Interagency Threat Assessment: Cannabis Cultivation on Public Lands in California

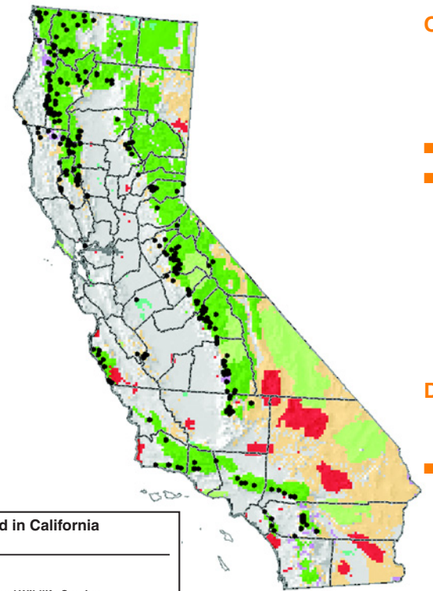
Implementation Plan and Timeline 2004

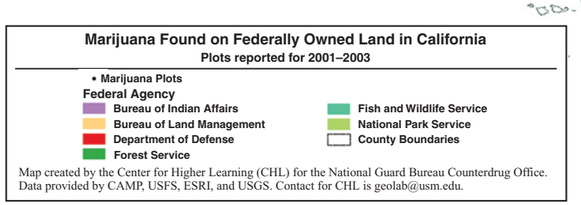
Project Mission: "...to conduct a limited-scope pilot project that seeks to estimate the amount of cannabis being cultivated on public lands in the state of California during the 2004 growing season, with the eventual goal of producing an annual scientific estimate of total domestic cannabis cultivation and production." – *2004 National Drug Control Strategy ((*

January	February	March	April	May	June	July	August	September	October	November	December
Assess Feasibility and Organize											
	PHASE 1: Pre-Survey Preparation										
				PHASE 3: Ground Truthing and Imagery Analysis							
					PHASE 4: Data Analysis						
						PHASE 2: Survey Design and Implementation					
										PHASE 5: Final Report and Follow-On	

Assess Feasibility and Organize

1. Define project requirements
   - Define project scope
   - Determine deliverables
     - Intended use and recipients
     - Substantive content
     - Classification / Restrictions
2. Identify potential info sources
3. Determine participating agencies - Roles, Responsibilities, Resources
   - NDIC
   - DEA
   - National Guard Bureau
   - CAMP
   - USDA (USFS, NASS, ARS)
   - Dept of Interior (BLM, EROS, NPS)
   - JTF-6
   - Other
4. Determine contract support reqs
5. Establish legal boundaries, methods, and agency participation
6. Brief participating agencies and solicit their views throughout project development
7. Submit project plan to ONDCP
   - Personnel
   - Facilities and infrastructure
   - Collection plan
     - Imagery
     - "Ground truthing"
   - Agency participation and roles
   - Project milestones/timelines
   - Resource requirements
8. ONDCP approves project plan and identifies required resources





PHASE I: Pre-Survey Preparation

- By 2/28 NDIC formulates methodology in collaboration with other agencies
- By 3/1 Agencies provide historical eradication data to NGB for development of Predictive Cueing Layer Model (PCL) (CAMP, USFS, DCE/SP, BLM)
- By 3/15 NDIC prepares draft data request
- By 4/30 NDIC acquires hardware / software, secure work space, expertise

Dependencies:
- Sufficient funding for technical needs
- Availability of secure work space
- Availability of analytical support

PHASE 2: Survey Design and Implementation

- By 3/31 NGB provides PCL Map identifying high, medium, and low probability cultivation areas

Dependency:
- Requires historic eradication data from agencies

- By 4/7 NDIC develops survey/sampling plan
  - Size and scope determined by PCL Model, available resources, and level of technical expertise available
  - Eliminate areas not to be surveyed (e.g., deserts, excessive slopes, high population, etc.)
  - Sample high, medium, and low probability cultivation areas

Dependency:
- Requires completion of PCL Model

Options:
- All Federal Lands
- All USFS Lands
- Select USFS Lands (1-18 National Forests)

- By 4/9 NDIC submits Data Request
- By 4/30 NDIC establishes requirements for remote imagery
  - Coverage of entire study area or sampled area
  - Specify parameters for imagery collection
  - Determine sources
  - Determine need for aerial photography

Dependency:
- Availability of assets
- Costs and funding

- By 5/28 NDIC develops ground-truthing plan in coordination with participating agencies

PHASE 3: Ground Truthing and Imagery Analysis

Ground Truthing

- By 6/1, commence ground truthing - (NDIC / other agencies)
  - "Boots on Ground" (NGB, CAMP, DCE/SP)
  - Satellite imagery (USDA, USFS, USGS, et al)
  - Aerial photography / FLIR (USFS, NGB, CAP, et al.)

Dependencies:
- Agency participation
- Available manpower and assets
- Funding

Imagery Analysis

- Process imagery (rectification, enhancement, classification)
- Identify features of cannabis cultivation
  - Plant characteristics
  - Grow site characteristics (e.g., irrigation, trails, roads, dwellings, etc.)
  - Spectral signature through life cycle
  - Identify changes to suspect sites over time
- Identify and map grow sites

Dependency:
- Collection of sufficient imagery - USGS, USDA, NASA, USFS, inter al.

PHASE 4: Data Analysis

Cultivation Estimate

- Determine area under cultivation
- Identify and map grow sites
- Determine area of identified sites
- Use statistical analysis to derive cultivation estimate

Dependency:
- Collection of sufficient imagery - USGS, USDA, NASA, USFS, inter al.

Validation

- Multitrack approach
- Cultivation estimate based on sampling
- Validate via complete survey of one or more forests
- Validate via ground truthing

PHASE 5: Final Report and Follow-On

Final Report

- By 11/10 NDIC finalizes cultivation estimate
- By 11/19 NDIC completes supporting T/A
- By 11/26 NDIC submits DRAFT report to participating agencies for concurrence
- By 12/15 NDIC delivers and briefs final report to ONDCP Director, DEA Administrator, Secretary of Agriculture, Secretary of Interior, et al.

Follow-On

- Identify resource, budget, and staffing needs to institutionalize crop estimate process
- Establish funding mechanism
- Formalize agency participation
- Refine methodology
- Expand scope for 2005 estimate

Resource Requirements	
Requirements	**Cost**
Personnel Imagery IA GIS IA	
Infrastructure	
Hardware/Software	
Data Purchases	
Travel	
Miscellaneous	
Total Cost