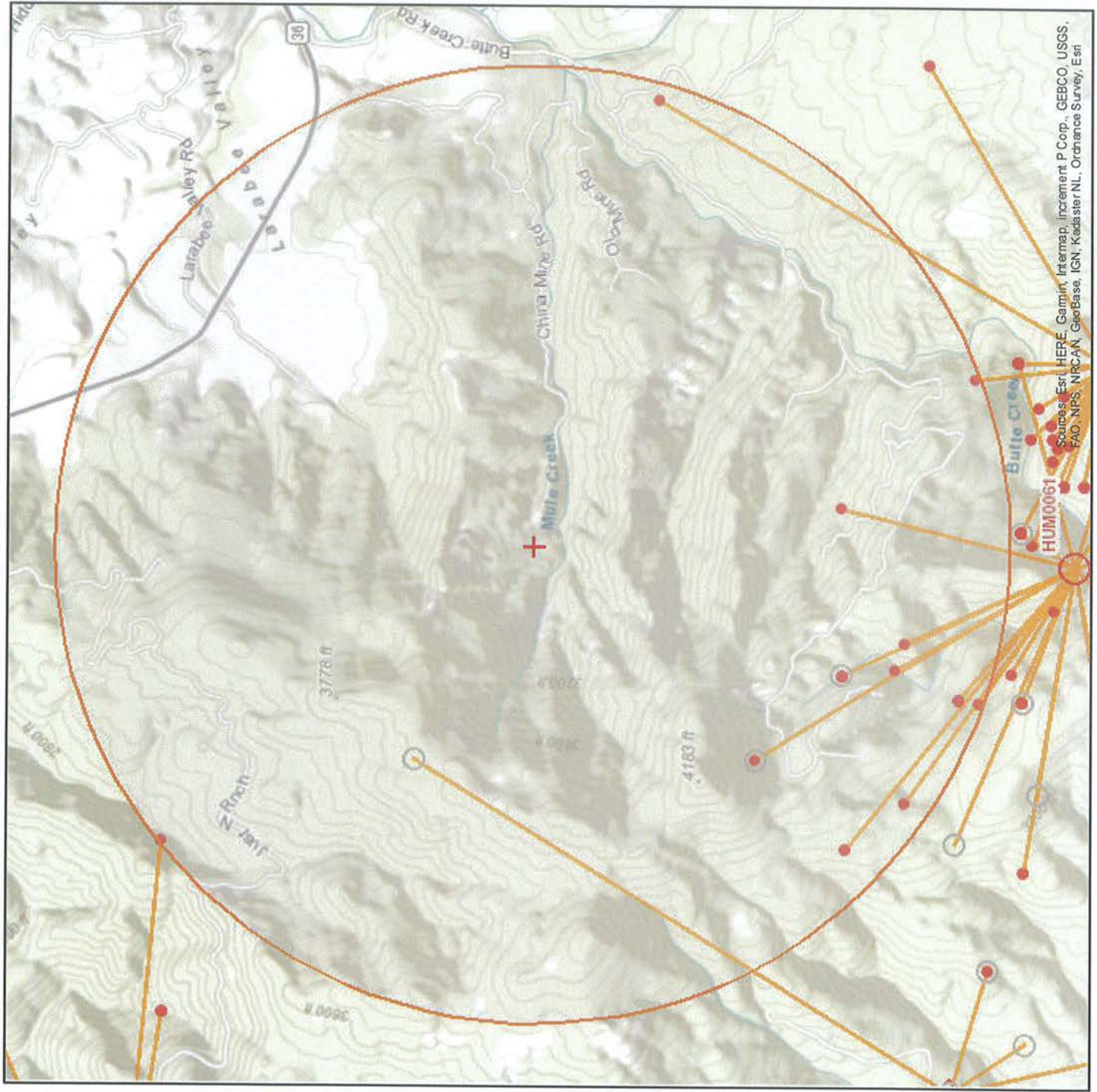
- ▲ Animal
- ▲ Plant

Spotted Owl Observations
 [ds704]

- Positive Observation
- Negative Observation
- Activity Center
- Not Valid Activity Center
- ◇ Abandoned

Spotted Owl Observations
 Spider Diagram [ds705]

-



November 5, 2018

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: BIOS selection

<i>Rhyacotriton variegatus</i>		Element Code: AAAAJ01020	
southern torrent salamander			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3G4
	State: None		State: S2S3
	Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive		
Habitat:	General: COASTAL REDWOOD, DOUGLAS-FIR, MIXED CONIFER, MONTANE RIPARIAN, AND MONTANE HARDWOOD-CONIFER HABITATS. OLD GROWTH FOREST.		
	Micro: COLD, WELL-SHADED, PERMANENT STREAMS AND SEEPAGES, OR WITHIN SPLASH ZONE OR ON MOSS-COVERED ROCKS WITHIN TRICKLING WATER.		
Occurrence No.	80	Map Index: 24034	EO Index: 22262
Occ. Rank:	Unknown	Presence: Presumed Extant	Element Last Seen: 1985-05-14
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Site Last Seen: 1985-05-14
			Record Last Updated: 2016-11-02
Quad Summary:	Larabee Valley (4012346)		
County Summary:	Humboldt		
Lat/Long:	40.40624 / -123.70388	Accuracy:	1 mile
UTM:	Zone-10 N4473085 E440274	Elevation (ft):	3200
PLSS:	T01S, R04E, Sec. 02 (H)	Acres:	0.0
Location:	HEADWATERS OF BUTTE CREEK, NW OF CHARLES MOUNTAIN, ABOUT 8 MILES SW OF THE COMMUNITY OF DINSMORE.		
Detailed Location:	SALAMANDERS FOUND AT TWO STUDY LOCATIONS DESCRIBED AS: CLOUDED, T1S, R4E, S2 AT 3150 FT ELEVATION, AND: BUTTE CREEK, T1S, R4E, S2&3 AT 3217 FT ELEVATION. MAPPED GENERALLY TO SEC 2 AND 3.		
Ecological:			
General:	SPECIES DETECTED DURING USFS OLD GROWTH STUDY BY WELSH AND LIND; 1 FOUND DURING AQUATIC SAMPLING 1984-85, 4 FOUND THROUGH TIME-CONSTRAINED SEARCHES IN 1985.		
Owner/Manager:	BLM, UNKNOWN		



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Ascaphus truei

Element Code: AAABA01010

Pacific tailed frog

Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4
	State: None		State: S3S4
	Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern		
Habitat:	General: OCCURS IN MONTANE HARDWOOD-CONIFER, REDWOOD, DOUGLAS-FIR & PONDEROSA PINE HABITATS.		
	Micro: RESTRICTED TO PERENNIAL MONTANE STREAMS. TADPOLES REQUIRE WATER BELOW 15 DEGREES C.		

Occurrence No.: 32	Map Index: 24034	EO Index: 6321	Element Last Seen: 1985-07-29
Occ. Rank: Unknown		Presence: Presumed Extant	Site Last Seen: 1985-07-29
Occ. Type: Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2017-11-21

Quad Summary: Larabee Valley (4012346)

County Summary: Humboldt

Lat/Long: 40.40624 / -123.70388	Accuracy: 1 mile
UTM: Zone-10 N4473085 E440274	Elevation (ft): 3200
PLSS: T01S, R04E, Sec. 02 (H)	Acres: 0.0

Location: HEADWATERS OF BUTTE CREEK, NW OF CHARLES MOUNTAIN, ABOUT 8 MILES SW OF THE COMMUNITY OF DINSMORE.

Detailed Location: STUDY SITES DESCRIBED AS BUTTE CREEK, T1S, R4E, SECTIONS 2 & 3, AT 3217 FOOT ELEVATION, AND ALSO CLOUDED, T1S, R4E, SECTION 2 AT 3150 FOOT ELEVATION.

Ecological: SITES WERE IN OLD-GROWTH STANDS, ESTIMATED AT 220 AND 292 YEARS OF AGE.

General: AT LEAST 4 COLLECTED IN 1985.

Owner/Manager: BLM, UNKNOWN



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Falco peregrinus anatum

Element Code: ABNKD06071

American peregrine falcon

Listing Status:	Federal: Delisted	CNDDDB Element Ranks:	Global: G4T4
	State: Delisted		State: S3S4
	Other: CDF_S-Sensitive, CDFW_FP-Fully Protected, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: NEAR WETLANDS, LAKES, RIVERS, OR OTHER WATER; ON CLIFFS, BANKS, DUNES, MOUNDS; ALSO, HUMAN-MADE STRUCTURES.		
	Micro: NEST CONSISTS OF A SCRAPE OR A DEPRESSION OR LEDGE IN AN OPEN SITE.		

*** SENSITIVE ***

Occurrence No.	5	Map Index:	42978	EO Index:	42978	Element Last Seen:	1995-04-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1995-04-19	Record Last Updated:	2000-05-17
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Larabee Valley (4012346)

County Summary: Humboldt

Lat/Long:		Accuracy:	80 meters
UTM:		Elevation (ft):	2775
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

General:

Owner/Manager:



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Pekania pennanti

Element Code: AMAJF01021

fisher - West Coast DPS

Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5T2T3Q
	State: Threatened		State: S2S3
	Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive		
Habitat:	General: INTERMEDIATE TO LARGE-TREE STAGES OF CONIFEROUS FORESTS AND DECIDUOUS-RIPARIAN AREAS WITH HIGH PERCENT CANOPY CLOSURE.		
	Micro: USES CAVITIES, SNAGS, LOGS AND ROCKY AREAS FOR COVER AND DENNING. NEEDS LARGE AREAS OF MATURE, DENSE FOREST.		

Occurrence No.	612	Map Index: 76850	EO Index: 77790	Element Last Seen:	2009-09-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-09-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-10-05

Quad Summary: Larabee Valley (4012346)

County Summary: Humboldt

Lat/Long:	40.41876 / -123.71150	Accuracy:	80 meters
UTM:	Zone-10 N4474480 E439638	Elevation (ft):	3550
PLSS:	T01N, R04E, Sec. 34, S (H)	Acres:	0.0

Location: BUTTE CREEK HEADWATERS, SE OF LARABEE BUTTES, ABOUT 2.1 MI SW OF HWY 36 AT RUN DOWN ACRES ROAD.

Detailed Location: SITE = "LARABEE BUTTE 1." MAPPED TO PROVIDED COORDINATES.

Ecological:

General: FISHER DETECTED AT A BAITED & SCENTED DIGITAL INFRARED CAMERA STATION ON 12 SEP 2009; STATION REBAITED WEEKLY & OPERATIONAL FROM 10 AUG 2009. BEAR(S) ALSO DETECTED.

Owner/Manager: BLM



Multiple Occurrences per Page
California Department of Fish and Wildlife
California Natural Diversity Database



Gilia capitata ssp. pacifica

Element Code: PDPLM040B6

Pacific gilia

Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5T3
	State: None		State: S2
	Other: Rare Plant Rank - 1B.2		
Habitat:	General: COASTAL BLUFF SCRUB, CHAPARRAL, COASTAL PRAIRIE, VALLEY AND FOOTHILL GRASSLAND.		
	Micro: 5-1345 M.		

Occurrence No.: 48	Map Index: 91569	EO Index: 92628	Element Last Seen: 2002-06-25
Occ. Rank: Unknown		Presence: Presumed Extant	Site Last Seen: 2002-06-25
Occ. Type: Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2014-02-13

Quad Summary: Larabee Valley (4012346)

County Summary: Humboldt

Lat/Long: 40.44324 / -123.68116	Accuracy: 1 mile
UTM: Zone-10 N4477177 E442233	Elevation (ft): 2195
PLSS: T01N, R04E, Sec. 24 (H)	Acres: 0.0

Location: LARABEE VALLEY, ATWELL PRAIRIE.

Detailed Location: EXACT LOCATION UNKNOWN, UNABLE TO LOCATE ATWELL PRAIRIE. MAPPED AS BEST GUESS BY CNDDDB IN THE VICINITY OF LARABEE VALLEY, WHICH IS HIGHER THAN GIVEN ELEVATION OF 669 M.

Ecological: PRAIRIE.

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2002 COLLECTION BY LEPPIG. NEEDS MAP DETAIL.

Owner/Manager: UNKNOWN

TRIBAL CONTACTS – HUMBOLDT COUNTY

(Southern Division – Loleta to Mendocino County Line)

Updated July 2, 2018

Native American Heritage Commission
1550 Harbor Blvd., Room 100
West Sacramento, CA 95691
(916) 373-3710
FAX (916) 373-5471
Attn: Ms. Gayle Totton gayle.totton@nahc.ca.gov

Bear River Band of Rohnerville Rancheria*
Barry Brenard, Chairman
Erika Cooper, Tribal Historic Preservation Officer
266 Kiesner Road
Loleta, CA 95551
Tribal Affiliation: Wiyot, Mattole
(707) 733-1900 / (707) 733-1723 Fax

InterTribal Sinkyone Wilderness Council
Hawk Rosales, Executive Director
P. O. Box 1523
Ukiah, CA 95482
Tribal Affiliation: Mattole, Sinkyone
(707) 468-9500

Round Valley Indian Tribes of the Round Valley Reservation*
Stephanie Britton, Tribal Historic Preservation Officer
77826 Covelo Road, Hwy 162
Covelo, CA 95428
Tribal Affiliation: Yuki, Pit River, Achomawi, Pomo, Conkow, Wailaki, Nomlaki, Wintu
(707) 983-6194 / (707) 983-6128 Fax
Cell: (707) 472-8668
sbritton@rvit.org

Wailaki Tribe
Louis Hoaglin Sr., Chairman
P.O. Box 684
Laytonville, CA 95454
Tribal Affiliation: Wailaki
(707) 223-6366
(707) 223-6367

Wiyot Tribe*
Ted Hernandez, Chairman
Thomas Torma, Cultural Director/Tribal Historic Preservation Officer
1000 Wiyot Drive
Loleta, CA 95551
Tribal Affiliation: Wiyot
(707) 733-5055 / (707) 733-5601 Fax



165 South Fortuna Boulevard, Fortuna, CA 95540
707-725-1897 • fax 707-725-0972
trc@timberlandresource.com

October 30, 2018

Native American Heritage Commission
Attn: Ms. Gayle Totton
1550 Harbor Blvd., Room 100
West Sacramento, CA 95691

Dear Ms. Gayle Totton:

As the Registered Professional Forester preparing a potential Conversion Exemption per 14CCR 1104.1 for HiGrade LLC, I am required by the California Forest Practice Rules to notify all Native Americans of this proposed operation with the following information:

1. TIMBER OWNER(S) OF RECORD: HiGrade LLC

Address: 1214 E Cardinal Lane

City: Mt. Prospect State: IL Zip: 60056 Phone: Neal Patel (847) 456-0773

2. TIMBERLAND OWNER(S) OF RECORD: HiGrade LLC

Address: 1214 E Cardinal Lane

City: Mt. Prospect State: IL Zip: 60056 Phone: Neal Patel (847) 456-0773

3. LICENSED TIMBER OPERATOR(S): TBD

4. REGISTERED PROFESSIONAL FORESTER PREPARING NOTICE: Name Chris Carroll RPF Number 2628

Address Timberland Resource Consultants, 165 South Fortuna Blvd, Suite 4

City Fortuna State CA Zip 95540 Phone (707) 725-1897

5. AGENCY OF HUMBOLDT COUNTY RESPONSIBLE FOR LAND USE CHANGES: Humboldt County Planning Department

6. PROJECT LOCATION: Located approximately 1.6 air miles southwest of the intersection of Highway 36 and China Mine Road and 6.4 air miles southwest of Dinsmore, CA in the W ½ of SW ¼ Section 26, Township 1 North, Range 4 East, Humboldt County, APN 210-071-013; located on the Larabee Valley USGS 7.5' Quadrangle. To access the property from eastbound Highway 36, turn right on to China Mine Road; continue for approximately 2 miles to arrive at the property through a locked gate.

7. TYPE OF CONVERSION: This is a potential conversion from timberland to agriculture and the maximum size of the conversion is less than 3 acres.

Sincerely,



Chris Carroll, RPF #2628
Timberland Resource Consultants

GLG, LLC - Timberland Conversion Evaluation General Location Map

APN: 210-071-013

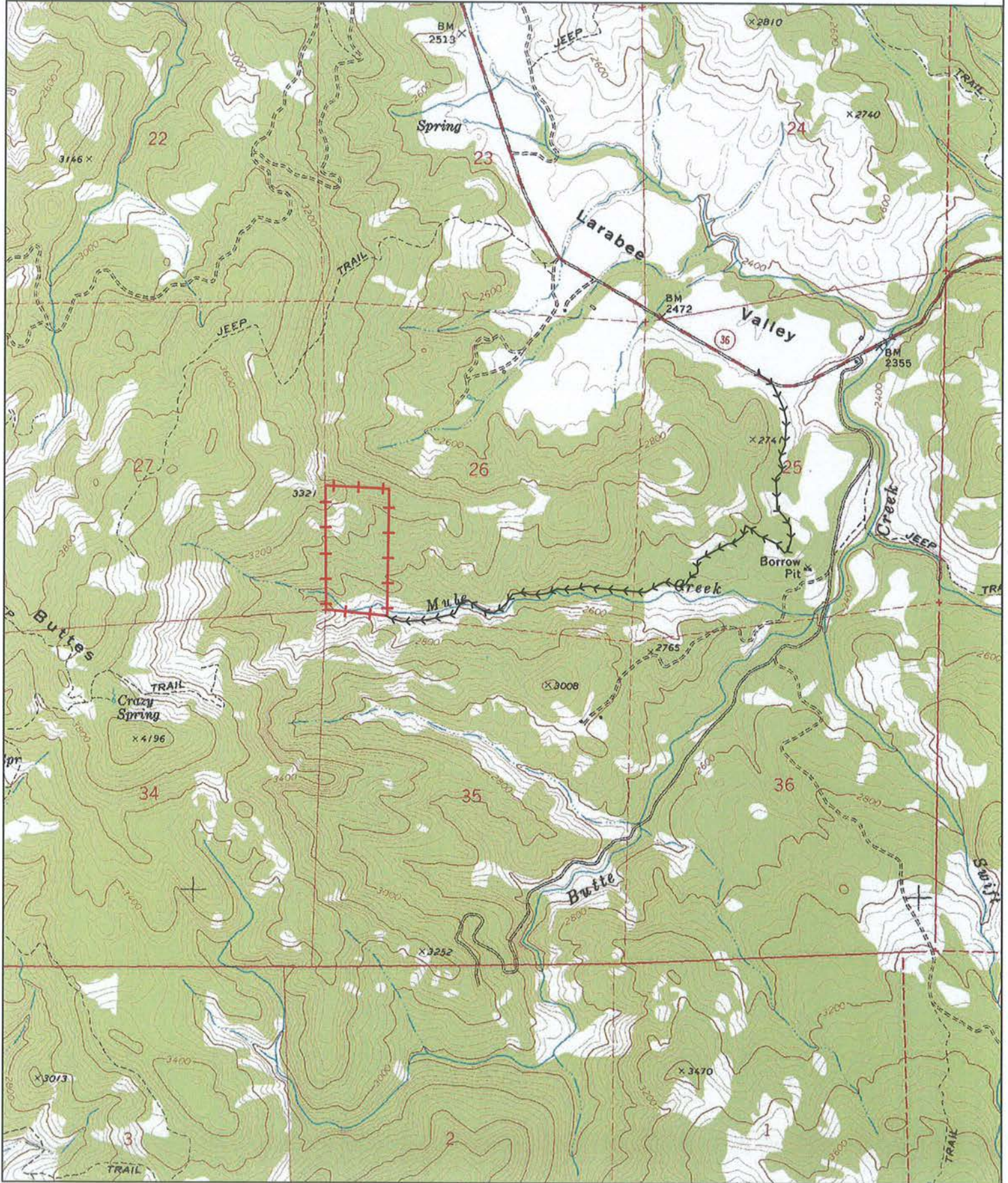
Revised: 10/11/18



W 1/2 of SW 1/4 of Sec. 26; T1N, R4E;
HB&M, Humboldt County
USGS 7.5' Quad: Larabee Valley
Map Scale: 1" = 2,000'

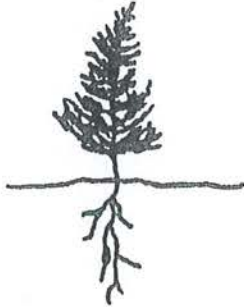


*The property boundary depicted is adapted from the Humboldt County Assessor's Parcel Map and the WRPP Site Map. This mapped boundary may not precisely align with the geographic boundary on the ground. The RPF is not responsible for surveying property boundaries.



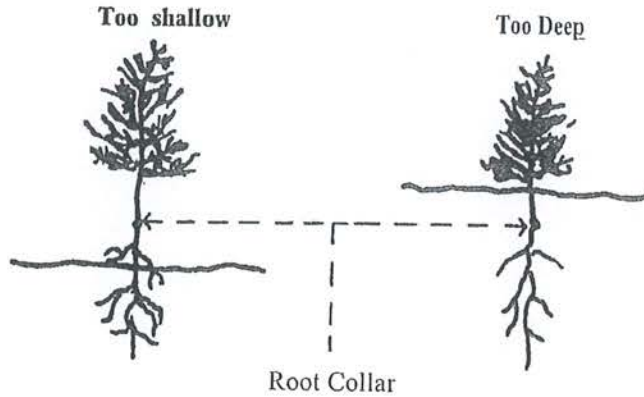
APPENDIX A

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.

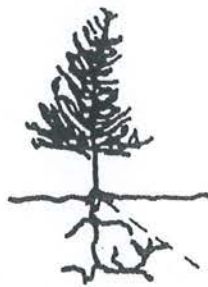
ERROR IN PLANTING



- 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

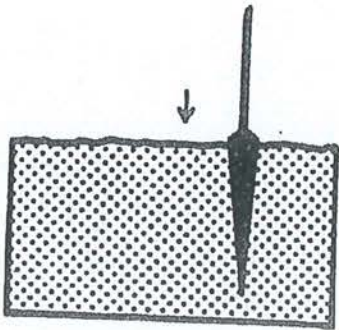


- Hole is not deep enough — planting in rocky soil.
 Roots cannot effectively take up water.
 Tree not wind-firm.

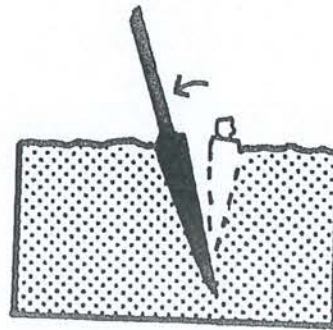
- Soil not firmly packed around roots.
- Air pocket forms.
- Roots dry out.

APPENDIX B
PLANTING WITH A FLAT BAR

1. Insert flat bar straight down.



2. Pull flat bar backward to open hole.

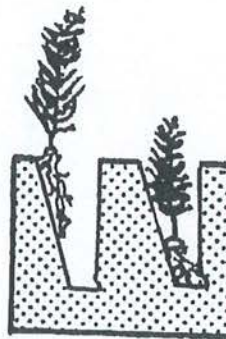


3. Remove flat bar and place seedling at correct depth with root collar at or slightly below ground level.

Correct

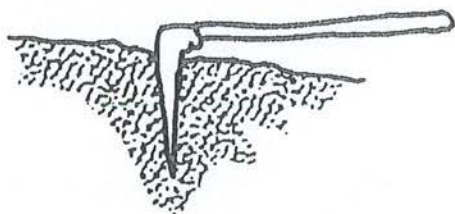


Incorrect

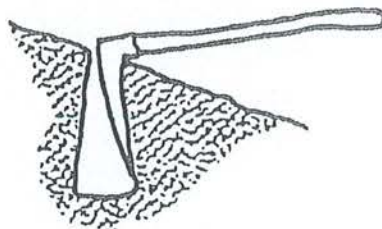


APPENDIX C
PLANTING WITH A HOE

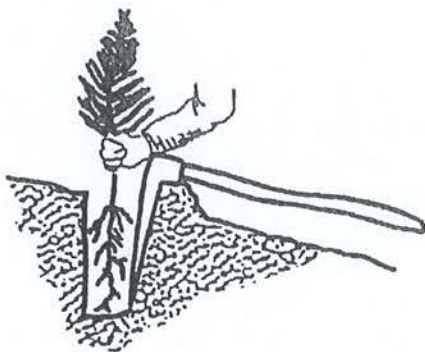
1. Swing hoe to get full penetration.



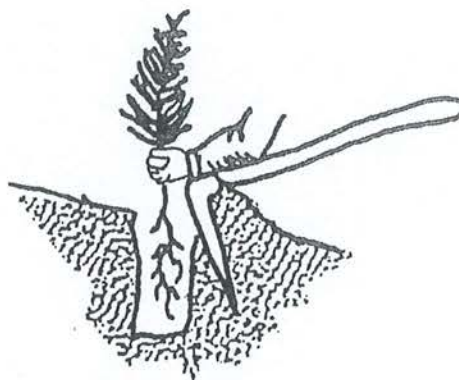
2. Lift handle and pull up to widen hole.



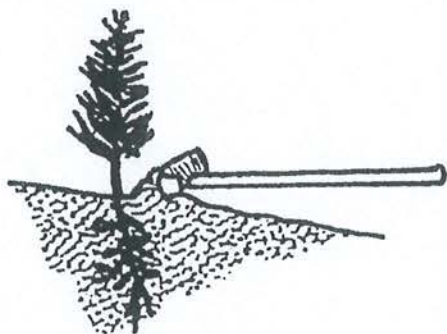
3. Place seedling while using hoe to hold back soil.



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



5. Use hoe to pack soil at top hole.



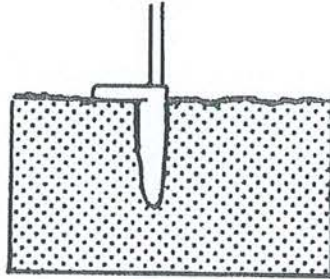
6. Firm soil around seedling with feet.



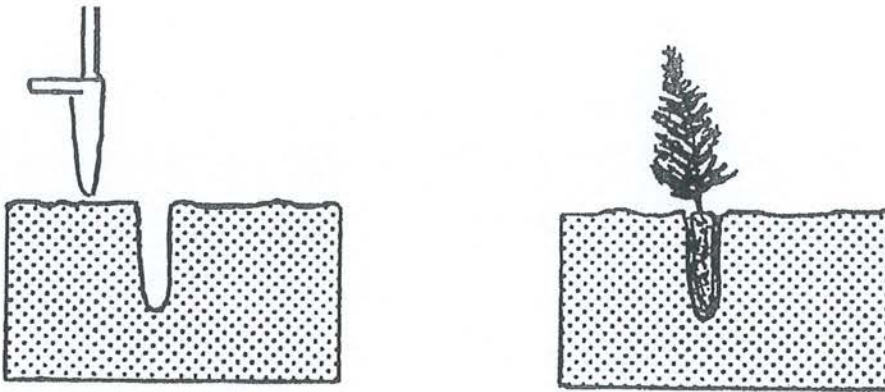
APPENDIX D

PUNTING WITH A PLUG BAR

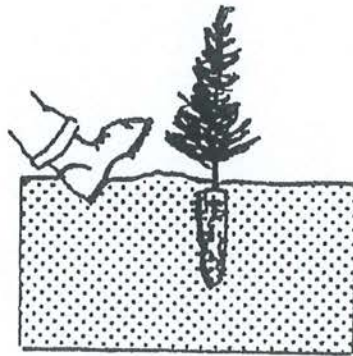
1. Insert plug bar straight down until plug bar footrest is level with ground.



2. Remove plug bar and place seedling in hole.



3. Firm soil around seeding with heel of boot.



Photos

The following photos were taken by Brita Rustad of Timberland Resource Consultants at APN 210-073-013 during the field inspection on October 17th, 2018.

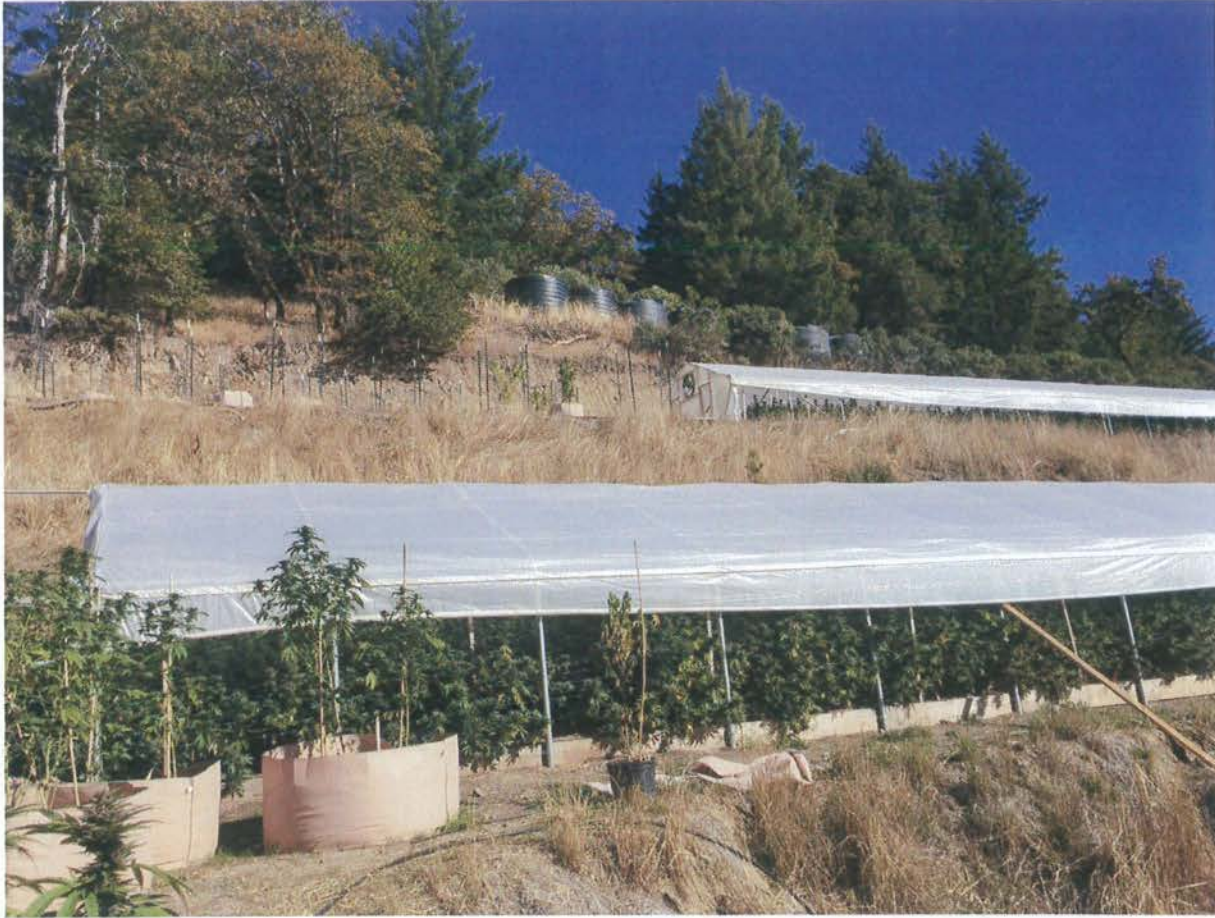


Photo 1: View of the Water Storage Area (highest terrace), Cultivation Site 1 (center terrace) and Cultivation Site 2 (lowest terrace) facing north.



Photos 2 & 3: View of Cultivation Site 2 facing northeast.



Photo 4: View of Cultivation Site 3 facing south.



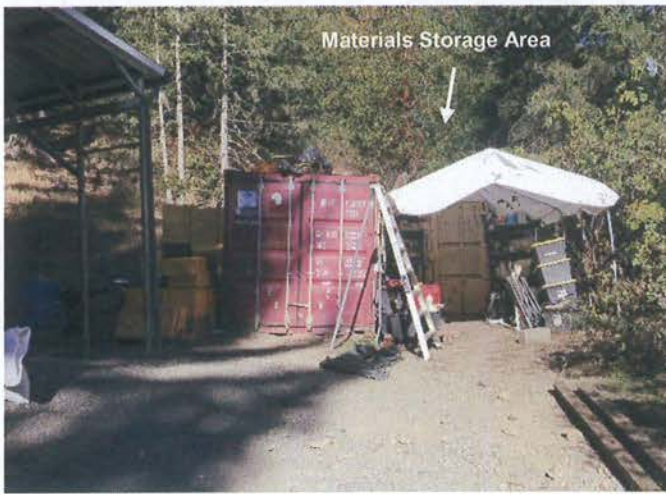
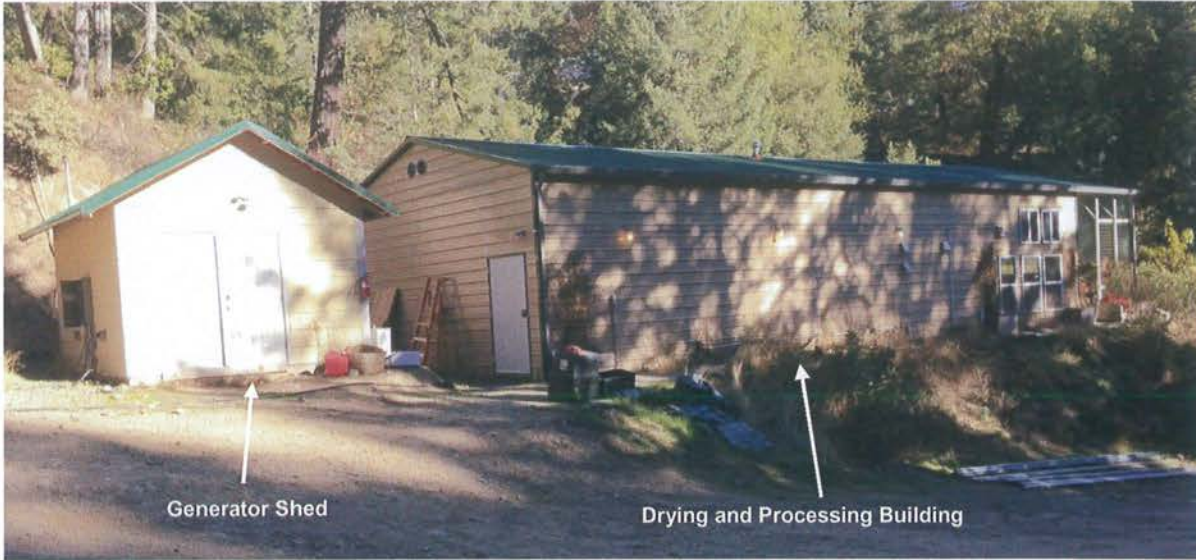
Photo 5: View of Cultivation Site 4 facing west.



Photos 6 & 7: View of Cultivation Site 4 facing west.



Photo 8: View of Drying and Storage Building facing northwest.



Photos 9, 10, & 11: View of Drying and Processing Building, Generator Shed, Fuels Storage Area, and Materials Storage Area 1.



Photo 12: View of Materials Storage Area 2 facing south.



Photo 13: View of House used for personal or recreational use only.



Photo 14: Example of water storage tanks. Notice that the surrounding timber stand appears to meet minimum stocking standards.



Photo 15 & 16: Examples of slash and woody debris from conversion activities near cultivation site and associated areas.

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