

SUPPLEMENTAL INFORMATION #3

For Planning Commission Agenda of March 1, 2018

<input type="checkbox"/>	Consent Agenda Item	}
<input checked="" type="checkbox"/>	Continued Hearing Item	}
<input type="checkbox"/>	Public Hearing Item	} #5
<input type="checkbox"/>	Department Report	}
<input type="checkbox"/>	Old Business	}

Re: Innovation West, dba Panther Gap Farms, Conditional Use Permits

Application Numbers 10508, 10509, 10552, 10553, and 10934

Case Numbers CUP16-030, 16-031, 17-021, 17-022, and 16-107

Assessor's Parcel Number (APNs) 107-124-015, 107-235-008, 107-235-007, 107-236-011, 107-236-010, 107-234-012, 107-111-001

From 3.16 miles to 4.0 miles east of the town of Honeydew on both sides of the Panther Gap Road, and to the east and west of Panther Gap Road, including addresses of 3000 Panther Gap Road and 3400 Panther Gap Road, Honeydew Area

Attached for the Planning Commission's record and review is (are) the following supplementary information item(s):

- Attachment 1: Correspondence submitted by CDFW
- Attachment 2: Documentation for existing cannabis cultivation for Apps Nos. 10508, 10509, 10552, and 10934
- Attachment 3: Documentation for existing cannabis cultivation on APN 107-236-010, Apps No.10553
- Attachment 4: *Innovations Wests: Quantifying Historic Cannabis Cultivation*, prepared for APN by Archeological Research and Supply Company, and filed February 13, 2018
- Attachment 5: Applicant's Rationale for pre-existing area

Discussion

The applicant is requesting five Conditional Use Permits to authorize approval of pre-existing cultivation areas. Each of the CUPs is for an acre resulting in a total of 5 acres of cultivation¹. At the February 1, 2018 Planning Commission hearing, staff recommended approval of the applications based on information presented by the applicant that his cultivation practices involved initiating cultivation within a greenhouse and then as the season progressed moving many the plants out of the greenhouse to occupy areas around the greenhouses. These areas of occupation around the greenhouses are referred to as holding pens in the applicant's letter contained in Attachment 5. Based upon this, he was given credit for the greenhouses and the areas around the greenhouses. The Department of Fish and Wildlife testified at the meeting that they had requested the ability to visit the site and opposed the information presented by the applicant as not sufficient to justify the amount of pre-existing cultivation being requested. Based on this information the Planning Commission continued the item and directed that a site visit be

¹ The applicant is also seeking a Special Permit for 10,000 square feet of mix-light cultivation (Apps #10554). For this project the County and the applicant are in agreement, and remain in an agreement, regarding the existing cultivation square footage and method, i.e., mix-light. Per CDFW's February 1, 2018 spreadsheet they calculate the existing cultivation to be 8,900 square feet for this permit application.

conducted and requested that staff work with the CDFW and the applicant to determine if agreement could be reached as to the amount of pre-existing cultivation.

A Site Visit was conducted on February 8, 2018 with the Applicant, the Applicant's representative from Archaeological Research and Supply Company, the California Department of Fish and Wildlife, CalFire and the County. Due to the size of the project parcels, the site visit focused on one property (APN107-236-010 CUP-16-022) because in the correspondence presented by the CDFW stated there was no evidence of pre-existing cultivation on this site. The site visit consisted of looking at the location of the existing greenhouses, and walking through the site looking at evidence of pre-existing cultivation. The evidence of pre-existing cultivation consisted entirely of evidence of "guerilla" style grows within the understory of the surrounding forest. There was no evidence on this site of pre-existing cultivation in greenhouses, or in manicured plots. This is a change from the information previously submitted by the applicant. The discussion below analyzes the information obtained resulting from the site visit. There is not sufficient evidence to justify one acre of pre-existing cultivation on this property.

At the time of the site visit, the applicant wanted to proceed forward to the Planning Commission with the information submitted for the other four applications without conducting a detail analysis and survey of the other sites prepared for the site which was visited. The applicant was comfortable continuing based on the information which he had submitted. In meetings with the application it was pointed out that the applicant's applications for Lake and Stream Alteration Agreements showed far less cultivation than is being claimed in the applications to the County. Approved LSA agreements with CDFW based upon site visits are used to justify pre-existing cultivation. In this case the information presented justifies cultivation but not in the amount that the applicant is requesting. This is presented in more detail below.

Observed evidence of prior cultivation activity include the following:

- Grow holes which are depressions in the native ground, the deepness of the grow holes was variable. The observable cover/top layer was dry leaf debris. These grown holes were located in the understory, and were scattered throughout the property that we walked through.
- Nursery pots one gallon or larger or in size mostly, many being black and some having camouflage painting. Sometimes the pots were empty and were stacked together, sometimes they were filled with soil/dirt, were located in the understory, and were scattered throughout the property. One approximately four inch nursery pot located.
- Black water transmission lines; irrigation emitters were not observed
- Occasionally a conventional/retail bag of potting soil.
- One 2,500 gallon tank.

For the location of the site visit, in particular the coordinates of Latitude 40.2518, Longitude -124.0261, the County reviewed available imagery beginning in 2006 through 2018. The year 2006 was selected because during the February 8, 2018 site visit, the applicant stated that in 2006 this location was the most heavily cultivated. Currently there are five greenhouses present in this location.

For the remaining CUP applications, the County conducted a review of aerial imagery. This review included measurement of observable features associated with cannabis cultivation, and that review is attached. The use of cannabis cultivation holding pens is not observable in the aerial imagery. The spreadsheet title "Review of Existing Cultivation Area for Other Sites" presents a tally of the cultivation area calculation for the other sites. Also presented herein is a collation of information contained in documents filed with other agencies, e.g., Regional Water Quality Board, regarding cultivation.

Attachment 1

From: Adler, Elanah
Sent: Friday, February 02, 2018 12:43 PM
To: Nielsen, Michelle
Subject: FW: Panther Gap Farms Conditional Use Permit Application-APPS 10508

From: Bocast, Kalyn@Wildlife [mailto:Kalyn.Bocast@Wildlife.ca.gov]
Sent: Wednesday, May 31, 2017 3:56 PM
To: Adler, Elanah <EAdler@co.humboldt.ca.us>
Cc: Planning Clerk <planningclerk@co.humboldt.ca.us>; Bauer, Scott@Wildlife <Scott.Bauer@wildlife.ca.gov>
Subject: Panther Gap Farms Conditional Use Permit Application-APPS 10508

Hello Elanah,

Thank you for referring the Panther Gap Farms Conditional Use Permit application (APPS 10508 Project) to the California Department of Fish and Wildlife (CDFW) for review and comment. The Projects consists of existing outdoor cannabis cultivation, up to one acre in size, on APN 107-124-015. Water is sourced from an existing surface water diversion and an existing groundwater well located on parcel 107-235-008(?). The applicant will forbear use of water from May 15th to October 31st during which time the well will be the source of water for irrigation.

CDFW offers the following comments on the Project in our role as a Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code section 21000 et seq.). These are comments intended to assist the Lead Agency in making informed decisions early in the planning process.

- A Final Streambed Alteration Agreement (1600-2015-0531) was issued to the applicant on 04/14/2016 for the water diversion on APN 107-235-008. The information provided in the County referral does not match the information provided in the CDFW SAA Notification. The referral materials state that the applicant contains up to 1 acre of existing outdoor cannabis cultivation. Ariel imagery, SAA notification materials and a site visit conducted by CDFW staff on 01/28/2016 confirm that there was no cannabis cultivation on this parcel prior to January 1, 2016. CDFW recommends that the application be reconsidered for permit approval.
- This project has the potential to affect sensitive fish resources such as Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), and steelhead trout (*O. mykiss*).
- CDFW would like to conduct a site visit prior to, and as condition of, Project approval to insure that applicant is in compliance with Fish and Game Code 1602. CDFW may have additional comments after site visit inspection.

Thank you for the opportunity to comment on this Project. Please contact me at Kalyn.bocast@wildlife.ca.gov if you need additional information.

Sincerely,

Kalyn Bocast
Environmental Scientist
Watershed Enforcement Team
California Department of Fish and Wildlife
619 2nd Street
Eureka, CA 95501
(707) 441-2077

From: Adler, Elanah
Sent: Friday, February 02, 2018 12:42 PM
To: Nielsen, Michelle
Subject: FW: Panther Gap Farms Conditional Use Permit Application-APPS 10509

From: Bocast, Kalyn@Wildlife [mailto:Kalyn.Bocast@Wildlife.ca.gov]
Sent: Wednesday, May 31, 2017 3:55 PM
To: Adler, Elanah <EAdler@co.humboldt.ca.us>
Cc: Planning Clerk <planningclerk@co.humboldt.ca.us>; Bauer, Scott@Wildlife <Scott.Bauer@wildlife.ca.gov>
Subject: Panther Gap Farms Conditional Use Permit Application-APPS 10509

Hello Elanah,

Thank you for referring the Panther Gap Farms Conditional Use Permit application (APPS 10509 Project) to the California Department of Fish and Wildlife (CDFW) for review and comment. The Projects consists of, up to one acre in size (44,000 square feet) of existing outdoor cannabis cultivation on APN 107-235-007. Water is sourced from an existing groundwater well, located on the adjacent property APN 107-235-008(?) and a surface water diversion. The applicant will forbear use of water from May 15th to October 15th during which time the well will be the source of water for irrigation. Electrical service is provided by PG&E, generators will only be used in the case of power loss.

CDFW offers the following comments on the Project in our role as a Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code section 21000 et seq.). These are comments intended to assist the Lead Agency in making informed decisions early in the planning process.

- A Final Streambed Alteration Agreement (1600-2015-0531) was issued to the applicant on 04/14/2016. The information provided in the County referral does not match the information provided in the CDFW SAA Notification. The referral materials state that the applicant contains 44,000 square feet of existing outdoor cannabis cultivation. Ariel imagery, SAA notification materials and a site visit conducted by CDFW staff on 01/28/2016 confirm that the cultivation area, prior to January 1, 2016, was approximately 6,400 square feet. CDFW recommends, as a condition of project approval, that the applicant provide proof of existing cannabis on the parcel, prior to the cutoff date (01/01/2016), or that the application be reconsidered for permit approval.
- This project has the potential to affect sensitive fish resources such as Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), and steelhead trout (*O. mykiss*).
- CDFW would like to conduct a site visit prior to Project approval to insure that applicant is in compliance with Fish and Game Code 1602. CDFW may have additional comments after site visit inspection.

Thank you for the opportunity to comment on this Project. Please contact me at Kalyn.bocast@wildlife.ca.gov if you need additional information.

Sincerely,

Kalyn Bocast
Environmental Scientist
Watershed Enforcement Team
California Department of Fish and Wildlife
619 2nd Street
Eureka, CA 95501
(707) 441-2077

From: Adler, Elanah
Sent: Friday, February 02, 2018 12:43 PM
To: Nielsen, Michelle
Subject: FW: Panther Gap Farms Conditional Use Permit Application-APPS 10552

From: Bocast, Kalyn@Wildlife [mailto:Kalyn.Bocast@Wildlife.ca.gov]
Sent: Wednesday, May 31, 2017 4:11 PM
To: Adler, Elanah <EAdler@co.humboldt.ca.us>
Cc: Planning Clerk <planningclerk@co.humboldt.ca.us>; Bauer, Scott@Wildlife <Scott.Bauer@wildlife.ca.gov>
Subject: Panther Gap Farms Conditional Use Permit Application-APPS 10552

Hello Elanah,

Thank you for referring the Panther Gap Farms Conditional Use Permit application (APPS 10552 Project) to the California Department of Fish and Wildlife (CDFW) for review and comment. The Projects consists of existing outdoor cannabis cultivation, up to one acre in size, on APN 107-236-011. Water is sourced from an existing surface water diversion and an existing groundwater well located on parcel 107-235-007. The applicant will forbear use of water from May 15th to October 31st during which time the well will be the source of water for irrigation.

CDFW offers the following comments on the Project in our role as a Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code section 21000 et seq.). These are comments intended to assist the Lead Agency in making informed decisions early in the planning process.

- A Final Streambed Alteration Agreement (1600-2015-0531) was issued to the applicant on 04/14/2016 for the water diversion on APN 107-235-007. The information provided in the County referral does not match the information provided in the CDFW SAA Notification. The referral materials state that the applicant contains up to 1 acre of existing outdoor cannabis cultivation. Ariel imagery, SAA notification materials and a site visit conducted by CDFW staff on 01/28/2016 confirm that there was no cannabis cultivation on this parcel prior to January 1, 2016. CDFW recommends that the application be reconsidered for permit approval.
- This project has the potential to affect sensitive fish resources such as Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), and steelhead trout (*O. mykiss*).
- CDFW would like to conduct a site visit prior to, and as condition of, Project approval to insure that applicant is in compliance with Fish and Game Code 1602. CDFW may have additional comments after site visit inspection.

Thank you for the opportunity to comment on this Project. Please contact me at Kalyn.bocast@wildlife.ca.gov if you need additional information.

Sincerely,

Kalyn Bocast
Environmental Scientist
Watershed Enforcement Team
California Department of Fish and Wildlife
619 2nd Street
Eureka, CA 95501
(707) 441-2077

From: Adler, Elanah
Sent: Friday, February 02, 2018 12:42 PM
To: Nielsen, Michelle
Subject: FW: Panther Gap Farms Conditional Use Permit Application-APPS 10553

From: Bocast, Kalyn@Wildlife [mailto:Kalyn.Bocast@Wildlife.ca.gov]
Sent: Wednesday, May 31, 2017 3:54 PM
To: Adler, Elanah <EAdler@co.humboldt.ca.us>
Cc: Planning Clerk <planningclerk@co.humboldt.ca.us>; Bauer, Scott@Wildlife <Scott.Bauer@wildlife.ca.gov>
Subject: Panther Gap Farms Conditional Use Permit Application-APPS 10553

Hello Elanah,

Thank you for referring the Panther Gap Farms Conditional Use Permit application (APPS 10553 Project) to the California Department of Fish and Wildlife (CDFW) for review and comment. The Projects consists of existing outdoor cannabis cultivation, up to one acre in size, on APN 107-236-010. Water is sourced from an existing surface water diversion and an existing groundwater well located on parcel 107-235-007. The applicant will forbear use of water from May 15th to October 31st during which time the well will be the source of water for irrigation.

CDFW offers the following comments on the Project in our role as a Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code section 21000 et seq.). These are comments intended to assist the Lead Agency in making informed decisions early in the planning process.

- A Final Streambed Alteration Agreement (1600-2015-0531) was issued to the applicant on 04/14/2016 for the water diversion on APN 107-235-007. The information provided in the County referral does not match the information provided in the CDFW SAA Notification. The referral materials state that the applicant contains up to 1 acre of existing outdoor cannabis cultivation. Ariel imagery, SAA notification materials and a site visit conducted by CDFW staff on 01/28/2016 confirm that there was no cannabis cultivation on this parcel prior to January 1, 2016. CDFW recommends that the application be reconsidered for permit approval.
- This project has the potential to affect sensitive fish resources such as Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), and steelhead trout (*O. mykiss*).
- CDFW would like to conduct a site visit prior to, and as condition of, Project approval to insure that applicant is in compliance with Fish and Game Code 1602. CDFW may have additional comments after site visit inspection.

Thank you for the opportunity to comment on this Project. Please contact me at Kalyn.bocast@wildlife.ca.gov if you need additional information.

Sincerely,

Kalyn Bocast
Environmental Scientist
Watershed Enforcement Team
California Department of Fish and Wildlife
619 2nd Street
Eureka, CA 95501
(707) 441-2077

From: Adler, Elanah
Sent: Friday, February 02, 2018 12:42 PM
To: Nielsen, Michelle
Subject: FW: Panther Gap Farms Conditional Use Permit Application-APPS 10934

From: Bocast, Kalyn@Wildlife [mailto:Kalyn.Bocast@Wildlife.ca.gov]
Sent: Wednesday, May 31, 2017 3:55 PM
To: Adler, Elanah <EAdler@co.humboldt.ca.us>
Cc: Planning Clerk <planningclerk@co.humboldt.ca.us>; Bauer, Scott@Wildlife <Scott.Bauer@wildlife.ca.gov>
Subject: Panther Gap Farms Conditional Use Permit Application-APPS 10934

Hello Elanah,

Thank you for referring the Panther Gap Farms Conditional Use Permit application (APPS 10934 Project) to the California Department of Fish and Wildlife (CDFW) for review and comment. The Projects consists of up to one acre in size (40,000 square feet) of existing outdoor cannabis cultivation on APN 107-234-012. Water is sourced from an existing surface water diversion and a proposed groundwater well. The applicant will forbear use of water from May 15th to October 31st during which time the well will be the source of water for irrigation.

CDFW offers the following comments on the Project in our role as a Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code section 21000 et seq.). These are comments intended to assist the Lead Agency in making informed decisions early in the planning process.

- A Final Streambed Alteration Agreement (SAA), project number 1600-2015-0512, was issued to the applicant on 04/12/2016. The information provided in the County referral does not match the information provided in the CDFW SAA Agreement. The referral materials state that the applicant contains 40,000 square feet of existing outdoor cannabis cultivation. Ariel imagery, SAA notification materials and a site visit conducted by CDFW staff on 01/28/2016 confirm that the cultivation area, prior to January 1, 2016, was approximately 7,000 square feet. CDFW recommends, as a condition of project approval, that the applicant provide proof of existing cannabis on the parcel, prior to the cutoff date (01/01/2016), or that the application be reconsidered for permit approval.
- This project has the potential to affect sensitive fish resources such as Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*O. kisutch*), and steelhead trout (*O. mykiss*).
- CDFW would like to conduct a site visit prior to Project approval to insure that applicant is in compliance with Fish and Game Code 1602. CDFW may have additional comments after site visit inspection.

Thank you for the opportunity to comment on this Project. Please contact me at Kalyn.bocast@wildlife.ca.gov if you need additional information.

Sincerely,

Kalyn Bocast
Environmental Scientist
Watershed Enforcement Team
California Department of Fish and Wildlife
619 2nd Street
Eureka, CA 95501
(707) 441-2077











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Attachment 2

APNs	Case #	Date of Application APNs*	Zoning	Document Name	Preparer	Agency Document Date Signed?	Cult Area in Docs	Type of cult	Any pics?	If yes, date taken	Notes:	
10508	CUP16-030	5/11/2016	107-124-015, 107-235-008	U	WRPP* (see note)	TRC	8/3/2016 Yes-TRC	22,000*	Yes	7/20/2016	*The WRPP evaluates cultivation areas in APN#107-235-008 (Apps#10508) & 107-235-007 (Apps#10509), a total of 44,000sf (split between two Apps#)	
10509	CUP16-031	5/11/2016	107-235-007	U	WRPP* (see note)	TRC	8/3/2016 Yes-TRC	22,000*	Greenhouses	Yes	7/20/2016	*2016 WRPP photos document 2016 expansion to 22,000sf each, earlier docs (SDUR) & pics indicate 6,400sf in 2015 conditions
					TRC	2/12/2016 Yes-Rentro	Referenced in MRP, Appendix C (# below)	n/a	no	n/a	*The RWQCB NOI evaluates cultivation areas in APN#107-235-008 (Apps#10508) & 107-235-007 (Apps#10509), therefore includes 10508 (and not 107-124-015, no cultivation is shown on site plan)	
					TRC	3/30/2016 No	10,000*	n/a	no	n/a	*The RWQCB MRP evaluates cultivation areas in APN#107-235-008 (Apps#10508) & 107-235-007 (Apps#10509), a total of 20,000 (split between two Apps#)	
					TRC	2/4/2016 Yes-TRC	12,800*	Greenhouses	Yes	12/1/2015	*The SDUR evaluates use on 107-235-008, POD on 107-234-007 (Not a part/no cultivation), POD 107-235-007 (Apps#10509), well on 107-235-007 (Aps#10509)	
					TRC	4/14/2016 Yes-Rentro	Not Specified, but reference 3 POD for 10508/10509	n/a	No	n/a	*Confirms the combination of both Apps#10508 & 10509	
					TRC	12/19/2015 Yes-TRC	Indicates all POD & cultivation for 10508/10509	n/a	No	n/a		
					TRC	Draft 4 1600	POD #1 & #2 for 10508/POD#3 (well) for 10509	n/a	No	n/a		
					TRC	Initial Statement						
					TRC	12/19/2015 Yes-TRC	Indicates all POD & cultivation for 10508/10509	n/a	No	n/a		
					TRC	12/19/2015 Yes-TRC	Indicates all POD & cultivation for 10508/10509	n/a	No	n/a		
10552	CUP17-021	5/26/2016	107-236-011	U	WRPP	TRC	8/1/2016 Yes-TRC	10,000*	Greenhouses	Yes	7/21/2016	*WRPP notes 10,000 sf of greenhouse cultivation, not acre
					TRC	2/12/2016 Yes-Rentro	Referenced in MRP, Appendix C (# below)	n/a	No	n/a	*No water storage in 2016. Will increase storage in 2017.	
					TRC	8/1/2016 Yes-TRC	10,000*	n/a	No	n/a		
					TRC	2/7/2016 Yes-Rentro	Not Specified, but reference 1 POD from LSA Application	n/a	No	n/a	*Landowner not using diversion, was used for "homes, abandoned cars". Currently planning for ag development, future ag use is presently unknown and plans for future residential and ag development	
					TRC	11/8/2015 Yes-TRC	"Future ag development currently unknown"	n/a	No	n/a	*Landowner not using diversion, was used for "homes, abandoned cars". Currently planning for ag development, future ag use is presently unknown and plans for future residential and ag development	
					TRC	8/23/2017 Yes-TRC	5,000*	Greenhouses	Yes	8/23/2017	*Report does not specify cult area, but attached map shows 5 20x50 greenhouses	
					TRC	7/27/2016 Yes-TRC	10,000*	Greenhouses	Yes	7/21/2016	*Reports states that cult site is two 40x100 greenhouses and a 20x100 mixed light nursery	
					TRC	2/12/2016 Yes-Rentro	None	n/a	No	n/a		
					TRC	3/30/2016 No-TRC	10,000*	Greenhouses	No	n/a		
					TRC	12/19/2015 Yes-TRC	6,400 in 2015, states increase to 10,000 in 2016*	Greenhouses	Yes	12/1/2015	*Says both that no surface water was diverted, but also say cultivated in 2015 & used 640 gallons per day	
10934	CUP16-107	8/18/2016	107-234-012, 107-111-001	TPZ	WRPP* (see note)	TRC	7/25/2016 Yes-TRC	10,000 total, but math adds to 12,000*	Greenhouses	Yes	11/25/2015	*Also photo on 7/20/16, math doesn't add up in project description, says no cultivation is occurring because not enough forbearance storage
					TRC	2/12/2016 Yes-Rentro	None	n/a	No	n/a		
					TRC	7/25/2016 Yes-TRC	10,000*	n/a	No	n/a	*Signed MRP form says 10,000, another MRP form in file states 20,000sf cult area, but not signed	
					TRC	2/4/2016 Yes-TRC	9,800*	Greenhouses	Yes	11/25/2015	*Two cult areas pics show 9,600sf	
					TRC	3/28/2016 Yes-Rentro	None	n/a	No	n/a	*For POD application for irrigation purposes	
					TRC	12/9/2015 Yes-TRC	10,000*	Greenhouses	Yes	11/25/2015	*Existing ag use is 10,000, future ag use is presently unknown, pics mention "proposed 3,200sf of greenhouses	
					TRC	1/2/2016 Yes-TRC	12,632sf of cult area irrigated	n/a	no	n/a	*Two POD applied for to irrigate approximately 12,632sf of cult area	
					TRC	Initial Statement						
					TRC	LSA Application						
					TRC	LSA/1600						

Review of Existing Cultivation Area for Other Sites									
APNs	Case #	Date of Application	APNs*	Zoning	Observed Existing Cultivation Area	Observed Cultivation Type	Data Source Date	Data Source	Notes
10508	CUP-16-030	5/11/2016	107-124-015, 107-235-008	U	15,000	greenhouses	9/27/2015	TerraServer	no evidence of cultivation holding pens
10509	CUP-16-031	5/11/2016	107-235-007	U	12,000	greenhouses	9/18/2015	TerraServer	no evidence of cultivation holding pens
10552	CUP-17-021	5/26/2016	107-236-011	U	4,600	greenhouses	6/16/2010	TerraServer	no evidence of cultivation holding pens
10934	CUP-17-107	8/18/2016	107-234-012, 107-111-001	TPZ	19,500	greenhouses	9/18/2015	TerraServer	no evidence of cultivation holding pens
10554	SP-16-051	5/26/2016	107-235-002	U	10,000	greenhouses	9/18/2015	TerraServer	No issues with CAV

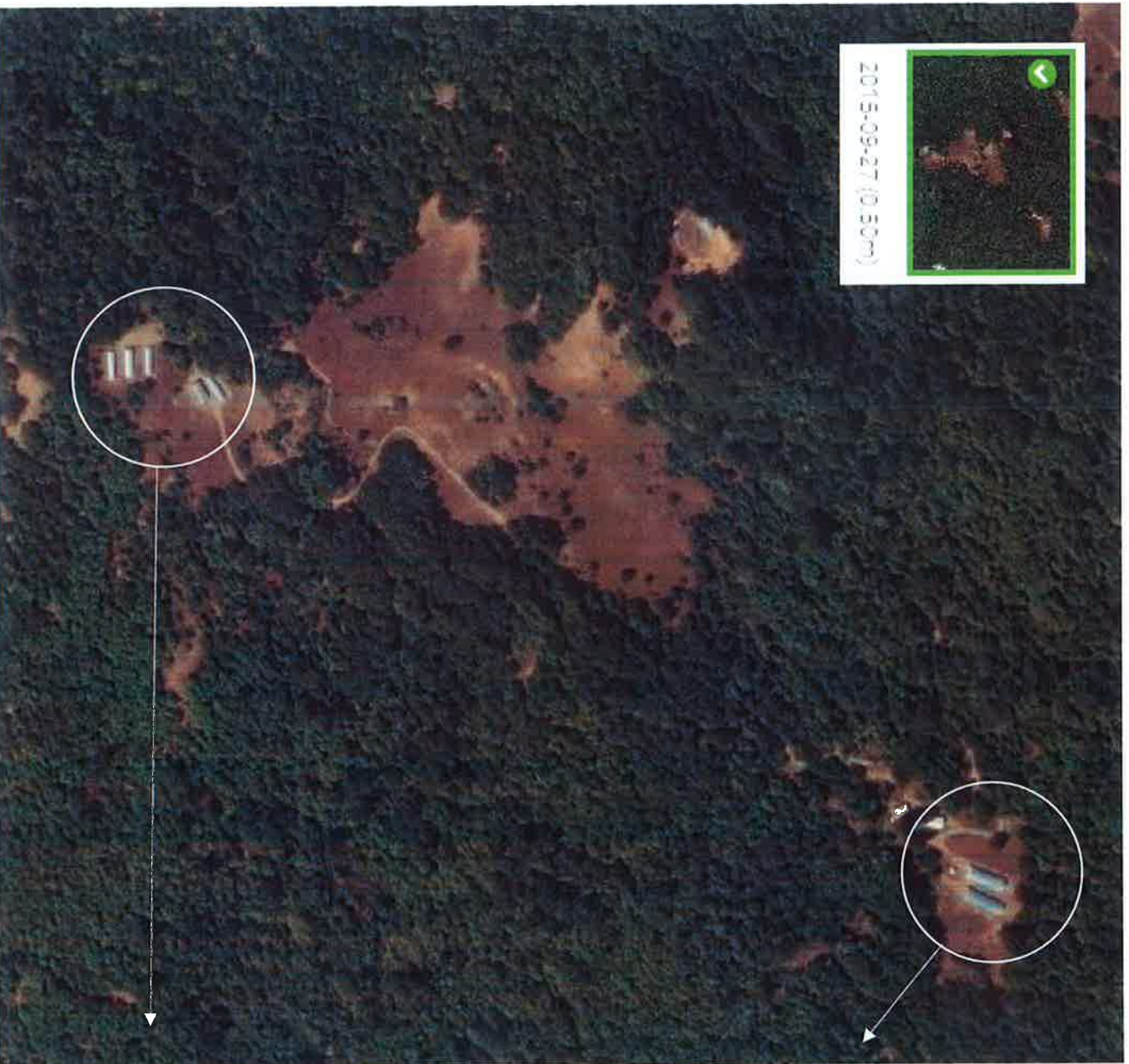
* APNs listed altogether comprise the legal parcel

*APNs listed altogether comprise the legal parcel

Innovation West App# 10508, APNs: 107-124-015 and 107-235-008



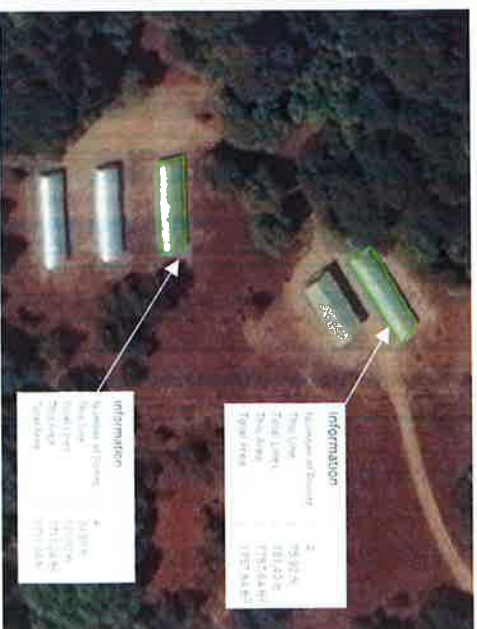
**Innovation West App# 10508, APNs: 107-124-015 and 107-235-008
Pre-Existing Cultivation Areas – Aerial Record**



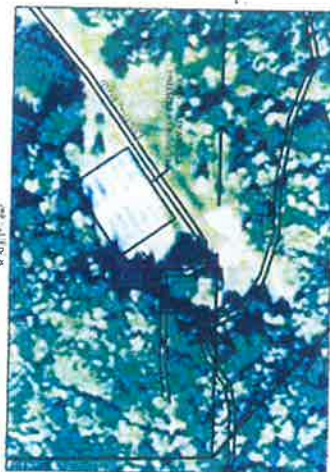
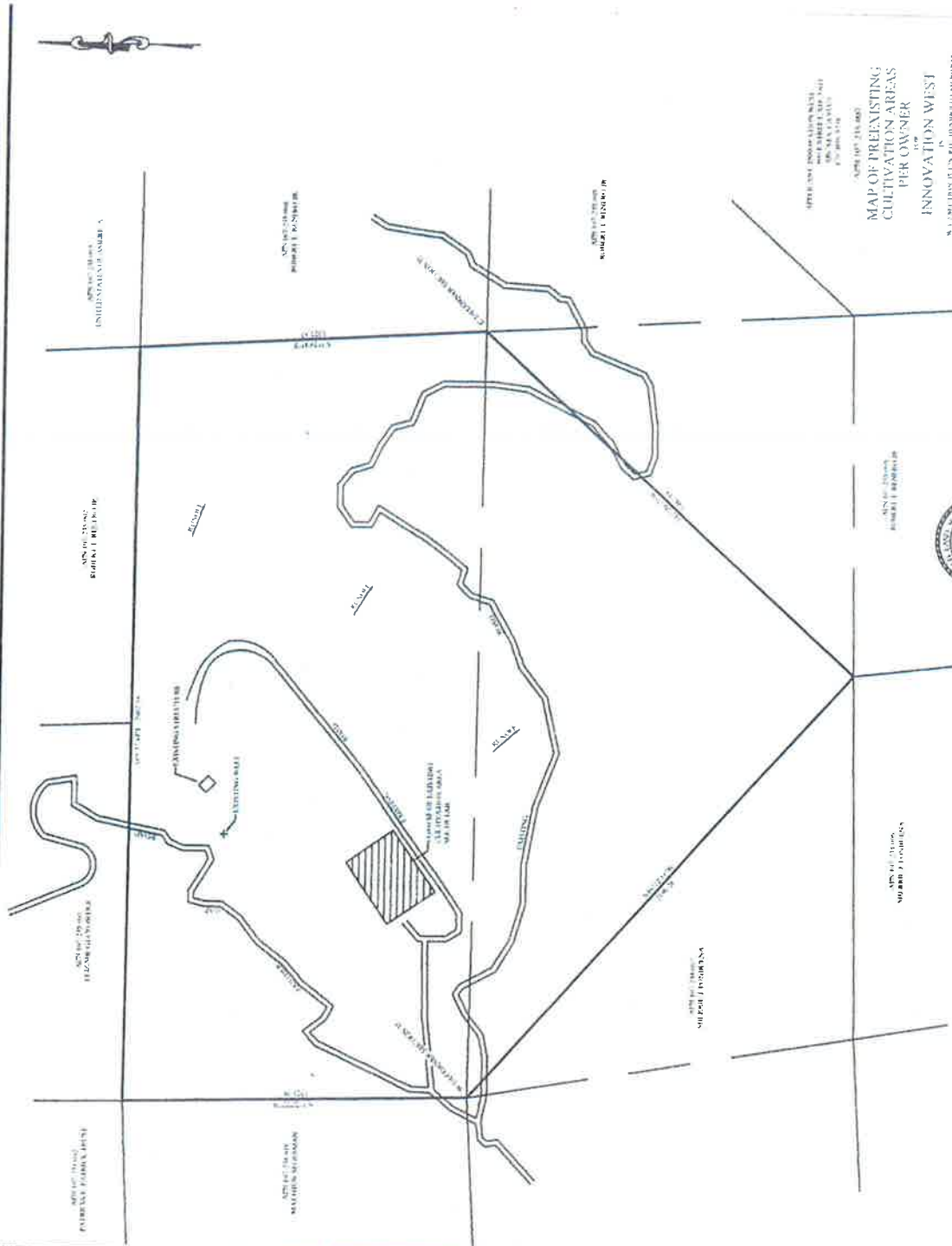
Total visible cultivation area: 15,000 ft2



Approximately 8,000 sq. ft. of mixed light



Approximately 7,000 sq. ft. of mixed light

[illegible][illegible]

APR 10 1975

MAP OF PREEXISTING
CULTIVATION AREAS
PER OWNER

INNOVATION WITH
 21
 22[illegible][illegible]

UNIVERSITY COUNTY

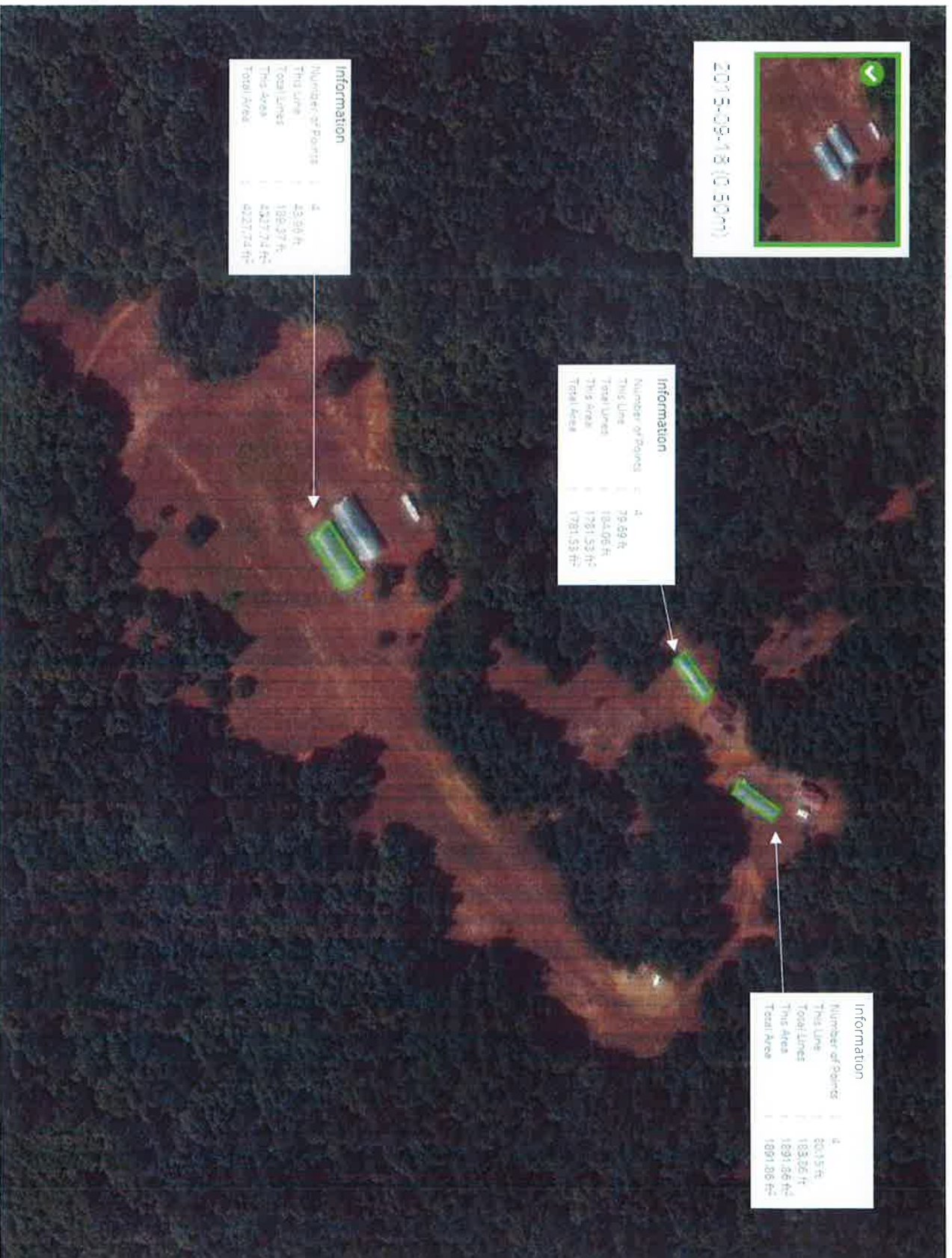
WILLIAM J. HENRY ASSOCIATES, INC.

EUREKA, CALIFORNIA

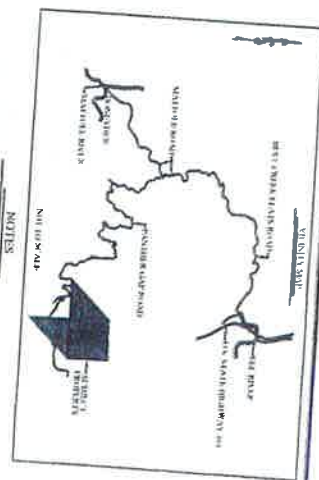
EUREKA, CALIFORNIA

Page 19

**Innovation West App# 10509, APNs: 107-235-007
Pre-Existing Cultivation Areas – Aerial Record**



September 18, 2015 – Approx. 12,000 sq. ft. of cultivation

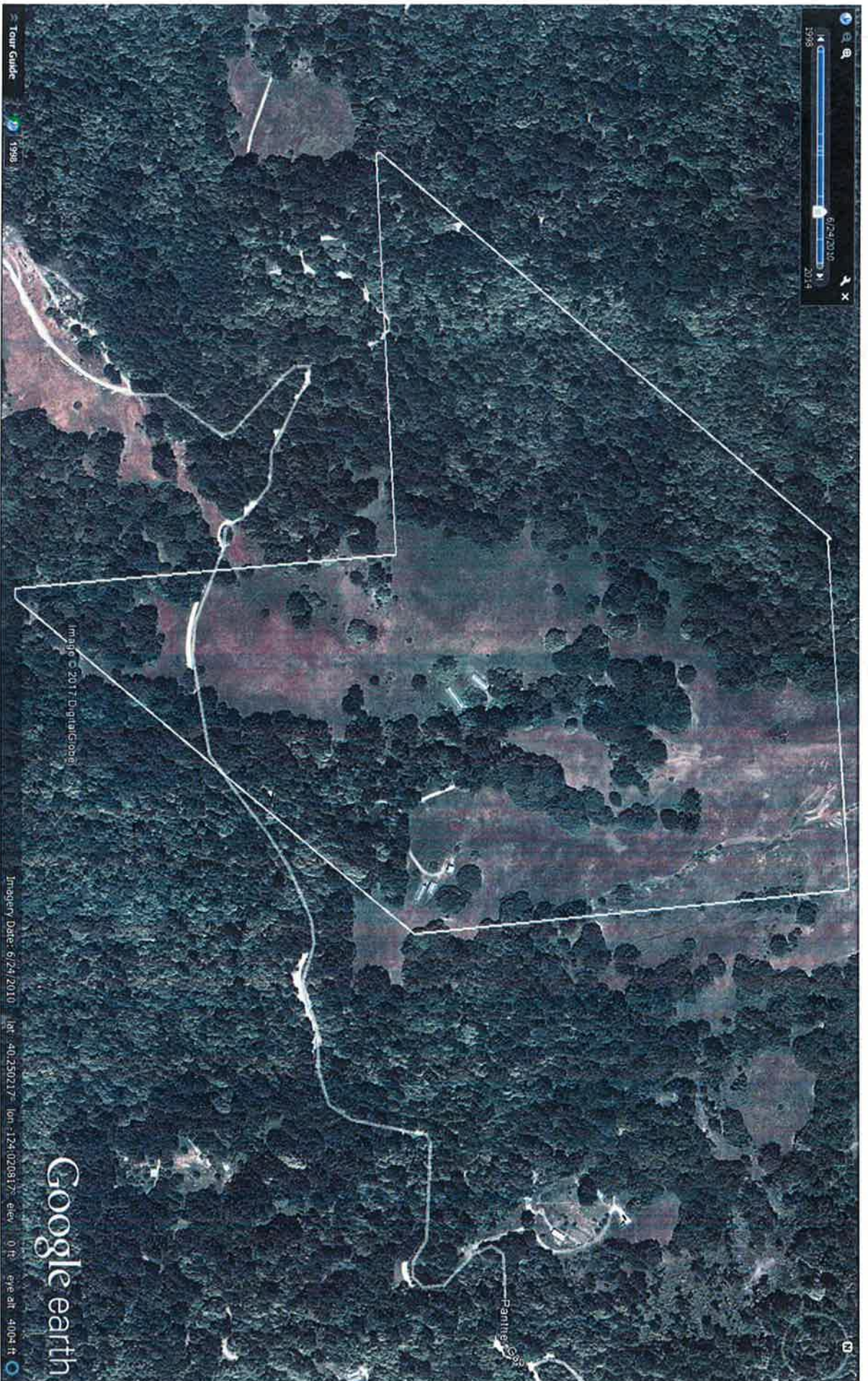


-

Mailed 8.8.07

COUNTY OF HENBOLD
STATE OF CALIFORNIA
KELLY O'HARA ASSOCIATES
EUREKA, CALIFORNIA

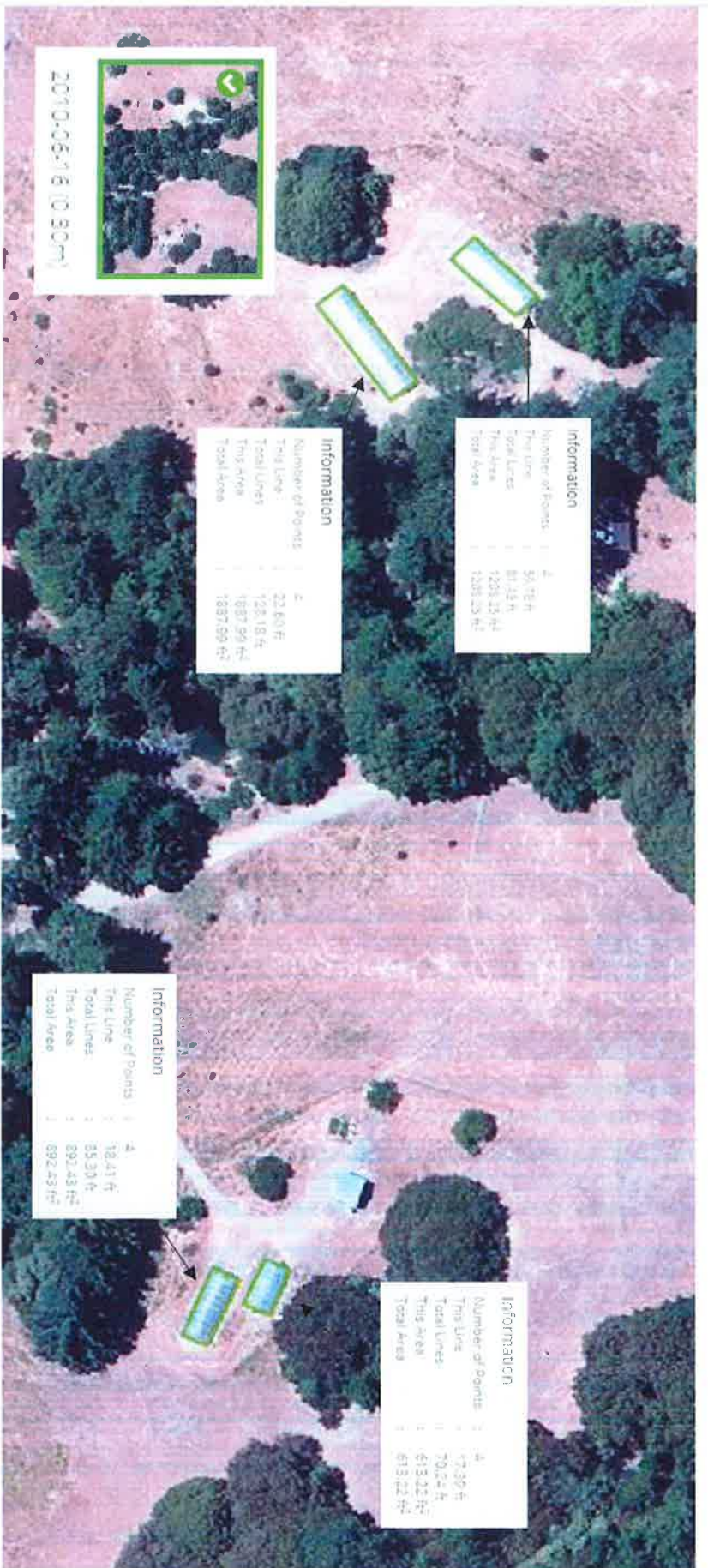
Innovation West App# 10552, APN: 107-236-011
Pre-Existing Cultivation Areas – Aerial Record



June 24, 2010 – Displays largest cultivation area visible between 2006 & 2015; cultivation occurs in the two general locations identified on plot plan, aerial record displays approximately 4,500 – 5,000 sq. ft. of cultivation on parcel

Innovation West App# 10552, APN: 107-236-011
Pre-Existing Cultivation Areas – Aerial Record

Cultivation are totals 4,600 SF



August 23, 2012



May 28, 2014



September 18, 2015



Innovation West App# 10934, APNs: 107-234-012 & 107-111-001
Pre-Existing Cultivation Areas – Aerial Record



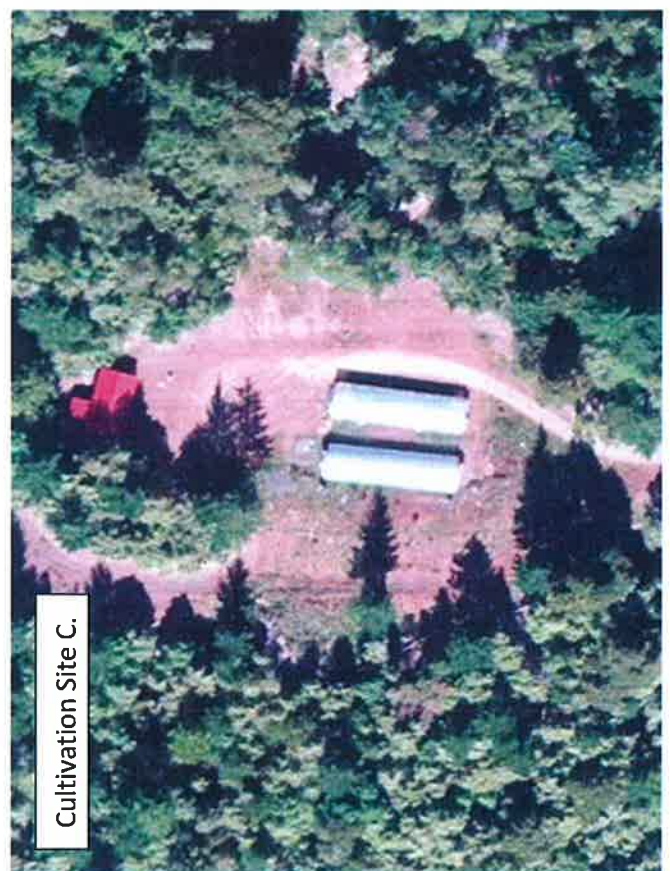
May 28, 2014 – Aerial reference map of cultivation sites claimed in cultivation plot plan



Cultivation Site A.



Cultivation Site B.

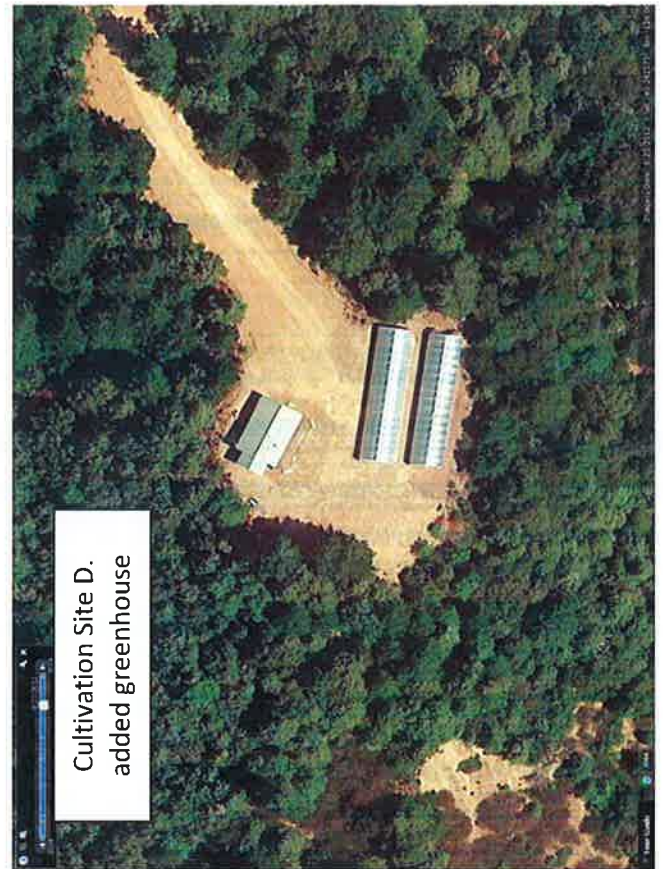
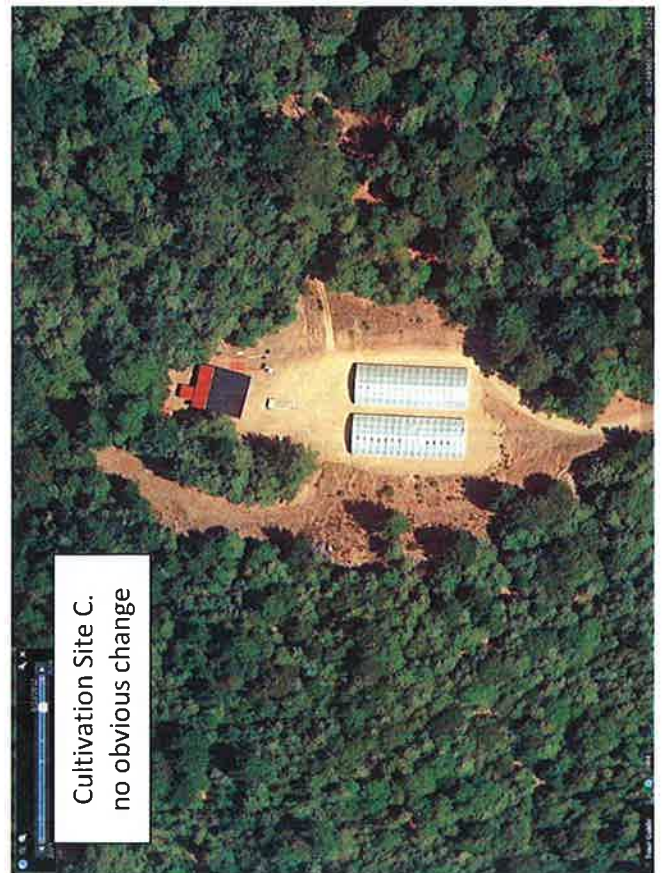
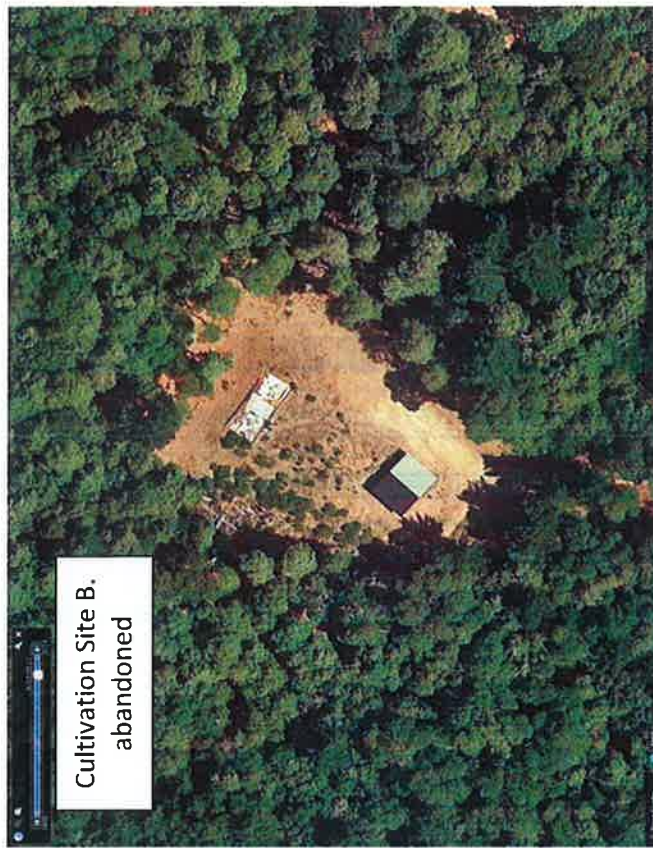
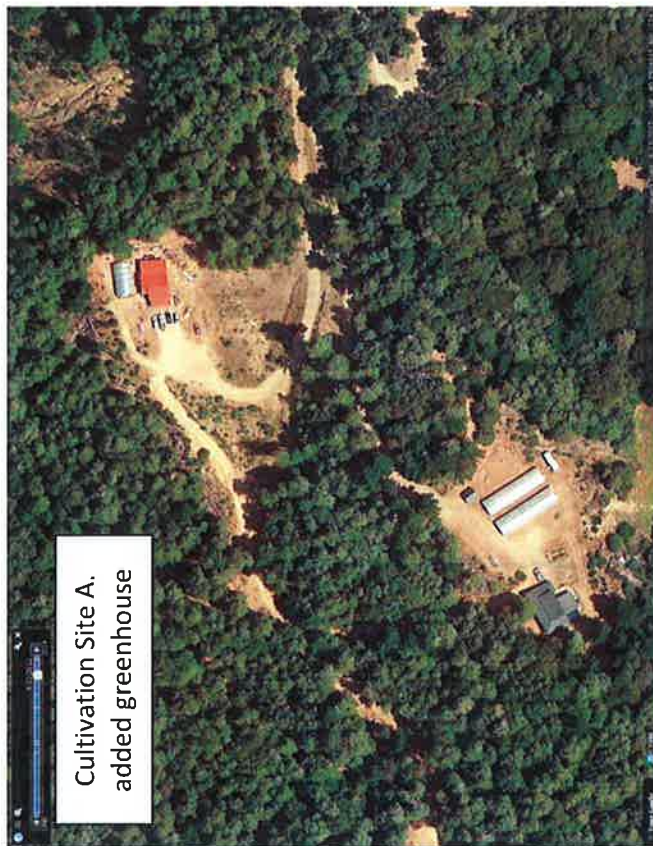


Cultivation Site C.



Cultivation Site D.

Innovation West App# 10934, APNs: 107-234-012 & 107-111-001
 Pre-Existing Cultivation Areas – August 23, 2012 (2012 cultivation levels are maintained through 2015)



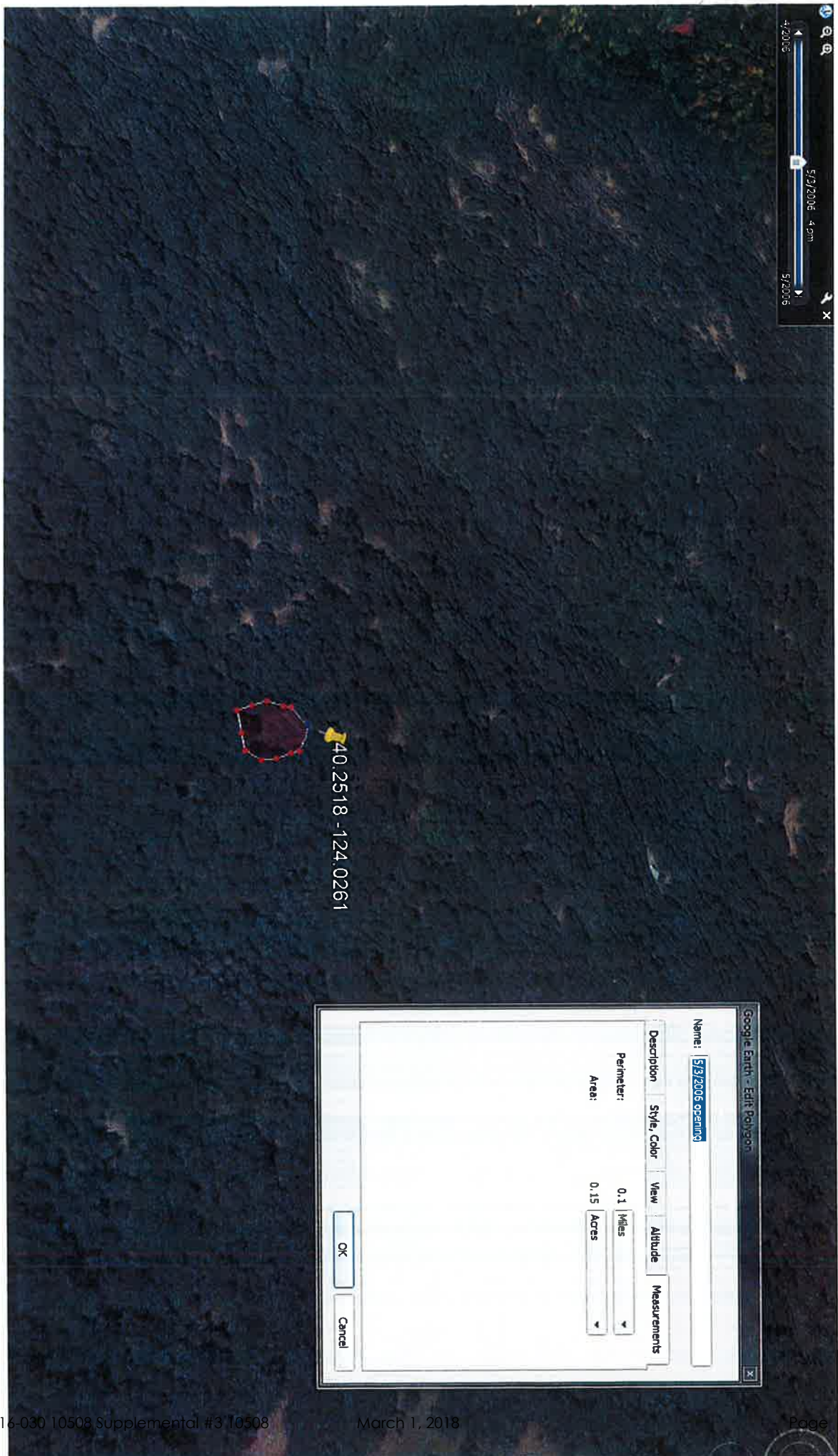
Innovation West App# 10934, APNs: 107-234-012 & 107-111-001
Pre-Existing Cultivation Areas – September 18, 2015 measurements

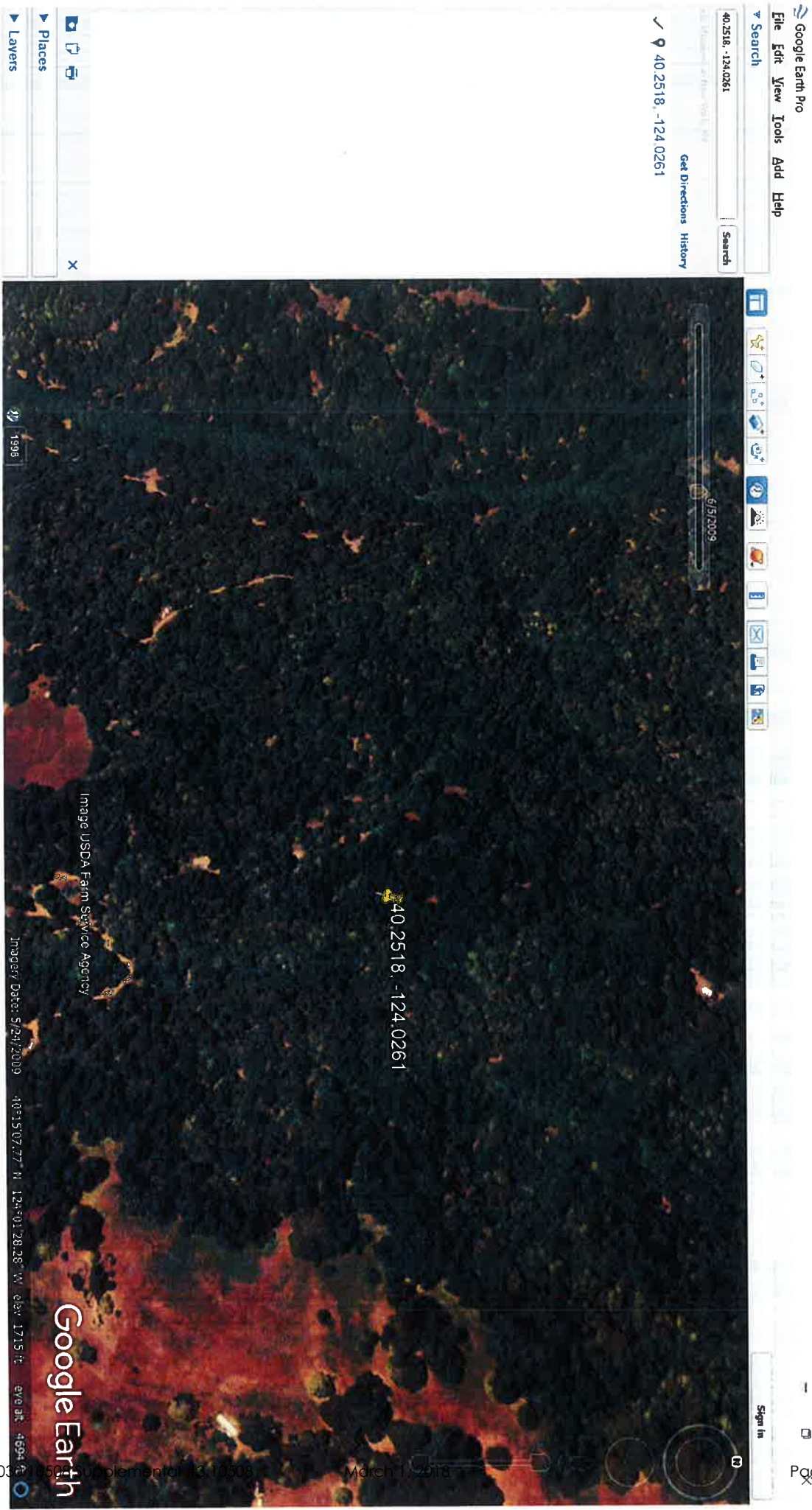
Visible total pre-existing cultivation area is approximately 19,500 sq. ft.



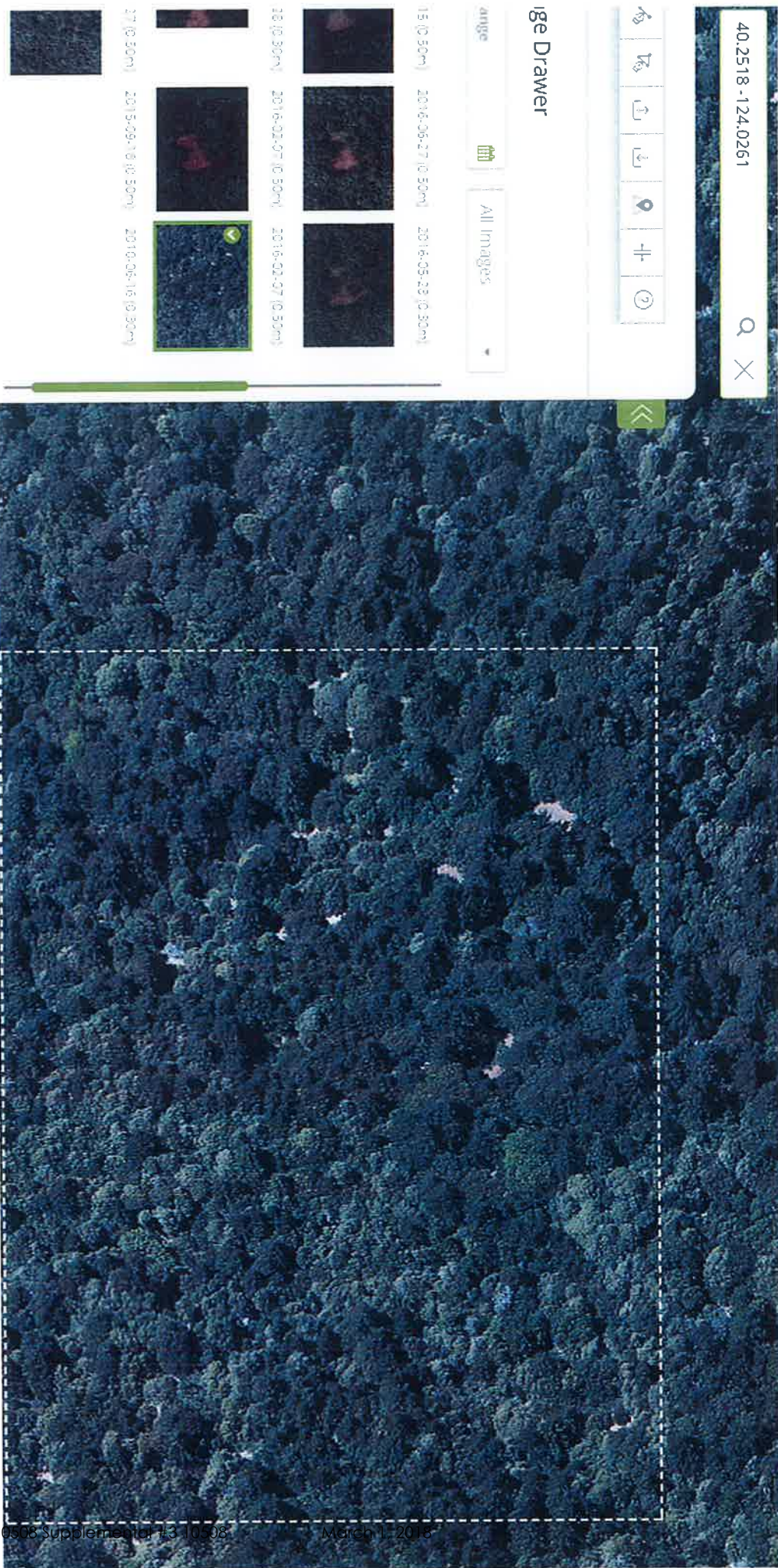
Attachment 3

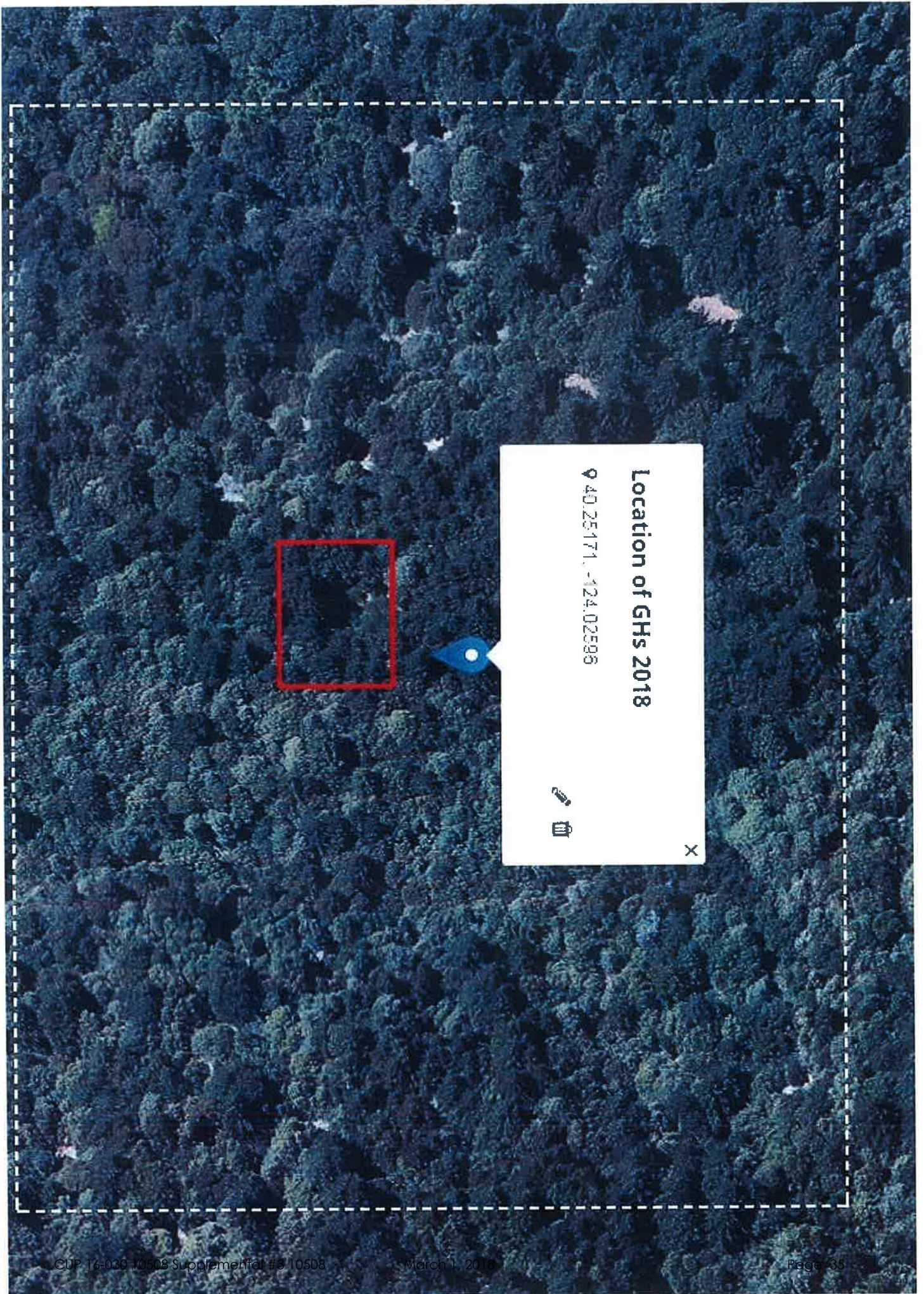
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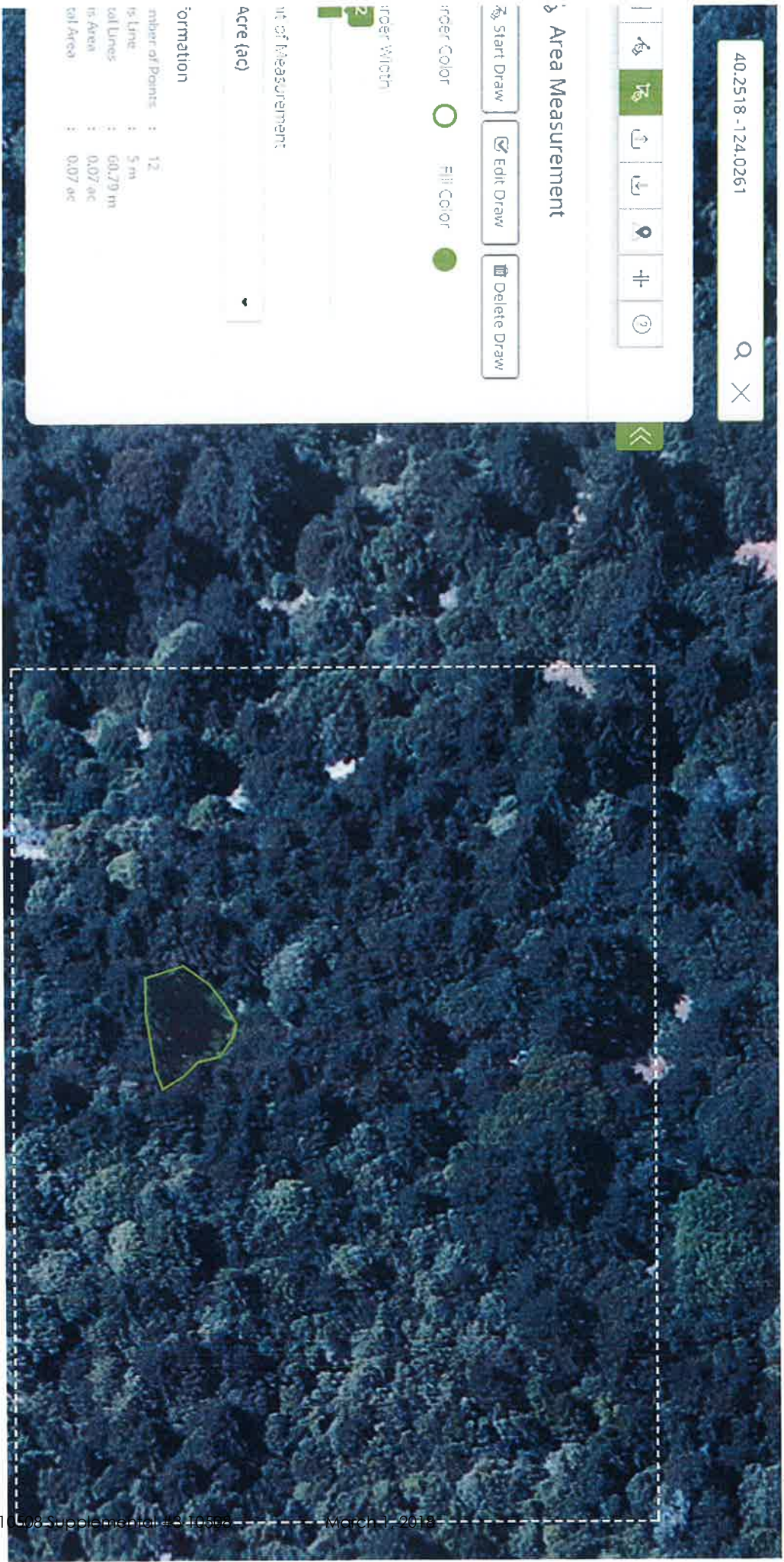




40.2518 -124.0261







40.2518 -124.0261

Q X

- 1
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Area Measurement

- Start Draw
- Edit Draw
- Delete Draw

Order Color ● Fill Color ●

Order Width

Order Width

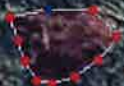
Unit of Measurement

Area (ac)

Information

Number of Points	12
Is Line	5 m
Total Lines	60.79 m
Is Area	0.07 ac
Total Area	0.07 ac

40.2518 -124.0261

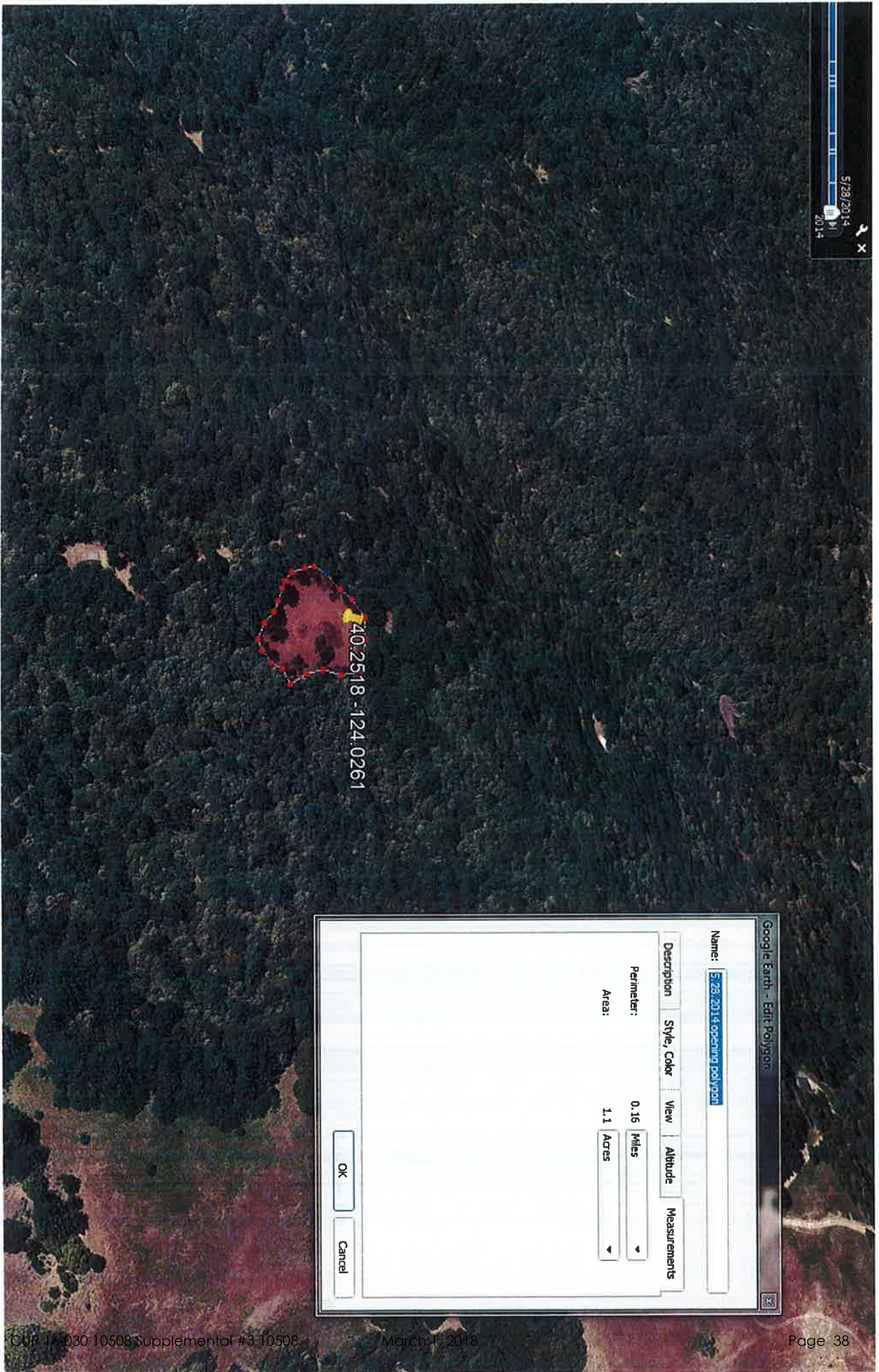


Google Earth - Edit Polygon

Name: 9/15/2010 opening

Description	Style, Color	View	Altitude	Measurements
Perimeter:				0.1 Miles
Area:				0.12 Acres

OK Cancel



107235010

X

Q

Show search results for 107.

Layer List

Operational Layers

☒

 Critical Facilities, Roads and Streams

☒

 Jurisdiction Boundaries & Land Use

☐

 Humboldt County Parcels (5.7) APN labels

☒

 Humboldt County Parcels (5.7)

☒

 Hazards

☒

 Coastal Zone

☒

 Natural Resources

☒

 Demographics, Economics, and Mobility

☐

 Topo Hillshade

☐

 Eureka Aerial 2014

☐

 Eureka Aerial 2007

☐

 Arcata Aerial 2003

☐

 NAIP 2016

☒

 NAIP 2014

☐

 NAIP 2012



40.2518, -124.0261



Show/Hide Pins



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Add Pin

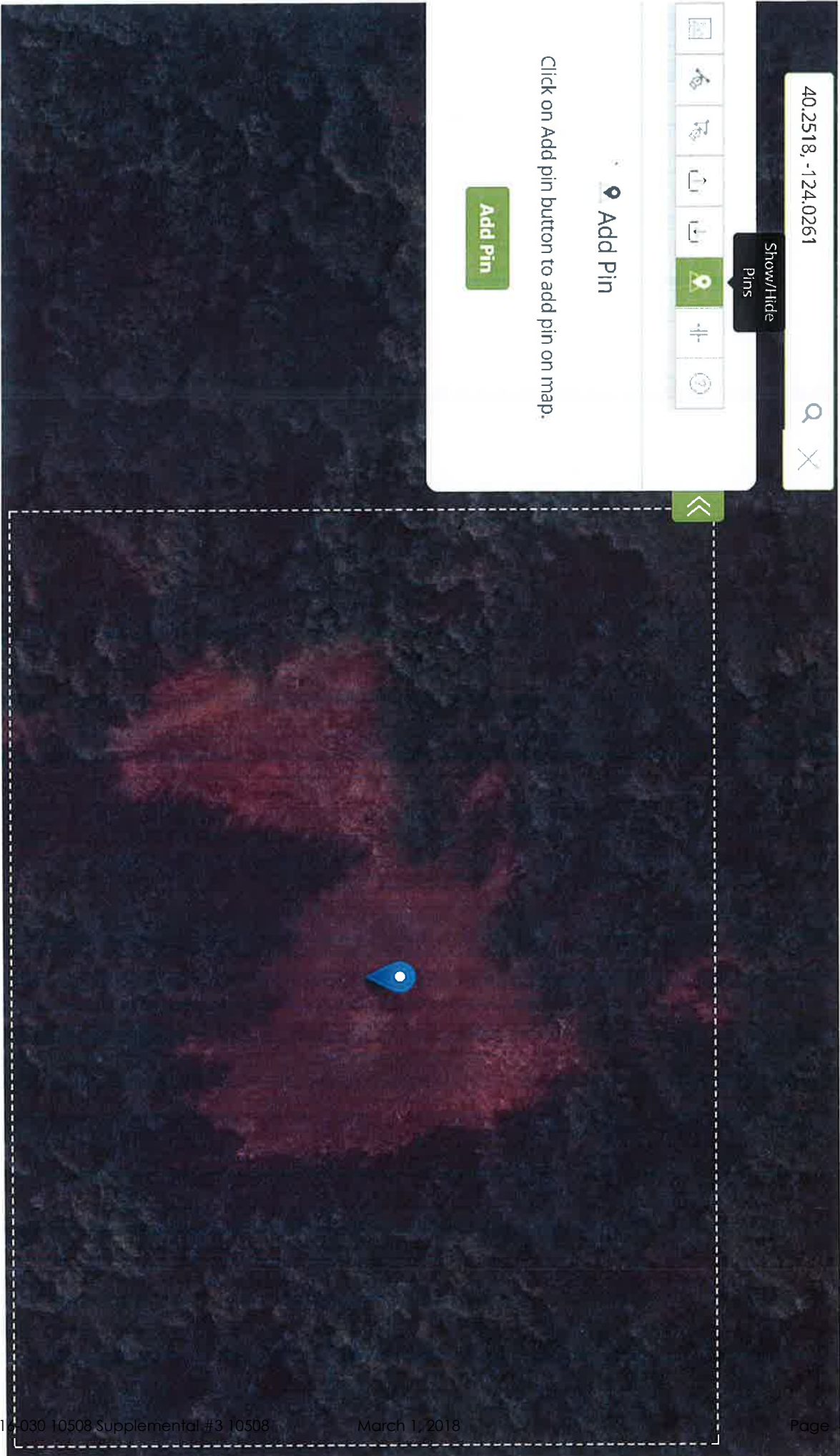


Image Date
9.18.2015

Latitude: 40.2518 Longitude: -124.0000



Area Measurement

Start Draw

Edit Draw

Delete Draw

Border Color  Fill Color 

Border Width

2

Unit of Measurement

Acre (ac)

Information

Number of Points	14
This Line	16.71 m
Total Lines	352.93 m
This Area	2.12 ac
Total Area	2.12 ac

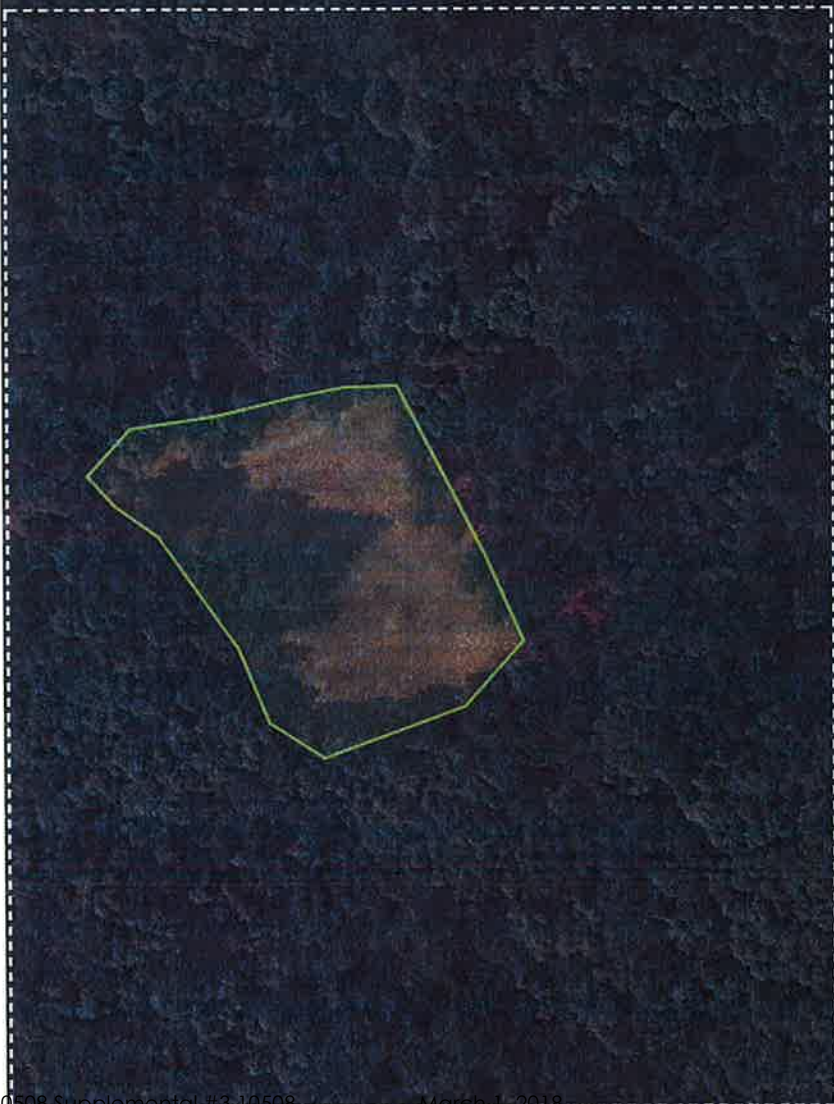
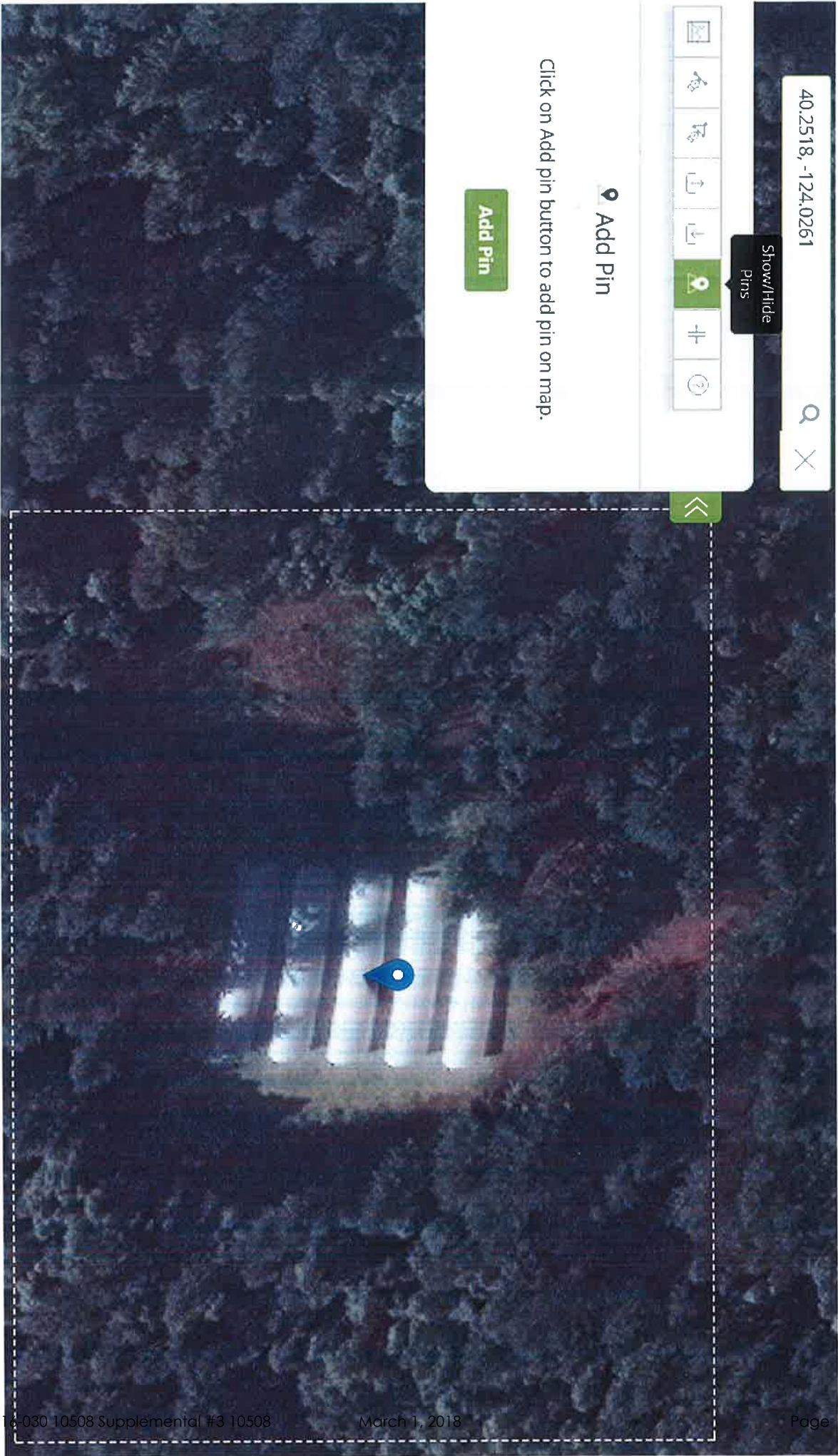


Image
Date
9.18.15



40.2518, -124.0261

Show/Hide
Pins

Add Pin

Click on Add pin button to add pin on map.

Add Pin

Latitude: 40.2518 Longitude: -1.24,....



Area Measurement

Start Draw Edit Draw Delete Draw

Border Color Fill Color

Border Width

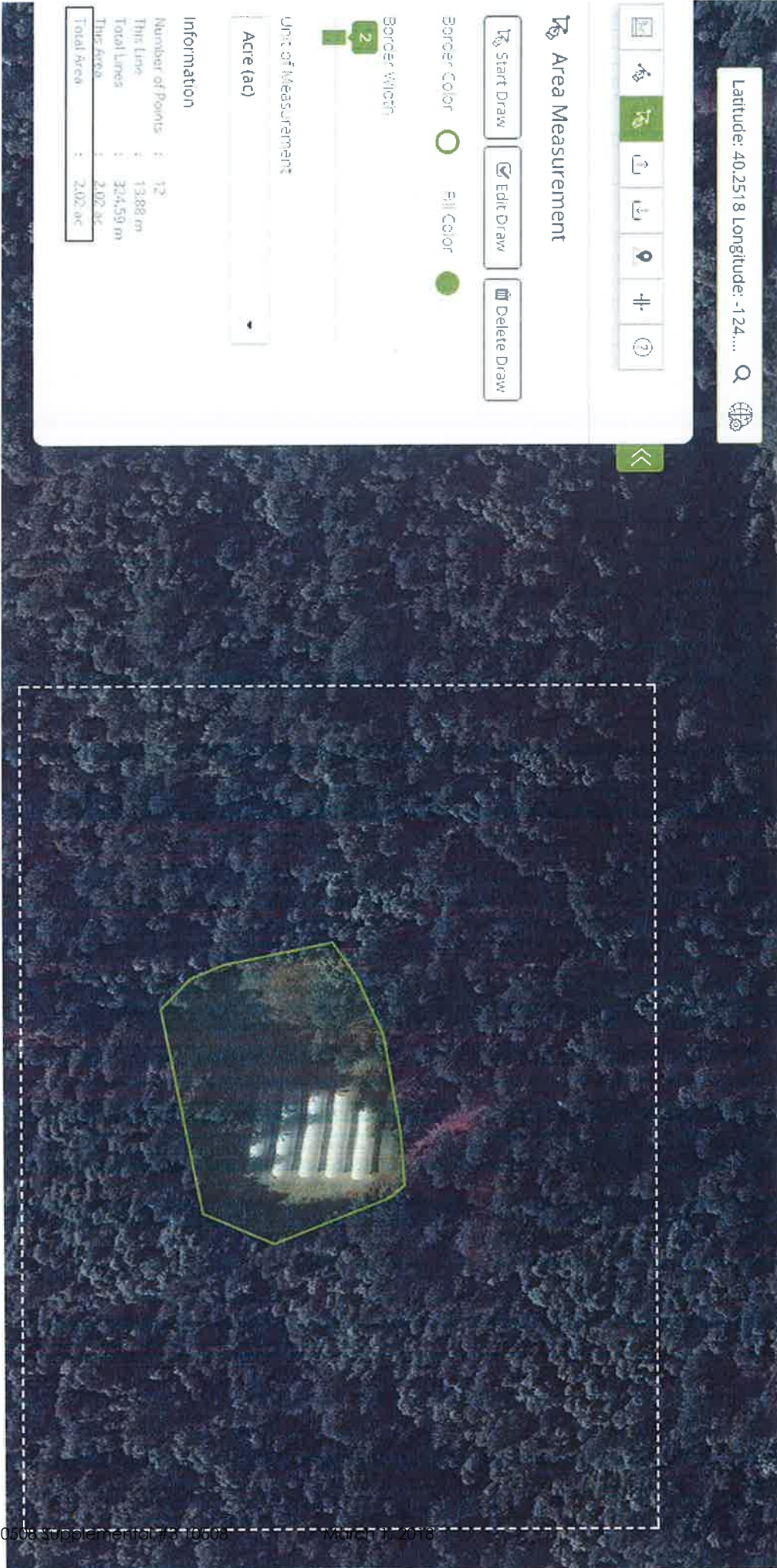
2

Unit of Measurement

Acre (ac)

Information

Number of Points	12
This Line	13.88 m
Total Lines	324.59 m
This Area	2.02 ac
Total Area	2.02 ac



Inventory from Archaeological Research & Supply Company				
received 2/13/2018				
Summary of Inventory				
Total Estimated Canopy in Ideal Conditions (SF)	Total Estimated Canopy reduced 1/3 (SF)			
720	482			
1,872	1,300			
108	75			
216	150			
4,104	2,850			
468	325			
288	193			
144	100			
7,920	5,475			
Assuming the sample is representative of the entire parcel yields an estimated total canopy of:				
Ideal Conditions (SF)	reduce 1/3 (SF)			
52,800	36,500			

Inventory from Archaeological Research & Supply Company				
received 2/13/2018				
Sites 1-6		Survey Date: 2/3/2018		
			Estimated Canopy in Ideal Conditions (SF)	Estimated Canopy reduced 1/3 (SF)
Site 3:*	10-20 GH	=20*36	720	482
Sites 7-15		Survey Date: 2/3/2018		
	Dia. in Inches	Dia. In Feet	Estimated Canopy in Ideal Conditions (SF)	Estimated Canopy reduced 1/3 (SF)
GH 1	31.5	2.6	36	25
GH 2	31.5	2.6	36	25
GH 3	31.5	2.6	36	25
GH 4	31.5	2.6	36	25
GH 5	31.5	2.6	36	25
GH 6	31.5	2.6	36	25
GH 7	31.5	2.6	36	25
GH 8	31.5	2.6	36	25
GH 9	31.5	2.6	36	25
GH 10	31.5	2.6	36	25
GH 11	31.5	2.6	36	25
GH 12	31.5	2.6	36	25
GH 13	31.5	2.6	36	25
GH 14	31.5	2.6	36	25
GH 15	31.5	2.6	36	25
GH 16	31.5	2.6	36	25
GH 17	31.5	2.6	36	25
GH 18	31.5	2.6	36	25
GH 19	31.5	2.6	36	25
GH 20	31.5	2.6	36	25
GH 21	31.5	2.6	36	25
GH 22	31.5	2.6	36	25
GH 23	31.5	2.6	36	25
GH 24	31.5	2.6	36	25
GH 25	31.5	2.6	36	25
GH 26	31.5	2.6	36	25
GH 27	31.5	2.6	36	25
GH 28	31.5	2.6	36	25
GH 29	31.5	2.6	36	25
GH 30	31.5	2.6	36	25
GH 31	31.5	2.6	36	25
GH 32	31.5	2.6	36	25
GH 33	31.5	2.6	36	25

GH 34	31.5	2.6	36	25
GH 35	31.5	2.6	36	25
GH 36	31.5	2.6	36	25
GH 37	31.5	2.6	36	25
GH 38	31.5	2.6	36	25
GH 39	31.5	2.6	36	25
GH 40	31.5	2.6	36	25
GH 41	31.5	2.6	36	25
GH 42	31.5	2.6	36	25
GH 43	31.5	2.6	36	25
GH 44	31.5	2.6	36	25
GH 45	31.5	2.6	36	25
GH 46	31.5	2.6	36	25
GH 47	31.5	2.6	36	25
GH 48	31.5	2.6	36	25
GH 49	31.5	2.6	36	25
GH 50	31.5	2.6	36	25
GH 51	31.5	2.6	36	25
GH 52	31.5	2.6	36	25
			1872	1300
	in sq meters	In SF	Estimated Canopy in Ideal Conditions (SF)*	Estimated Canopy reduced 1/3 (SF)
Lrg GH 1	2	21.52	36	25
Lrg GH 2	2	21.52	36	25
Grow Trench	2	21.52	36	25
			108	75
	Dia. In Inches	Dia. In Feet	Estimated Canopy in Ideal Conditions (SF)*	Estimated Canopy reduced 1/3 (SF)
Sml GH	15	1.31	36	25
GB w/ brown tarp	no size specified		36	25
GH with bucket	no size specified		36	25
GB w/ chicken wire	2		36	25
Multiple GBs w/ chicken wire	no quantity specified, assumed 2		72	50
			216	150
Survey Date: 2/11/2018				
	Dia. in Inches	Dia. In Feet	Estimated Canopy in Ideal Conditions (SF)	Estimated Canopy reduced 1/3 (SF)
GH 1	31.5	2.6	36	25

GH 2	31.5	2.6	36	25
GH 3	31.5	2.6	36	25
GH 4	31.5	2.6	36	25
GH 5	19.7	1.6	36	25
GH 6	19.7	1.6	36	25
GH 7		9.5 SF	36	25
GH 8	39.4	3.3	36	25
GH 9	11.8	1.0	36	25
GH 10	31.5	2.6	36	25
GH 11	15.75	1.3	36	25
GH 12	23.6	2.0	36	25
GH 13	31.5	2.6	36	25
GH 14	31.5	2.6	36	25
GH 15	31.5	2.6	36	25
GH 16	27.56	2.3	36	25
GH 17	31.5	2.6	36	25
GH 18	31.5	2.6	36	25
GH 19	31.5	2.6	36	25
GH 20	39.4	3.3	36	25
GH 21	31.5	2.6	36	25
GH 22	31.5	2.6	36	25
GH 23	31.5	2.6	36	25
GH 24	31.5	2.6	36	25
GH 25	23.6	2.0	36	25
GH 26	98.43	8.2	36	25
GH 27	15.75	1.3	36	25
GH 28	31.5	2.6	36	25
GH 29	23.6	2.0	36	25
GH 30	19.7	1.6	36	25
GH 31	27.6	2.3	36	25
GH 32	31.5	2.6	36	25
GH 33	31.5	2.6	36	25
GH 34	23.6	2.0	36	25
GH 35	31.5	2.6	36	25
GH 36	31.5	2.6	36	25
GH 37	31.5	2.6	36	25
GH 38	31.5	2.6	36	25
GH 39	31.5	2.6	36	25
GH 40	31.5	2.6	36	25
GH 41	31.5	2.6	36	25
GH 42	31.5	2.6	36	25
GH 43	31.5	2.6	36	25
GH 44	31.5	2.6	36	25
GH 45	31.5	2.6	36	25
GH 46	31.5	2.6	36	25
GH 47	31.5	2.6	36	25
GH 48		21.5 SF	36	25

GH 49		31.5	2.6	36	25
GH 50		31.5	2.6	36	25
GH 51		31.5	2.6	36	25
GH 52		31.5	2.6	36	25
GH 53		31.5	2.6	36	25
GH 54		31.5	2.6	36	25
GH 55		23.6	2.0	36	25
GH 56		31.5	2.6	36	25
GH 57		39.4	3.3	36	25
GH 58		39.4	3.3	36	25
GH 59		31.5	2.6	36	25
GH 60		31.5	2.6	36	25
GH 61		39.4	3.3	36	25
GH 62	size not specified	n/a		36	25
GH 63	size not specified	n/a		36	25
GH 64		35.4	3.0	36	25
GH 65		35.4	3.0	36	25
GH 66		23.6	2.0	36	25
GH 67		19.7	1.6	36	25
GH 68		39.4	3.3	36	25
GH 69		47.2	3.9	36	25
GH 70		31.5	2.6	36	25
GH 71		31.5	2.6	36	25
GH 72		31.5	2.6	36	25
GH 73		51.2	4.3	36	25
GH 74		31.5	2.6	36	25
GH 75		31.5	2.6	36	25
GH 76		31.5	2.6	36	25
GH 77		31.5	2.6	36	25
GH 78		31.5	2.6	36	25
GH 79		27.6	2.3	36	25
GH 80		31.5	2.6	36	25
GH 81		23.6	2.0	36	25
GH 82		11.8 SF		36	25
GH 83		31.5	2.6	36	25
GH 84		11.8	1.0	36	25
GH 85		19.7	1.6	36	25
GH 86		31.5	2.6	36	25
GH 87		15.8	1.3	36	25
GH 88		19.7	1.6	36	25
GH 89		19.7	1.6	36	25
GH 90		31.5	2.6	36	25
GH 91		31.5	2.6	36	25
GH 92		31.5	2.6	36	25
GH 93		31.5	2.6	36	25
GH 94		31.5	2.6	36	25
GH 95		31.5	2.6	36	25

[illegible]

GB 2	23.6	36	25
GB 3	23.6	36	25
GB 4	23.6	36	25
		144	100

Photos from 2/8/18 site visit



Stack of
pots, pic 1 of 2

FEB 8 2018



FEB 8 2018

Stack of pots, pic
2 of 2: same as
1, different angle



FEB 8 2018



FEB 8 2018



FEB 8 2018

Grow Hole

FEB 8 2018

Grow Hole

FEB 8 2018

8102 8 B7F





FEB 8 2018

Grow Hole

FEB 8 2018

Attachment 4



INNOVATIONS WEST: QUANTIFYING HISTORIC CANNABIS CULTIVATION

ABSTRACT

This project uses an archaeological research design and survey techniques to identify definitive evidence of historic cannabis cultivation. The results of the survey and research have conclusively proved that cannabis was cultivated on the Innovation West properties for an extended period, using a variety of techniques that evolved with the growth of the industry in Humboldt County.

Nick Angeloff, MA

Archaeological Research and
Supply Company

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Introduction

This research project included a targeted survey of the 60-acre parcel APN 107-236-010. The survey was driven by a research design based in background research and utilized professional archaeological field methods. A fifteen percent (15%) sample of the property was surveyed with the owner of the property identifying areas which he had personally cultivated over the past two decades, indicating that the entirety of what was surveyed had been cultivated in 2006 as the most intensive cultivation year and resulted in the identification of sixteen (16) historic cannabis growing sites, totaling 2.25 acres within the parcel boundaries. The subject property has been used to cultivate cannabis for at least the past 30 years, if not longer. There is no reason to believe that the evidence of production was not utilized on an annual basis, continuously. Given the survey only represents a fifteen percent sample, it is clear the overall property has been used intensively for cannabis production and has utilized several different techniques to do so over the evolution of the industry in the county. As such, it is extrapolated that there is a minimum of 30 cultivation sites on the property, conservatively. It is noted that the property owner indicated he has always been a 'clean and green operation', choosing not to use rodenticides and chemical fertilizers in his cultivation strategy the entire time he has operated on the parcel. This sample has provided a unique opportunity to understand the diversity and intensity of unregulated cannabis cultivation for the entire history of the industry in Humboldt county.

Research Design

The research design for this project addresses a significant gap in the historic resources body of knowledge. The following breakdown of the history of the marijuana industry is compiled through multiple sources including the 'TIMELINE for Marijuana in Northwest California' compiled by Edie Butler for the Community Study of the Emerald Triangle Project, copyrighted by Guerra & McBane LLC 2015, Version December, 2015. The research design of this project is simply to document, at the project parcel level, evidence of cultivation and the patterns which the cultivation follows within the historical context of the cannabis industry. The goal is to compile this research into a larger history of cannabis in Humboldt County that incorporates the archaeological evidence and compares this data with the known historic patterns developed through oral histories and various print documents.

Research Orientation

Humboldt County and many of its cities have sequentially combated, de-criminalized, and recently regulated the agricultural production, processing and sales of Cannabis. The once underground market and now legal industry has not been documented from an historical perspective. The industry has both historic and contemporary significance to much of the country, particularly Humboldt County as the birthplace of the 'Emerald Triangle'. This research documents a small portion of a significant period in Humboldt County's economic history.

Archaeological literature is replete with examples of research focused on historic industries both in the built environment and within the depositional record. The field of historic archaeology, to a large degree is based in understanding the economic and social reality as interpreted through archaeological deposits and preserving the unique aspects of the built environment as related to significant people and places generally associated with dominant industrial drivers. To date there has not been a study related to Humboldt County's Cannabis industry, a world famous geographic location for the quality and quantity of product distributed, legally and illegally throughout the world. The fact that the best economic analyses have demonstrated that the underground Cannabis industry contributes 415 million dollars annually (conservatively) to Humboldt County's 1.6 billion dollar economy, roughly 26% (Jennifer Budwig, "Potential Economic Impact To Humboldt County If Marijuana Is Legalized," 2013, Budwig

Thesis Pacific Coast Banking School graduate program University of Washington), indicates that the subject matter is worthy of historic research. The importance of understanding the history of industrial level economy in Humboldt from port and early agricultural economies to the logging industry and now the Cannabis industry through the archaeological context is well proven. The lack of archaeological research focused on the development of the Cannabis industry is a significant hole in regional, state and national historic record.

Background

History

European ships were known to have traveled the waters of northern California as early as the 1600s. During these travels, explorers may have landed along the north coast of California, and would have almost undoubtedly contacted indigenous populations if they harbored in Humboldt or Trinidad Bay. Still, the first definitive contact is that of Hecata and Bodega in 1775. For nine days, they lay at anchor in Trinidad Bay, trading with the Yurok. Hecata noted that the Yurok were already in possession of iron knives, clearly indicating that this was not the first time the indigenous population had encountered and traded with Europeans (Coy 1929).

Though the frequency of travelers into north coastal California increased as time went on, it was not until the 1850s that large numbers of Euro Americans permanently settled in the area. In search of gold, thousands of settlers flooded the north coast of California. Despite finding much less than gold than the gold field of the Sierra Nevada foothills could yield, settlers stayed and quickly found other ways to make a living from the land.

Timber, fishing, dairy, and agriculture soon became the primary industries in Humboldt County. In the immediate vicinity of the project area, however, timber dominated. By the 1880s the larger, more profitable mills based out of Humboldt Bay to the south, including the project area, dominated the lumber markets.

Humboldt County had a short yet notorious history during prohibition, from 1920-1930 moonshiners found a safe-haven in the foggy green forests carving out their own life into the untouched and inaccessible character of the region. Smuggling alcohol back into the urban sprawl through rough north pacific seas was a risky but profitable venture for a couple decades.

The logging industry slowed during the depression but blossomed during the post war era with large scale industry driving the economy to the exclusion of other industries. However, after the summer of love in 1967 many counter culture figures migrated north from San Francisco into the hills and mountains of Humboldt. Disenfranchised with the war in Vietnam and the turbulence of the civil rights movement homesteads began to develop, which attracted people from all over the country seeking alternative lifestyles distant from the dramas of the world. Living from the land, shedding material possessions, and deepening their connection with the earth were some of main attributes to these newfound ideas being put into practice. The sheer distance of Humboldt from the chaos of society opened a large space for personal exploration which would lead to the dramatic transformation of a whole region (Humboldt Seed Organization 2014).

The Controlled Substances Act of 1970 classified marijuana along with heroin, methamphetamine, cocaine and LSD as a Schedule 1 drug. In 1975 the U.S. government started their major campaign against cannabis eradication. Mexico was the major producer and supplier to the United States and to reduce the influx, Mexican fields of cannabis were sprayed with a powerful chemical nerve toxin

Paraquat (Humboldt Seed Organization 2014). It's difficult to pinpoint the exact moment when the technique for growing sinsemilla, or seedless pot, arrived in Humboldt County, but it was most likely in the mid 1970's (Butler 2015). Around the same time that marijuana growers in Humboldt and the neighboring counties of Trinity and Mendocino began producing sinsemilla, the U.S. and Mexican government began spraying paraquat on the Mexican marijuana crop, inadvertently creating a market for Humboldt County growers. This eradication of Mexican interests caused a major increase in cannabis production in the Humboldt region as the continued isolation ensured the confidence of these newly developing growers. Many genetics began to flood in from all over the world brought by these "free spirited" travelers settling down behind the "redwood curtain" (Humboldt Seed Organization 2014). At the time, more than 90 percent of the marijuana smoked in the United States came from abroad (Daly 2014). Paraquat-laced pot posed serious health risks to consumers creating a sudden interest in other sources. By 1979 an estimated 35 percent of the marijuana smoked in California was homegrown, and rising (Daly 2014). California marijuana became synonymous around the state and nation with high quality. By 2010, an estimated 79 percent of all marijuana consumed in the United States came from California (Brady 2013). An industry was born in Humboldt County, bridging "the cultural divide between hippies and rednecks by providing income for all, and would bring a new economic boom to the area just as the old industries were drying up" (Brady 2013). People flocked to Humboldt County, marijuana was \$4,000 a pound, a family could get by on 20, 30, 40 pounds a year and be happy (Woody 2016).

This peace wouldn't remain for long as the 1980's were an incredibly difficult time for grower's. President Reagan started a major attack by instating minimum prison sentencing for trafficking and production of the plant.



Figure 1 Local CAMP helicopter from a grower's perspective, from The New Yorker, Jackson Krule 2014

Reagan also funded the Campaign Against Marijuana Production (CAMP), a collaborative effort between federal, state and local authorities designed to eradicate the production of Marijuana within Humboldt County (Woody 2016). This time also marked the beginning of California's domination of domestic production, as quality began to rise through the emerging hybrid movement.

The 1990's brought on a new kind of change, one of resistance against the government. Many grower's lived on their own private land but retreated to the safety of state and national forests to cultivate. Reducing the risk of direct confrontation, many devoted guerrilla growers quietly worked in extreme environmental conditions far out of the reach of most authority's hands. Small portions of crops were eradicated but most of the region remained unscathed. In 1996, the Compassionate Use Act or proposition 215 was voted in by the people of California, forever shifting the Nation's view on cannabis. Some of the first doctors recommending cannabis were concentrated in Northern California including Humboldt County as many began to exercise their new-found rights. This controversial medical movement was met with force from the federal government, which contradicted the individual States' rights written into the constitution to protect the people. Many were prosecuted but the numbers continued to rise in medical marijuana recommendations and growers. Mom-and-pop backyard pot gardens got bigger after 1996. After spending decades trying to eradicate marijuana in Humboldt County, the state started treating the business as quasi-legal, at least if growers were supplying the medical marijuana market. People came out of the woods and started growing pot in greenhouses (Woody 2016).



Figure 2 Large Scale Marijuana Production, from: North Coast Journal 2015



Figure 3 Large Scale Marijuana Production, from: Lost Coast Outpost September 2014

The potential of the region was quickly realized, and production spiked substantially as Humboldt was now become one of the most renown places on earth for producing Cannabis.

By the year 2000, case history within the judicial system was changing. Larger amounts of people were succeeding in their defense of legal gardens in city, county and state courts alike. Confidence was reaching an all-time high and the liberal laws in Humboldt County stood out from the rest of the state. Respecting privacy laws and not prosecuting those actively cultivating gardens, Humboldt was becoming a safe-haven for cultivation.

This liberal approach to the law has pulled growers from all over the world to Humboldt to participate in this immense movement. A "green rush" hit Humboldt as outsiders, Bulgarians, Laotians, Texans, flooded into the county and set up industrial-scale marijuana farms (Woody 2016). Now with over 30,000 active greenhouses and tens of thousands of full sun gardens it is more than apparent that growth is in full effect (Humboldt Seed Organization 2014). This incredible growth hasn't come without its share of problems and federal intervention. In late of 2013 Humboldt County was declared by the federal government and the DEA as a "High Intensity Drug Trafficking Area" (Salon 2013). The environmental impact from these pot "gardens" is ravaging the redwood ecosystem that Humboldt environmentalists have spent decades fighting to save and restore (Woody 2016). "The single biggest threat to our environment right now has been unregulated cannabis," said Natalynne DeLapp, executive director of the Environmental Protection Information Center, a grassroots group that spearheaded the effort to protect the Headwaters and its wildlife (emphasis added). "In the last 20 years we've seen a massive exponential growth in cannabis production in the hills of Humboldt County and we've seen really devastating environmental effects" (Woody 2016).

Growers have fragmented forests by cutting trees to build greenhouses and roads on steep hillsides, choking creeks home to endangered salmon with sediment, fertilizers and pesticides and sucking streams dry during a record drought to irrigate marijuana crops. Once-still forests echo with the racket of hundreds of diesel generators. Rat poison and other toxic chemicals used by some growers to protect their plants are killing rare wildlife like the Pacific fisher.



Figure 4 Poisoned Fisher, from: North Coast Journal, August 1, 2013

After a radio-collared fisher was found dead in a remote forest in 2009, an autopsy revealed it had died from poisoning by a rodenticide commonly used on illegal grow sites. As the green rush brought more of these "trespass grows" into state and national forests and parks and onto private timberlands, the fisher death toll rose. In a 2012 study, Gabriel and his colleagues found that 79 percent of 58 fishers they examined had been exposed to rodenticides, four had died and a nursing female had passed the poison on to her offspring. By late 2015, the death rate from poisoning hit 18 percent of the radio-collared population (Woody 2016).



Figure 5 Rodenticides at Marijuana Grow, from: North Coast Journal August 2013

Gabriel estimates that only a fraction of trespass grow sites are detected. "There may be 10,000 to 20,000 sites that still need to be cleaned up," he said. "With the 300 to 500 grow sites law enforcement eradicates each year, you could just see the numbers just piling and piling up. What we worry about is that wildlife and their habitat are slowly drowning in these toxicants that will be in the environment for decades to

come."

The California Ballot of 2016 legalized cannabis in California. With plans from locally produced and permitted marijuana gardens to tasting rooms and smoke lounges, ending a medical era and allowing marijuana tourism to flourish. This community is deeply rooted in the evolution of the cannabis industry.

The above research has resulted in a division of the history of cannabis cultivation in Humboldt County into three era's:

1. The current research is driven by the recent regulatory efforts of Humboldt County resulting in an ordinance that gives preference to documented historic Cannabis grows during the permitting process. Innovation West is an approximately 600-acre property comprised of multiple parcels with conclusive evidence of historic Cannabis cultivation and processing, representing the bulk of Humboldt County's historic association with the plant. The grow sites are represented in the archaeological record as discrete areas of watering equipment, soils containers, excavated areas of native soils, fertilizer and soil amendment containers, herbivore fencing and deterrents, among a variety of other known and unknown objects in association with the production of Cannabis. Early period, or Counter Culture Era representing small scale and gradating into large scale rudimentary farming techniques with a relative lack of concern over law enforcement ramifications. These areas will be the most difficult to find as the early counter culture farmers tended to 'clean up after themselves' at the end of the season. The evidence of grows should be in open south facing areas with easy access to year-round water and represented by tilled field farming techniques. As the old hippies' recount, 'we used to grow fields, just like rows of corn'.
2. The CAMP era. This era began in the mid 1980's and runs into the mid 1990's. The exponential increase in law enforcement, the growers move to the fringe, prices skyrocket and grows become small but more numerous. A distributed economic model begins to develop to mitigate risk with single growers tending multiple locations, often creating 'sacrificial' grows in the open while locating high quality grows in difficult locations. It is expected that there will be an increase in the quantity of Cannabis grows in locations both on north and south facing aspects, located in fringe forest areas or forested areas with trees removed to open holes in the canopy.
3. The Prop 215 era. Post 1996 we see a real change in both the ethos of growers and the makeup of those growing and comprising the expanding industry. Early entrepreneurs saw a loophole in prop 215, no real regulations were adopted with the new law. Growers start aggregating 215 permits to develop large grows, again, and both outdoor and a new indoor grow industry develops. The industry has developed into a significant black market prior to the prop 215 era and now explodes with the confusion created among law enforcement by the aggregation of permits. CAMP and local authorities no longer know if a grow is legal or illegal from a helicopter. This created fertile ground for organized crime syndicates to invest in the industry. We expect these grows to range from a distributed model of the CAMP era to the open grow techniques of the early era but incorporating greenhouses as a technological advancement, and what can only be described as brazen open grows. We have described the first two expected deposit types above; specific artifacts should allow for temporally defining assemblages. The brazen grows will incorporate the use of heavy equipment, massive spring and water impoundments and a heavy prevalence of modern fertilizers and rodenticides. In addition, herbivore protection devices now not only include fencing but traps including nets, and traditional spring traps. The prop 215 era sites will be located throughout the property and indoor grows will be associated with the addition of generators, fuel bunkers, and either metal containers or wooden structures.

The known history of the industry in Humboldt County begins in the late 1960's with an alternative, 'Counter Culture Era' moving to the county to 'live off the land' with Cannabis cultivation being the only

agriculture crop that could provide a decent standard of living. The industry began to develop into a larger scale black market economy during the 1980's when the children and grandchildren of the original 'farmers', and local large scale land owners who found it increasingly more difficult to operate their ranches with traditional income flows, decided the market was underdeveloped and production could be massively increased with relative ease. The significant increase and brazen disrespect for the law resulted in the Camp Era (Campaign Against Marijuana Production) beginning in the mid 1980's. The law enforcement efforts both drove the industry into a dispersed production model and led to the blossoming of the indoor grow.



Figure 6 An indoor grow; photograph by the New Yorker's Jackson Krul November 3, 2014

Additionally, CAMP resulted in a massive price increase with the long-term grower appreciative that they no longer had to produce by the field but could now limit crops to small plots to make their fortunes. This fight between law enforcement and illicit growers continues today but peaked in the 1990's. In 1996, with the passage of California's proposition 215 the battle began to wane with growers using the new law to grow more volume both indoor and outdoor in greenhouses as producers of medical marijuana (Woody 2016). During the 21st century the Cannabis industry has exploded with law enforcement, and local populations seeing the entry of organized crime into the county setting up industrial scale operations with millions of dollars of investment and devastating impacts to the environment. The competition from these organizations has led the local producers to up their game as well. Now well-heeled with generations of wealth accumulated through the underground market, local industrialists followed suit, burying trailers and containers to hide indoor grows, leveling mountain tops, importing thousands of yards of high quality soil annually, drilling high volume wells and developing acre-feet of water storage to provide water for thirsty crops.

Each of these eras result in substantially different archaeological deposits, early farmers cleaned up after themselves leaving very little evidence, their children openly grew acres of crops with little fear from the localized law enforcement efforts (particularly when a bag of cash could cause an otherwise conservative land owner or law enforcement officer to look the other way, the next generation, the CAMP generation hid from the law, growing at the fringes of the canopy and turning to a new indoor production model to

hide from the black helicopters. The passage of prop 215 resulted in large scale production with aggregation of growing permits resulting in large greenhouse grows, and as the value of the industry skyrocketed attracted industrial capitalists focused solely on increasing production and margins with little concern for the environment or of being impacted by law enforcement.

Property Specific History

The Innovation West property has been cultivated since the 1980's with the current owner becoming associated with the property in 1996 and purchasing the property in 1999. Each of the areas surveyed was associated with the current owner's cultivation over the past two decades and each area was cultivated or part of a cultivation cycle that occurred year on year. During the early 215 Era federally funded enforcement efforts tended to ignore California regulations which extended the cultivation patterns of the Camp Era on this property, and others. The continued disguised grow patterns are identified throughout the project area and confirmation of the extended pattern is highlighted with a transition from chicken wire supports to plastic bird netting at many of the grow locations. Plants were started in one area and moved to these documented locations to be tended for the remainder of their growth cycles. When law enforcement efforts appeared to target specific, legal locations on this property plants were variously tied up to minimize their canopy size or moved, when possible, to other locations in a game of cat and mouse.

The vast majority of what was recorded as cultivation evidence on this property was of a permanent nature (grow holes excavated in the ground) and was not part of this cat and mouse game. The mobile nature of these efforts clearly requires the plants to be in pots or buckets to allow for change in location. These sites, for the most part have been cleaned up and leave little evidence behind. While this project did document evidence of potted plants, some of which were painted in camouflage, the documentation reflects only a small percentage of actual annual operations. Where pots or buckets were located is considered herein to be a location of cultivation. Whether those pots were moved during any one given season is irrelevant as the final location is what was documented as the location of operations. If during that season those pots moved around the property, those other locations would not be identifiable as a location of cultivation due to the lack of associated artifacts.

In addition, the property owner indicated that in this same effort to avoid detection and association with cultivation, the strategy was to place grow areas along or adjacent to property lines. This was an effort to minimize risk as the grower could claim not to be associated with the activity by claiming no knowledge of the grow or a belief that it was not within the owner's parcel. In this light, several of the identified cultivation areas known to be associated with the current owner appear to be on the adjacent properties. This is either a reflection of inaccurate GIS parcel lines or a product of the above mentioned cat and mouse tactics of the extended 215 Era strategies.

In the context of this project the definition of what is considered to be a cultivation area and site is provided for the record from Humboldt County CUMLUO section 55.4.7 "Definitions":

"Cultivation Area" means the sum of the area(s) of cannabis cultivation as measured around the perimeter of each discrete area of cannabis cultivation on a single premises, as defined herein. Area of cannabis cultivation is the physical space where cannabis is grown and includes, but is not limited to, garden beds or plots, the exterior dimensions of hoop houses or greenhouses, and the total area of each of the pots and bags containing cannabis plants on the premises. The cultivation area shall include the maximum anticipated extent of all vegetative growth of cannabis plants to be grown on the premises.

"Cultivation site" means the location or a facility where medical cannabis is planted, grown, harvested, dried, cured, graded, or trimmed, or that does all or any combination of those activities, except where

drying, curing, grading or trimming is otherwise prohibited.

The results of this project are presented in this context as the area where cultivation occurred on a single premise and each site is a location where cannabis was planted, grown, harvested, dried, cured, graded, and trimmed, and all associated activities with the production of cannabis. A very conservative approach was utilized, minimizing the potential production areas to the subject parcel and tightening polygons to the greatest degree possible, omitting water lines between features and artifacts. It is the opinion of this research that the proposed project will result in significant environmental protection by consolidating the documented production of the parcel into a single, well-regulated facility.

Field Methods:

Two surveys were conducted by qualified archaeologists from ARSC utilizing no more than 15 meter transects providing for 100% coverage of all accessible areas identified in an approximate 15% sample, including 16 known locations of historic cannabis growing on the property. Areas harboring obscured visibility were subject to surface scrapes and clearing of vegetation as is necessary to clearly view surface soils. The first survey, conducted on February 3rd using six archaeologists, identified eight (8) distinct areas of cultivation. The second survey, conducted on February 11th using two archaeologists, identified a further eight (8) areas of cultivation and expanded two of the previously surveyed areas. No sub surface exploration was conducted during this investigation.

This report accurately recounts the results of the background research and survey as guided by the research orientation. The survey included areas of the property as identified on the attached map that were selected due to the location of known historic Cannabis cultivation sites representing the above-mentioned eras of the development of the Cannabis industry. The research was objective in nature and any Cannabis related resources identified during field survey has been documented and included in this report.

Results

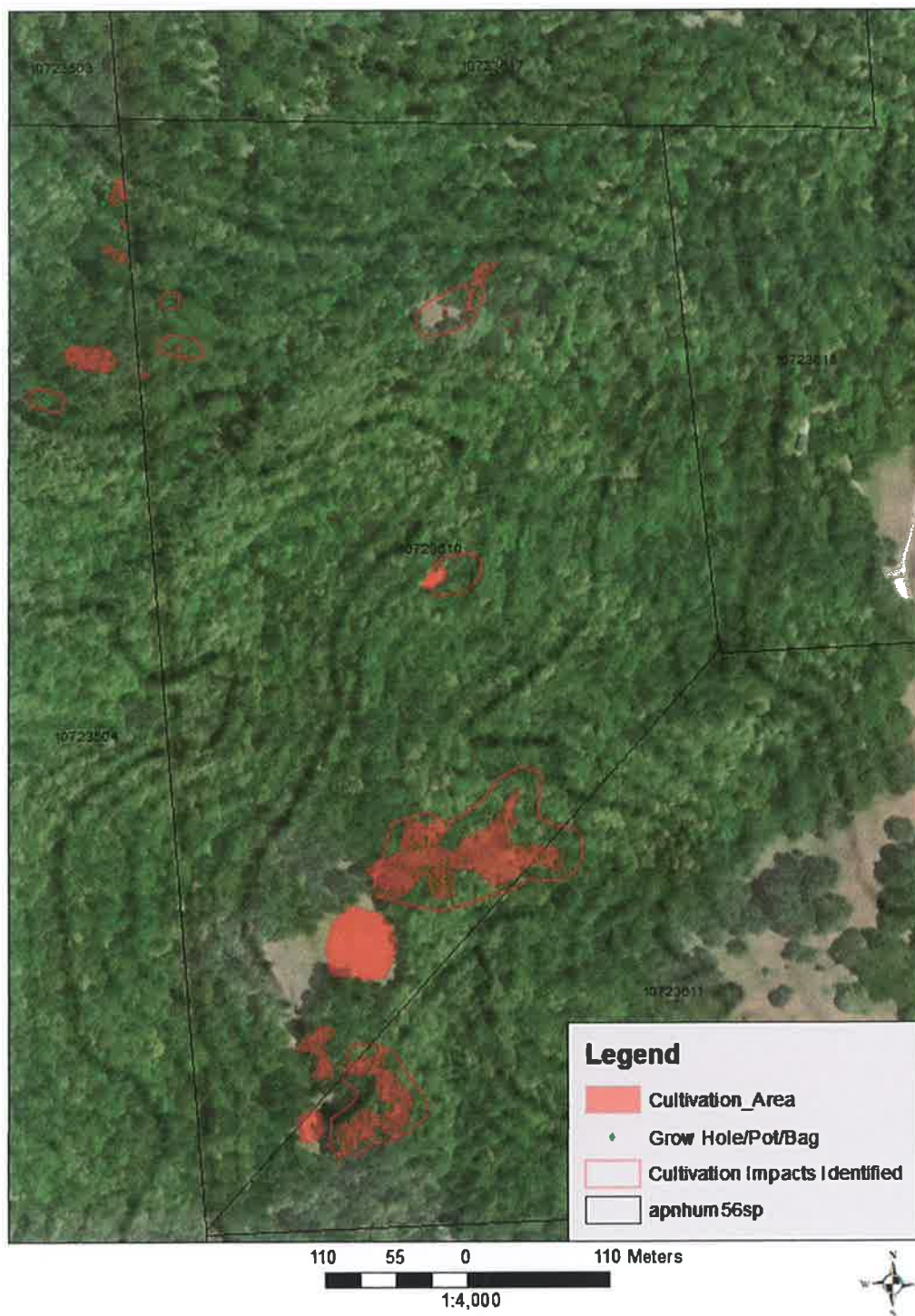
The surveys resulted in sixteen (16) historic marijuana grow areas being identified ranging in age from the camp era through the 215 era. The first survey utilized two crews of three documenting two distinct areas of the parcel, this resulted in two techniques for recording. One crew documented areas of cannabis production and noted the evidence at each site, the second crew took gps points at each feature or artifact resulting in two end products. Between the two surveys a field meeting was conducted with the project proponent, county officials, representatives from the Department of Fish and Wildlife, and an archaeologist from the California Department of Forestry. The record documented was evaluated at this meeting and it was determined that the preferred method of recording was to take gps points of each artifact or feature as the data could then be presented as points in map format as opposed to a polygon with descriptions of associated features and artifacts. I The survey of February 11th utilized the latter technique and also documented each artifact or feature associated with past cultivation. n addition, the polygon method resulted in approximately eight acres of area impacted by pre-existing grows while the gps point method has resulted in 2.25 acres of pre-existing cannabis cultivation area, a drastic reduction in the area portrayed as impacted by pre-existing cultivation activities. The data is presented below both in descriptive terms for the one survey without significant gps point data and in tabular form for those areas with points; as well as in map form with both polygons and points represented. The final site, 16, was documented in the field as the location of new, unused greenhouses and subsequent to field work, evidence of row crops were identified through GIS aerial photos from 2014. Site 16 is therefore documented and presented as an GIS aerial map herein.

The earliest evidence of cultivation at these sites is represented by metal potting containers, and the latest

(aside from the 2014 aerial photo of row crop evidence) is the plastic netting and late soda cans associated with cultivation infrastructure and the two indoor cultivation/propagation areas. Other sites were difficult to date but it can be assumed that a vast majority of the locations were in production from the Camp Era through the 215 Era with at least two sites considered indoor grows and the balance represented by black plastic piping and various forms of potting containers (from plastic buckets/pots, to holes in the ground, to grow bags). Two sites are clearly well-organized indoor grows or propagation rooms with electrical outlets, timers and other contemporary items reflecting very late production level operations. Cannabis cultivation has been ongoing through the past three decades, at a minimum, into the second decade of the 21st century.

The property appears to have been cultivated continuously since 1996 and the legalization of medical marijuana. The owner of the parcel was clear that the property was used to its fullest extent year on year with 2006 being the year of highest production. While some sections of the identified grow areas may not have been utilized in any single year, it makes economic sense that as regulations loosened and law enforcement efforts eased, the volume of production increased. In this light, it makes sense that holes dug into the ground, the vast majority of the evidence for cultivation, were used year on year for cultivation and it would be counter intuitive that this type of effort was abandoned yearly to dig more holes. This was confirmed by the property owner during the survey, the holes were used year on year by amending the soil each season ending in 2016 with the submission of the application for permitted production with the county.

A total of 2.25 acres of pre-existing cultivation (figure 7) was documented within the parcel, conservatively, with just a 15% sample survey. It is highly likely that well over 10 acres of cannabis production impacts occurred annually within this same parcel when considering trenching for water lines, water diversions, fertilizer spread and other impacts to the environment associated with cannabis production that the county is focused on limiting through regulation.



Sites 1-16

The results of the field surveys are presented below in two formats, the first survey of February 3rd was divided into two crews, one of which used traditional archaeological techniques to record the location of each concentration of cannabis cultivation but did not take gps points on each feature or artifact. These results are presented first as sites 1-6. The second crew of the February 3rd survey and the February 11th survey crew both took individual gps point of individual features and artifacts associated with cannabis cultivation, these results are presented in table form below sites 1-6. The February 11th crew divided the finds into four geographic areas, the subsequent mapping divided these areas into seven (7) discrete areas of cultivation. The final site, site 16, was documented through aerial photography overlays using gis and is presented at the end of this section using a written description and gis map.

SITE 1

Small grow camp with 1970s or 1980s recycled-materials stoves (2)

- This is a small site with two homemade stoves, some ½” polyline, and a fire pit.
- The site appears to be from the 1970s or 1980s. The two stoves are indicative of crafty repurposing of materials, which could have been a necessity in the early cultivation periods. The camp is on a flat right next to a spring.
 - Kelly photos: 20180203_104804 - 20180203_105335
 - Byron photos: IMG_20180203_104836082 - IMG_20180203_104943330

SITE 2 – Small refuse area + Meadow growing area

- Soil bags, beer and soda cans, chicken wire
 - Kelly photos: 20180203_105822 - 20180203_110043
- Meadow Area with grow depressions which extends up hillside. The area has a campfire (1x1 m) from the mid 2000s.
 - Kelly Photos: 20180203_110116 - 20180203_110624
 - Byron Photos: IMG_20180203_110114126 - IMG_20180203_110444180
- ½” Black tubing, chicken wire, black plastic trash bags, old Shasta can (1980s), bleach bottle
 - Kelly Photos: 20180203_123935 - 20180203_124720
 - Byron Photos: IMG_20180203_123638435 - IMG_20180203_124921169

SITE 3 – Late-90s grow area on terrace

- Roughly 10 – 20 grow depressions along terrace
- Black plastic netting
 - Kelly photos: 20180203_112051 - 20180203_113428
 - Byron notes: IMG_20180203_112033179, onwards not sure when ends

SITE 4 – Small grower dwelling area

- Ammo box, plastic grow pots, big blue tarps, hand saw, metal cooking pot, 1/8” plastic pipe, black plastic fencing
- Kelly photos: 20180203_120849 - 20180203_121558
- Byron photos: IMG_20180203_120927314 - IMG_20180203_121036050

SITE 5 – Pots on terrace, ½” soft poly tubing, at least ten pots

- Kelly photos: not sure, these might be confused with Site 4
- Not sure about Byron’s photos, need to see notes

SITE 6 - Drying Shed and 2-tier terrace

- Reported by to have been built in 2001.
 - Kelly Photos: 20180203_103812 - 20180203_104038
 - Byron Photos: IMG_20180203_103938503

- Two-tier greenhouse
- 2000s-era greenhouse plastic located at bottom of two tier greenhouse. Possible date from this refuse
 - Kelly photos: 20180203_104147 - 20180203_104344
 - Byron Photos: IMG_20180203_103946279

SITES 7-15

- **Client: Taft**
- **Survey Date: 2/03/2018**
- **Grow Hole (GH)**
- **Grow Bag (GB)**
- **Grow Pot (GP)**

Item	Waypoint	Associated Area	Photo Number	Diameter/Size
Grow Hole 1	145	7		80cm
Grow Hole 2	146	7		80cm
Polypipe ½ in. and aluminum frame pipe	147	7		
Trash camp	148	7		
Corrugated fiberglass	149	7		
Rusted aerosols can, polypipe, and chicken wire	150	7		
Grow Hole 3	151	7		80cm
Pier blocks	152	7		
2 grow bags with chicken wire	153	7		
Chicken wire with grow bag	154	7		
T-Post to hold up plants	155	7		
T-Post to hold up plants	156	7		
T-Post to hold up plants	157	7		
Grow Hole 4	158	7		80cm
Grow Hole with bucket and wire	159	7		80cm
Grow Hole 5	160	7		80cm
Grow Holes 6-12	161-167	7		80cm
T-Post with wire				
Grow Hole 13 with square pot	169	7		80cm
Polypipe ½ in.	170	7		
Polypipe	171	7		
Polypipe	172	7		
Polypipe	173	7		
Grow bag and brown tarp	174	7		
Chicken wire cage	175	7		
Polypipe	176	7		
Plastic netting	177	7		
Chicken wire	178	7		
Grow Hole 14	179	7		80cm
Chicken manure bag	180	7		
Chicken Wire	181	7		

Chicken wire	182	7	
Polypipe	183	7	
Polypipe	184	7	
Polypipe	185	7	
Grow Hole 15 with chicken wire and polypipe and corrugated fiberglass	186	7	
Dr. Pepper can	187	7	
Grow Hole 16	188	7	80cm
Polypipe and chicken wire	189	7	
Grow Hole 17 w/ chicken wire	190	7	80cm
Plastic pot w/ chicken wire	191	7	
Large Grow Hole # 1	192	7	1m x 2m
Grow Hole 18 w/ chicken wire	193	7	80cm
Grow Hole 19 w/ chicken wire	194	7	80cm
3 gallon pot			
Grow Hole 20 w/ chicken wire	195	7	80cm
Grow Hole 21 w/ wood stake	196	7	80cm
Multiple grow bags, one sleeping bag, plastic netting, plastic sheeting, atlas mason jar, Safeway Cola can	197	7	
Grow Holes 22-25	198-201	7	80cm
Corrugated fiberglass/Visqueen plastic	202	7	
Three Grow Holes (# 26-29)	203	7	80cm
Chicken Wire	204	7	
Plastic netting and polypipe	205	7	
¾" in. Polypipe	208	7	
Grow Hole 30	209	7	80cm
Polypipe	210	7	
Multiple grow bags w/ chicken wire	211	7	
Grow Hole 31	212	7	80cm
Polypipe bundle with corrugated fiberglass	213	7	
Fertilizer bag	214	8	
Large Grow Hole # 2	215	8	1m x 2m
Polyline ½ in.	216	8	
Grow Holes # 32-34 with polyline continuing from point 216	217-219	8	80cm
Grow bag with fabric mesh	220	8	
Grow Holes # 35-43	221-229	8	80cm
Grow camp	230	8	
Grow Hole 44	231	8	80cm
Grow Trench	232	8	1m x 2m
Grow Holes 44-51	233-240	8	80cm
Hole with wooden framing	241	8	40cm
Grow Hole 52	242	8	80cm
Grow Hole 53	243	8	80cm

Decommissioned, intact
greenhouse

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- **Client: Taft**
- **Survey Date: 2/11/2018**
- **Grow Hole (GH)**
- **Grow Bag (GB)**
- **Grow Pot (GP)**

Item	Waypoint	Associated Area	Photo Number	Diameter/Size
Grow Hole 1 (GH1)	059	1	105020654	80cm
GH2	060	1	105457370	80cm
GH3	061	1	105725702	80cm
GH4	062	1	105908906	80cm
GH5	066	1	110203688	50cm
GH6	065	1	110501167	50cm
GH7 (trench)	064	1	110742243	220cm X 40cm
GH8	067	1	111500954	100cm
GH9	068	1	111637960	30cm
GH10	069	1	111846371	80cm
GH11	070	1	112036559	40cm
GH12	072	1	112209091	60cm
GH13	073	1	112407817	80cm
GH14	074	1	112545589	80cm
GH15	075	1	112746457	80cm
GH16	076	1	113003944	70cm
GH17	077	1	113201296	80cm
GH18	078	1	113403193	80cm
GH19	079	1	113555091	80cm
GH20	080	1	113804097	100cm
GH21	081	1	114028212	80cm
GH22	082	1	114220584	80cm
GH23	083	1	114408418	80cm
GH24	084	1	114605975	80cm
GH25	085	1	114813703	60cm
GH26 (trench)	086	1	115028180	250cm
NOTE: Area 1 behind old nursery				
GH27	087	2	115325741	40cm
GH28	088	2	115508025	80cm
GH29	089	2	115641597	60cm
GH30	090	2	115957172	50cm
GH31	091	2	120115509	70cm
GH32	092	2	120257310	80cm
GH33	093	2	120450883	80cm
Grow Pots associated with GH33	094	2	120614653	(Xgal) 8 total
GH34	095	2	120823977	60cm
GH35	096	2	121107661	80cm
GH36	097	2	121221285	80cm

NOTE: Area 2 Across road from nursery

GH37	099	3	121757533	80cm
GH38	100	3	121926624	80cm
GH39	101	3	122123208	80cm
GH40	102	3	122503174	80cm
GH41	103	3	122621675	80cm
GH42	104	3	122743621	80cm
GH43	105	3	122922686	80cm
GH44	106	3	123048186	80cm
GH45	107	3	123201123	80cm
GH46	108	3	123551066	80cm
GH47	109	3	123705525	80cm
GH48 (trench)	110	3	123839885	200cm X 100cm
GH49	111	3	124119149	80cm
GH50	112	3	124257375	80cm
GH51	113	3	124410141	80cm
GH52	114	3	124555171	80cm
GH53	115	3	124741448	80cm
GH54	116	3	124853882	80cm
GH55 (bag)	117	3	125043892	60cm
GH56	118	3	125253864	80cm
GH57	119	3	125441951	100cm
GH58	120	3	125611935	100cm
Refuse	121	3	125911170	N/A
GH59	122	3	130539062	80cm
GH60	123	3	130742302	80cm
GH61	124	3	131226681	100cm
GH62 (with pots)	125	3	131538527	
GH63 (with pots)	126	3	131731855	
NOTE: Area 3 behind greenhouses				
Grow Pot 1 (GP1)	127	4	133700811	20cm
Grow Bag 1 (GB1) (with hole)	128	4	133953813	60cm
GB2 (with hole)	129	4	134123156	60cm
GB3 (with hole)	130	4	134220021	60cm
GB4 (with hole)	131	4	134336701	60cm
GH64	132	4	134519541	90cm
GH65	133	4	134659222	90cm
GH66	134	4	134902671	60cm
GH67	135	4	135219504	50cm
GH68	136	4	135404001	100cm
GH69	137	4	135532266	120cm
GH70	138	4	135726814	80cm
GH71	139	4	140005788	80cm
GH72	140	4	140248869	80cm
GH73	141	4	140627399	130cm
GH74	142	4	140803782	80cm
GP2	143	4	141513518	5gal
GP3	144	4	141724934	1gal
GP4	144	5	141724934	1gal
GP5	144	4	141724934	1gal
GP6	144	4	141724934	1gal
GH75	145	4	142056871	80cm

GH76	146	4	142244845	80cm
GP7	147	4	142540382	5gal
GP8	148	4	142717817	10gal
GP9	148	4	142717817	10gal
GP10	149	4	143031632	5gal
GH77	150	4	143208529	80cm
GH78	151	4	143429693	80cm
GH79	152	4	143606131	70cm
GH80	153	4	143744927	80cm
GH81	154	4	143854629	60cm
GH82 (trench)	155	4	144252066	220cm X 50cm
Grow pots associated with GH82	155	4	144252066	5gal
Grow pots associated with GH82	155	4	144252066	5gal
GH83	156	4	144525211	80cm
GH84	157	4	144737150	30cm
GH85	158	4	144833000	50cm
GH86	159	4	145101692	80cm
GH87	160	4	145248935	40cm
GH88	161	4	145451980	50cm
GH89	162	4	145451980	50cm
GP11	163	4	145807656	20gal
GP12	163	4	145807656	20gal
GP13	163	4	145807656	20gal
GP14	163	4	145807656	20gal
GH90	164	4	150027860	80cm
GH91 (with bag)	165	4	150538074	80cm
GH92	166	4	150748928	80cm
GH93	167	4	150855262	80cm
GH94	168	4	151016009	80cm
GH95	169	4	151156862	80cm
GH96	170	4	151311747	80cm
GH97	171	4	151430781	80cm
GH98	172	4	151554365	80cm
GH99	173	4	151709924	90cm
GH100	174	4	151851822	80cm
GH101	175	4	152007486	80cm
GH102	176	4	152149435	80cm
GH103	177	4	152307692	80cm
GH104	178	4	152424007	80cm
GH105	179	4	152553796	80cm
GH106	180	4	152645785	80cm
GH107	181	4	152750826	80cm
GH108	182	4	152938833	80cm
GH109	183	4	153030685	80cm
GH110	184	4	153212765	80cm
GH111	185	4	153309891	80cm
GH112	186	4	153437448	80cm
GH113	187	4	153553478	80cm
GH114	188	4	153638529	80cm

NOTE: Area 4 North of open cultivation area

SITE 16

Site 16 shows evidence of cultivation via long row crop lines on the 2014 Eureka aerial available on Humboldt County GIS (figure 8). In addition, a nutrient mixing storage container was located in association with attached water line dated 1999. The nutrient mixing storage tank and associated lines do not date prior to 1999. This site is the proposed location of the permitted grow and harbors the identical footprint of the proposed grow location.



Figure 8 Site 16 meadow with 2014 Eureka Aerial showing row crop lines

Conclusions

The evidence for long term cannabis cultivation on the Innovation West property is indisputable. Cannabis production has been occurring on the property since at least the Camp Era and developed into an industrial scale endeavor through the 215 era. All aspects of the cultivation process are present on the property and at some individual sites. The sites are in areas that follow patterns of the two eras, with Camp Era extending into the 215 Era artifacts represented by early grow holes and metal buckets with chicken wire caging evolving into plastic netting associated with fiberglass roofing and Visqueen plastic for ephemeral greenhouses during the later period of use. As expressed on this property it appears that growers were attempting to conceal their activities to some extent well into the 215 Era. The latest grow evidence is in the form of indoor operations and open grows represented by the two buildings and the lower open meadow showing evidence of row crops.

With the understanding that this project undertook a 15% sample of the property, approximately 10 acres of survey, this report only reflects a small percentage of the actual cannabis cultivation that took place on the property but documents a conservative 2.25 acres of pre-existing cultivation within the boundaries of the Humboldt County GIS parcel alone. Given that the sample included areas of known cultivation based on the producer's memory and was not completely random the results cannot be extrapolated on a one to one basis (16 locations/10acres each), it can conservatively be assumed that the 60 acre property will harbor a minimum of 30 locations both in timber and in prime agricultural zones. This extrapolation assumes a less than equal number of sites on the remaining 50 acres of the property.

It is clear that the parcel was utilized to cultivate more acres of cannabis with greater environmental impacts in any one given year over the past two decades than is proposed via the permitted and regulated process as proposed. The location of the proposed operations has been the site of some of the pre-existing cultivation in an equal footprint, while two indoor operations have been identified and hundreds of cultivation holes with associated terracing of landforms and other environmental impacts associated with the pre-existing cultivation will be decommissioned as a result of issuing the permit. At a minimum 1.25 acres of pre-existing cultivation using unregulated strategies will be mitigated with the permitting of this project.

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Attachment 5

Robert T. Renfro
Innovation West Dba Panther Gap Farms
600 F Street STE 3-611
Arcata, CA 95521-6301

John Ford
Planning Director
Humboldt County Planning & Building Department
3015 H Street, Eureka, CA 95501

RE: APPS Nos. 10508, 10509, 10552, 10553, 10934

Subject: Cultivations Pre-Existing January 1, 2016

Dear Mr. Ford:

The following narrative is intended to accompany maps prepared by licensed surveyors, Kelly-O'Hern Associates, indicating the locations of medical marijuana cultivations that were in existence prior to January 1, 2016. Because satellite imagery is not able to capture the true extent of pre-existing operations due to poor resolution, timing, positioning limitations and other factors, this additional explanation is intended to present a fuller understanding of the pre-existing operations.

The cannabis cultivation history of the parcel(s) shown on the map(s) accompanying this narrative is extensive as the Panther Gap/Honeydew area was one of the first areas in Humboldt County to be cultivated on a large scale. The history of this activity goes back over 40 years; however, for the purposes of describing medical marijuana cultivations that preexisted January 1, 2016, the following will be limited to medical marijuana cultivation activities during the time period following enactment of proposition 215 on November 5, 1996. Having said that, the history preceding the 215 era is not irrelevant with respect to understanding cultivation activities and strategies subsequent to the enactment of proposition 215.

Historical Reference:

The campaign against marijuana planting (CAMP) that was in effect during the 1980s and early 1990s had a profound effect on how growers operated in the post 215 enactment era. Due to past experiences with CAMP, most growers felt that law enforcement was to be avoided whenever possible even though cultivations for medical marijuana were legal if operated within the guidelines of proposition 215 and then later SB 420. The people of the State of California passed laws giving its citizens the right to legally cultivate medical cannabis under the collective model; however, the Board of Supervisors at the time did not adopt a local ordinance and therefore the Humboldt County Sheriff's Office (HCSO) and District Attorney allocated significant man-

power and funding toward the eradication of Legal Medical Cannabis. The large scale disregard of State Law by the HCSO resulted in cultivation strategies that sought to conceal the cultivations from view, not only from satellites, but from human observers perched in low-flying fixed wing aircraft and helicopters. This was accomplished by placing plants under the drip line of tree canopies, intermixing them with native bushes such as Manzanita, Ceanothus and other brush so that they would blend in, and mixing them in with re-vegetating areas such as previously logged areas that had been planted with young trees for reforestation and log landings undergoing natural ecological succession. Well executed concealment plans resulted in cannabis plantations that were very difficult to detect from the air.

Later, through a string of unsuccessful prosecutions of those persons that grew cannabis in greenhouses where the cannabis could not be seen from outside of the greenhouse, growers learned that the translucent greenhouse covers prevented law enforcement from obtaining search warrants due to lack of probable cause. This ushered in the new era of greenhouse cultivation. Nevertheless, many growers were reluctant to build large-scale greenhouses which might attract high-profile awareness by law enforcement. Because of this, smaller greenhouses were used in conjunction with the old school concealment methods described above.

The final evolution of cultivation strategies came after the 1992 election of a pro-cannabis Humboldt County District Attorney that campaigned on a platform largely based on not prosecuting cannabis growers. This emboldened the growers which led in some cases to additional greenhouse space being built and for others placing their plantations both inside the greenhouse and around the greenhouse in full sun and full view. This latter strategy allowed the growers to greatly increase the size of their cultivations without the additional capital investment required to build more greenhouse space.

Permit Application Sites:

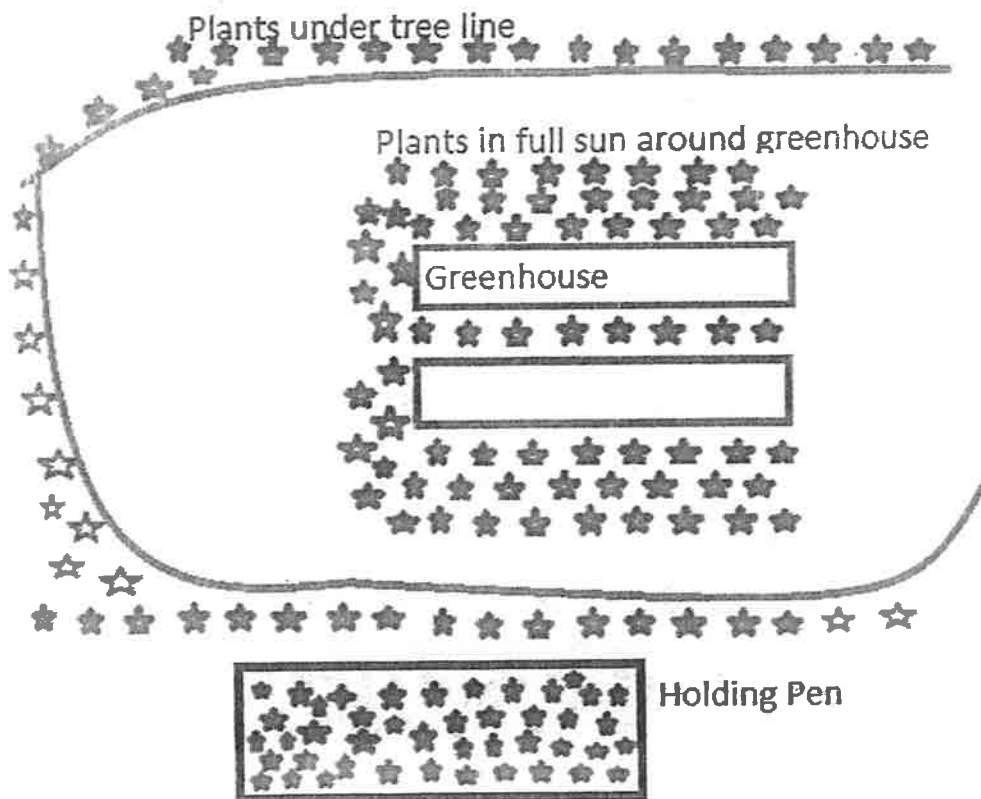
While the above recap of history is generally descriptive of many remote areas of the County, it is specifically correct as a description of the evolution of cultivation strategies that have occurred on my parcels that are the subject of these specific permit applications (APPS Nos. 10508, 10509, 10552, 10553, 10934). It should be noted that while we implemented new strategies, such as the construction of greenhouses, we did not abandon the old strategies. For example, areas previously planted under the tree line and in areas intermixed with other vegetation were not abandoned when greenhouses were built, instead the greenhouse space simply added to the size of the overall cultivation. Similarly, when it became safe to place plants around the greenhouse space in full sun and full view, the other plantation areas remained in use and the overall cultivation size grew once again into an even larger plantation.

There is one other element specific to these properties that has not yet been discussed and that is the "holding pen." Holding pens were located under thick forest canopy where little light reached the forest floor. We used these holding pens to warehouse cannabis plants during the

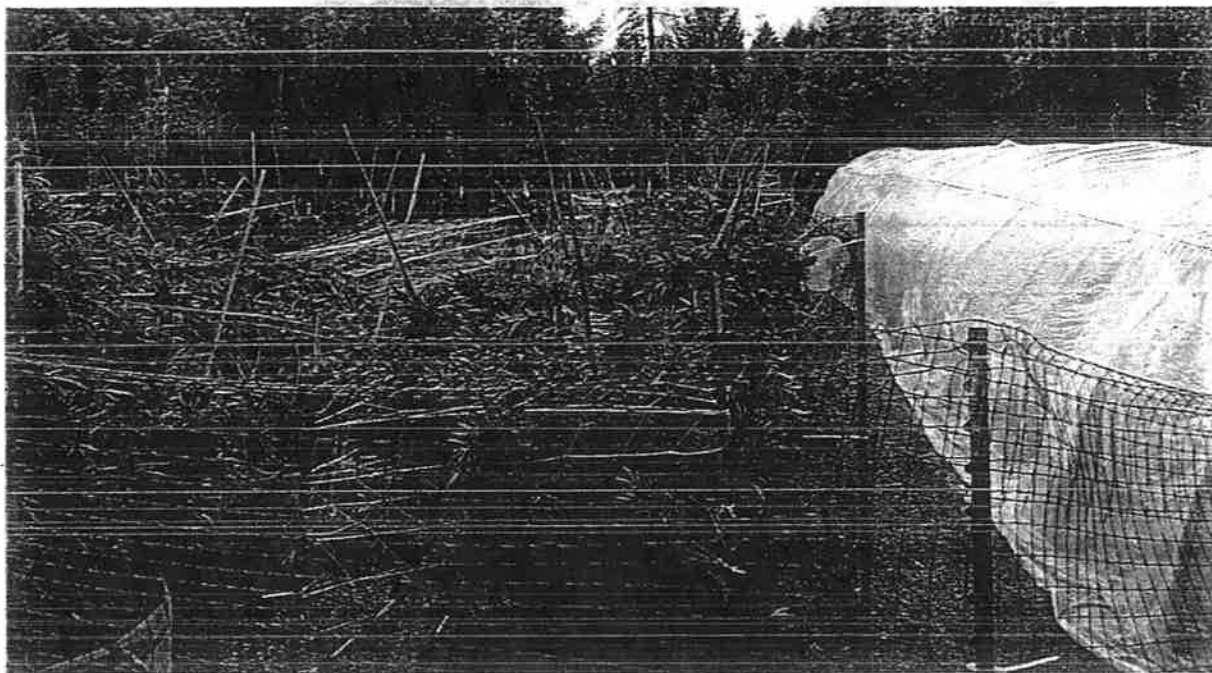
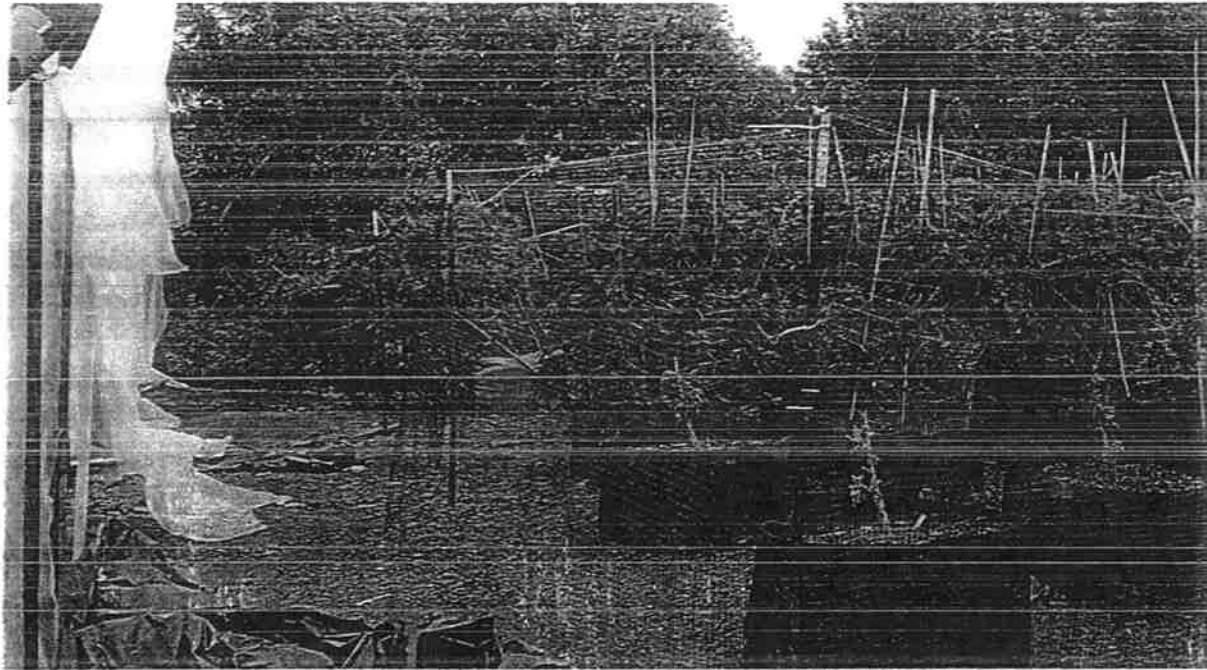
vegetative cycle in a lowlight condition so as to temporarily stunt growth of the plant while keeping it alive for planting during the next cycle after the harvest of the current crop. This allowed us to get a jumpstart on the next cycle, thus shortening that cycle's overall duration.

While these holding pens are part of the overall pre-existing cultivation area, the licensed surveyor was not made aware of their locations and extents; therefore, they are not shown on the accompanying maps and they have not been counted into the mapped area calculations shown on the map. These holding pen areas can be quantified in the future if necessary as can numerous other outdoor grow areas that are not part of the current plan.

The following image is a diagrammatic presentation of an arrangement where greenhouses are used along with plants placed around the greenhouses, under the tree canopy, and in the holding pen. This is how it was arranged at near mature stage of growth. Early in the growth cycle, all of the plants were contained within the greenhouses and remained there until the plants had grown too large to fit within the greenhouse, thus requiring relocation outside.



The photos below are samples of what this arrangement generally looks like near a greenhouse at full maturity.



I hope that this explanation furthers the understanding of the information depicted in the maps prepared and signed by the licensed surveyor and previously provided to the County. I ask that the County Planning Department accept this information along with the previously supplied documentation in total as sufficient evident of cultivation pre-existing January 1, 2016, in amounts supporting the applications and move forward with final processing of the subject permit applications.

Thank you.

Sincerely,

A handwritten signature in dark ink, appearing to read "Robert T. Rantiro". The signature is fluid and cursive, with a large initial "R" and a stylized "T".

Robert T. Rantiro

Innovation West Dba Panther Gap Farms

Applicant/Property Owner

