

Marijuana Issues Facing Land Trusts



**James Bernard, Environmental Management Consulting
California Land Trust Conference, Los Angeles, March 9, 2016**

The scale and scope of marijuana in California

“Much of the available farmland, from Eureka to Monterey and all the way to San Diego, will soon be dotted with cannabis fields. I can only imagine how large our industry will be five years from now! We will dominate the agricultural landscape and will easily be California’s largest grossing crop.” —Tim Blake, founder and producer of the Emerald Cup cannabis competition

Marijuana by the numbers

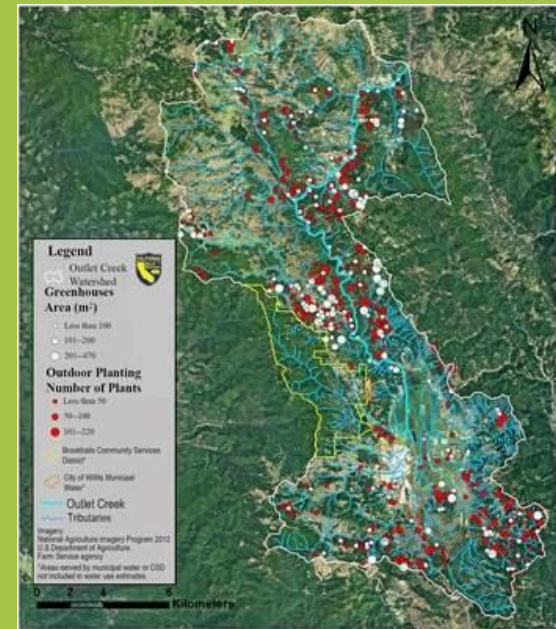
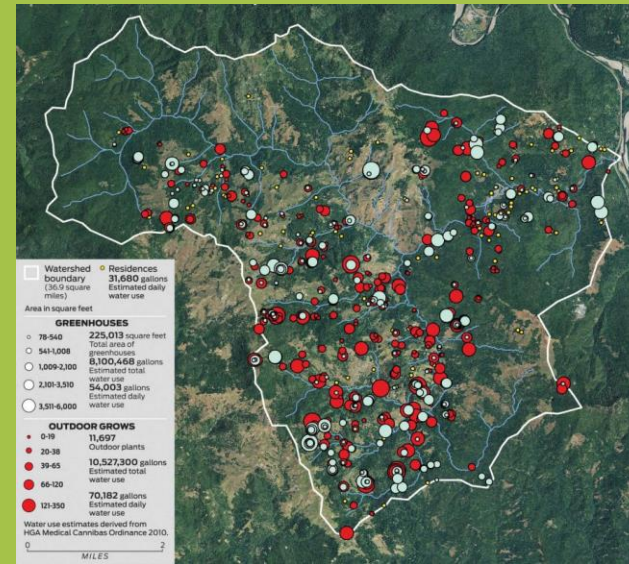
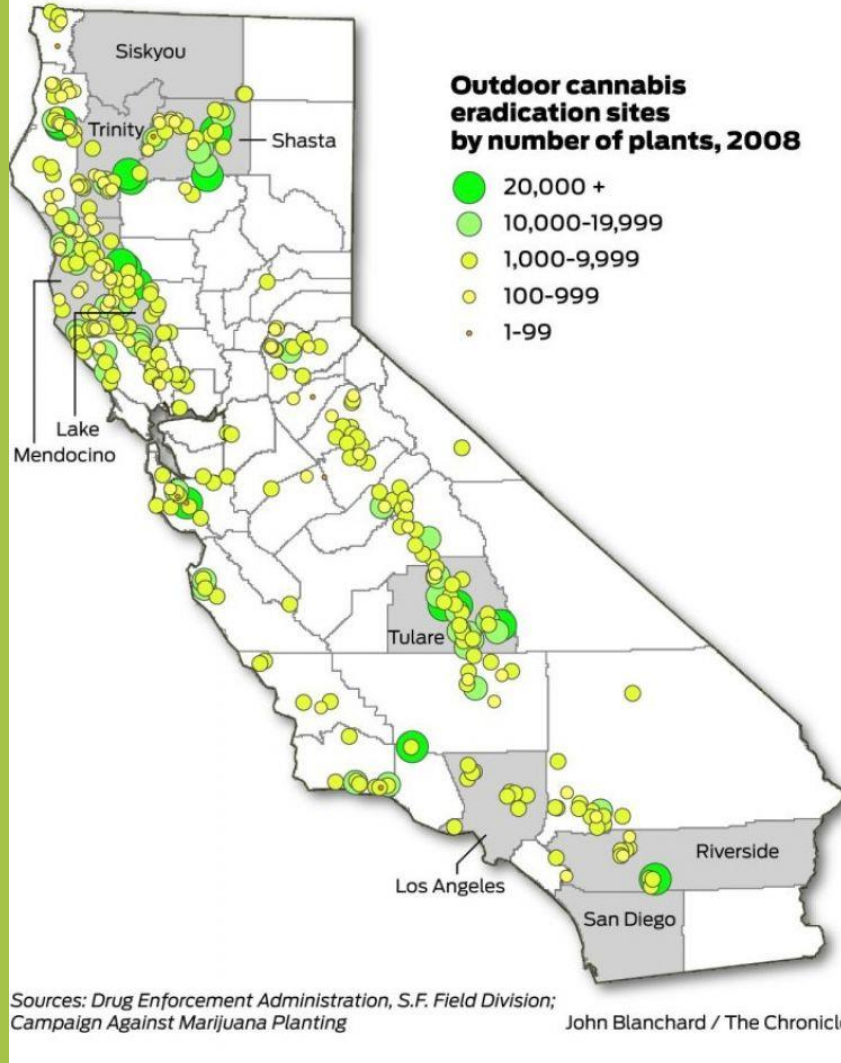
- As of 2011, more than 750,000 Californians had obtained doctor “recommendations” to treat everything from cancer-related nausea to pain and anxiety using marijuana.
- As of 2011, cooperatives that provide marijuana were paying more than \$100 million in sales taxes.
- Officials estimate there are 50,000 marijuana farmers across the state with an estimated 40,000 grows in the jurisdiction of the North Coast Regional Water Quality Board.
- California produces as much as 70% of the cannabis sold in the United States and an estimated 60% of U.S. marijuana is grown in Mendocino, Humboldt, and Trinity counties.



The scale and scope of marijuana in California

Pot central


Two-thirds of the marijuana seized in the United States is in California.



Policy, legal, and legislative context in California

- The package of three state laws are set to go into effect January 2018 and move away from a nonprofit, collective model to a commercial licensing structure. AB 243—Marijuana Watershed Protection Act is the environmental cornerstone of the package and requires medical cannabis farmers to follow the same rules as traditional farmers, viewing cultivation as agriculture. AB 243 also provides funding for environmental cleanup and enforcement of environmental regulations.
- However, the state rules and licensing for cultivating, dispensing and delivering cannabis are statewide minimums. Local jurisdictions can add stricter regulations and retain existing authority to impose fees and taxes. 30 municipalities have enacted bans on various aspects of cannabis cultivation, 20 have a ban pending approval, and another 20 are considering one. If the counties impose their own licenses, the fees could only recover the cost of providing service or they would be a tax.
- A drafting error mistakenly left in the final version of AB 266--Medical Regulation and Safety Act stating that if cities did not adopt their own land use regulations for allowing medical marijuana cultivation permits by March 1, 2016, the state would assume responsibility was corrected by AB 21 February 3, 2016.
- While the state law has requirements that commercial grows obtain both state and local licenses, personal grows of up to 100 square-feet and caregiver grows of up to 500 square-feet are exempt.

Local jurisdictions can add stricter regulations and retain existing authority to impose fees and taxes



YUBA COUNTY FACT
Families Against Cannabis Trafficking

is an organization of families and other interested parties that oppose the commercial trafficking of Marijuana/Cannabis. We do not oppose the use of 'medical' marijuana provided protections are in place to prevent a proliferation of illegal production and sales. On March 10, 2015, the Yuba County Board of Supervisors adopted a revised Marijuana Cultivation Ordinance. The below information is provided as a Public Service.

Summary of Ordinance #1538-Marijuana Cultivation


- Marijuana can only be grown on a parcel with a legally established and permitted dwelling.
- Outdoor cultivation and cultivation within a dwelling/residence is prohibited.
- Cultivation of more than 12 plants is prohibited regardless of parcel size.
- Cultivation of marijuana shall be contained within a building that is an accessory to a dwelling.
- The accessory building shall be permitted and approved by the Building Department.
- The accessory building shall be equipped with an odor and moisture filtration system.
- A legal water source must be available and the unpermitted drawing of surface water is prohibited.
- Registration, through County Code Enforcement must be completed prior to cultivation.
- Active Code Enforcement violations must be corrected prior to registration.
- A potential cultivator and non-owner of the parcel, must provide written and notarized permission from the parcel owner.
- Other conditions also apply, for questions contact Code Enforcement.

Medical Marijuana Registration Applications
Registration Applications can be obtained online or at the Yuba County Code Enforcement Counter
Yuba County Code Enforcement
915 5th Street Marysville, CA 9590
(530) 749-5455
FAX: (530) 749-5464
www.co.yuba.us/codeenforcement/home

Marijuana Cultivation Complaints

- Suspected violations of Yuba County Ordinance Code #1538 can be turned in to Code Enforcement by telephone (530) 749-5455, over the counter or by completing an online Service Request (complaint) Form www.co.yuba.us/codeenforcement/home. You will be asked for your name and contact information, but this information will be kept confidential.
- Suspected marijuana operations impacting streams and lakes in violation of the California Fish and Game Code Sections 1600-1616 (Lake and Streambed Alterations) can be reported by telephone via the CALTIP telephone line (888) 334-2258.
- Nuisance guard dogs can be reported to Yuba County Animal Control Services at (530) 741-6301.
- Suspected sales and transportation of marijuana may be determined to be a felony or misdemeanor and should be reported to the Yuba County Sheriff's Office at (530) 749-7777.

Additional information can be found at www.yubacountyfact.com or on Facebook



Butte County Department of Development Services
TIM BELLINGH, DIRECTOR | PETE CALARCO, ASSISTANT DIRECTOR
7 County Center Drive Oroville, CA 95965 530.538.7801 Telephone 530.538.7785 Facsimile
www.buttecounty.net/dds

FORM NO
DC-E2

**RESTRICTIONS ON MEDICAL MARIJUANA CULTIVATION
COMPLAINT FORM**

Date: _____

Alleged Violation Address: _____

Property Owner: _____ Parcel: _____

City: _____

Complaint Type: Check violation(s) that apply AND include written remarks below.
(Code sections listed with violation to reference) (BCC = Butte County Code)

- Cultivation Area Violation (over maximum) - ECC 34A-8(a)(1-4)
- Parcel does not have a legal residence - ECC 34A-5(n)
- Outdoor grow on a parcel, 5 acre or less - ECC 34A-4(b)(1)
- Setback violation (please specify below in detail)
- Medical marijuana plants are in public view - ECC 34A-8(b)(4)
- Fencing (no fence on parcel less than 5 acres, unapproved materials, plants are taller than fence, unsecure access, etc.) - ECC 34A-10
- Building violations (no permit and larger than 120 sq ft, unpermitted electrical, no ventilation,

1 Requirements
- ECC 34A-8(a)(1), 34A-4(b)
Apply - ECC 34A-7(a)(1) No municipal sewer system permitted 4A-7(b)
Type of medicinal - ECC 34A-7(c)

Initials contact Environmental Health at 530.538.7281 or Mira Loma Dr, Oroville, CA 95965

Space provided below:



Policy, legal, and legislative context in California

- California Department of Fish and Wildlife has 16 staff to police marijuana grows and has been able to inspect less than 1% of the sites. Governor Jerry Brown budgeted \$3.3 million in 2014 to boost enforcement, but experts estimate that the state needs \$25 million a year to regulate the state's plantations and enforce environmental laws .

Joint Report to the Legislature on the Department of Fish and Wildlife and State Water Resources Control Board pilot project to address the Environmental Impacts of Cannabis Cultivation (Watershed Enforcement Team)



CDFW is proposing a fee enhancement of 300%, up to the statutory cap of \$5,000 to obtain a Lake and Streambed Alteration permit that requires Marijuana Cultivation Site remediation in order to help ameliorate the unconventional permitting process for already existing sites. Each segment of the fee schedule would increase correspondingly. This enhancement would help fully fund the true cost of staff processing MCS permits, enable CDFW to hire additional staff to help process these complicated permits and the anticipated increase in permit applications.

Policy, legal, and legislative context in California

The California Water Boards are developing a regulatory program to protect waters of the State from harmful activities from cannabis cultivation that is intended to prohibit waste discharges from agricultural practices, land clearing and grading activities in rural areas and forests. Permits will cover medical marijuana under Proposition 215 grown on private land. Actions by the Water Boards include a flyer June 15, 2015 addressing “cannabis cultivation best management practices.

Cannabis Cultivation Best Management Practices

These best management practices (BMPs) may help mitigate water pollution from cannabis cultivation activities. We recommend that you consult a professional engineer/contractor before starting an advanced BMP.

LIABLE PARTIES:
Property Owner
Site Caretaker
Property Resident
Construction Contractors

Erosion & Sediments

ISSUE: Poorly maintained or badly constructed roads and excavations increase a major source of sediment pollution.

BMP SOLUTIONS:

- Minimize disturbed areas and protect soil and
- Provide temporary construction sediment control measures
- Use erosion control measures on exposed soil
- Use silt fences and erosion control blankets on steep slopes
- Control sediment with filter socks and filter rolls
- Install sediment traps, check dams or vegetative buffer strips
- Keep gutters and roof drains clean
- Install sediment traps on roof drains
- Plan and design new roads and roadsides
- Reduce erosion by mulching and using water basins during storm peak up discharges
- Repair eroded areas and water courses

Potting Soil, Amendments, Fertilizers, and Pesticides

ISSUE: Potting soil, soil amendments, fertilizers and pesticides can be easily carried off and discharged into surface waters

BMP SOLUTIONS:

- Plan cover crops and mulch and protect riparian areas
- Follow best management practices for application
- Install buffer strips to slow or trap sediment and nutrients
- Avoid application of fertilizers and pesticides near riparian areas
- Implement best management practices for application
- Store fertilizers and pesticides in a secure and locked area

Housekeeping and Trash

ISSUE: Waste byproduct may impact the environment and water quality.

BMP SOLUTIONS:

- Dispose of solid waste properly
- Store paint, oil, tires, oil filters and other hazardous materials
- Store tires and other hazardous materials in a secure and locked area

Water Supply

ISSUE: Diverting water in a manner that negatively impacts beneficial uses and/or water rights holders.

BMP SOLUTIONS:

- Obtain appropriate right permits from water right application with the State Water Resources Control Board
- Divert water rights to beneficial uses and water right holders
- Install water storage devices to store water until the appropriate time of use
- Obtain the Division of Water Rights
- Install water storage devices in a secure and locked area
- Implement riparian water storage and control devices
- Install water storage devices in a secure and locked area
- Obtain the Division of Water Rights
- Install water storage devices in a secure and locked area

Your responsibilities do not stop after BMPs are installed. You should routinely inspect your site.

California Regional Water Quality Control Board
North Coast Region

Order No. 2015-0023

Waiver of Waste Discharge Requirements and General Water Quality Certification for

Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region

The California Regional Water Quality Control Board, North Coast Region, (hereinafter Regional Water Board) finds that:

Overview

1. The North Coast Region is inundated with cannabis cultivation in headwaters and main river systems, with active, developed sites in steep and rugged terrain. With the increase in use and cultivation of cannabis since the voters' passage of the Compassionate Use Act (Prop 215) and the legislature's passage of AB 420, the unregulated activity of cannabis cultivation has grown increasingly year by year, with land area under cultivation increasing exponentially over the past decade. The increased cultivation throughout the North Coast Region has resulted in significant waste discharges and a loss of in-stream flows associated with improper development of rural landscapes on privately-owned parcels and the diversion of springs and streams, to the cumulative detriment of beneficial uses of water.
2. The purpose of this Order is to provide a water quality regulatory structure to prevent and/or address poor water quality conditions and adverse impacts to water resources associated with cannabis cultivation on private land. Under this Order, any landowner or operator cultivating cannabis that results in a discharge of waste to an area that could affect waters of the State (including groundwater) will fall within one of three tiers depending on the nature of their operation and risk to water quality. Properties with site characteristics or development that have impacts that cannot be ultimately mitigated to less than significant levels require regulation under a separate and individual order.

The North Coast Regional Water Quality Board issued an order August 13, 2015 to “provide a water quality regulatory structure to prevent and/or address poor water quality conditions and adverse impacts to water resources associated with cannabis cultivation on private land.”

Policy, legal, and legislative context in California

- Supporters of legalizing recreational marijuana use in California are proposing several voter initiatives for the November 2016 ballot. The Nature Conservancy has estimated the environmental impacts of marijuana cultivation and the associated cost of enforcement, regulation, and restoration to be \$120 million per year that will need to be included in any ballot initiative.



ADDRESSING THE ENVIRONMENTAL IMPACTS OF MARIJUANA CULTIVATION

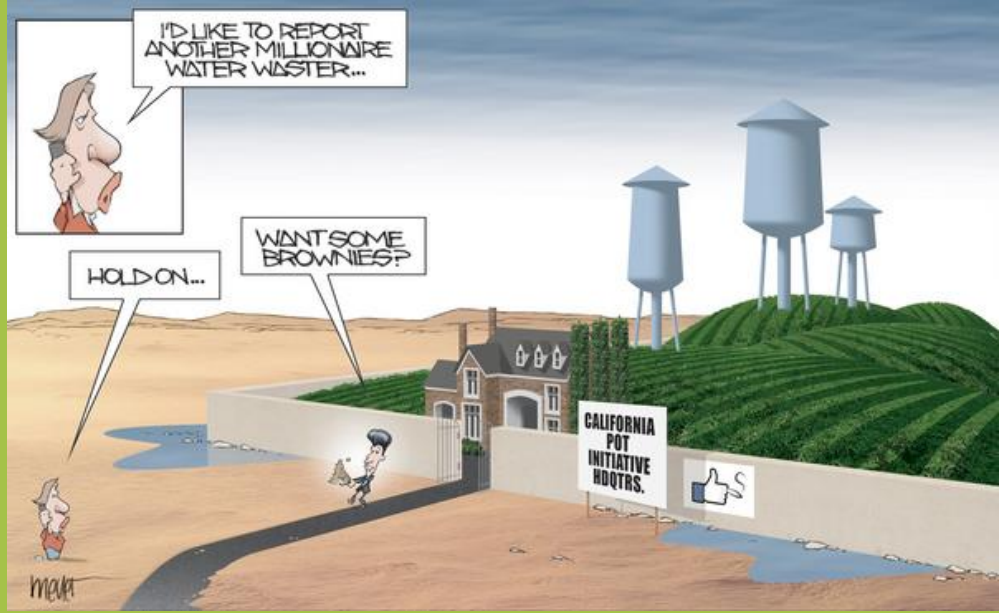
The enormous environmental impacts associated with marijuana cultivation put the health of California's land, water supply, and wildlife in jeopardy—and the amount of water used in marijuana cultivation is especially concerning during this historic drought. Marijuana irrigation techniques can dry up or deplete sensitive water sources; pesticides and other chemicals used can poison wildlife and pollute public waterways; and clear cutting and land clearing destroy endangered species habitat and cause serious erosion. Despite this damage, the industry is inadequately regulated and there are no revenues from the sale or cultivation of marijuana dedicated to environmental protection and restoration in California.

California isn't unique in this regard—no state in the country has developed such policies even though they exist for other crops. Colorado and Washington both allocate their projected \$67 and \$289 million tax revenues, respectively, from legal recreational marijuana sales to state funds to support public health and education—yet no funds are earmarked for environmental solutions.

California is at a major crossroad. If we do not act now, we may lose rare wildlife forever and see our rivers and streams contaminated and dried up. The momentum in our state towards legalization provides a key opportunity to set an example for the rest of the country, and reduce, regulate, and mitigate environmental harm.

Based on our research, The Nature Conservancy estimates it will take at least \$120 million per year to address environmental impacts of marijuana cultivation explicitly to:

- Regulate water impacts, prevent natural resource degradation, and enforce land use regulations and environmental laws in the context of marijuana cultivation. For example, resources are needed to stop unpermitted water diversions that can dry streams and harm and kill federally endangered and threatened species like coho salmon and steelhead trout.
- Clean up the impacts of marijuana cultivation sites. Marijuana cultivation can have many serious and persistent effects on the environment. For example, heavy use of pesticides, herbicides, and fertilizers can contaminate soils, pollute streams, and poison rare wildlife such as Pacific fishers and northern spotted owls. Also, marijuana cultivation sites often leave behind significant infrastructure that needs to be removed in order to ensure that the sites will not be re-utilized—this includes trash pits, water diversions, and irrigation infrastructure.
- Restore land and waters damaged by marijuana cultivation. Land clearing and road building for marijuana cultivation often removes native forests and other vegetation, and causes serious erosion. Among other things, resources are needed for treating erosion sources before dirt reaches streams, where it can seriously damage habitat for fish, frogs, and other animals; and to restore fisheries where damage has already been done.



The marijuana marketplace

- Until recreational marijuana use becomes legal, the alternatives for cannabis growers have been the black market or medical marijuana dispensaries, a highly competitive market. Dispensaries desire different kinds of cannabis with a wide range of strengths and characteristics desired leading to some 400 strains on the market. More than 100 trademark applications are pending with the California Secretary of State's office While dried flower buds and edibles have been the preferred choices for imbibing cannabis, oils are taking over the market, with over half the sales in many places.



21227 FOOTHILL BLVD • HAYWARD CA. 94541 • (510) 222-9555 • WWW.GOE.MENU



Indoor versus outdoor growing

- Although indoor growing produces a more reliable product and generally less environmental damage, there are strong proponents of organic, outdoor grown marijuana. An outdoor marijuana plant takes about 900 gallons to grow to harvest and about half as much for an indoor plant. While a single harvest is usually possible from an outdoor grow, multiple or continuous harvests are possible from indoor grows. Three harvests are possible and legal in Colorado. Outdoor “light deprivation” farming emulates indoor techniques to induce early flowering.



Environmental impacts of marijuana cultivation by the numbers

- In 2012, in California's public forests, authorities found 315,000 feet of plastic hose, 19,000 pounds of fertilizer and 180,000 pounds of trash on more than 300 illegal marijuana plantations.
- At about 6 gallons of water per plant per day over 150 watering days, a trespass grow site with 10,000 plants diverts 60,000 gallons of water per day, or 9 million gallons in a season.
- 75 gallons of diesel fuel are required to grow a pound of marijuana.
- Indoor cultivation electricity use is equal to 1 million average California homes and greenhouse-gas emissions equal to those from 1 million average cars.

Impacts of marijuana and honey oil production

- **Multiple source cumulative damage**
- **Water quantity impacts**
- **Water quality impacts**
- **Wildlife impacts**
- **Solid waste impacts**
- **Energy impacts and carbon footprint**
- **Site contamination**
- **Honey oil butane explosion damage**

Multiple source cumulative damage

October 2014, Number of trespass sites cleaned: 7

Personnel per day: 50 (25 Officers & N. Guard; 25 Sci. Team & Volunteers)

Total water diversion restored to watersheds: 67.5 million gallons

Total amount of fertilizer used at sites: 8,188 pounds

Total amount of rodenticide used at sites: 128 pounds

Insecticide used at sites: 560 gallons of usable insecticide

Carbofuran used at sites: 68 ounces concentrated carbofuran

Garbage removed: >8,000 pounds

Irrigation pipe removed: >8.5 miles



Water quantity impacts



6-8 gallons a day



150 days



900 - 1,200 gallons per plant/season

Source: Gabriel, IERC

Water quantity impacts

Public Land Water Diversion Rates: California

💧 * **1,200** gallons per plant, full season



2012: ~870,000 plants = 💧 **1.04** billion gallons



2013: ~500,000 plants = 💧 **600** million gallons



2014: +500,000 plants = 💧 **600** million gallons



Each Year: Amount of 💧 San Francisco households uses: **3 weeks to +1 month**

Source: Gabriel, IERC

Water quantity impacts



Water quality impacts

Impacts to Aquatic Organisms from Water Diversions

- Loss of habitat
- Higher water temperatures
- Increase susceptibility to diseases
- Decrease prey availability for aquatic and terrestrial wildlife



Source: Gabriel, IERC

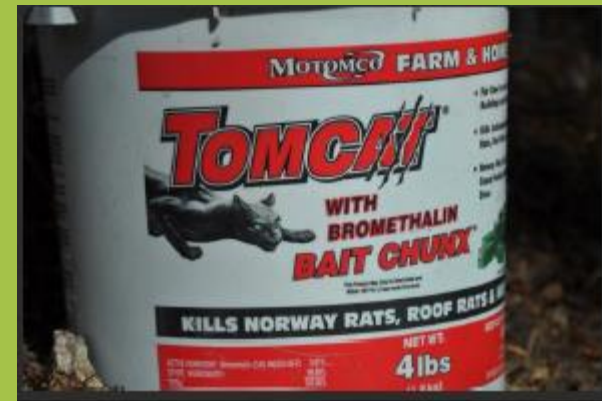
Wildlife impacts

Heavy use of pesticides, herbicides, rodenticides, and fertilizers can contaminate soils, pollute streams, and poison rare forest flagship species such as Pacific fishers and northern spotted owls, but also raptors and predators that consume poisoned animals.



Carbamate insecticide laced hot dog 20 meters from dead fisher

Anticoagulant rodenticide



Flavored neurotoxin rodenticide

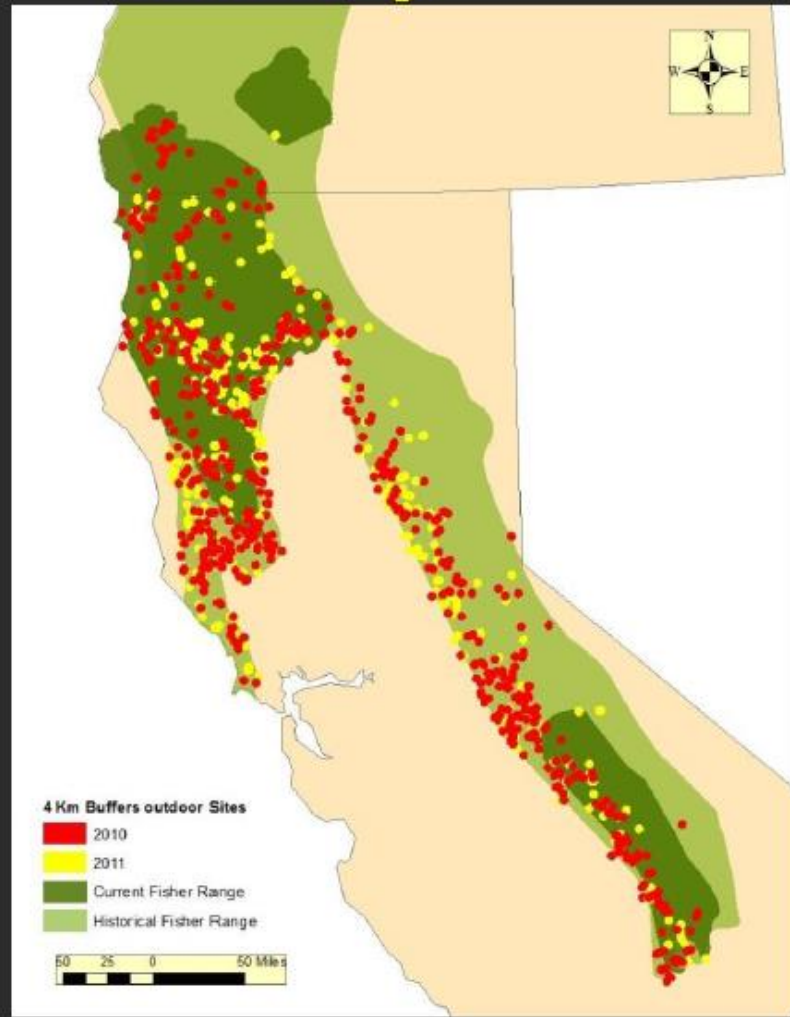
Wildlife impacts

2010 -2011

- **~1,100** trespass grow sites eradicated
- Liberally, **only 40-60%** sites are discovered.
- Only a fraction are cleaned.
- Sites have the potential to impact **30-35%** of fisher's current range.

Source: Gabriel, IERC

Trespass Marijuana Sites within the Fisher's Range



Solid waste impacts



Marijuana cultivation sites often leave behind significant human infrastructure that needs to be removed in order to ensure that the sites will not be reoccupied, including trash, human waste, animal carcasses, generators, water diversion basins, and irrigation equipment (pumps, pipe).



Energy impacts and carbon footprint



In California, indoor cultivation is responsible for about 3% of all electricity use, or 9% of household use. This corresponds to the electricity use of 1 million average California homes, greenhouse-gas emissions equal to those from 1 million average cars, and energy expenditures of \$3 billion per year.

Site contamination



Cultivation sites now often include temporary laboratories or refining areas with associated chemicals that contaminate soil and water and require costly remediation.

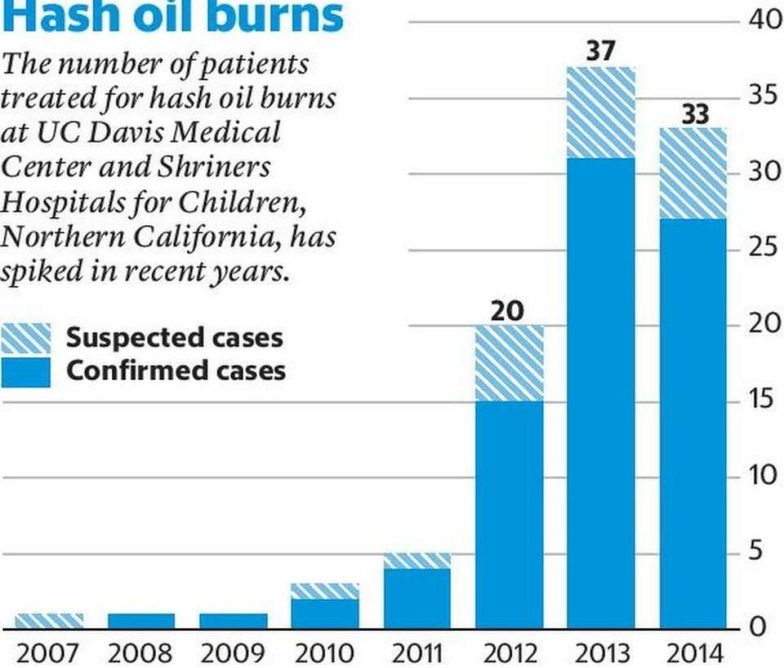


Honey oil butane explosion damage



Hash oil burns

The number of patients treated for hash oil burns at UC Davis Medical Center and Shriners Hospitals for Children, Northern California, has spiked in recent years.



Source: Dr. David Greenhalgh

The Sacramento Bee



Critical Habitat or Wildlife Lost from Grow Site Initiated Fires

2006-2014



- Confirmed 110,235 acres

Total cost > \$55 Million

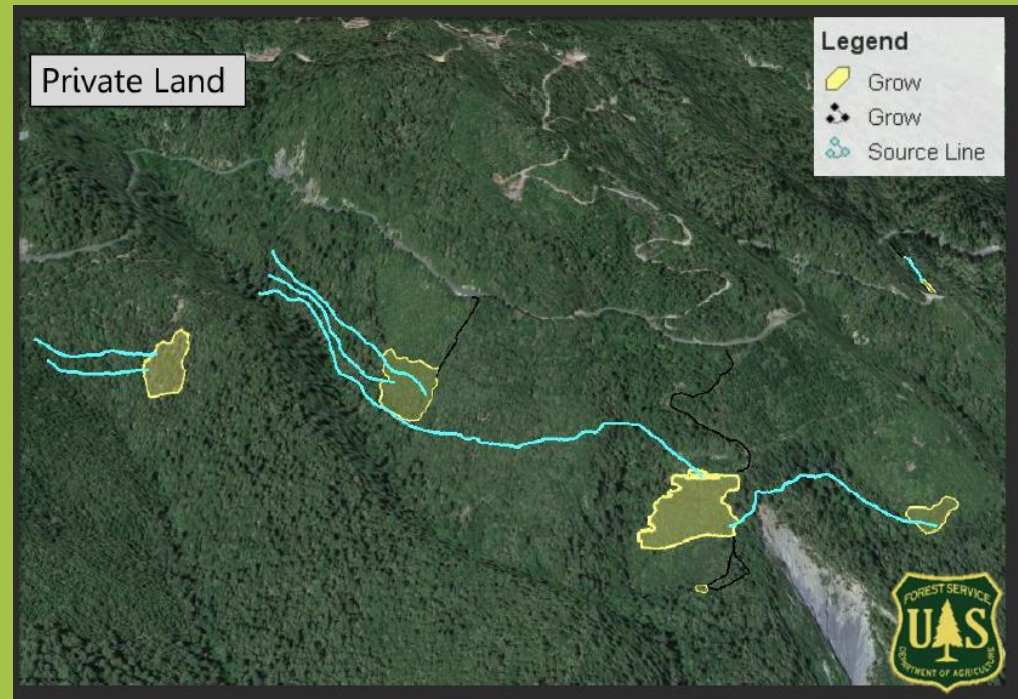
Suppression Cost Only



Stewardship Issues

Think like a grower

- Water
- Soil
- Vegetation/land cover
- Envision the entire growing season
- Detection
- Difficult access
- Mobility



Detection is just the beginning: remote surveillance of grows

- **Images from aircraft and satellites**--costs based on ground resolution, seasonality, specific areas of focus, size of the property, and proximity to the base airfield ranging between \$500 and \$9,000 per site
- **Drones**—"in sight" operation and disruptive of wildlife
- **On the ground cameras**—inexpensive, good for confirmation



Safety

- Individuals tending domestic grow sites often use weapons—such as semiautomatic assault rifles and high-powered rifles—against intruders to protect grow sites. The number of intimidation incidents and the amount of violence associated with illegal marijuana grows has increased recently. Accordingly, the safety of monitors is paramount in monitoring conserved land, fee or easement, when assessing land where illegal or limited-legality marijuana is being grown or is potentially taking place. **Experienced assessment staff or monitors should be involved with marijuana grows, not volunteers, no matter how well-trained for liability and/or exposure to dangerous conditions reasons.**

Strength in numbers or in combinations

- **Single monitors are not preferred for stewardship visits on lands with growers.** Intimidation tactics and prevention of freedom to access parts of the conserved property have taken place resulting in scary experiences and costly revisits to fulfill the requirements of the easement. Sometimes, combinations of different personalities or a mix of sexes as monitors works well with growers to deflect animus or allow one person to assume a more forceful role and the other a more “reasonable” approach to engaging cooperation.

Property assessment techniques

Having excellent **baseline documentation** is essential. **Boundaries** should be walked as often as possible as trespass grows are often found along property lines. **Water sources**, springs and both temporal and year-round watercourses need to be identified, mapped, and checked regularly. Proximity of water sources to access, such as **hiking trails**, provide conditions susceptible/conducive to growing.

Etiquette for the unexpected trespass grow

- For properties where growing is not known or suspected, *at the first sign or indication that an unexpected grow is in the immediate vicinity, monitors should turn around and retrace steps to an area that is known to be secure.*
- Such signs are black plastic irrigation pipe in isolation or crossing a trail, temporary fencing, rodent traps, trash, used containers (pesticide, herbicide, fertilizer, butane), water containers, camping equipment, and dead wildlife that have eaten poisoned rodents. Sometimes, trip wires and wildlife cameras are used as alert systems near a grow. Brush and vegetation may be piled into a wall encircling the grow. Areas of forest that have been cleared of understory vegetation while retaining an overstory canopy signal grow sites. Some grows have been found on above-ground platforms in trees.
- Typical *human red flags* include individuals carrying in large amounts of food or irrigation tubing, vehicles parked in the same area multiple times per week or month, new trails or increased use of low-attraction areas, and unusual loss of water flow in creeks.
- If the monitors are using GPS devices, taking a location reading should be undertaken quickly. Once the monitors or the property assessment person is out of the zone near where a grow may be taking place, decisions can be made about how to proceed with the monitoring or assessment visit, who to inform or not, and next steps.

Annual conservation easement monitoring for properties with grows or growers

Scheduling and communication

- A typical outdoor growing season in northern California would run from roughly April to a harvest toward the end of September with primary processing in September and October. Scheduling monitoring during the growing season should be avoided, especially toward harvest time when most attempts by non-growers or growers from offsite are made to harvest plots or steal freshly harvested plant material and tensions are high and potentially lethal conflicts occur. If an annual monitoring visit must be made during the growing season, earlier in the cycle is better.

Involving law enforcement

- Mendocino County Sheriff Tom Allman estimates that 30 percent of his department's resources and staffing are dedicated to marijuana issues during the growing months. He said the department would usually only pursue gardens that have 100 plants or more, unless there is a public safety or environmental concern. Some landowners have attempted to remove the marijuana gardens themselves, an action that is discouraged by law enforcement. A number of land trusts have developed relationships with law enforcement over time to communicate monitoring schedules, share information, and enhance safety in monitoring visits.

Removing trespass grows and illegal water diversion: Mendocino County ranchland



Wednesday, September 25, 2013 2:00 p.m.

- Remove your remaining plants immediately!
- You have 24-hours before they will be destroyed.
- You are *trespassing* and your activity is not welcome on this property ever again.
- Your fencing, hose, and grow materials have been removed to assist you to leave. This land and water are not yours to use.
- Failure to comply will have consequences and this is a one-time-only deal.



Making trespass grows on land trust lands public knowledge

Illegal pot grows cause destruction to Land Trust preserves

Northern California is famous for its relaxed attitude toward growing marijuana. However, these crops cause a lot of headaches for people charged with caring for natural lands. This year alone, SLT staff have discovered three illegal grows on our properties. These grows create safety hazards,



especially when staff unexpectedly stumble across an active grow occupied by “gardeners,” which was the case recently on one of our preserves outside of Healdsburg. Fortunately, our employees were able to slip away unseen and call the Sheriff’s office, which promptly responded. Though they were unable to catch the three people camping onsite, they were able to remove more than 600 plants. Unfortunately, we were left with the task of cleaning up thousands of feet of plastic dripline, several truckloads of garbage and containers of fertilizer and pesticides, as well as taking care of more than an acre of land that had been stripped of all natural vegetation. Staff and volunteers will be finishing the cleanup and erosion control activities over the next couple weeks to prevent any further damage during the coming rainy season.

--Sonoma Land Trust newsletter, September 2013

Working with marijuana growers at the watershed level: Sanctuary Forest, Mattole River watershed

Sanctuary Forest, a land trust in southern Humboldt County, developed a Storage and Forbearance program for landowners in critical reaches of the Mattole River headwaters and tributaries. An innovative voluntary partnership helps landowners get the water storage capacity they need in order to give up pumping from the river during the critical dry season to keep water flowing when the river's aquatic organisms need it most. The program has installed tanks on 19 properties of willing landowners along two key stretches of the Upper Mattole main stem and has secured funding for three more. Community participation has been essential to solving the

low-flow problem and the Forbearance program is the result of years of cooperation between Sanctuary Forest and local residents. The idea of combining greater storage and a no-pumping period originated from a community forum in 2002. Early adopters of the program and other resident undertaking their own water conservation measures are making long-term changes in water use pattern needed to maintain healthy summertime flows. The work of Sanctuary Forest in the Upper Mattole is a model that can be used by other rural land trusts and communities in California facing similar seasonal water shortages

**Resilience in a Time of Drought:
A Transferable Model for Collective Action
in North Coast Watersheds**



Salmon Keeper, ©2007 Nancy McKittrick

Prepared in partial fulfillment of a grant from the Bella Vista Foundation

January 2014

Amending conservation easements to allow, preclude or contain growing

- Amendments to existing easements held by land trust are generally acceptable if they significantly strengthen the conservation provisions of the easement or extend these provisions to other eligible property. An amendment might be possible if a landowner were to offer additional conservation measures on the same or adjacent properties that would offset any reduction of conservation values of the easement property such as marijuana cultivation. The landowner would have to demonstrate to the satisfaction of the land trust that any amendment would enhance or have a neutral effect on the conservation values of the property or the immediate area.
- Should a protected property change ownership from a grower to another owner more committed to the conservation values of the land, the land trust should take the opportunity to amend the conservation easement to prohibit marijuana cultivation.
- With older conservation easements that are vague about activities in the “homestead area” of the protected property, a policy of containment can be achieved with landowners who would grow by approaching the subject openly and with candor.

Enforcing the conservation easement with landowners who are growing

- If the conservation easement was purchased using federal funding, the landowner can be notified that the easement does not allow them to do something that is in violation of federal law.
- Prohibitions on trash, waste, and hazardous materials, common in most conservation easements, can be enforced through the land trust's violations policy to preclude growing.
- California Civil Code Section 815.7 (b) states that “actual or threatened injury to or impairment of a conservation easement or actual or threatened violation of its terms may be prohibited or restrained, or the interest intended for protection by such easement may be enforced, by injunctive relief granted by any court of competent jurisdiction in a proceeding initiated by the grantor or by the owner of the easement.”

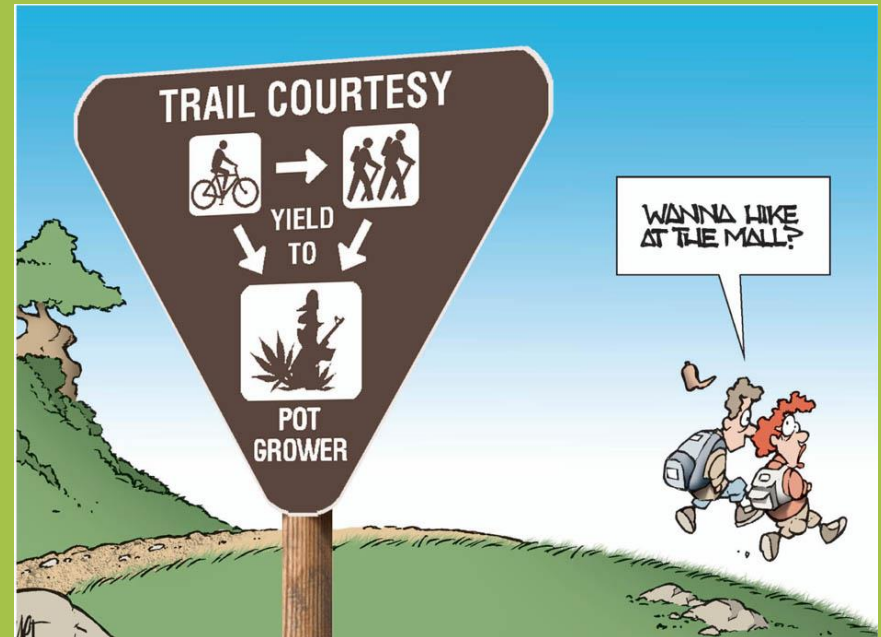
Land Conservation Issues

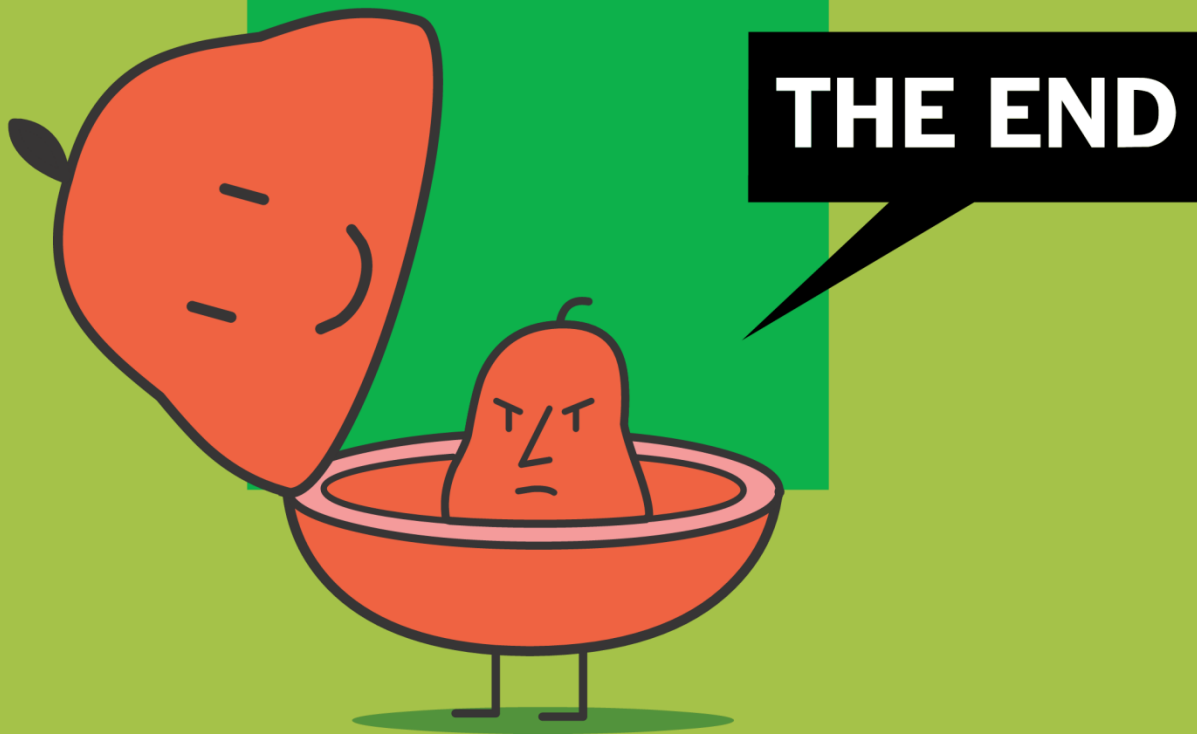
- **Pre-acquisition assessment of properties for marijuana that may be considered for acquisition or donation**
 - Using selection criteria. A criterion similar to “the landowner is not sufficiently committed to land conservation or insists on provisions in a conservation easement that the Land Trust believes would seriously diminish the property’s primary conservation values or the ability to enforce the easement” is usually in place.
 - Stewardship endowment. If marijuana grows are known adjacent to a property under consideration for acquisition or donation, a stewardship endowment that will support multiple monitors on each visit or that supports multiple annual visits should be considered and requested.
- **Conservation easement language to preclude marijuana cultivation or leasing for other than traditional agriculture**
 - Prohibit agriculture
 - Restrict water rights by not allowing use or development of the water rights or leasing water rights in any manner that would change, disturb, alter, diminish or impair the conservation values being protected, or that otherwise would be inconsistent with the purposes of the conservation easement.

Recommendations and Implications for the Future

- Land trusts will need to monitor/be involved in local regulation of marijuana cultivation.
- Land trusts will need to be involved in the development of regional groundwater regulations.
- Land trusts will increasingly need to deal with successor landowners of conserved lands will want the option of growing marijuana for personal medical or care giving use.

With fee purchases by land trusts on the increase, will there be an increase in recreation versus growing conflicts?





Environmental Management Consulting: jbernard@mcn.org