



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

June 17, 2018

Tihomir Karparov
3550 Goodman Ranch Road
Reday CA 95560

Re: APN 220-071-008/ Application #:11426

Dear Tihomir Karparov,

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 #11426) for APN 220-071-008. Please accept this letter as the RPF's written report required by Humboldt County Code, Ordinance No. 2559 (Commercial Medical Marijuana Land Use), Section 55.4.10 (j), cited below.

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

Timberland Resource Consultants (TRC) inspected and evaluated the cultivation site and associated areas contained within the application on June 13 & 15, 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: 220-071-008

Acreage: 225 acres

Legal Description: NW 1/4 of Section 19

Township 4 South, Range 2 East,
Humboldt Base & Meridian, Humboldt County

Located on USGS 7.5' Quadrangle: Briceland, CA

Humboldt County Zoning: Timber Production

Site Address: 3550 Goodman Ranch Road, Etnersbug

Landowner/Timber Owner: Arthur J. Phillips

The project is located in Humboldt County, in the Whitethorn area, on the west side of Goodman Ranch Road, approximately 2.39 mile north from the intersection of Huckleberry Lane and Goodman Ranch Road, on the property known as 3550 Goodman Ranch Road.

Parcel Description & Timber Harvest History

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

The property consists of second growth tanoak and Douglas-fir with a minor component of madrone, canyon live oak, pepperwood and black oak. Review of 1968 aerial imagery suggest that the majority of the property had been recently harvested (within the last 10-15 years) based upon visible truck roads, landings, skid roads, and timber type changes. Increment borings of second growth Douglas-fir within the vicinity of the northern-most cultivation site reveals a stand age of approximately 50 years old.

There were no signs of more recent ground disturbance or changes in stand structure or composition suggesting additional logging entries have occurred since the original harvest. Moreover, none have been recorded by Cal Fire (Watershed Mapper v2 http://egis.fire.ca.gov/watershed_mapper/). The property was transferred to current landowner, Arthur J. Phillips, in 1993.

Project Description

Two cultivation sites were inspected during the field assessment within APN 220-071-008. The following table lists the inspected sites and their acreages; see detailed site descriptions below.

Cultivation Site/Associated Area	Total Acreage	Converted?	Converted Acreage
Cultivation Site A	0.85	Yes	0.85
Cultivation Site B	0.60	Yes	0.60
TOTAL	1.45		1.45

Cultivation Site A

Review of aerial imagery reveals that the cultivation site was initially developed between 2005 and 2009, which consisted of a single greenhouse occupying an area of approximately 0.15 acres in size. The site was expanded between 2010 and 2012 to a size of approximately 0.29 acres, and again between 2012 and 2014 to a size of approximately 0.53 acres. The final expansion of the site occurred between 2014 and 2016 to its present size of approximately 0.85 acres. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Cultivation Site B

Review of aerial imagery reveals that the cultivation site was initially developed between 2010 and 2012, which consisted of a "fuzzy" opening that was approximately 0.16 acres in size. The site was expanded between 2012 and 2014 to a size of approximately 0.36 acres and enlarged again between 2014 and 2016 to its present size of approximately 0.60 acres. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Timberland Conversion Summary

TRC observed approximately 1.45 acres of unauthorized timberland conversion for cultivation-related purposes. 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)."

Cultivation Site A: No conversion areas exist within a Watercourse and Lake Protection Zone (WLPZ) or Equipment Exclusion Zone (EEZ) on the property. The closest watercourse (Class III) is located approximately 75 feet northwest of the cultivation site. A Class II-Large is located approximately 150 feet east. Conversion activities have not occurred within a watercourse buffer.

Cultivation Site B: Per the Applicant's WRPP, and as verified by the RPF during the June 2018 site visits, the cultivation site is adjacent to a watercourse, which classification is as follows: The stream begins as a spring-fed Class II watercourse until it crosses the road and then downgrades to a Class III watercourse. The Class III continues for approximately 100 feet in distance and then changes to a Class II watercourse. Based upon this classification, the conversion area is not located within a WLPZ or EEZ. If the watercourse was entirely a 'Class II', the conversion area would encroach slightly into the WLPZ but not significantly. Because the property is subject to Water Board Order R1-2015-0023, the Class II buffer is '100-feet' regardless of slope steepness and consequently portions of the cultivation site are located in the 100-foot buffer zone. The conversion did not occur within the Forest Practice Rule's watercourse buffer zone but it did occur within the Water Board's buffer zone. The Applicant's WRPP proposes measures to mitigate this potential impact, however no violation of 14CCR 1104.1(a)(2)(F) occurred.

14CCR 923.2 Design and Location of Logging Roads and Landings

The cultivation site was not constructed and maintained per 14CCR 923.2(a)(5)&(6), which states:

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.

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.

While its recognized that the cultivation site is not a log landing, construction and maintenance of the graded flat should (at a minimum) meet or exceed similar requirements stated in the Forest Practice Rules for log landings. Compliance with Humboldt County's grading ordinance, Water Board Order, and other regulations require even higher standards. Therefore, this report shall assess the cultivation site's graded flat to the standards of a log landing.

Cultivation Site A: Storm water runoff is being concentrated into the head of a Class III watercourse resulting in potential sediment delivery to a downstream watercourse. The storm water runoff is directly discharging into a large pile of discarded potting soil that is stocked-piled within 50 feet of the head of a Class III watercourse. The Applicant's WRPP has identified this location as Map Point 13. Proposed improvements in road drainage between the residence and cultivation site are expected to decrease the amount of storm water runoff from the entering the graded flat and thus discharging at this location. The WRPP shall also require the removal of the soil pile and installation of a minimum of three straw waddles across the drainage path. This site shall be monitored annually per Water Board Order R1-2015-0023.

Limitations and Considerations for Timberland Conversion Activities

923.4. Construction and Reconstruction of Logging Roads and Landings.

Cultivation Site A: was not constructed per 14CCR 923.4(h), which states:

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.

Portions of the fill slope, located in the southeastern corner of Cultivation Site A, are intermixed with stumps, logs, and woody debris. Treatment of this "unstable fill" requires removal of all buried woody material (stumps, logs, limbs, chunks, etc.) and subsequent treatment per 14CCR 1104.1(a)(2)(D) – Treatment of Slash and Woody Debris. The fill shall be reconstructed and thoroughly compacted in approximately one-foot lifts. The fills shall be no greater than 65 percent (1.5:1, horizontal to vertical) unless properly engineered.

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.*

Slash, logs, and woody debris from past conversion operations exist at both cultivation sites. Several distinct piles and/or concentrations requiring treatment are identified on the attached Conversion Evaluation Map. Treatment is required for all slash, logs, and woody debris located within the periphery of both cultivation sites and is not limited to those areas shown on the map.

Limitations and Considerations for Timberland Conversion Activities

Biological Resources and Forest Stand Health

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

A query of the California Natural Diversity Database (CNDDDB) on June 16, 2018 showed three 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 cultivation sites and associated areas. The red-bellied newt, Foothill yellow-legged frog, and Coho salmon were observed within the Mattole River within the BAA. The closest of these observations is the red-bellied newt, which is approximately 800 feet west of Cultivation Site A.

The query of the CNDDDB revealed no known Northern Spotted Owl (NSO) Activity Centers within a 0.7-mile radius BAA surrounding the cultivation sites and associated area. NSO habitat within the property is a combination of nesting, roosting, and foraging habitat.

No major forest health issues were observed during the field assessment. Though the property is located within Humboldt County, a Zone of Infestation (ZOI) for Sudden Oak Death (SOD), no symptoms, signs, or evidence of oak mortality were observed (*Oak Mortality Disease Control*). However, SOD is prevalent in this geographic area and is likely to occur within the property.

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

Cultural Resources

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

No archeological sites were observed during the TRC field assessment. The RPF conducted pre-field research for the project's geographic location and closely surveyed the foot print of the two converted sites. The RPF did not survey the surrounding undisturbed areas for presence or evidence of prehistoric or historic sites because an archeological survey shall occur within a 600-foot buffer of both cultivation sites by a professional archeologist. The archaeological survey of the conversion areas was conducted by Chris Carroll, a certified archaeological surveyor with current CALFIRE Archeological Training (Archeological Training Course #575). The survey consisted of examining the two graded flats associated with Cultivation Sites A & B. Per 14 CCR 1104.2(2)(I), all required Native American tribes and organizations have been notified of the project location and are encouraged to respond with any information regarding archaeological sites, cultural sites, and/or tribal cultural resources within or adjacent to the project area.

Recommendations

In summary, a total of 1.45 acres of unauthorized timberland conversion has occurred within APN 220-071-008. This total does not exceed the three-acre conversion exemption maximum. The conversion activities conducted on the property do *not* comply with the California Forest Practice Act and the California Forest Practice Rules. The RPF recommends the following measures for the converted areas:

Cultivation Site A

1. Slash, logs, and woody debris treatment required.
2. Implement all proposed improvements in road drainage between the residence and cultivation site as specified in the WRPP to hydrologically disconnect storm water runoff from the Class III watercourse. The WRPP shall also require the removal of the soil pile and installation of a minimum of three straw wattles across the drainage path. Subsequent monitoring required by Water Board Order R1-2015-0023 may result in the requirement to conduct more aggressive measures such as re-grading of the entire site to control drainage, or the construction of sediment retention basin.
3. Portions of the fill slope, located in the southeastern corner of Cultivation Site A, are intermixed with stumps, logs, and woody debris. Treatment of this "unstable fill" requires removal of all buried woody material (stumps, logs, limbs, chunks, etc.) and subsequent treatment per 14CCR 1104.1(a)(2)(D) – Treatment of Slash and Woody Debris. The fill shall be reconstructed and thoroughly compacted in approximately one-foot lifts. The fills shall be no greater than 65 percent (1.5:1, horizontal to vertical) unless properly engineered.

Cultivation Site B

1. Slash, logs, and woody debris treatment required.

Sincerely,



Chris Carroll, RPF #2628
Timberland Resource Consultants

Pictures



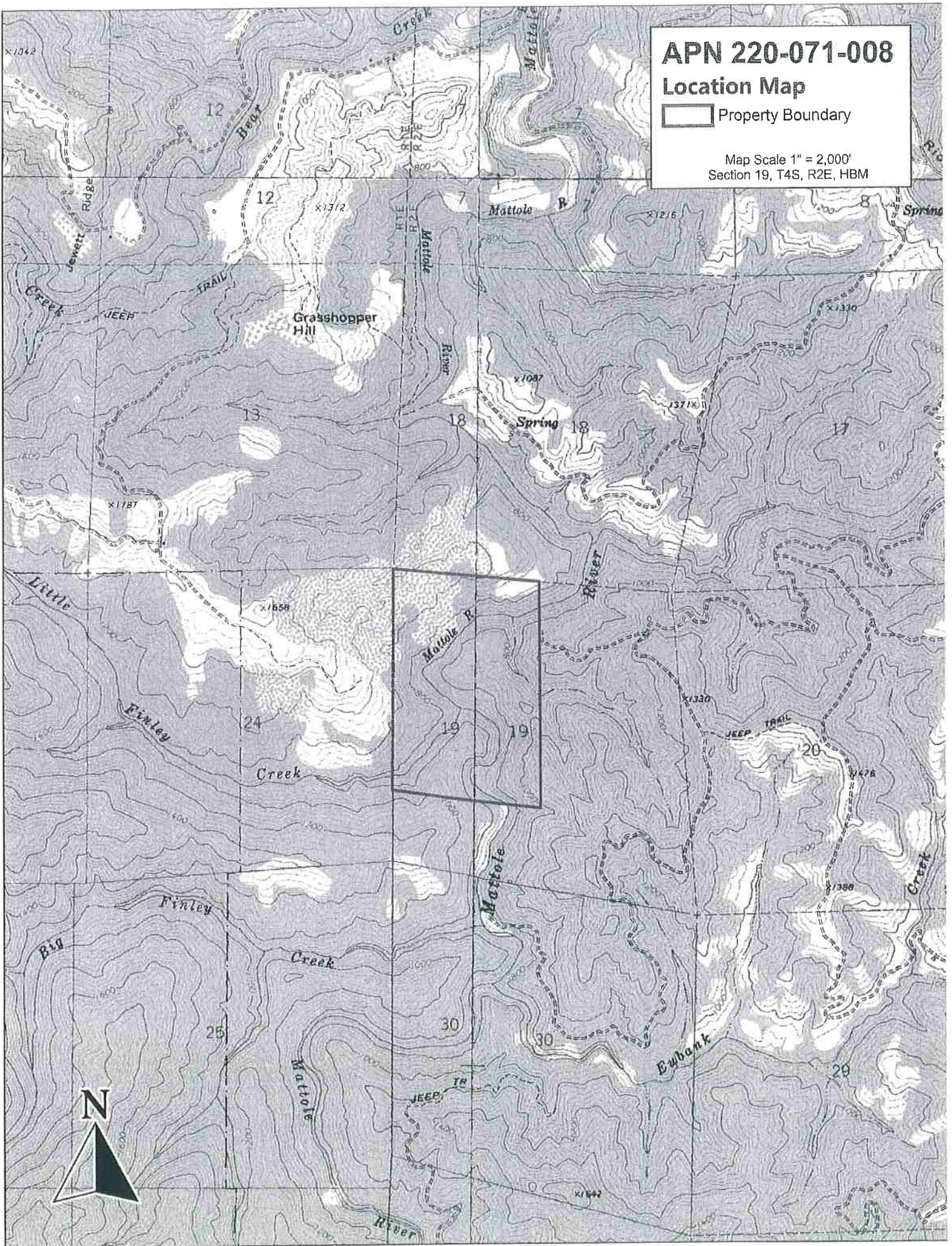
Picture 1: Perched and unstable fill material located at the southeastern corner of Cultivation Site A. Photo date 6-15-2018.

APN 220-071-008

Location Map













 Property Boundary

Map Scale 1" = 2,000'
Section 19, T4S, R2E, HBM

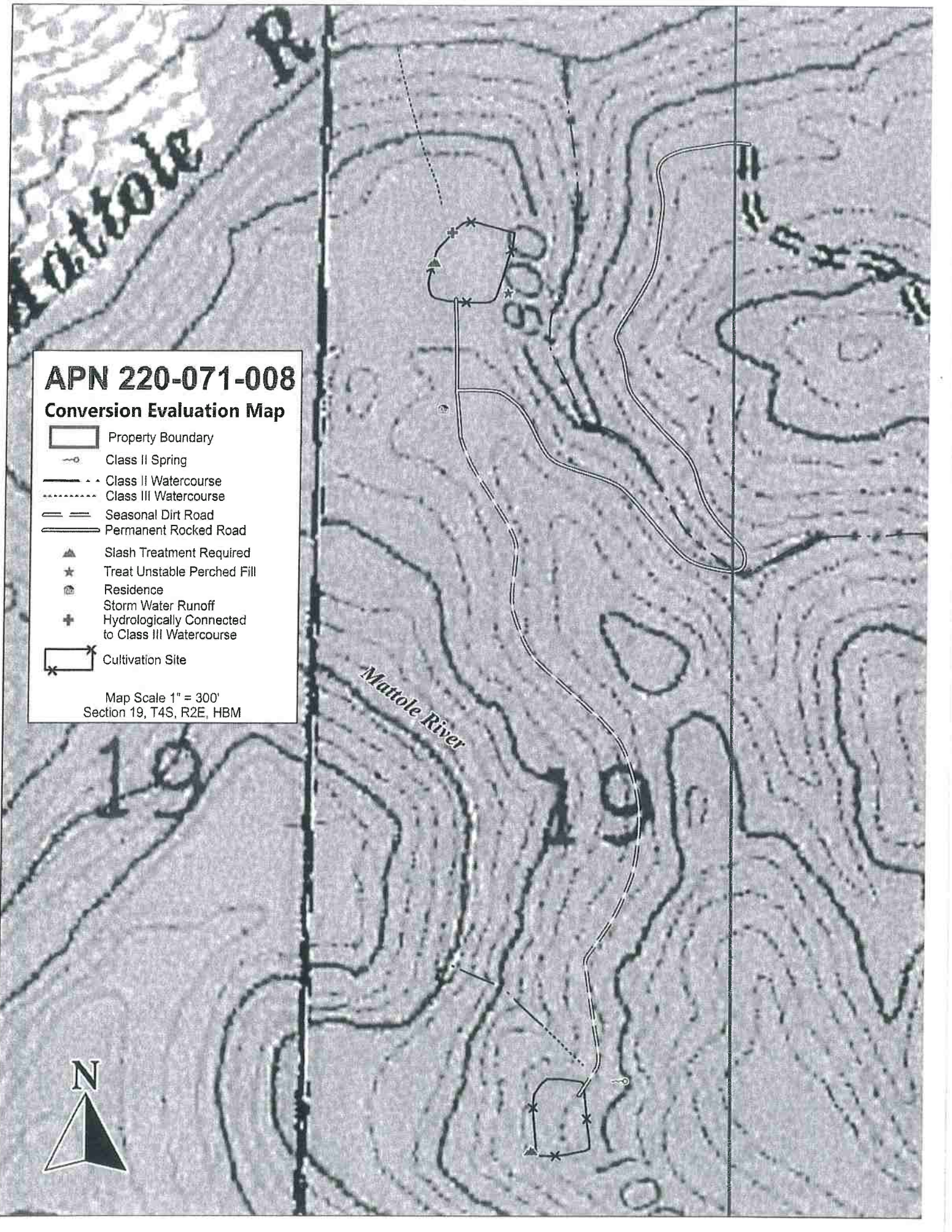


APN 220-071-008

Conversion Evaluation Map

-  Property Boundary
-  Class II Spring
-  Class II Watercourse
-  Class III Watercourse
-  Seasonal Dirt Road
-  Permanent Rocked Road
-  Slash Treatment Required
-  Treat Unstable Perched Fill
-  Residence
-  Storm Water Runoff
-  Hydrologically Connected to Class III Watercourse
-  Cultivation Site

Map Scale 1" = 300'
Section 19, T4S, R2E, HBM

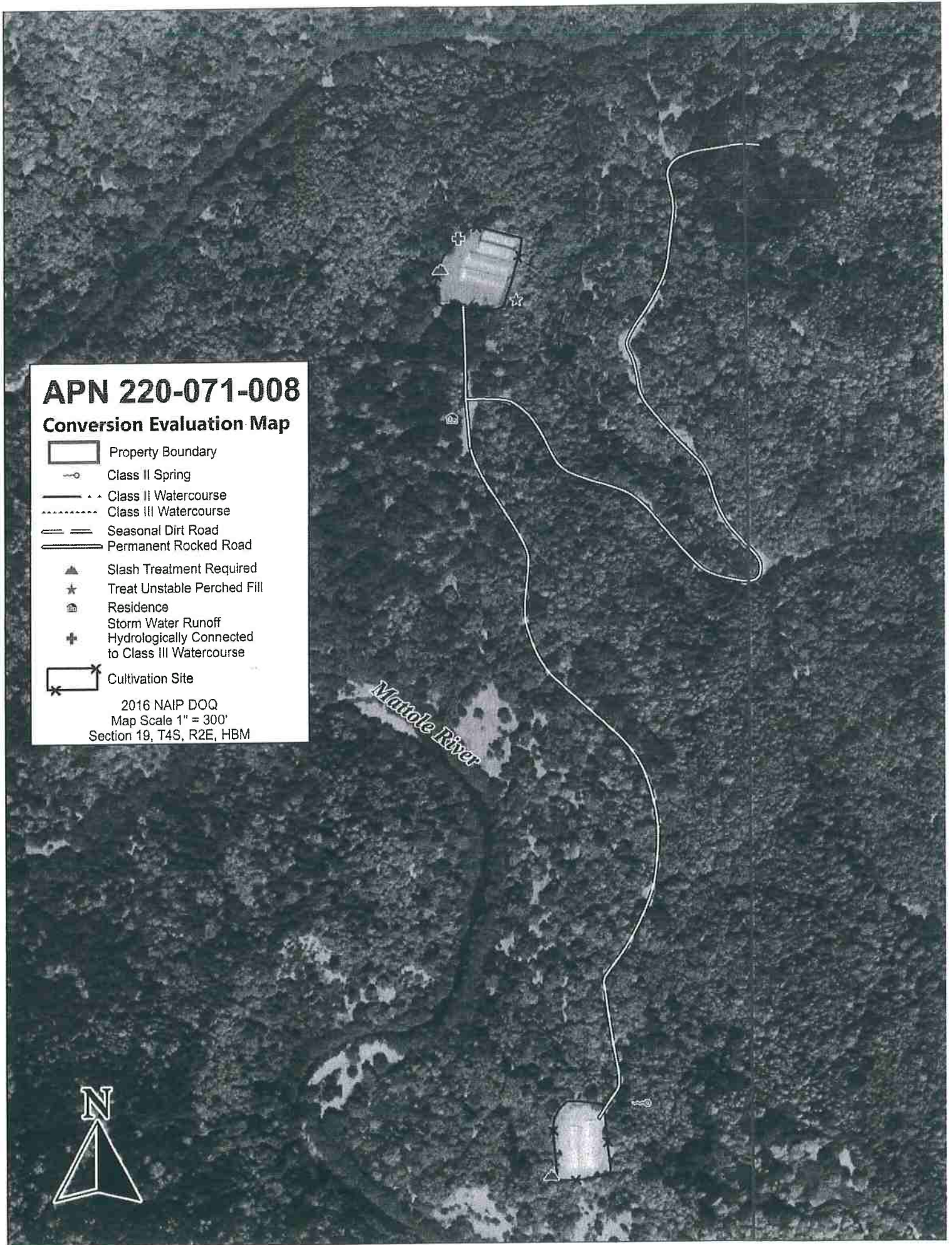


APN 220-071-008

Conversion Evaluation Map

-  Property Boundary
-  Class II Spring
-  Class II Watercourse
-  Class III Watercourse
-  Seasonal Dirt Road
-  Permanent Rocked Road
-  Slash Treatment Required
-  Treat Unstable Perched Fill
-  Residence
-  Storm Water Runoff
-  Hydrologically Connected to Class III Watercourse
-  Cultivation Site





2016 NAIP DOQ
Map Scale 1" = 300'
Section 19, T4S, R2E, HBM



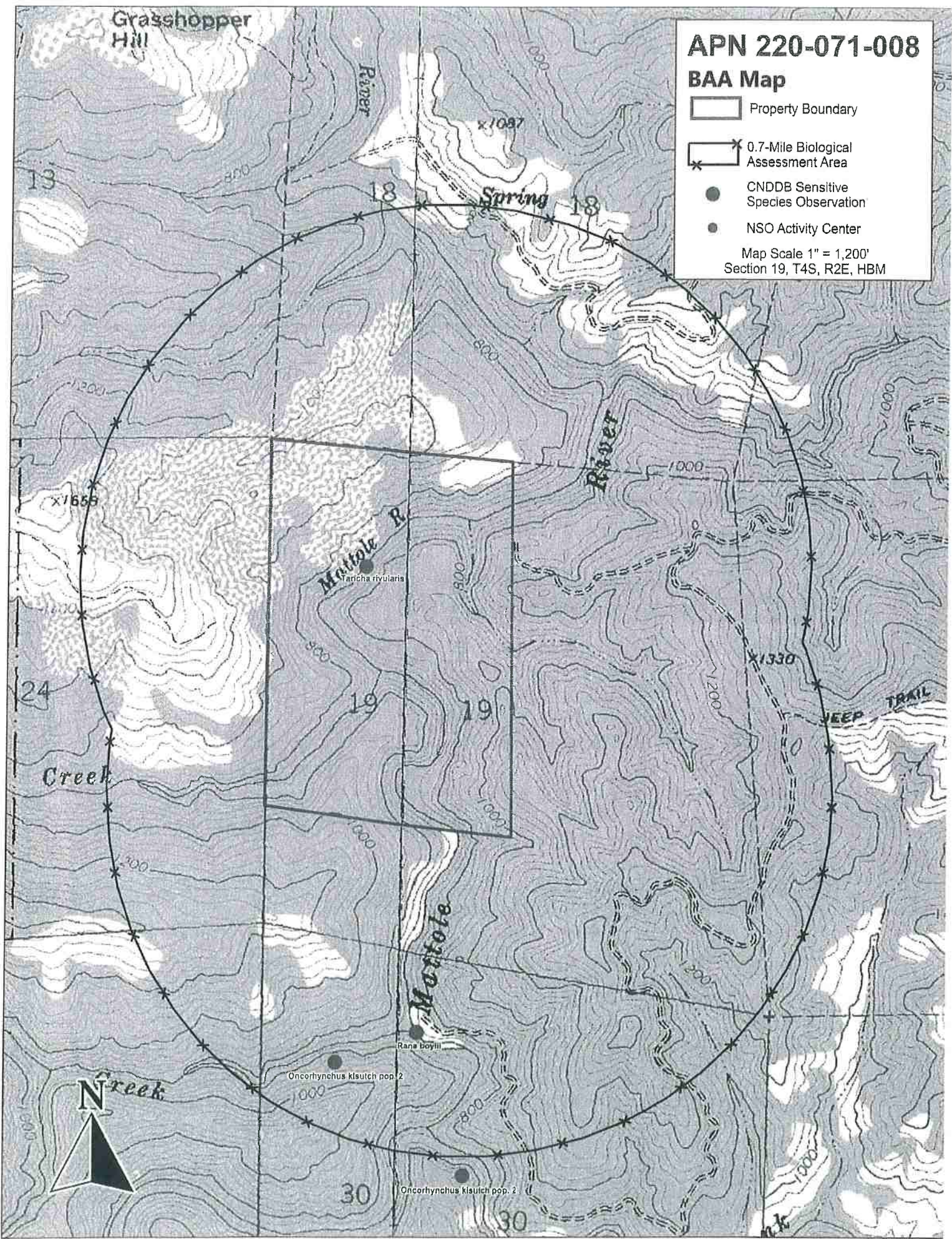
Grasshopper Hill

APN 220-071-008

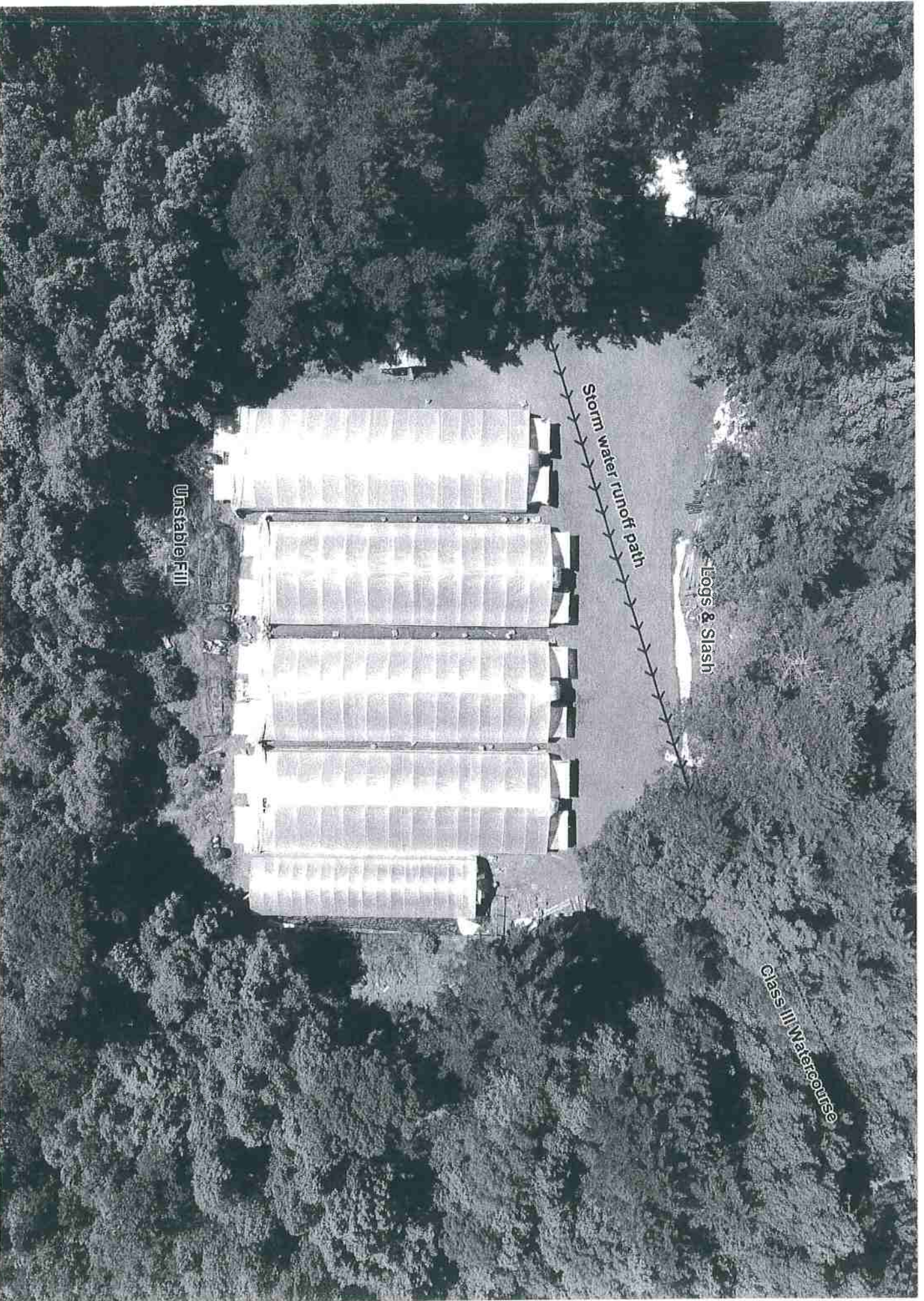
BAA Map

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

Map Scale 1" = 1,200'
Section 19, T4S, R2E, HBM



Cultivation Site A



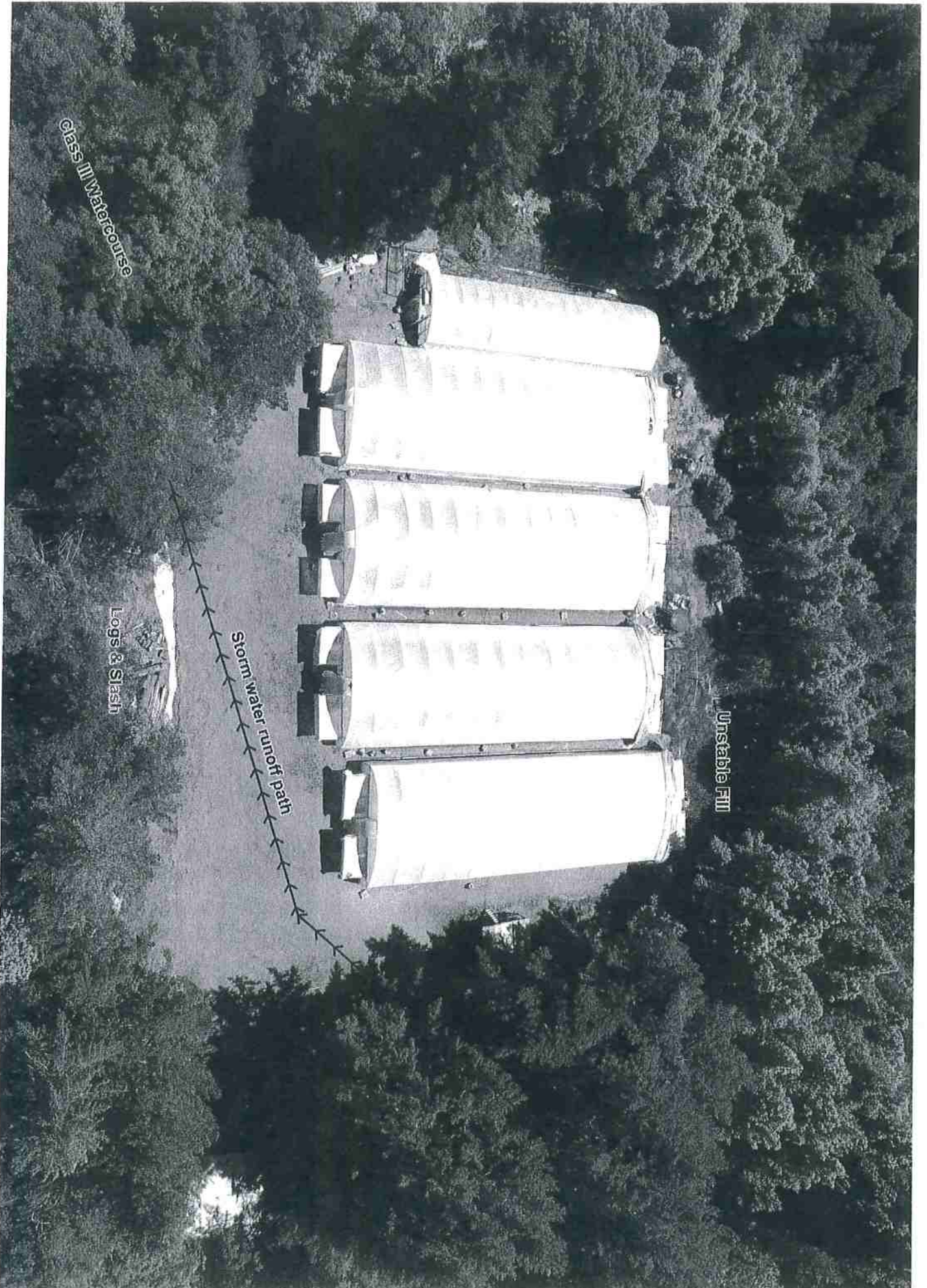
Unstable Fill

Storm water runoff path

Logs & Slash

Class III Watercourse

Cultivation Site A



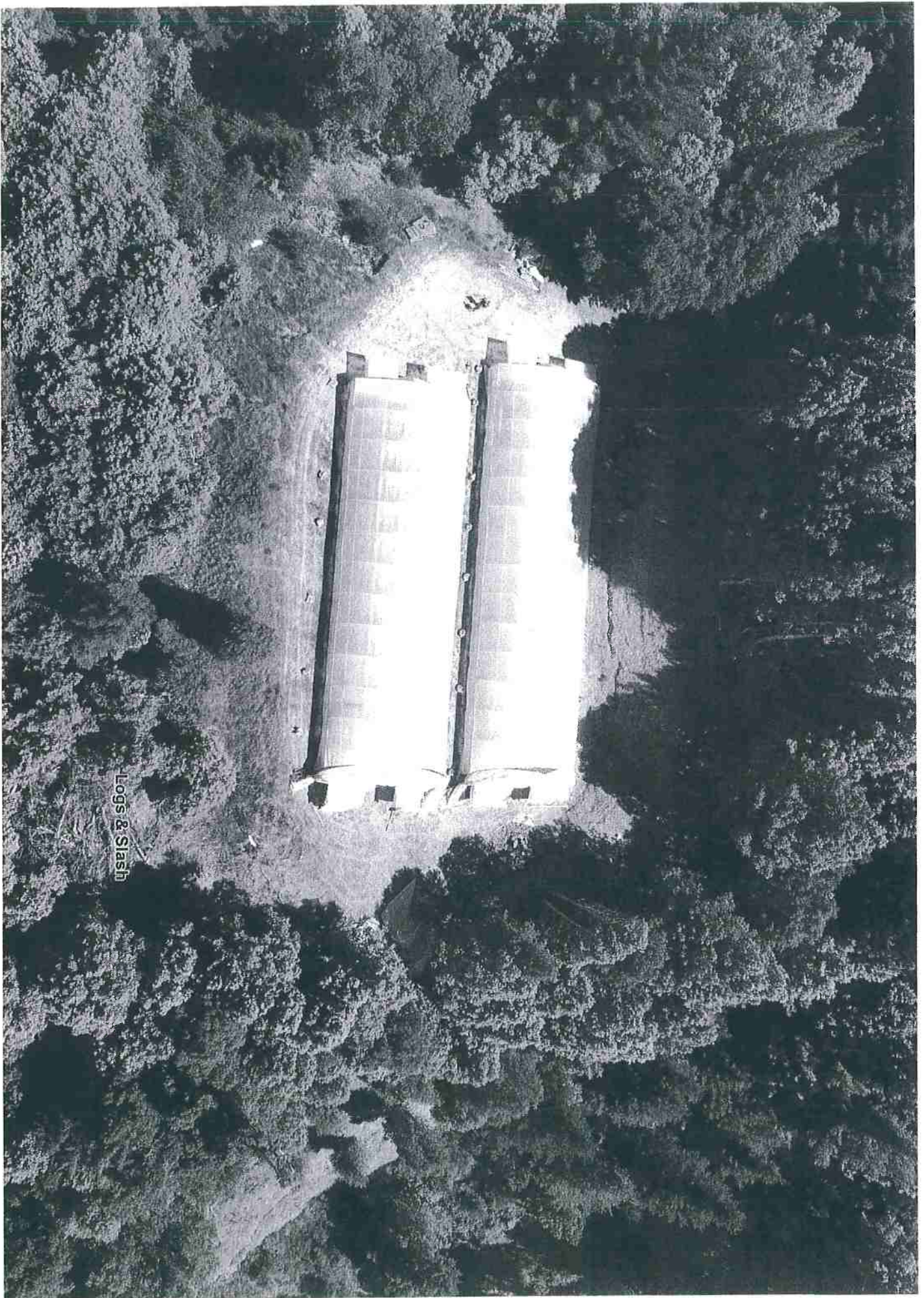
Class III Watercourse

Unstable Fill

Stormwater runoff path

Logs & Slash

Cultivation Site B



Logs & Slash

**Water Resource Protection Plan
Site Map [WDID: 1B170612CHUM]**

Property Boundary

Sites

Cultivation Area

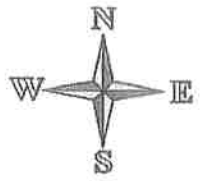
Roads

- Permanent
- Seasonal
- Trail

Watercourses

- Class I
- Class II
- Class III

- Point of Diversion (POD)
- Water storage tank
- Water storage bladder
- Residence
- Storage sheds
- 100 foot Class II riparian buffer
- Cultivation area to be removed



40' contour intervals
Map Scale 1" = 400'
Map Date 2/8/2016

