

# Regulation of Cannabis Cultivation: Impact on the Environment and Personnel



7.5 REHS Contact Hours  
Included

May 30, 2019

Ironstone Vineyards

894 6 Mile Road

Murphys, CA

### **Why is this workshop needed?**

There is a need for clear, objective information about environmental and safety issues associated with regulated and unregulated/black market cultivation of cannabis. Inspectors are concerned about their safety and the protective equipment needed when they inspect regulated and unregulated sites. Community members frequently raise issues of environmental impacts associated with regulated and unregulated sites. There is a lack of clear information about the status of the state's emerging regulatory program. Policy makers need objective information and dialogue with subject matter experts in order to formulate regulations pertaining to cannabis cultivation.

### **Who is the intended audience?**

The intended audience for this workshop is policy makers, regulators, law enforcement officers, and community members that seek clear, objective information about the impact of regulated and unregulated/black market cannabis cultivation.

### **What information will be presented?**

**Dr. Gabriel** will share the results of his extensive investigations into the environmental and ecological impacts of unregulated/black market grows.

**Ms. Chavez, Ms. Amodeo, and Mr. Perea** will share information about how cannabis cultivation is regulated at the state level and the status of regulation state regulatory activities at this time, along with a discussion of the current issues and challenges being experienced by state regulators.

**Dr. Butsic** will share issues, challenges, and opportunities associated with cannabis regulation from a broader public policy perspective.

Throughout the workshop, attendees will be encouraged to write their questions and issues of concern on sheets of paper that will be available at each table. The panel, composed of all of the speakers, will address the questions and issues raised in a dialogue format from each of their perspectives. In addition, the panel will be asked to share best practices for inspector and worker safety at regulated cultivation sites.



# Regulation of Cannabis Cultivation: Impact on the Environment and Personnel

## Agenda

Ironstone Winery, Murphys California  
May 30, 2019

- 8:00 a.m.      **Registration**
- 8:30 a.m.      **Impact of Unregulated Grows on the Living Environment**  
*Mourad Gabriel, Ph.D.*, Co-Director, Integral Ecology Research Center
- 10:30 a.m.      **Break**
- 10:45 a.m.      **Status Update on Regulation of Cannabis Cultivation**  
*Tabatha Chavez*, Assistant Chief, Compliance and Enforcement  
California Department of Food and Agriculture
- Noon            **Lunch**
- 12:45 p.m.      **Status Update on Regulation of Cannabis Cultivation**  
*Kelly Amodeo*, Cannabis Environmental Scientist  
California Department of Pesticide Regulation  
*Griffin Perea, P.G.*, Program Manager, Cannabis Regulatory Program  
Central Valley Regional Water Quality Control Board
- 2:15 p.m.      **Break**
- 2:30 p.m.      **Impact of Legalization & Regulation of Cannabis**  
*Van Butsic, Ph.D.*, Berkeley Dept. of Env. Science, Policy & Management
- 3:30 p.m.      **Panel: Questions and Answers**  
*Mourad Gabriel*, Ph.D., Integral Ecology Research Center  
*Van Butsic*, Ph.D., Berkeley Dept. of Env. Science, Policy & Management  
*Griffin Perea*, Central Valley Regional Water Quality Control Board  
*Tabatha Chavez*, California Department of Food and Agriculture  
*Kelly Amodeo*, Department of Pesticide Regulation
- 5:00 p.m.      **Adjourn**

# Speaker Biographies

(Shown in the order presented on the agenda)

**Kelly Amodeo**, is an Environmental Scientist at the Department of Pesticide Regulation specializing in cannabis integration. She is focused on mitigating risk associated with pesticide use in the cannabis industry and educating growers on worker health and safety concerns and regulation. She started work at the Department of Pesticide Regulation with the Environmental Monitoring Branch before transferring to the cannabis team. She earned her B.S. in Environmental Toxicology from UC Davis with an emphasis in NeuroToxicology and worked in the Pam Lein Lab studying the effect of PCB on neurodevelopment.

**Tabatha Chavez**, Tabatha Chavez is the Assistant Chief with the Compliance and Enforcement Branch of the California Department of Food and Agriculture's CalCannabis Cultivation Licensing Division. Tabatha oversees inspection and investigation of state licensed cannabis cultivators, and the California Cannabis Track-and-Trace system. She spent ten years with the California Beverage Container Recycling Program in several capacities, most recently as a Senior Management Auditor where she implemented statewide technical assistance and compliance program, that included investigations, license revocation and prosecutions of system fraud. Prior to her tenure with CalRecycle, Tabatha served ten years with the California Conservation Corps conducting emergency response and public service conservation activities with participation in administrative and health and safety investigations, budgetary, policy, and legislative functions.

**Mourad Gabriel, M.S., Ph.D.**, co-founded IERC with Greta Wengert in 2004. Mourad earned his B.S. in Wildlife Biology at Humboldt State University, his M.S. in Wildlife Ecology at Humboldt State University, and his Ph.D. in Comparative Pathology (emphasis on wildlife disease ecology) at the University of California Davis, School of Veterinary Medicine. Dr. Gabriel is also a Research Associate Faculty at the One Health Institute, Wildlife Health Center at the University of California Davis, School of Veterinary Medicine.

**Griffin Perea, P.G.**, began work at the Central Valley Regional Water Quality Control Board in the Forest Activities Program in 2013 and in 2015 moved into the Cannabis Cultivation Waste Discharge Regulatory Program. He was promoted to Senior Engineering Geologist for the Regional Board in 2016, and is tasked as the Program Manager for the Central Valley Water Boards Cannabis Regulatory Program as well as overseeing cannabis related enforcement efforts out of the Board's Redding office. Prior to working at the Regional Board, Griffin worked as a geologist on remediation of contaminated groundwater from underground storage tanks for a private consulting firm and he worked on large scale construction projects and drilling projects while employed with the Bureau of Reclamation. He has a Bachelor of Science Degree in Geology from the California State University, Chico.

**Van Butsic, Ph.D.**, is an Assistant Cooperative Extension Specialist and Adjunct Professor at UC Berkeley in the Department of Environmental Science Policy and Management where he conducts research on land system science, fire and forest policy, land use planning and Cannabis. Dr. Butsic is the co-director of the Center for Cannabis Research at UC Berkeley where he works with an interdisciplinary team to conduct research on cannabis policy, communities and the environment. He holds a PhD in Forestry and MS in Agricultural and Applied Economics both from the University of Wisconsin - Madison, and a BA in economics from Reed College.



# Regulation of Cannabis Cultivation: Impact on the Environment and Personnel

## Registration Information

**Fee:** Registration before May 15: **\$75**  
Registration after May 15: **\$100**  
Included: Continental breakfast, lunch, and afternoon snacks, plus REHS contact hours

**Payment:** There are two alternatives for paying the registration fee:  
**(1) Check:** Mail a check payable to: [California Association of Environmental Health Administrators, PO Box 2017, Cameron Park, CA, 95682](#)  
**(2) Online Payment:** Log on and pay at [www.ccdeh.com](http://www.ccdeh.com)

**Mail:** Complete the registration form below and send it to:

Sheryl Baldwin  
CAEHA  
Post Office Box 2017  
Cameron Park, CA, 95682  
[sheryl@ccdeh.com](mailto:sheryl@ccdeh.com)

**Questions:** For questions about *payment of fees or other aspects of the workshop*, contact Brad Banner at (209) 754-6632, or send him an email at [bbanner@co.calaveras.ca.gov](mailto:bbanner@co.calaveras.ca.gov).

**Please complete this registration form and remit with payment to CAEHA for each person attending the workshop from your agency or business no later than May 15, 2019.**

**Attendee:**

Name

7.5 REHS  
Contact  
Hours  
Included

Address

City

Zip

Telephone

Email (print clearly!)

**Company/Agency:**

**Payment Type:**

☐ Online

☐ Check

**Are you an REHS?**

☐ No

☐ Yes, Registration #: \_\_\_\_\_

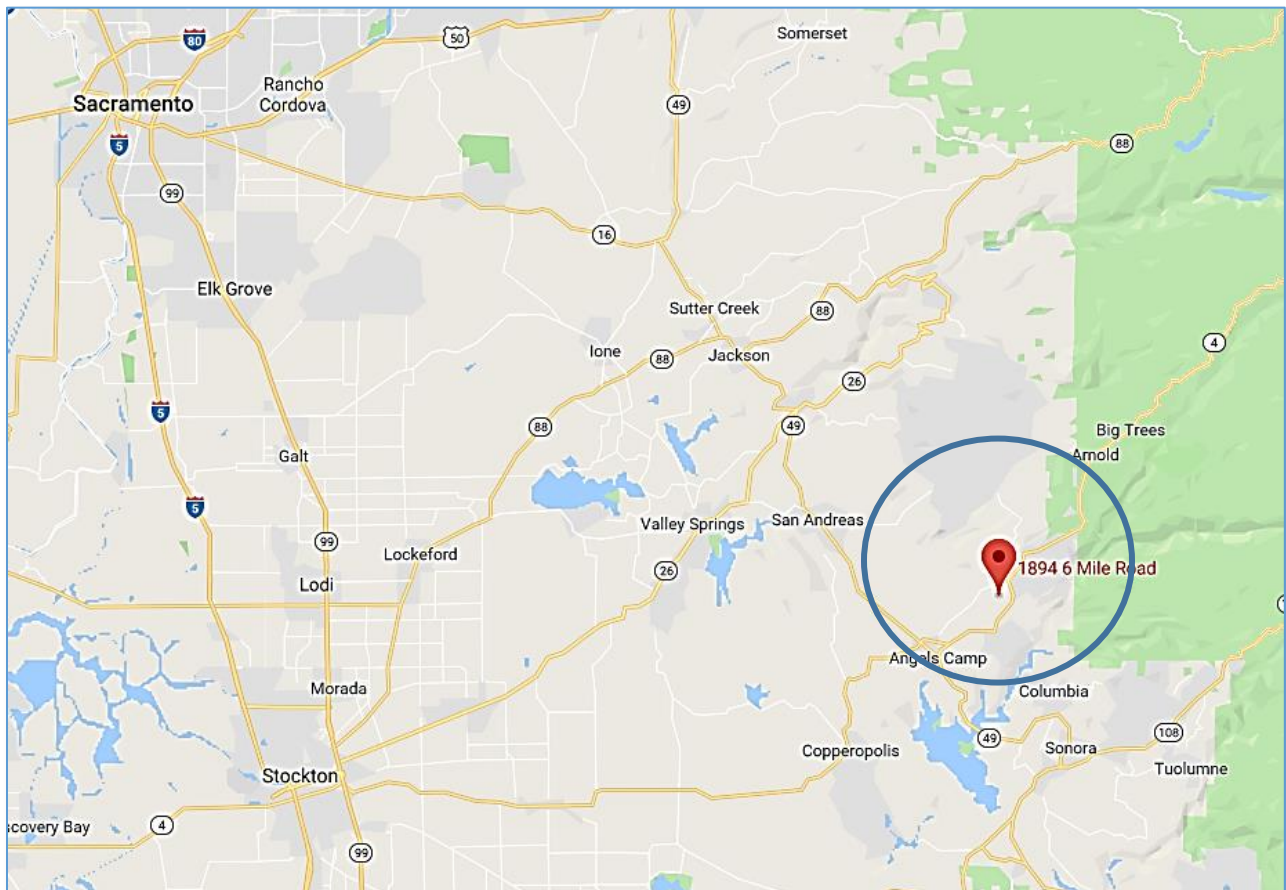
**Comments:**





# Regulation of Cannabis Cultivation: Impact on the Environment and Personnel

## Location



## Accommodations

### **Murphys Suites**

134 CA-4, Murphys; (209) 728-2121

Room rate: \$90.00

Bank of 25 rooms reserved through April 14 for nights of May 29 and May 30

### **Murphys Inn Motel**

76 Main St, Murphys; (209) 728-1818

Room rate: \$100.80

Bank of 25 rooms reserved through April 14 for nights of May 29 and May 30

### **Further Assistance with Lodging**

For assistance in booking lodging, utilize Murphys' new online booking service at:

<https://www.gocalaveras.com/location/places-to-stay/murphys-lodging/>



