

Environmental Impact of Marijuana Cultivation in Nevada County

SUMMARY

Marijuana, also known as cannabis and by numerous other names, is a preparation of the cannabis plant intended for use as a psychoactive drug or medicine. Marijuana is used in a variety of methods, including, smoking, ingestion and topical application.

The Nevada County Civil Grand Jury recognizes the current discussion in Nevada County regarding the legality of marijuana cultivation. However, it is not the intent of the Nevada County Civil Grand Jury to address the legal issues of marijuana cultivation.

It has been widely reported in the local media of proliferation in the cultivation of marijuana in Nevada County in recent years. The Nevada County Civil Grand Jury chose to write this report to educate the community on the environmental impact this increase is having in Nevada County. In addition, how the effects of irresponsible cultivation is having on public safety. The Nevada County Civil Grand Jury also inquired as to what actions were being taken by officials of Nevada County to prevent ongoing environmental damage to the land, flora and fauna of Nevada County by some cultivators and to provide public safety.

The Nevada County Civil Grand Jury recognizes that many marijuana cultivators use eco-friendly, sustainable and safe agriculture practices in their operations. However, the Nevada County Civil Grand Jury also finds there are some cultivators who are not conforming to these practices.

The Nevada County Civil Grand Jury interviewed staff from state and local agencies. During these interviews, the review of documentation and the review of photographs, the Nevada County Civil Grand Jury learned of environmental impact caused by irresponsible cultivation of marijuana. Some examples of this environmental impact include:

- the discharge of contaminants into the watershed and surrounding areas., including chemicals contained in fertilizers and pesticides;
- the discharge of human waste, waste water, trash and garbage onto local lands;
- the use of improper/illegal animal poisons, resulting in death to protected wildlife;
- wildfires caused by open campfires or from improper electrical wiring;
- improper clearing of woodlands and grading practices resulting in erosion damage to the land;

- the improper and illegal diversion of water from rivers, creeks, streams, irrigation sources and water storage facilities; and
- offensive odors.

The Nevada County Civil Grand Jury interviewed staff from state and local public safety agencies. The Nevada County Civil Grand Jury learned that in addition to the potential danger from the environmental impact there is also danger to public safety, including:

- trespassing on public and private lands;
- improvised security devices surrounding cultivation areas;
- theft of resources, including water and electricity; and
- increased violent crimes, such as home-invasions, armed robbery and theft.

During interviews with Nevada County staff, the Nevada County Civil Grand Jury was consistently told that enforcement of ordinances pertaining to marijuana cultivation was the responsibility of the Nevada County Sheriff's Office. If the Nevada County Sheriff's Office receives a public complaint, they investigate and if the marijuana cultivation is non-compliant, the Nevada County Sheriff's Office refers the issue to the proper department. Each Nevada County department keeps track of their own services; **no interdepartmental tracking is done.**

There are no written protocols, policies or procedures regarding the referral of code non-compliance issues to the appropriate authority within the County. Nevada County Sheriff's Office staff is unaware of any protocol requiring other county departments to report marijuana cultivation to the Nevada County Sheriff's Office.

GLOSSARY

ASA - Americans for Safe Access
CCD - Nevada County Code Compliance Division
CDA - Nevada County Community Development Agency
CDFW - California Department of Fish and Wildlife
CEO - Nevada County Executive Office
CGA - California Growers Association
County - County of Nevada
CWQCB - California Water Quality Control Board, Central Valley Region
ESA - Emerald Growers Association
Jury - Nevada County Civil Grand Jury
NCSO - Nevada County Sheriff's Office
NID - Nevada Irrigation District

SYRCL - South Yuba River Citizens League
USFS - United States Forest Service

BACKGROUND

California Penal Code section 925 states, in part: “The grand jury shall investigate and report on the operations, accounts, and records of the officers, departments, or functions of the county...”

Marijuana, also known as cannabis and by numerous other names, is a preparation of the cannabis plant intended for use as a psychoactive drug or medicine. Marijuana, in various forms, is used in a variety of methods, including, smoking, ingestion and topical application.

The Nevada County Civil Grand Jury (Jury) recognizes the current discussion in the County of Nevada (County) regarding the legality of marijuana cultivation. However, it is not the intent of this Grand Jury report to address the legal issues of marijuana cultivation.

The Jury chose to write this report to educate the community on the environmental impact irresponsible cultivation is having on the land, the effects on public health and safety of the residents of the County. The Jury inquired into the availability of education on proper conservation techniques to cultivators from the County and other private agencies. The Jury questioned what actions were being taken by the County to prevent potential environmental damage to the land, flora and fauna by irresponsible cultivators and to provide for public health and safety.

APPROACH

The Jury, in conducting this inquiry:

- interviewed staff from these public agencies:
 - Nevada County Sheriff’s Office
 - Nevada Irrigation District
 - California Department of Fish and Wildlife
 - California Water Quality Control Board, Central Valley Region
 - Butte County Code Enforcement Division
 - Nevada County Agricultural Commissioner
 - Nevada County Department of Environmental Health
 - Nevada County Code Compliance Division
 - Nevada County Community Development Agency
 - Nevada County Office of the County Executive

- interviewed staff from these private organizations:

- California Growers Association
 - South Yuba River Citizens League
 - Nevada County Resource Conservation District
- reviewed documents and photographs from the following sources:
 - California Department of Fish and Wildlife
 - California Water Quality Control Board, Central Valley Region
 - Butte County Department of Development Services, Code Enforcement Division
 - California Growers Association
 - California Fish and Game Code
 - California Water Code
 - South Yuba River Citizens League
 - County of Nevada
 - Nevada Irrigation District

DISCUSSION

The proliferation of the cultivation of marijuana in Nevada County has been widely reported in the local media in recent years. The Jury chose to write this report to educate the community on the environmental impact irresponsible cultivation is having on the land, and the effects on public safety of the residents of the County. The Jury questioned what actions were being taken by the County to prevent potential environmental impact to the land, flora and fauna by irresponsible cultivators and to provide for public safety.

The Jury recognizes that many marijuana cultivators practice eco-friendly, sustainable and safe agriculture practices in their business. However, the Jury found there are irresponsible cultivators who are not interested in complying with these practices.

Environmental Concerns

The Jury interviewed staff from several state and local agencies. Through these interviews, as well as the review of documents and photographs, the Jury learned of environmental impact from the irresponsible cultivation of marijuana in the County.

In interviews with staff from the California Water Quality Control Board, Central Valley Region (CWQCB) and the California Department of Fish and Wildlife (CDFW), officials as well as a representative of South Yuba River Citizens League (SYRCL) offered the Jury verbal, documented and photographic evidence of the discharge of both legal and illegal chemicals into the watershed of local rivers, streams and creeks and the results thereof. These discharges result from the use of fertilizers, pesticides and rodenticides in the cultivation of marijuana. Some discharges are from fuels used in the generation of electrical

power and for cooking stoves. Many of the chemicals used are not legal for use in California, but continue to be used by irresponsible cultivators.

The Jury also learned that small wildlife will ingest these chemicals, with deadly results. Then, larger wildlife will feed upon the carcasses of these smaller animals, resulting in the same deadly results, with death being caused by the ingestion of the original toxins. This chain of death can run from the smallest creatures, such as birds, squirrels and rodents to larger animals, such as bears.

In interviews with staff from the CWQCB and the Nevada Irrigation District (NID), the Jury learned of damage to local waterways resulting from run-off into rivers and streams of these chemicals, with results such as abnormal vegetation growth. Additionally, the Jury learned of damage to vegetation and wildlife downstream because of unpermitted diversions of water from rivers, streams and irrigation ditches by irresponsible growers.

Interviews with the CWQCB, the NID, the CDFW and the Nevada County Sheriff's Office (NCSO), presented evidence of increased danger caused by illegal camping and open campfires in and near cultivation sites by irresponsible cultivators. Staff from the above agencies has witnessed clear-cutting of property, leakage and spillage of pesticides, fertilizers, rodenticides, and fuels, such as diesel, on properties, and human trash and waste left on properties by irresponsible growers. They also have evidence of the death of wildlife, resulting from the ingestion of contaminants.

Staff indicated in the past year, there had been wildfires associated with marijuana cultivations. Many cultivations have hoop-style greenhouses with lights used to stimulate the growth of marijuana plants within these structures. Many times power to these lights is supplied by extension cords stretched across dry grass in violation of code.

Staff also stated that explosions and fires have been associated with honey oil laboratories. The environmental damage from such an explosion includes an uninhabitable dwelling, butane canisters and chemical spillage leaching into the ground. In addition, a large number of discarded butane canisters were found in local waters.

Evidence was also provided showing the impact of unpermitted "clear-cutting" of wooded lands and the terracing of hillside slopes to provide areas for marijuana cultivation. By not using proper techniques, the irresponsible cultivators cause erosion of lands due to clear-cutting and terracing.

Interviews indicated there were complaints by neighboring property owners near marijuana cultivations regarding the noxious odors emitted from cultivation areas during certain periods of the growing season.

Education and Outreach

California Growers Association (CGA) is a trade association for marijuana cultivation in California offering information on “best practices.” CGA is working to address the issues of illegal grading, land use, fertilizer runoff, illegal water diversion and theft. CGA has conducted educational workshops for cultivators on various subjects, including watershed issues in cultivating marijuana, water conservation, energy conservation, soil health and drip irrigation. The CGA continues to provide outreach and education to the marijuana cultivators of the County.

CGA representatives have met with three of the five members of the Nevada County Board of Supervisors. CGA also invited Supervisors to a policy summit held by CGA in December 2015. CGA staff stated they had received a response to this invitation from only one of the Supervisors. A CGA representative stated they brought up several environmental issues to the County staff but received no response. Additionally, the representative stated there is no partnership with the County on the marijuana cultivation issue.

In contrast, the CGA representative indicated they have an ongoing relationship with state and federal agencies including, but not limited to the CDFW and United States Forest Service (USFS).

The Jury interviewed personnel from SYRCL. SYRCL is an advocate for the preservation of the South Yuba River and its watershed, and also offers educational workshops in conjunction with CGA on “best practices.”

SYRCL staff told the Jury that the negative environmental impacts of irresponsible marijuana cultivation range from water diversions, water pollution, the poisoning of wildlife, litter, vegetation removal, and erosion. In California, the environmental impacts of marijuana cultivation have been further exacerbated by drought conditions.

SYRCL is partnering with Nevada County local chapters of The Emerald Growers Association (ESA) and Americans for Safe Access (ASA) to educate cultivators by presenting a series of workshops entitled *Best Management Practices*.

SYRCL has not invited the County to be a partner in these workshops. Staff told the Jury that SYRCL has not reached out to the County and the County has not reached out to SYRCL to open a dialogue. In addition, staff added that the County did not contact SYRCL regarding the development of Ordinance No. 2405.

SYRCL is also working with the USFS to develop *Best Management Practices* and monitoring protocols for remediating large, illegal grows throughout the Yuba River watershed. The focus of this project is to conduct:

- clean-up of sites for safety and hazardous materials, fuels, trash, and chemicals;
- restoration of water diversions, terracing, trails/roads, trash pits/holes, and vegetation management; and

- monitoring of water quality, fuel spills, and soil testing.

While only a limited number of scientific studies have been produced, there are hundreds of news articles on the topic, many of them highlighting the impacts of irresponsible marijuana cultivation on water and wildlife. It is estimated that the water demand to grow cannabis from both illegal and legal grow operations exceeds the amount of available surface water in many watersheds. The use of rodenticides to deter wildlife from grazing on marijuana plants has poisoned wildlife.

Public Health and Safety Concerns

In addition to the environmental damage from the irresponsible cultivation of marijuana, there is also potential danger to the public safety of residents of the County.

Many irresponsible cultivators grow on lands they do not own, both public property and private property owned by others. Often, the owners of the private property may not have knowledge of the cultivation and illegal camping occurring on their property. Home-made security devices, commonly known as “booby-traps” or “trip wires” may be deployed around the cultivation area creating a potential safety hazard.

There were thefts from the water storage tanks at the North San Juan Fire Department and the Grizzly Hill School, both in North San Juan. The theft from the fire department compromised their ability to combat wildfire in the area. There is also the theft of water from NID irrigation ditches.

Electrical power has been stolen from neighboring buildings or other sources. The theft of power may also result in an increased danger of wildfire by the use of improper, inadequate electrical wiring and connections.

Response by the County

The Jury asked the question: “What is being done by the County to address the issues of environmental damage and the threat to public safety?”

Since 2012 the County has had Ordinance No. 2349 which places limitations on the cultivation of marijuana in the county and bans any business from dispensing marijuana, in any form, to the public. In January 2016, the County enacted Ordinance No. 2405 which bans all outdoor cultivation of marijuana and places limitations on the indoor cultivation of marijuana. The ban on dispensaries remains.

The Jury interviewed officials and staff from various County departments and agencies. The Jury also reviewed various ordinances pertaining to land use, building, agriculture and

nuisance. In review and interviews with County staff, the Jury learned that many of these ordinances are applicable to marijuana cultivation.

During interviews with County staff, the Jury was consistently told that enforcement of ordinances pertaining to marijuana cultivation was the responsibility of the NCSO. The NCSO staff estimated that marijuana cultivation in the County has increased tenfold since 2006. Staff stated that marijuana cultivation is found in both rural and populated areas.

Yuba County has enacted a ban on outdoor marijuana cultivation and Butte County enforces significant fines for out of compliance marijuana cultivation. As a result, many growers, including irresponsible growers, have moved their operations to Nevada County, increasing marijuana cultivation locally.

County staff reported that a property owner must give a tenant permission to cultivate marijuana. However, there are growers who cultivate marijuana without property owner knowledge or permission.

If the NCSO receives a public complaint, they have stated they investigate and if the marijuana cultivation is non-compliant, the NCSO refers the issue to the proper department. Each County department allegedly keeps track of their own services; no interagency tracking is done.

However, on Jury request, NCSO staff was unable to provide to the Jury documentation as to the number of referrals made by the NCSO to other County departments regarding possible code violations found at marijuana cultivations. Also, NCSO staff was unable to provide documentation as to the number of referrals from other County departments, regarding possible code violations of marijuana cultivations.

There are no written protocols, policies or procedures regarding the referral of code non-compliance issues to the appropriate authority within the County. NCSO staff is unaware of any protocol requiring other county departments to report marijuana cultivation to the NCSO.

Nevada County Code Compliance Division (CCD) staff indicated to the Jury that CCD does no enforcement of the current county marijuana ordinance and that CCD staff “is not in the marijuana ordinance enforcing business.” CCD comes under the authority of the Nevada County Community Development Agency (CDA) and that a past CDA director had given a verbal directive that the CCD is not to be “the eyes and ears for the Sheriff’s Department.”

As an example, a CCD director stated that if a CCD staff member was on a property, on a complaint unrelated to marijuana and sighted a marijuana cultivation that was obviously out of compliance, the staff would not issue a citation or refer the matter to the NCSO. On request of the Jury, the CCD could not provide any written order, memorandum or document which makes this statement. Staff said this directive came to a director of the CDA from either the Nevada County Executive Officer (CEO) or the Nevada County Board of Supervisors. Staff again stated they had never seen this information in a written format.

If the CCD receives a direct complaint regarding a potentially out of ordinance marijuana grow, they will direct the complainant to contact the NCSO. The CCD will not take the information and does not forward the information to the NCSO. The number of these complaints are not recorded or tracked by the CCD.

As an example, the CCD will receive a complaint regarding a possible unpermitted deck being built. If a code compliance officer investigates the issue and sees a marijuana grow, they will not refer the matter to the NCSO. CCD staff estimated the CCD receives approximately 50 such complaints a year.

On request of the Jury, the CCD could not provide any written policy regarding the referral or the receipt of referrals from other agencies regarding possible code violations at marijuana cultivations. Also, on request, the CCD could not provide any documentation regarding the actual number of referrals the CCD forwarded to the NCSO each year.

FINDINGS

- F1.** The cultivation of marijuana in Nevada County has grown exponentially in the past ten years.
- F2.** There is public knowledge of the growth of marijuana cultivation in Nevada County.
- F3.** Many cultivators of marijuana do and want to follow proper environmental practices in cultivation.
- F4.** Irresponsible cultivators of marijuana have caused significant environmental damage.
- F5.** Irresponsible cultivators of marijuana are a threat to public safety in Nevada County.
- F6.** Nevada County has numerous ordinances, rules and regulations pertaining to land use.
- F7.** The Jury received contradictory information as to the application of ordinances, rules and regulations in Nevada County.
- F8.** Many of these ordinances, rules and regulations should be applied to the practice of marijuana cultivation.
- F9.** The Jury was unable to find evidence that any records are being maintained regarding interdepartmental cooperation of marijuana grow referrals.

- F10.** One consistent theme received by the Jury from County staff, was that any and all enforcement of any ordinances, rules and regulations that pertained to the cultivation of marijuana was the sole responsibility of the Nevada County Sheriff's Office.

RECOMMENDATIONS

The Nevada County Civil Grand Jury recommends that the Nevada County Board of Supervisors direct the Nevada County Executive Officer, in conjunction with the Nevada County Sheriff's Office, to:

- R1.** Empanel an interdepartmental working group to coordinate all information pertaining to environmental dangers and public safety issues caused by marijuana cultivations.
- R2.** Develop policies and procedures defining the responsibilities of each department as it pertains to environmental issues surrounding marijuana cultivation.
- R3.** Document and track interdepartmental referrals pertaining to marijuana cultivation violations.
- R4.** Enforce the legal application of existing land use ordinances.

REQUEST FOR RESPONSES

Pursuant to Penal Code Section 933.05, the Jury requests responses to all recommendations from the Nevada County Board of Supervisors by September 14, 2016.

Reports issued by the Grand Jury do not identify individuals interviewed. Penal Code section 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Grand Jury.