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# Up In Smoke: Wholesale Marijuana Cultivation within the National Parks and Forests, and the Accompanying Extensive Environmental Damage

## Warren Eth\*

#### I. Introduction

Noon on August 24, 1989, a lone helicopter flies above a fertile forest. On board a military pilot and a civilian spotter eye the foliage beneath. This is a routine patrol, and the target is marijuana clandestinely planted in cleared fields deep within the forest. The spotter signals a suspect clearing that closer inspection reveals to be a large field of marijuana. Local law enforcement is contacted, and by 7:30 p.m. the police have cleared and burned 13,000 marijuana plants. This did not occur in Colombia, a nation known for drug enforcement problems, but in the Los Padres National Forest in Santa Barbara County, California.

A gathering storm, with devastating winds of environmental damage and human danger, is lashing our National Forests and Parks.<sup>4</sup>

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<sup>1.</sup> Peter Grier, *Pentagon's Support Role Increases*, CHRISTIAN SCI. MONITOR, September 1, 1989, at 8.

<sup>2.</sup> CENTRAL INTELLIGENCE AGENCY, THE 2008 WORLD FACTBOOK (2008), available at https://www.cia.gov/cia/publications/factbook/geos/co.html (last visited March 6, 2008) (noting Columbia is the world's leading coca cultivator, and a producer of opium poppy and cannabis, in 2004 2,100 hectares of opium poppy was cultivated yielding a potential 3.8 metric tons of pure heroin).

<sup>3.</sup> Grier, supra note 1.

<sup>4.</sup> United States Drug Enforcement Administration, Fact Sheet, http://www.dea.gov/concern/18862/marijuana.htm (last visited on January 20, 2007) (noting that data indicates that domestic cannabis eradication, occurring primarily in California, Kentucky, Tennessee, Hawaii, and Washington, often on public lands including Forest Service lands increased steadily from 2000 through 2003, decreased in 2004, and increased sharply to its highest recorded level in 2005).

On September 9, 2003, Sheriff's deputies in Tulare County, California seized 5,000 marijuana plants from Sequoia National Forest. On August 29, 2006, at the Point Reyes National Sea Shore in California, the National Park Service and other agencies discovered several marijuana grow sites and confiscated approximately 20,000 marijuana plants with an estimated street value of fifty million dollars.

Quite simply, as Congressman Mark Souder declared, "[in our] parks, forests, and public lands, criminals are abusing the people's property not as routes over which to transport their drugs but as the very resources with which they produce these drugs." What is of special concern, and the focus of this comment, is the collateral, unmitigated environmental damage inflicted upon public lands, "that once were the epitome of natural beauty have become large scale marijuana farms and toxic waste sites. Terraced hillsides and cannabis plants have replaced... trees and foliage. Plastic irrigation tubing has overrun bubbling brooks and streams ... human waste and litter have covered the organic forest floor."

The environmental magnitude of this problem is difficult to grasp. When staff, from the under budgeted National Park Service, attempted to restore damaged land in Sequoia National Park, they found a deadly danger that growers bring to the park, use in the park, and leave in the park: pesticides, insecticides and rodenticides. In 2005, Park Rangers in Sequoia found evidence that 2,870 pounds of toxic N-P-K fertilizer were used on a five acre grow site, as well as gallons of Sevin and Malathion concentrate.

<sup>5.</sup> Police Reports, THE FRESNO BEE, September 10, 2003, at B2.

<sup>6.</sup> Press Release, National Park Service Park Rangers and Drug Enforcement Officers Remove Illegal Marijuana Cultivation Site at Point Reyes National Seashore, (August 29, 2006), available at <a href="http://www.nps.gov/pore/parknews/newsreleases\_20060829\_marijuanaremoval.htm">http://www.nps.gov/pore/parknews/newsreleases\_20060829\_marijuanaremoval.htm</a>.

<sup>7.</sup> Drug Production on Public Lands—A Growing Problem: Joint Hearings before the H. Subcomm. On Criminal Justice, Drug Policy and Human Resources and the H. Subcomm. on Energy Policy, Natural Resources and Regulatory Affairs of the Committee on Government Reform, 108th Cong. 7 (2003) [hereinafter *Hearings*] (statement of Rep. Mark E. Souder (R-IN)).

<sup>8.</sup> Id. (quoting statement of Rep. Doug Ose (R-CA)).

<sup>9.</sup> Katherine McIntire Peters, *Losing Ground*, Government Executive.com, December 2003, http://www.govexec.com/features/1203/1203s2.htm.

<sup>10.</sup> Marcia Rasmussen, *High in the Back Country*, The Sierra Club Tehipite Chapter, TEHIPITE TOPICS, Vol. 51, No. 6, Summer 2005, at 1.

<sup>11.</sup> Id. at 6 (Sevin is the trade name for this insecticide, scientifically it is 1-napthyl N-methylcarbamate—a broad-spectrum insecticide; Malathion, scientifically known as diethyl (dimethoxy phosphinothioyl) thiobutanedioate, is an organophosphate. These poisons and their environmental impacts are discussed further in this comment); see The Chemical Database, The Department of Chemistry University of Akron, http://ull.chemistry.uakron.edu/erd/ (last visited Apr. 4, 2008).

Beyond the severe environmental damage inflicted on the Parks by these hazardous chemicals, animals are threatened and killed by the growers. Dave Burns of the federal Bureau of Land Management discussed the threat growers pose to animals in an interview in the High Country News, "[j]ust last week we were at a site where a (grower) had poached a bunch of animals, deer meat was hanging in the trees. They'd killed a bear and kept its claws. And there were two owls impaled up on posts with their wings spread out." Joe Fontaine, a member of Wilderness Watch, testified before Congress about the threat to animals from poaching, "[a] lot of these people, we know, are poachers... and so, the impact on wildlife just in the poaching is a problem too." 13

This calamity is endemic to the public lands managed by the government of the United States of America. Specifically, this comment focuses on two types of public lands where the environmental damage and impact from marijuana growing is the most acute: National Parks and National Forests. The National Parks are operated under the patronage of the National Park Service, within the Department of the Interior. The National Forests are operated under the auspices of the United States Department of Agriculture via the Forest Service.

This comment will begin with a brief introduction into the public

<sup>12.</sup> Adam Burke, *The Public Land's Big Cash Crop*, 37 HIGH COUNTRY NEWS 20 (OCT. 31, 2005), available at http://www.hcn.org/servlets/hcn.Article?article\_id=15867 (last visited Jan. 20, 2007) (as seen by Mr. Burns at an unnamed National Park in California, most probably one within the "Emerald Triangle," a geographic region of California containing National Parkland notorious for marijuana grow sites; see generally Press Release, Campaign Against Marijuana Planting Seizes \$1.25 Billion Worth of Plants During 2001 Season, Office of the Attorney General, State of California (Dec. 18, 2001), available at http://ag.ca.gov/newsalerts/release.php?id=1046.

<sup>13.</sup> Hearings, supra note 7, at 80 (statement of Mr. Fontaine, President, Wilderness Watch).

<sup>14.</sup> Press Release, United States Dept. of State, U.S. Links Illegal Drug Production, Environmental Damage (June 2003), available at http://usinfo.state.gov/gi/Archive/2003/Jun/08-632478.html; see also National Drug Intelligence Center, National Drug Threat Assessment 2007 (Oct. 2006), http://www.usdoj.gov/ndic/pubs21/21137/21137p.pdf (Law enforcement reporting strongly suggests an expansion of domestic cannabis cultivation and marijuana production, particularly in remote areas of public lands including national Forest System lands. These reports are supported by domestic cannabis eradication data for 2005 that show the highest level of cannabis eradication ever recorded.).

<sup>15.</sup> See generally Information Sheet, Public Lands & the Agencies that Manage Them, Public Lands Information Center, http://www.publiclands.org/agencies.php (last visited Apr. 6, 2008) (Other types of Public Lands exist but are beyond the scope of this comment, e.g., the US Army Corps of Engineers manages some lakes and local areas surrounding the lakes and the US Fish and Wildlife Service operates National Wildlife Refuges.).

<sup>16.</sup> See 16 U.S.C. § 3 (2006); 16 U.S.C. § 551 (2006). See generally National Park Service Act, 16 U.S.C. §§ 1 - 18f-1 (2006).

<sup>17.</sup> National Forest Management Act of 1976, 16 U.S.C. §§ 1600-1614 (2006).

land(s) system and clarify the distinctions between National Parks and National Forests. The distinctions between these two types of public lands are essential to understanding the particular environmental damage being inflicted on fragile ecologies. Because of the large number of historic and recreational parks managed by the National Park Service, this comment will examine the ecology and environmental devastation in two major adjoining National Parks, Sequoia and Kings Canyon National Park in California. Similarly, as the National Forest System, in forty-four States, comprises multiple individual "forests," this comment will focus on a single National Forest, the San Bernardino National Forest in California. 19

However, in order to demonstrate that marijuana growing and the accompanying environmental disaster is distributed across all parks and forests, system wide statistics will be introduced. Following the discussion of the ecosystems of the two exemplars, the taxonomy of *Cannabis Sativa L.* and its environmental impact, as a naturally occurring species, as well as its legal status, will be analyzed. Because the environmental impact and damage are the primary concerns of this comment, an in depth review of a "grow" site components, layout and agricultural methodology will also be presented.

The comment will conclude with a proposed solution to the environmental danger presented by illegal marijuana grow sites within the public lands, specifically in California. A preferable solution, presented at the conclusion of this comment, will include a method to revitalize the already discovered and environmentally toxic grow sites

<sup>18.</sup> National Park Service, About Us, http://www.nps.gov/aboutus/index.htm (last visited Jan. 20, 2007). Because Sequoia National Park and Kings Canyon National Park are adjoining, separated by only a line on a map, the Parks will be treated as a single unit, Sequoia and Kings Canyon National Park = SEKI, unless noted otherwise. There is precedent for such treatment. The National Park Service merges these two parks together on their webpage and refers to the two by the abbreviation SEKI. See e.g. National Park Service, Sequoia and Kings Canyon National Parks, www.nps.gov/seki (last visited Apr. 5, 2008). Furthermore, the parks share a planning office, a Superintendent and Business Plan, among other major indicia of interconnection. See generally National Park Service, SEKI-Management Documents, http://www.nps.gov/seki/parkmgmt/index.htm (last visited Apr. 5, 2008).

<sup>19.</sup> National Forest Service, About Us, Meet the Forest Service, http://www.fs.fed.us/aboutus/meetfs.shtml (last visited Jan. 20, 2007).

<sup>20.</sup> See generally National Drug Intelligence Center, Report on Marijuana and Methamphetamine Trafficking on Federal Lands Threat Assessment (February 2005), http://www.usdoj.gov/ndic/pubs10/10402/10402p.pdf.

<sup>21.</sup> Marijuana is classified as a Schedule I substance, 21 U.S.C. § 812(c) (2006), under the Comprehensive Drug Abuse Prevention and Control Act of 1970, Pub. L. 91-513, Title II, Oct. 27, 1970, 84 Stat. 1242 (it is important to stress here that the constitutionality of the act, vis-à-vis the Commerce Clause and the penumbra protections of the 10th Amendment, medical marijuana and other particular legal quandaries are not the focus of this comment); see generally Gonzales v. Raich, 545 U.S. 1 (2005).

that remain sullied after the marijuana is harvested or destroyed.<sup>22</sup> The solution, similar in nature to the exception that the State of California receives from the federal auto emission rules, recognizes California's unique environmental challenge, the acute problem of marijuana growing on vast tracks of public lands, and would allow the state to be exempt from certain sections of the Controlled Substances Act. This exemption would give California the tools it needs to initiate an environmentally friendly industry (hemp), eliminate the incentives to grow clandestine marijuana fields on public lands, create a massive surplus in tax revenue and protect our natural treasures in ways never before possible.

II. Public Lands Scrutinized: National Parks and National Forests— Preserved Ecosystems and Environmental Exemplars

#### A. Public Lands—National Parks as Opposed to National Forests

The differences between National Parks and National Forests are vital to an understanding of the environmental aspects of this problem and which federal agency is ultimately responsible. Congress creates and determines who runs public lands under the Enclave and Property Clauses of the Constitution.<sup>23</sup> These Clauses are intricate, and the details of Public Land doctrines and related legal quandaries exceed the scope of this comment. Thus, for the purposes of this article, it is sufficient to establish that the Congress of the United States has vast powers to create and regulate lands, which the government of the United States has authority over.<sup>24</sup> This authority can preempt a state's authority over federal public land(s).<sup>25</sup>

<sup>22.</sup> Sean Markey, Marijuana War Smolders on U.S. Public Lands, NATIONAL GEOGRAPHIC NEWS (Nov. 4, 2003), available at http://news.nationalgeographic.com/news/2003/11/1103\_031104\_marijuana.html (quoting Laura Mark, the Forest Service's regional drug investigator in California, "The environmental damage that these guys cause is phenomenal.... And we're not able to clean it up. We do not have the funds or resources.").

<sup>23.</sup> U.S. Const. art. I, § 8, cl. 17 ("to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings"); U.S. Const. art. IV, § 3, cl. 2 ("The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; and nothing in this Constitution shall be so construed as to Prejudice any Claims of the United States, or of any particular State.").

<sup>24.</sup> Cal. Coastal Com v. Granite Rock Co., 480 U.S. 572, 580 (1987) ("This Court has 'repeatedly observed' that [t]he power over the public land thus entrusted to Congress is without limitations."); see also Kleppe v. New Mexico, 426 U. S. 529, 539 (1976) (quoting United States v. San Francisco, 310 U.S. 16, 29 (1940)).

<sup>25.</sup> McKelvey v. United States, 260 U.S. 353, 359 (1922) ("It is firmly settled that Congress may prescribe rules respecting the use of the public lands. It may sanction

Although a state's authority *can* be preempted, states possess overlapping jurisdictional powers over public lands, and can police or prosecute crimes on federal land when the Federal Government does not challenge jurisdiction. Hence, an assault on the grounds of Los Padres National Park in the Santa Barbara, Ojai, Mt. Pinos District<sup>26</sup> can be prosecuted by the United States Attorney for the Central District of California, or by the State of California in Superior Court, Santa Barbara County. However, it is the federal government with primary law enforcement and oversight responsibility, by and through the agency that Congress has designated as the authority to manage the Public Land in question.<sup>27</sup> While states can enforce laws on federal lands, state law enforcement agencies tend to be busy policing their counties and municipalities, leaving parks and forests to the Park Rangers and the Forest Rangers respectively.

The fundamental difference between a National Park and a National Forest is the use of the land and the environment (flora, fauna, biota, animals, timber and minerals). The mandate of the National Parks, maintained by the Department of the Interior by and through the National Park Service, is primarily "one of protectionism." Under law, the Director of the National Park Service, must uphold the "fundamental purpose of the said parks . . . which purpose is to conserve the scenery and the natural and historic objects and the wild life therein . . . by such means as will leave them unimpaired for the enjoyment of future generations."

Rules promulgated by the National Park Service, an agency, are afforded deference, according to the standards set forth in *Chevron v. Natural Resources Defense Council* and its progeny.<sup>30</sup> Hence, the

some uses and prohibit others, and may forbid interference with such as are sanctioned"); see also Kleppe v. New Mexico, 426 U.S. 529, 543 (1976) ("When Congress so acts, the federal legislation necessarily overrides conflicting state laws under the Supremacy Clause."); see generally Light v. United States, 220 U.S. 523 (1911).

<sup>26.</sup> Map of Los Padres National Forest Section 7, http://www.fs.fed.us/r5/lospadres/maps/rec/recmap\_south\_7.htm (last visited Jan. 20, 2007).

<sup>27. 16</sup> U.S.C. § 3 (2006) (provisions dealing with the Secretary of the Interior); 16 U.S.C. § 551 (2006) (provisions dealing with the Secretary of Agriculture).

<sup>28.</sup> National Rifle Assoc. v. Potter, 628 F. Supp. 903, 905 (D.D.C. 1986).

<sup>29. 16</sup> U.S.C. § 1 (2006) (This provision uses the word "unimpaired." This has been called the "no-impairment" interpretation.); see Bicycle Trails Council v. Babbitt, 82 F.3d 1445, 1453 (9th Cir. 1996).

<sup>30. 467</sup> U.S. 837 (1984) (Chevron is a seminal administrative law case that essentially answers the question "whether, and when, courts will defer to agency interpretations of law"; Chevron essentially holds that "courts should defer to an agency interpretation unless the relevant statute is clear or the agency interpretation is unreasonable." Jacob E. Gersen, Adrian Vermeule, Chevron As A Voting Rule, 116 YALE L.J. 676, 676 (2007). As Chevron has yet to be overruled by the Supreme Court, further nuances of administrative law and qualifications on Chevron are beyond the scope of this

Director and National Park Service can ban or limit activities that "impair" the park, and these determinations are accorded deference under *Chevron*. Because, as *National Rifle Association v. Potter* <sup>31</sup> noted, the overarching scheme behind National Parks is one "of protectionism."

The National Parks function as a bastion of preservation, where animals, trees and trails are protected for future generations. The National Park Service can, "balance the sometimes conflicting policies of resource conservation and visitor enjoyment in determining what activities should be permitted or prohibited." National Parks are open to the public for enjoyment, recreation and hiking, but other activities within these Parks are curtailed to maintain the goals of conservationism.

National Forests, on the other hand, are maintained under a "multiple use" theory.<sup>33</sup> National Forests, as opposed to National Parks, can be logged, mined, hunted in and host other activities that are prohibited in National Parks. Since National Forests can be used, leased and exploited, several environmental laws are triggered. Chief among these laws is the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4375 (2006). Each National Forest is managed separately, and the Secretary of the Department of Agriculture is "to develop land and resource management plans to guide the maintenance and use of resources within national forests."<sup>34</sup> Each individual Forest is then subdivided into "management areas" for how resources will be administered. The plans are ordinarily "revised on a ten-year cycle, or at least once every fifteen years."<sup>35</sup>

The management plans must be put to an environmental study, pursuant to NEPA, showing that the agency has considered that the "adverse environmental effects of the proposed action are adequately identified and evaluated" and "after complying with the Act's procedural prerequisites, had decided that the benefits to be derived... justified" the proposed action can proceed.<sup>36</sup>

Environmental groups may bring suit against an agency, alleging an improper NEPA study.<sup>37</sup> However, to prevail, the group must show that the agency failed to consider, or overlooked, environmental data: NEPA "is designed to insure a fully informed and well-considered decision"; it does not require a decision that is agreed upon by all, let alone an

comment).

<sup>31. 628</sup> F. Supp. 903, 905 (D.D.C. 1986).

<sup>32.</sup> S. Utah Wilderness Alliance v. Dabney, 222 F.3d 819, 826 (10th Cir. 2000).

<sup>33. 16</sup> U.S.C. § 1604 (2006).

<sup>34.</sup> Sierra Club v. Marita, 46 F.3d 606, 608 (7th Cir. 1995).

<sup>35.</sup> Id.

<sup>36.</sup> Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 351 (1989).

<sup>37.</sup> See generally Kleppe v. Sierra Club, 427 U.S. 390 (1976).

environmental group.<sup>38</sup>

In summary, National Parks "emphasize strict preservation of pristine areas... to preserve resources unimpaired for future generations" and thus, certain activities are curtailed. National Forests, on the other hand, "emphasize not only resource preservation, but other kinds of use as well... under this concept of "multiple use," national forests are managed to provide Americans with a wide variety of services and commodities, including lumber, cattle grazing, mineral products and recreation with and without vehicles." National Parks can be adjacent to National Forests, and vice versa. It is of paramount importance to discern whether one is in a National Forest or a National Park, as what one may do in one, may be prohibited in the other.

Marijuana cultivation occurs, system wide, in both National Parks and National Forests. Whether the marijuana is grown in a National Park or National Forest will affect the agency that has primary jurisdiction, i.e. either the Park Rangers under the Interior Department or the Forest Rangers under the Agriculture Department. In either locus, Park or Forest, marijuana cultivation requires the felling of trees; the placing of pesticides, fungicides and poisons; dumping and leaving massive amounts of trash; poaching; terracing land; and other environmental scourges. These acts defy the will of Congress, make a mockery of our Parks and Forests, as bastions of preservation, and destroy the environments that have been set aside as pristine legacies for future generations.

#### B. San Bernardino National Forest

The lands that encompass what is now San Bernardino National Forest (SBNF) became the National Forest it is today via a proclamation by President Coolidge. In a presidential proclamation, offered in 1925, Coolidge stated "certain lands immediately heretofore forming a part of the Angeles National Forest, in California, should constitute a part of the San Bernardino National Forest also in California." Once it became a National Forest, San Bernardino became a public land "set aside for the conservation of natural resources such as trees, water, minerals, livestock range, recreation, or wildlife."

<sup>38.</sup> Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 227 (1980).

<sup>39.</sup> National Park Service, What's In a Name?, 1997, http://www.nps.gov/archive/seki/nps\_usfs.htm (last visited October 14, 2006).

<sup>40.</sup> *Id*.

<sup>41.</sup> Presidential Proclamation, 44 Stat. 2585 (1925).

<sup>42.</sup> San Bernardino National Forest, About Us, http://www.fs.fed.us/r5/sanbernardino/about/index.shtml (last visited Jan. 20, 2007).

#### 1. Ecosystem and Wildlife

The motto of SBNF is "the land of many uses." San Bernardino allows permit based hunting, camping, off-roading on all terrain vehicles (ATVs), horseback riding, hiking, fishing and logging by permit. The rough and rugged forest terrain is home to bald eagles, deer and other mammals. The Santa Ana River runs through the San Gorgonio region of the SBNF and is home to a diverse array of wildlife. Hunting is permitted, but strictly regulated. Game animals include mule deer, mountain and valley quail, and turkey. Waterfowl can be hunted on Baldwin Lake in Big Bear and Lake Hemet in San Jacinto. Band-tailed pigeons, cottontail rabbits, jackrabbits, and black bears can also be hunted.

The California Department of Fish and Game regulates all hunting within the State of California and the Forest Service uses the permitting authority of the state government to issue applicable hunting permits. The hunting regulations in California are very stringent and the fines and penalties for noncompliance are harsh. The multiuse system as implemented by the Forest Service at San Bernardino is an excellent example of sustainable multiple use that allows people to interact with and enjoy the environment. San Bernardino National Forest is an example of Congress, as the representative of the people, designating an environmentally friendly recreation area for the people "with a view to preserving its inherent primeval attributes and preserving the wilderness in a primitive condition in so far as that is possible."

#### C. Sequoia and Kings Canyon National Park (SEKI)

Located in the State of California, Sequoia and Kings Canyon National Park is the second oldest national park in the United States. It was initially created by Congress on September 25, 1890 and later amplified by Congress on October 1, 1890.<sup>48</sup> The 51<sup>st</sup> Congress set aside the lands "for the preservation from injury of all timber, mineral

<sup>43.</sup> San Bernardino National Forest Homepage, http://www.fs.fed.us/r5/sanbernardino/ (last visited Jan. 20, 2007).

<sup>44. 36</sup> C.F.R. § 251.14 (2006).

<sup>45.</sup> San Bernardino National Forest, Hunting Regulations, http://www.fs.fed.us/r5/sanbernardino/recreation/hunting/index.shtml (last visited Jan. 2007).

<sup>46.</sup> See, e.g., California Fish & G. Code (2007), Cal. Pen. Code (2007) and California Code of Regulations, Title 14 (2007).

<sup>47.</sup> U.S. v. Perko, 133 F. Supp. 564, 569 (D.C. Minn. 1955).

<sup>48.</sup> Act of Oct. 1, 1890, 51 Cong. Ch. 1263, 26 Stat. 650; see also LARY M. DILSAVER AND WILLIAM C. TWEED, CHALLENGE OF THE BIG TREES: A RESOURCE HISTORY OF SEQUOIA AND KINGS CANYON NATIONAL PARKS (Sequoia Natural History Association, Inc. Jan. 1990).

deposits, natural curiosities, or wonders within said reservation, and their retention in their natural condition". <sup>49</sup> Congress sought to insure that the land would be set aside for authorized visitors to enjoy, and not be trespassed upon or meddled with, by declaring that the Secretary of the Interior should "cause all persons trespassing upon the same after passage of this act to be removed therefrom, and generally, shall be authorized to take all such measures as shall be necessary or proper to fully carry out the objects and purposes of this act." <sup>50</sup> Congress also set forth provisions to protect the fish and game within the park. <sup>51</sup> It cannot be argued or suggested that the 51<sup>st</sup> Congress, in setting apart these lands for preservation, intended or would allow marijuana cultivators to set up shop within the park—wantonly destroying and sullying the lands.

#### 1. Ecosystem and Wildlife

The ecosystems in Sequoia and Kings Canyon (SEKI) are as diverse as the parks geography,

Sequoia and Kings Canyon National Parks contain big trees, high peaks, and deep canyons. . . . Located in the southern Sierra Nevada range, the parks' elevations extend from 1,300 feet (418m) in the foothills to 14,491 feet (4,417m) at the summit of Mount Whitney, the highest mountain in the contiguous 48 states. <sup>52</sup>

Due to these geographic, climatic and geophysical variations, SEKI contains a "collage of habitats that create a rich assemblage of terrestrial, aquatic and subterranean ecosystems." The ecosystem at Sequoia also contains one of the most precious dendrological specimens, the Sequoiadendron giganteum, the giant Sequoia, the only species of the genus Sequoiadendron. The presence of this conifer alone should demand that this National Park be adequately protected, as "the natural distribution of giant sequoia is restricted to about 75 groves . . . along a limited area of the western Sierra Nevada, California." 55

The wildlife present within SEKI is diverse and many of the species calling Sequoia home are federally protected wildlife. According to its website, "260 native vertebrate species are in the parks; numerous

<sup>49.</sup> See Act of Oct. 1, 1890, 51 Cong. Ch. 1263, 26 Stat. at 651.

<sup>50.</sup> Id.

<sup>51.</sup> Id.

<sup>52.</sup> Sequoia Kings National Park, Nature and Science, http://www.nps.gov/seki/naturescience/index.htm (last visited Jan. 20, 2007).

<sup>53.</sup> Id.

<sup>54.</sup> United States Forest Service, Fire Effects Information System (FEIS) Database, http://www.fs.fed.us/database/feis/plants/tree/seqgig/introductory.html (last visited Jan. 20, 2007).

<sup>55.</sup> Id.

additional species may be present but have not been confirmed. Of the native vertebrates, five species are extirpated (extinct here), and over 150 are rare or uncommon." Among the large mammals in the park are black bears (*Ursus americanus*) and "coyote . . . ringtail, mule deer, and pika; and several rare species, such as the wolverine, badger, bighorn sheep (federally endangered), and many rare bats—half of which are state or federally listed." The wildlife, ecosystem and dendrological specimens truly make Sequoia a gem demanding not just token protection as codified in dusty tomes, but actual protection, to ensure that these treasures are indeed actually "set apart" and preserved.

#### III. Cannabis Sativa L.

#### A. Taxonomy

One of the older, albeit unverified, report(s) of a human interacting with Cannabis sativa L. <sup>59</sup> (hereinafter marijuana) comes from an Islamic chronicler named al-Maqrizi. As the story goes, a monk named Haydar, living in the mountains of Neyshaur in northeastern Iran in 1155 AD, came upon a plant on an afternoon stroll. It was brutally hot outside, yet the plant stood un-withered. Curious, Haydar ate some of the leaves and continued his walk. Haydar, "usually a taciturn man... returned in a fickle frame of mind, with a smile on his face." Humanity, and its varying cultures, has known marijuana for thousands of years. It is a naturally occurring plant within the environment and its use, from as long ago as 6,000 years, is well documented. <sup>61</sup> In fact, even a cursory examination of the etymology of the word cannabis, indicates that this plant was no stranger to humanity. <sup>62</sup>

<sup>56.</sup> See Sequoia Kings National Park, supra note 52.

<sup>57.</sup> Id.

<sup>58.</sup> See San Bernardino National Forest, supra note 42.

<sup>59.</sup> Government of Canada, Integrated Taxonomic Information System (ITIS): Online Database, http://www.cbif.gc.ca/pls/itisca/next?v\_tsn=19109&p\_ifx=cbif (last visited Oct. 21, 2006).

<sup>60.</sup> MARTIN BOOTH, CANNABIS: A HISTORY 1 (Picador; Reprint edition May 12, 2005) (2004); see also Victor Robinson, The Discovery of Hashish, from An Essay on Hasheesh 23 (New York 1912).

<sup>61.</sup> See Jonathan Green, Cannabis 10 (Thunder's Mouth Press 2002) ("Cannabis Sativa... is one of humanities oldest cultivated plant... it may well have been originally planted as a foodstuff... oldest evidence of its existence is 6000 years old"); see also Robert C. Clarke and David Paul Watson, Cannabis and Cannabinoids: Pharmacology, Toxicology, and Therapeutic Potential 3, (Franjo Grotenhermen and Ethan Russo eds., Haworth Press; 1st edition 2002) (Cannabis is among the very oldest of economic plants, providing fiber, edible seed and drug resin).

<sup>62.</sup> See MARTIN BOOTH, supra note 60, at 2 ("from the Greek word kannabis, which derived from Sanskrit cana, related to the Assyrian name qunubu, while the Celtic word

Marijuana is a hearty plant, with the ability to grow at altitudes as high as 8,000 feet. It is a heliotropic plant, in that it prefers direct sunlight. It can grow to 6 meters in height and is dioecious, meaning the plants are either male or female. The distinguishing characteristic is the leaves, which are "palmate and serrated"; the females have large flowers "which grow tightly together to form clusters, consist of a pair of white stigmas approximately 1 centimeter long in an erect V, joining an ovule at the base which contains a small green pod formed of modified leaves called bracts and bracteoles."

The fibrous stalk of the marijuana plant is an excellent, environmentally friendly, organic source for rope,

The bark of the hemp stalk contains "bast" fibers which are among the Earth's longest natural soft fibers and are also rich in cellulose; the cellulose and hemi-cellulose in its inner woody core are called hurds. Hemp stalk is not psychoactive. Hemp fiber is longer, stronger, more absorbent and more insulative than cotton fiber. 65

Among many other uses, hemp can be used to make clothes, bags, cloth and fabric. <sup>66</sup>

The United States government recognized the importance of hemp after the attack on Pearl Harbor disrupted supplies of certain materials. While that day lived in infamy, the U.S. government's "Hemp for Victory" campaign slipped into obscurity. 67 Unknown to many is that "the U.S. government formed War Hemp Industries and subsidized hemp cultivation. During the War, U.S. farmers grew about a million acres of hemp across the Midwest as part of that program." 68 However, for the purposes of this comment, it is the vegetable matter of the female plant,

is quannab and the Spanish canamo").

<sup>63.</sup> *Id.* at 4.

<sup>64.</sup> Id.

<sup>65.</sup> Hemp Basics LLC, *HempBits*, www.hempbasics.com (last visited Oct. 21, 2006) (however, hemp is illegal to grow in the United States due to its association with marijuana); see also Patricia Leigh Brown, *California Seeks to Clear Hemp of a Bad Name*, N.Y. TIMES, Aug. 28, 2006, at A1).

<sup>66.</sup> Resense.com, *Modern Uses for Hemp*, http://www.rense.com/general49/could.htm (last visited October 21, 2006) (see chart mid page listing the myriad of uses for hemp); see also Jean M. Rawson, *Hemp as an Agricultural Commodity*, CRS Report for Congress, Library of Congress (July 8, 2005), http://www.fas.org/sgp/crs/misc/RL32725.pdf.

<sup>67.</sup> Hemp for Victory (United States Department of Agriculture 1942), http://video.google.com/videoplay?docid=-6234815658481845054 (last visited Jan. 20, 2007).

<sup>68.</sup> Hemp Industries Association, *History of Hemp*, http://www.thehia.org/history/history.htm (last visited Oct. 21, 2006); see also Help Wanted by War Hemp Industries Inc., JPEG Image of Poster as published in the Jackson County Pilot (Minnesota) June 1, 1944, http://tiny.cc/8ezYl (last visited Apr. 5, 2008).

namely the flowering tops and leaves that make marijuana cultivation on public lands desirable. <sup>69</sup>

# B. Chemistry and Psychopharmacology of Marijuana

When Haydar ate the leaves of the plant he found on his walk so many years ago, his mood improved and he was happier. Since its discovery, the pleasurable effects of marijuana have been recognized by many civilizations. However, what was not known then was why exactly this plant, when smoked, eaten or chewed, provided such sensations. Science answered these questions, and, initially, the U.S. government listened to the science behind marijuana, i.e. the chemistry of what made the substance psychoactive and that criminalization was not required. At least that was how it went until government policy went in a direction science did not support and marijuana became the scapegoat for racial

<sup>69.</sup> House of Lords Science and Technology Committee, Cannabis: The Scientific and Medical Evidence, HL Paper 151, 9th Report, Session 1997-98 (Nov. 4, 1998), available at http://www.parliament.the-stationery-office.co.uk/pa/ld199798/ldselect/ldsctech/151/15101.htm (last visited Jan. 20, 2007) ("As a drug of abuse, it usually takes the form of herbal cannabis (marijuana), consisting of the dried leaves and female flower heads, or cannabis resin (hashish), the resin secreted by the leaves and flower heads, which may be compressed into blocks.").

<sup>70.</sup> See Martin Booth, supra note 60, at 154 (beginning in 1875 the focus of drug laws was on opium, a truly dangerous drug that can be smoked or injected); see also The La Guardia Committee Report, The Marihuana Problem in the City of New York, Mayor's Committee on Marihuana, The New York Academy of Medicine, City of New York (1944).

<sup>71.</sup> See Taxation of Marihuana: Hearing on HR 6909 Before Subcomm. on Senate Comm. on Finance, 75th Cong., 1st Sess., 33-4 (1937) (statement of Mr. Harry J. Anslinger, Commissioner of Narcotics, Treasury Department) (Mr. Anslinger is seen as the principle man driving the United States governments harsh policy against marijuana, in this testimony, patently false scientific data and wild accusations about marijuana were made before the Committee, the statements were believed by the Senate and the public, laying the foundation for a marijuana "drug war" that is still being fought today; one particularly audacious statement by Mr. Anslinger was in response to a question by Senator James J. Davis, Pennsylvania:

SENATOR DAVIS: How many cigarettes would you have to smoke before you got this vicious mental attitude toward your neighbor? MR. ANSLINGER: I believe in some cases one cigarette might develop a homicidal mania, probably to kill his brother. It depends on the physical characteristics of the individual. Every individual reacts differently to the drug. It stimulates some and others it depresses. It is impossible to say just what the action of the drug will be on a given individual, of the amount. Probably some people could smoke five before it would take that effect, but all the experts agree that the continued use leads to insanity. There are many cases of insanity.");

See also John Tierney, Lighting Up In Amsterdam, N.Y. TIMES, Aug 26, 2006, at A15 (Even though marijuana has been widely available since the 1970's, enough to corrupt a couple of generations, the Netherlands has not succumbed to reefer madness.); see also United States Department of Justice, Drug Enforcement Administration, In The Matter

and immigration tensions.<sup>72</sup>

psychoactive Δ9-The substance marijuana in is (THC).<sup>73</sup> tetrahydrocannabinol or Cannabis contains many cannabinoids, but THC is the primary psychoactive chemical. works via "its ability to activate special proteins known as receptors found on the surface of certain cells. The drug binds specifically to these proteins and activates a series of processes within the cells, leading to alterations in the cell's activity."<sup>74</sup> The net result is a "high" or "buzz" that users experience. The activated receptors "influence pleasure. memory, thought, concentration, sensory and time perception, and coordinated movement."<sup>75</sup> THC is delivered, optimally, orally via inhalation of fumes of dried marijuana—essentially, a marijuana joint function(s) as an inhaler, delivering THC into the lungs. Once in the bloodstream, "the effects of marijuana start as soon as 1-10 minutes after it is taken and can last 3 to 4 hours or even longer."<sup>76</sup> Demand for marijuana is high. Currently, marijuana is the most commonly used illegal drug in America.<sup>77</sup> However, federal law prohibits the growth. use or sale of marijuana; it is a Schedule I Controlled Substance, listed among the most dangerous of narcotic substances known to mankind.<sup>78</sup>

Of Marijuana Rescheduling Petition, Docket No. 86-22, 57 (September 6, 1988), petition denied, 54 Fed. Reg. 53767(Dec. 28, 1989) (ALJ Young concluded in his ruling that in practical terms, marijuana cannot induce a lethal response as a result of drug-related toxicity and recommends rescheduling. ALJ Young is subsequently overruled by DEA Administrator John C. Lawn. Administrator Lawn has jurisdiction over the petition pursuant to the procedures prescribed by the Controlled Substances Act, 21 U.S.C. §§ 801-802 (2006), and the Administrative Procedures Act, 5 U.S.C. §§ 551-559 (2006)).

<sup>72.</sup> See MARTIN BOOTH, supra note 60, at 162-169 (Booth notes that the "problem" was often assessed by a census of the Mexican or black population. When the Texas state legislature debated the subject, one member declared, "all Mexicans are crazy, and this stuff [marijuana] is what makes them crazy." The links between drugs and racism is not confined to the USA.); see also Joseph D. McNamara, Criminalization of Drug Use, PSYCHIATRIC TIMES Vol. XVII Issue 9 (September 2000) ("The average American's image of drug users is that of dangerous young people of color-males who will rob them to obtain money to buy drugs. . . . These cherished misconceptions are the enduring and erroneous foundations of the ill-conceived "war on drugs.").

<sup>73.</sup> See MARTIN BOOTH, supra note 60, at 4.

<sup>74.</sup> See House of Lords Science and Technology Committee, supra note 69, at Chapter 3 (Mid page, Box 1 "Cannabis Pharmacology—Terminology").

<sup>75.</sup> Miles Herkenham, et al. Cannabinoid Receptor Localization in the Brain, PROC. NATL. ACAD. Sci. USA, Vol. 87(5), 1932-1936 (Mar. 1990).

<sup>76.</sup> Neuroscience for Kids, *Marijuana*, http://faculty.washington.edu/chudler/mari.html (last visited Oct. 21, 2006).

<sup>77.</sup> U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Results from the 2005 National Survey on Drug Use and Health: National Findings 17 (Sept. 2006), http://oas.samhsa.gov/nsduh/2k5nsduh/2k5Results.pdf.

<sup>78. 21</sup> U.S.C. § 801(c)(17) (2006).

#### C. Legal Issues

It would be incorrect to say that every state in the Union readily agrees with the federal government that marijuana is a menace on par with heroin or LSD, two other Schedule I substances. 79 However, under the Commerce Clause of the Constitution, the federal government has usurped any state rights to make marijuana totally legal, or even making it available to the ill or dying, sans any federally borne repercussions. This does not mean states cannot decriminalize, under state law, the use of marijuana for the ill, or other enumerated classes.<sup>80</sup> However, it is still illegal under federal law, and the D.E.A. will enforce the federal law in the all the states in the Union. This usurpation of states rights has withstood constitutional scrutiny.<sup>81</sup> For the purposes of this comment, federal law is of utmost importance, for the cultivation under examination is being conducted on federally controlled lands.<sup>82</sup> Even, assuming in argumendo, that states could regulate the legal status of marijuana within their borders, free of federal (D.E.A.) interference, the National Parks and Forests, being under federal control, would still be subject to federal law. Therefore, a brief examination of federal law in regards to marijuana is required.

Federal law views marijuana as *per se* illegal to possess.<sup>83</sup> Generally, the severity of the crime depends on whether one is simply possessing a small amount for personal use, or possessing with intent to distribute<sup>84</sup> (usually an amount exceeding that which an individual can

<sup>79.</sup> Drug Policy Alliance, State of the States Drug Policy Reform: 1996-2002 4 (Sept. 2003), http://www.drugpolicy.org/docUploads/sos\_report2003.pdf. (Since 1978, thirty-five states have passed laws recognizing marijuana's medicinal value, but most of these have been essentially symbolic. For instance, fourteen states currently have laws that allow patients to legally use marijuana through state-run therapeutic research programs, though the federal government effectively blocks such programs by failing to provide the marijuana approved for research. Federal law also prevents doctors from prescribing marijuana in the seven states which allow such prescriptions.).

<sup>80.</sup> See, e.g., 22 M.R.S.A. § 2383-B(5) (2006).

<sup>81.</sup> Gonzales v. Raich, 545 U.S. 1 (2004) ("CSA's categorical prohibition of the manufacture and possession of marijuana, did not . . . exceed Congress' authority under the commerce clause . . . the circumstance that the CSA ensnared some purely intrastate activity was of no moment.").

<sup>82.</sup> See McKelvey v. United States, 260 U.S. 353, 359 (1922).

<sup>83. 21</sup> U.S.C § 844(a) (2006) (This statute deals with "simple possession." There are, however, specialized authorizations for certain laboratories to possess Schedule I substances, including marijuana, but that is unusual and beyond the scope of this comment.); see, e.g., New York State Department of Health, Bureau of Narcotic Enforcement, License Application to Engage in a Controlled Substance Activity, DOH-4330 (5-07), http://www.health.state.ny.us/forms/doh-4330.pdf (State form with the additional Federal requirements included).

<sup>84. 21</sup> U.S.C. § 841(a)(1) (2006).

consume recreationally) or manufacturing.<sup>85</sup> The penalties increase on par with the type of controlled substance and the amount.<sup>86</sup> Attempt and conspiracy to manufacture or distribute is also a crime, and "any offense defined in this subchapter shall be subject to the same penalties as those prescribed for the offense."<sup>87</sup>

These policies reflect our nations "war on drugs." Logic would dictate, then, that the federal government, and especially Congress, with its 'wartime' drug policy, so its environmental policies and its declarations concerning our National Parks and Forests would not stand idly by while Drug Trafficking Organizations (DTO's) and illicit growers pillaged, ravaged and sullied our National Parks and Forests with massive marijuana fields. That would be hypocrisy, inexcusable and the public would not stand for it. However, that is exactly what is happening, our Parks and Forests are being ravaged and polluted, to grow marijuana for American customers demanding more of the drug than ever before. The public is standing for it, and our National Parks and Forests are paying a heavy environmental price.

<sup>85. 21</sup> U.S.C. § 802(15) (2006) (defines manufacturing in general; for the purposes of this comment, manufacturing as defined as "the production, preparation, propagation" enumerates growing and cultivation of marijuana).

<sup>86. 21</sup> U.S.C. § 841 (2006) (The punishment for the manufacturing/distribution of 1 kilo of heroin, 21 U.S.C. § 841(b)(1)(A)(i) (2006), is akin to possessing 1,000 kilos of marijuana. 21 U.S.C. § 841(b)(1)(A)(vii) (2006).).

<sup>87. 21</sup> U.S.C. § 846 (2006).

<sup>88.</sup> Drugsense.org, Drug Clock, http://www.drugsense.org/wodclock.htm (last visited Jan. 20, 2007) (The federal government spent over \$19 billion dollars in 2003 on the War on Drugs, at a rate of about \$600 per second. The budget has since been increased by over a billion dollars.).

<sup>89. 21</sup> U.S.C. § 801a(1) (2006) ("The Congress has long recognized the danger involved in the manufacture, distribution, and use of certain psychotropic substances for nonscientific and non-medical purposes, and has provided strong and effective legislation to control illicit trafficking.").

<sup>90.</sup> National Environmental Policy Act of 1969 (NEPA), 91 P.L.190, 83 Stat. 852 (1970); see also 42 U.S.C. § 4331(b)(1)-(6) (2006).

<sup>91.</sup> National Park System General Authorities Act, 91 P.L. 383, 84 Stat. 825 (1970); see also 16 U.S.C. § 1a-7a (2006).

<sup>92.</sup> See generally National Forest Management Act of 1976, 16 U.S.C. §§ 1600-1614 (2006).

<sup>93.</sup> See Adam Burke, supra note 12; see also Zachary Coile, National Park's Pot Farms, S.F. CHRON., Nov. 18, 2005, at A1.

<sup>94.</sup> See U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration, Results from the 2005 National Survey on Drug Use and Health: National Findings 17 (Sept. 2006), http://oas.samhsa.gov/nsduh/2k5nsduh/2k5Results.pdf.

<sup>95.</sup> See, e.g., Tom Stienstra, Wildlife the Victim of Growing Bay Area Marijuana Business, S.F. CHRON, Aug. 27 2006, at C-13.

#### IV. Cultivation within the Public Lands

#### A. History and Background

The principal economic theory of supply and demand dictates that when a demand for a product is high, and supply short, prices for that product will rise. If supply, for whatever reason, is controlled or suppressed and demand remains high, profiteers will seek to satisfy the demand illicitly. If the substance can be grown easily, or does not require complex procedures to manufacture and is not particularly dangerous to use, then it is all the more difficult to restrain the products availability. Enter marijuana: it can be grown by any person with seeds, soil, minimal gardening supplies and, preferably, if one seeks to avoid prosecution, seclusion. It can be grown 'environmentally' friendly, or organically, assuming one can erect netting to avoid insects and take other growing precautions.

The key to growing marijuana, due to its status as *per se* illegal, is seclusion. The average recreational user, with no aspirations to profiteer or manufacture, can grow indoors and even without soil. This so called "closet growing," or indoor cultivation, cannot yield a sufficient harvest to make selling highly profitable. Furthermore, in the indoor location, the electricity needed for artificial lights, the potting materials and other traceable equipment make this a risky venture.

<sup>96.</sup> See generally Steven Landsburg, Price Theory and Applications (4th ed. 1998).

<sup>97.</sup> See generally ED ROSENTHAL, EASY MARIJUANA GARDENING (2000); see also GREG GREEN, THE CANNABIS GROW BIBLE: THE DEFINITIVE GUIDE TO GROWING MARIJUANA FOR RECREATIONAL AND MEDICAL USE, (2003) (everything one would need, supply wise, can be purchased at a store like Home Depot).

<sup>98.</sup> The Growing Edge, What Is Hydroponics? http://www.growingedge.com/kids/growing\_info.html (last visited Jan. 20, 2007) ("In traditional gardening, plants have to work to get the nutrients from the soil. In hydroponics, a nutrient solution feeds your plants directly.... Since hydroponics can be done indoors, you can grow plants year-round.").

<sup>99.</sup> Drug Enforcement Administration, The D.E.A. Position On Marijuana, http://www.dea.gov/marijuana\_position.html#54 (last visited Jan. 20, 2007).

<sup>100.</sup> See U.S. v. Hamilton, 434 F.Supp.2d 974, 979 (D.Or. 2006) (upholding an administrative warrant seizing power records of residential customer. An Agent believed that Mr. Hamilton's high power consumption was indicative of an indoor marijuana grow operation. His basis for probable cause was Mr. Hamilton's high power bills in comparison to his neighbors.); see also Jack I. Lerner and Deirdre K. Mulligan, Taking the "Long View" on the Fourth Amendment: Stored Records and the Sanctity of the Home, 2008 STAN. TECH. L. REV. 3, 23 (2008) (Relying on Smith v. Maryland, the court distinguished utility records from the thermal imaging device at issue in Kyllo. "[W]hen Mr. Hamilton used power in his home," the court reasoned, "he voluntarily conveyed that information to PGE, his electric company. As a result, he had no reasonable expectation of privacy in his power records.").

Therefore, a secluded, outdoor location that is tillable and has access to streams is ideal. If such a place could be found, a grower could buy fertilizers, poisons and pesticides, and use them to enhance the growth and potency of the plant and keep pests and animals away. The fertilizers, pesticides and poisons could be used in abundance, because obviously, this is not the grower's property, and after the harvest the grower could abandon everything, including wastes, trash and tools and move on.

Even better, instead of being a grower, an enterprising profiteer could instead be a manager, and hire field hands to handle the growing aspect of the operation. The manager/financer would then acquire the supplies (seeds, shovels, growing apparatus, food, supplies and weapons) and transport the field hands to a remote grow site and leave the field hands there until after the harvest. This profiteer could even franchise, by setting up multiple sites. Such a secluded place for profiteering and franchising was found. Unfortunately, and to the environment's detriment, it was and still is in our National Parks and Forests.

A denizen of the average American metropolis has great difficulty imagining complete and utter seclusion. To imagine places where one is surrounded by trees and forest for thirty miles in every direction is alien. When two campers were killed in the Juniper Prairie Wilderness area of the Ocala National Forest, a total of 400,000 acres, some areas only 25 miles from the town of Ocala, the papers described the couple as dying in the "middle of nowhere." If areas with acreage of 400,000 are considered the middle of nowhere, than the San Bernardino National Forest, with 671,686 acres, has areas of indescribable seclusion and remoteness.

Due to the "roughness and inaccessibility of the land," <sup>103</sup> and the scarcity of law enforcement personnel, <sup>104</sup> determining at what point marijuana growers began to exploit the National Parks and Forests is impossible. This is, in part, because "neither the U.S. Forest Service nor

<sup>101.</sup> Catherine Shoichet, Spot Where Couple Died Known for Its Seclusion, St. Petersburg Times, Jan. 12, 2006, at 8A.

<sup>102.</sup> San Bernardino National Forest, *About Us*, http://www.fs.fed.us/r5/sanbernardino/about/ (last visited Jan. 20, 2007) (600,000 acres is approximately 937.5 square miles).

<sup>103.</sup> Benito Ortiz, Undocumented Immigrants Recruited to Grow Marijuana in National Park, NOTICERO SEMANAL, Mar 1, 2005, available at http://news.newamericamedia.org/news/view\_article.html?article\_id=86acd7298461c568 c149043c420677df.

<sup>104.</sup> Michelle Burkhart, Where Have all the Rangers Gone? 37 HIGH COUNTRY NEWS, 24 (Dec. 26, 2005), available at http://www.hcn.org/servlets/hcn.Article? article\_id=16007 ("All [law enforcement officers] have hundreds of thousands of acres to patrol... some forests lack even a single law enforcement officer.... Others have only three or four.").

the National Park Service keeps precise statistics about crime on federally protected lands." However, best estimates put the problem beginning in the late 1980s. Whether this scourge started in the 1980s or before is inconsequential; the significant factor is that the problem has been increasing exponentially, yearly, since 1997. 107

#### B. The Marked Increase in Cultivation

The increase in cultivation has been phenomenal: in 2004, "100,000 marijuana plants have been removed from California national parks, including 44,000 from Sequoia." Tulare County reported a "79,000-plant haul... valued at \$360 million." The data is undeniable. The problem is increasing and the damage to the environment of the Forests and Parks is fast approaching a point of no return. In Sequoia National Park, a Park official remarked, "this is a problem that, if not prevented immediately, can with time cause irreversible harm to plant and animal life in the park." 110

The National Drug Intelligence Center (NDIC), in its 2005 threat assessment, remarked,

Much of the outdoor cannabis cultivation in the United States occurs on federal lands . . . the number of cannabis plants eradicated on National Forest Service lands increased from 2002 (597,797) to 2003 (729,481) . . . marijuana producers cultivate on federal lands that vary in size from a few plants . . . to tens of thousands of plants cultivated by organized criminal groups for wholesale-level distribution. 111

The increase, on National Forest land, as reported by the NDIC shows a significant 22% increase. This figure only accounts for *known* sites. Statistics becoming available for the 2006 season are already showing a sharp increase: authorities have so far found "940,000 marijuana plants growing on state and federal land in the Golden State. With the harvest season beginning, officials expect to find more pot

<sup>105.</sup> Jennifer Sullivan, Crime Slowly Creeps Into Parks, Forests, SEATTLE TIMES, Oct. 15, 2006, at B1.

<sup>106.</sup> See Adam Burke, supra note 12 ("[L]aw enforcement agents saw evidence of Mexican drug rings on public lands at least as far back as 1980").

<sup>107.</sup> Rex Hudson, Report: Marijuana Availability in the United States and its Territories, Federal Research Division, Library of Congress 22 (Dec. 2003) http://www.loc.gov/rr/frd/pdf-files/MarAvail.pdf (In 1997 316,013 marijuana plants were removed from US Forest Service lands, in 2001, 719,985 marijuana plants were removed, a 127.8% increase).

<sup>108.</sup> Joe Robinson, War of the Weed, LOS ANGELES TIMES, Aug. 9, 2005, at F3.

<sup>109.</sup> Id.

<sup>110.</sup> See Benito Ortiz, supra note 103.

<sup>111.</sup> See National Drug Intelligence Center, supra note 20, at 2.

farms and surpass last year's haul of 1.1 million plants." Officials are frustrated and often see it as a losing battle; an exasperated official remarked, "There are more big sites. It boils down to patrol resources. What do we have available to us. It's such a huge, huge area to consider." There is no question that there has been a marked increase of marijuana cultivation on public lands. The damage it is causing to the environment is immense, and the permanent damage it is causing to our National Parks and Forests is unacceptable, and shows no signs of decreasing. In fact, a report by the National Drug Intelligence Center noted, "cannabis cultivation . . . on federal lands likely will increase . . . [growers] have increased the size and scope of their cannabis cultivation operations on National Forest Service lands."

### C. The "Modus Operandi" of Public Land Cultivation and the Environmental Damage

#### 1. Introduction

Every step of the growing process causes environmental damage. It is paramount to remember that "in a national park everything is protected" [and legally] "you're not even supposed to take a pine cone." Pinecones aside, illegal growers are bringing in thousands of pounds of fertilizers, poisons, food, tents, irrigation hoses, seeds, shovels, hoes, guns, beer cans and a host of other contraband that threaten the environment of the park. These growers do not just come into the park and plant the marijuana crops in the brush, leaving the trees and organic forest floor undamaged. Rather, they clear the land, terrace the hills and spray pesticides about haphazardly. 116

To feed their crops, these growers dam streams, divert water and line the forest with miles of irrigation hose. 117 The chemical and fertilizer runoff from the grow sites carries the toxins to these streams

<sup>112.</sup> Chuck Squatriglia, Pot Farms Ravaging Park Land, S. F. CHRON., Sep. 6, 2006, at A1.

<sup>113.</sup> Mark Prado, Environmental Damage Feared at Marijuana Growing Site, MARIN INDEP. JOURNAL (Sept. 6, 2006), available at http://www.marinij.com/marin/ci 4293398.

<sup>114.</sup> See National Drug Intelligence Center, supra note 20, at 7.

<sup>115.</sup> See Joe Robinson, supra note 108 (comments of Special Agent X "Sequoia's lone special agent assigned to the marijuana war, who, for his own safety, can't be identified").

<sup>116.</sup> See Hearings, supra note 7.

<sup>117.</sup> See Katherine McIntire Peters, supra note 9 ("It's unbelievable how good these guys are at finding hidden springs, diverting streams, and even drilling wells in some cases.").

and dammed ponds and saturates the ground. They set traps for animals, shoot animals and defecate and urinate in pits around the site. The grow sites, manned by a number of farmers, generate waste and debris. The federal Office of National Drug Control policy estimates that growing *one* acre of marijuana damages *ten* acres of land.

The Parks and Forest Services, already suffering from heavy budget cuts, do not have any additional funds to clean up the sites because "the National Park Service does not allocate money specifically for the task, the funds come from each park's operating budget—leaving less money for things like park programs and improvements."121 continuing wars in Afghanistan and Iraq, a crippled and damaged Gulf Coast and other menaces on the horizon, there are little federal monies available. 122 In fact, in the Federal Governments Fiscal Year 2007 budget, the Department of Agriculture, the agency that runs the Forest Service, was "hit with the third-largest percentage decrease in spending of any department" and the Department of the Interior, overseer of the National Parks, received a three percent budget cut, with \$100 million cut from the National Park budget specifically. 123 A source of funds must be allocated or created to combat the environmental scourge of marijuana growing in the National Parks and Forests. However, funds cannot be conjured from the firmament; a source of funds must be either allocated or created. There is no money from which to allocate; hence, it must be created using revolutionary techniques and novel ideas. To maintain the status quo means to cede our parks to drug cartels.

2. The Site: Deforestation by Irrigating, Burning, Clearing and Terracing

Once a remote location is found, within a National Park or Forest, the cultivator must clear the selected grow site of timber, foliage and the

<sup>118.</sup> Daniel B. Wood, Wild West: Drug Cartels Thrive in US National Parks, Christian Sci. Monitor Jun. 10, 2003, http://www.csmonitor.com/2003/0610/p01s03-usgn.html (When polluted runoff flows into lakes and streams, varying nitrate levels can kill fish species, launching a domino effect on the food chain. "We have found evidence of insecticide contaminating groundwater, which can be devastating.").

<sup>119.</sup> *Id*.

<sup>120.</sup> See Chuck Squatriglia, supra note 112.

<sup>121.</sup> Id.

<sup>122.</sup> U.S. Treasury: Bureau of Public Debt, The Debt to the Penny, http://www.treasurydirect.gov/NP/BPDLogin?application=np (last visited Apr. 6, 2008) (as of April 3, 2008 the national debt was \$9,437,425,175,221.31).

<sup>123.</sup> The Washington Post Online, Interactive Federal Budget, http://www.washingtonpost.com/wp-srv/politics/interactives/budget07/agencies.html (last visited Jan. 20, 2007).

organic forest floor. The sites are often cleared with chainsaws. <sup>124</sup> The trees are not all cut down. Rather, some trees are "stripped of their limbs to make room for the plants, leaving only a canopy of branches to hide the illicit crop." Additionally, terracing is necessary if the grow site is located on a hillside. <sup>126</sup>

Terracing is an agriculture method for maximizing crop yield for plants that must be grown on steep or sloping lands, "terraces prevent erosion by shortening the long slope into a series of shorter, more level steps." Because many of the marijuana cultivation sites are in remote hilly regions of Parks or Forests, growers employ this method. These clearing and terracing methods are incredibly harmful to the soil and environment of the Parks and Forests; "they tear up the hillsides, terrace it, [and] erode it." 128

In a dry climate like California, terracing and eroding the steep slopes is a fire hazard and compromised slopes and hills, due to extensive terracing, can cause landslides and other damage. As for the developing and compromising of natural lands, at least at SEKI, "for every five acres of marijuana, a grower will develop 180 acres of wilderness." <sup>129</sup>

Once a site has been tilled, terraced or turned over and holes dug for seeding the ground, a water source must be acquired before planting can commence. The complex and highly technological methods these illicit growers employ is astounding. Some gardens have "elaborate automatic watering" systems, while others are complexly irrigated by hoses and ditches. The extent of the irrigation systems can be breathtaking. In some instances, "water is diverted from creeks and streams, using a pipe or hose for gravitational irrigation, affecting wildlife in the riparian area. A 2,000 to 3,000 plant garden may affect an area approximately ten

<sup>124.</sup> See Hearings, supra note 7, at 42 (statement of Mr. Delgado, "Environmental damage occurs when marijuana growers burn off the native vegetation and destroy national wildlife habitats by clearing cultivation areas with chain saws"), and at 87 (testimony of Laura Whitehouse who notes, "Growers clear the under story from parkland to cultivate marijuana plants and terrace the land, stirring up soil and attracting non-native, invasive plants that wouldn't otherwise take hold in the mountainous region, setting off a disturbing domino effect across the parks' delicate ecosystems.").

<sup>125.</sup> See Chuck Squatriglia, supra note 112.

<sup>126.</sup> Id. at 2

<sup>127.</sup> Department of Agriculture, Natural Resource Conservation Service, Terracing, http://www.nrcs.usda.gov/Feature/backyard/terrac.html (last visited Jan. 20, 2007).

<sup>128.</sup> Ryan Masters, *Weed Invasion*, MONTEREY COUNTY WEEKLY, (Oct. 5, 2006), http://www.montereycountyweekly.com/issues/Issue.10-05-2006/news/Article.news\_4.

<sup>129.</sup> See Joe Robinson, supra note 108.

<sup>130.</sup> USDA Forest Service, News Release, *Fire Reveals Marijuana Garden on Stanislaus National Forest Land* (Oct. 6, 2006), http://www.fs.fed.us/r5/stanislaus/news/2006/2006-1006-marijuana.shtml.

<sup>131.</sup> See National Drug Intelligence Center, supra note 20.

acres, with the water source over one mile away."<sup>132</sup> Some of the irrigation tubing and systems run for miles. In SEKI, "6 to 7 miles of irrigation hose were removed" from some of the sites. <sup>133</sup>

This disturbance of waters, the polluting of waters from these irrigation tubing systems and the fertilizer runoffs, is in violation of the Clean Water Act (CWA), a fact that was not lost on Congressman Ose during a hearing held in October of 2003. He stated, "I'm sitting here thinking under the Clean Water Act, redirecting water flows, for instance, the impact on habitat along those streambeds, the mammals and the flora and fauna that come to rely on that water stream." Congressman Ose may be correct in stating that the irrigation activities of these cultivators violate the Clean Water Act. Sadly, however, even if they are in violation of the CWA, that would be just another federal law they are violating. The task is not to find out *what* federal laws these cultivators are violating, but how to immediately stop the cultivation and its resulting environmental damage within our Parks and Forests.

#### 3. The Materials: Pesticides, Fungicides and Fertilizers

As if the terracing, the felling of trees, soil damage and poaching of animals are not enough, the cultivators bring hundreds of pounds of pesticides, fertilizers and other poisons in to our Parks and Forests. They liberally apply the fertilizer to accelerate the marijuana plants growth and to increase its THC potency. The pesticides are also liberally applied to prevent wildlife and insects from consuming their crop. 137

It is self evident that liberally applying hundreds of pounds of

<sup>132.</sup> Id. at 25 (statement of Mr. Gaffrey).

<sup>133.</sup> National Park Service, Sequoia Kings National Park (SEKI), Fact Sheet 2003 (on file with author).

<sup>134.</sup> See National Drug Intelligence Center, supra note 20, at 87 (Congressman Ose to Mr. Fontaine).

<sup>135.</sup> See 33 U.S.C. §§ 1251 et seq. (2006).

<sup>136.</sup> See Benito Ortiz, supra note 103; see also United States Department of State, supra note 14 (growers "spread fertilizers and pesticides... the arsenic-based poisons kill small animals and rodents and in turn, the larger animals and birds that consume them, devastating the food chain and area water supplies); see also Sean Markey, supra note 22 ("hundreds of pounds of pesticides, herbicides, fertilizers, rat poison that growers haul into each garden sites during the growing season to boost their harvest yields and kill plant-eating pests"); see generally Press Release, USDA Forest Service, Pot Grower Reaps Jail Time (July 31, 2003), available at http://www.nps.gov/archive/havo/news/pr\_20030731.htm (Potting soil, vermiculite, and fertilizer were spread over the ground as a plant bed); Press Release, USDA Forest Service, Volunteers Help Clean Up Illegal Marijuana Gardens (Mar. 17, 2005), available at http://www.fs.fed.us/r5/sierra/news/2005/03/mjgardens.shtml ("drug traffickers smuggle... tons of agricultural equipment, pesticides, fertilizer, and food into backcountry gardens to conduct illegal activity on public lands").

<sup>137.</sup> See Katherine McIntire Peters, supra note 9.

pesticides and fertilizer to an acre large growing site in a National Park or Forest is environmentally devastating. Pristine, virgin and unprotected park and forest is being exposed to chemicals and poisons that are considered so ruinous that they are controlled under federal statutes. <sup>138</sup>

A massive amount of these poisons and fertilizers are being used by growers at their illicit sites. In SEKI, at one particular grow site, it was noted that, "within the 5 acres of garden and camp area, 2,870 pounds of N-P-K fertilizers were documented. A total of 2 gallons of Sevin and 1.1 gallons of Malathion concentrate were documented, as well as smaller quantities of 6 additional insecticides and 3 rodenticides." These toxins, indiscriminately applied to massive grow sites within the parks and forests, presents a massive environmental danger. Furthermore, the chemicals and poisons are left to seep and leach into the ground and waters surrounding the site. Because, these "fertilizer[s] contain[] nitrate and phosphate, heavy spillage may cause [an] adverse environmental impact such as eutrophication in confined surface waters or nitrate contamination of ground or surface water." 140

Compounding the preliminary concerns are that the poisons and chemicals are not safely stored at the grow sites (the unused fertilizers and chemicals or those yet to be used), so after heavy rains, "one only has to look at the steep slope and the flowing streams in this area to know that these chemicals have not remained within the confines of the marijuana gardens." Furthermore, even when a site is discovered and the marijuana seized by authorities, clean up of the site and its toxic, leaching fertilizers and poisons is not possible. This is because a shortage of money and manpower makes cleanup of most drug production sites, especially marijuana gardens, impossible, "[w]e don't clean those sites up. We don't have the manpower."

The scope of the chemicals and poisons used is truly disturbing. In some sites, where restoration was attempted, Special Agents and Restoration Specialists found the following insecticides, among many others, "Ortho Malathion 50 Plus Insect Spray Concentrate Ortho Ortho-Klor Termite and Carpenter Ant Killer Concentrate," the following rodenticides, "Wilco Ground Squirrel Bait (diphacinone), Grants Gopher

<sup>138.</sup> See Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), 7 U.S.C. §§ 136-136a (2006).

<sup>139.</sup> Athena Demetry, Fifty Marijuana Gardens Restored in Sequoia National Park in February, 2005, Internal Report, US Forest Service 2006 (on file with author).

<sup>140.</sup> European Fertilizer Manufactures Association, NPK Fertilizer (Ammonium Nitrate Based), http://www.efma.org/publications/guidance/section15.asp (last visited Jan. 20, 2007).

<sup>141.</sup> See Marcia Rasmussen, supra note 10, at 6.

<sup>142.</sup> See Katherine McIntire Peters, supra note 9.

Killer Pellets, Unidentified gopher poison pellets ("Comet"-type container)" and the following, fertilizers, among others, "Simplot XB 6-20-20, Bandini Prochoice 15-15-15, Hydro Prills 15-15-15." While these chemicals were discovered at grow sites in SEKI, it is, sadly, accurate to say it is indicative of what is present at grow sites around the National Park and Forest system, where cultivation is a problem. The ongoing environmental damage being wreaked on our Parks and Forests from these chemicals, fertilizer and poisons is a mockery of our preservation efforts and subverts our attempts at preserving our nation's natural treasures.

# 4. The Wait and Final Harvest: Armed Patrol, Poaching, Polluting and Generating Waste

The marijuana grow sites are operated and manned primarily by illegal immigrants. The financiers, for the most part, are Mexican drug cartel, also called Mexican Drug Trafficking Organizations (DTO's). Growing marijuana in National Parks and Forests in the United States is extremely profitable, and the start up costs are financially insignificant. Fronting a point man with seeds, materials, trucks and supplies and then allowing the point man to recruit the necessary field hands either from the United States or Mexico is a minute cost.

The profitability of the clandestine National Park or Forest growing

<sup>143.</sup> See Athena Demetry, supra note 139.

<sup>144.</sup> See Katherine McIntire Peters, supra note 9 (Most marijuana gardens follow a standard operating procedure, "It's like they all attended the same Marijuana 101 class." [remark by Laura Mark of the National Forest Service]); see also Hearings, supra note 7 (testimony of Laura Whitehouse, "Pollution from fertilizer and pesticide runoff kills native fish and enters the watershed and water supply of nearby communities.").

<sup>145.</sup> See Hearings, supra note 7, at 93 (Mr. NUNES: "There's a lot of talk about these Mexican nationals or illegal aliens and controlling these marijuana gardens. Is this being over exaggerated or is it the largest percentage of the folks out there, are they really illegal aliens?" Mr. JIMENEZ: "A good majority of them are, yes."); see also Associated Press, Prison Time for Pot Guards Questioned, DAILY BREEZE (Torrance, Cal.), Nov. 17, 2003, at A5 (Police and defense lawyers alike say the guards are often indigent Mexican citizens who immigrated to the U.S. illegally.).

<sup>146.</sup> See National Drug Intelligence Center, supra note 20, at 3 (Law enforcement and Forest Service reporting indicates that Mexican DTOs control a significant portion of the cannabis cultivation on federal lands in California and finance large cultivation sites.); see also Tom Stienstra, Wildlife the Victim of Growing Bay Area Marijuana Business, S.F. Chron, Aug. 27 2006, at C-13 ("Just about all of it is being run by the Mexican drug cartel," Ferry said. "They recruit illegal immigrants in Mexico, bring them to safe houses in California, and give them \$300 to get by. Then they run them into the hills and mountains . . . through harvest, give them \$3,000.); see generally Press Release, DEA-Nunez-Medina Sentenced to 120 Months for Marijuana Grow Operation in National Forest (July 28, 2006), www.usdoj.gov/dea/pubs/states/newsrel/phnx073106p.html.

operation is staggering. A 60,000 plant grow operation is worth \$240 million dollars. If a financier would rather start with a smaller operation, it is important to bear in mind that each plant, when mature, is valued at \$4,000. So a small garden of about 1,000 plants, tucked away in San Bernardino National Forest, would be worth \$4 million.

As for the overhead, the field hands, their pay is diminutive and field owners are not beyond stiffing their employees after harvest. A jilted marijuana farm hand has little recourse, either by virtue of their illegal alien status or because they engaged in a criminal endeavor or both. Not only would the farm hand not have recourse to recover wages, the farm hand would either be deported, indicted or both. Or even worse, after complaining to the authorities, the errant farmhand may meet an untimely end.

Once the spot has been prepared, i.e. terraced, cleared and fertilized, the farm hands are left at the desolate site, deep within the National Park or Forest, until harvest time. <sup>150</sup> In the intervening weeks and months, as the plants grow and mature, the field hands live at the site, eating, drinking, hunting and generating human waste and trash. <sup>151</sup> These farm hands are also armed <sup>152</sup> and protect the grow site from both animal and man using trip wires, assault weapons, booby traps. <sup>153</sup> The farm hands posses a willingness to shoot at police <sup>154</sup> and to even die protecting the grow site. <sup>155</sup> After the harvest in early October, the marijuana grow site

<sup>147.</sup> Coile, supra note 93 (Obviously this profit is tax free.).

<sup>148.</sup> Id.

<sup>149.</sup> See Benito Ortiz, supra note 103 ("Owners don't keep their promises to the field workers. Many undocumented farmhands never see their money, either because they get arrested before getting paid or because their bosses disappear with all the drugs.").

<sup>150.</sup> See Hearings, supra note 7 (Rangers say that cartels hire illegal immigrants to work and live in the camps, probably for months on end. They use public roads to access parks by night, scurry into the underbrush with supplies, and lug goods up steep hillsides by moonlight.).

<sup>151.</sup> Stacy Solie, Confiscated Pot Plants Repossessed, POINT REYES LIGHT, (Sept. 7, 2006) http://www.ptreyeslight.com/cgi/news.pl?record=183 ("Strewn about the camp were tools, shoes, remains of food and a mousetrap. Socks, underwear and cups hung casually from branches in the sunlight—signs of an abrupt interruption to the normal course of daily life.").

<sup>152.</sup> See Daniel B. Wood, supra note 118 ("Marijuana growers keep themselves heavily armed, officials say—partly out of worry about rival growers, partly because the street value of marijuana can be so high. Several shootouts have erupted between growers and law enforcement.").

<sup>153.</sup> Brian MacQuarrie, *Incursions into Paradise*, BOSTON GLOBE, Dec. 2, 2005, at A1 ("[B]ack-country visitors are being cautioned about armed guards, booby traps, and trip wires that protect a skyrocketing increase of marijuana cultivation on public land in California."); see also Zachary Coile, *National Park's Pot Farms*, S.F. CHRON., Nov. 18, 2005, at A1.

<sup>154.</sup> Brent Whiting, *Pot Discovery Leads to Shooting*, THE ARIZONA REPUBLIC (Oct. 23, 2006), http://www.azcentral.com/news/articles/1023brk-potshooting23-ON.html.

<sup>155.</sup> MacQuarrie, supra note 153 ("Four suspects were killed in raids on California

is abandoned. If it is still viable for use next season it will be reused. However, erring on the side of caution, it is usually abandoned. Another site is easy to come by; there are plenty of spots in the vast un-patrolled public lands.

## D. Revisiting San Bernardino National Forest and Sequoia and Kings Canyon National Parks

The environmental damage being done to our National Parks and Forests from marijuana growing and harvesting is acute. This comment described National Parks and a National Forest in California: Sequoia and Kings Canyon (for our purposes combined as SEKI) and San Bernardino. The idyllic environments of these sanctuaries contain natural wonders, unique animal life and distinct species that are present only because of the sanctuary of these designated zones of protection. The process of marijuana growing was presented and its dark byproducts, poisonous to these environments were described in detail.

In 2004, 44,000 marijuana plants were eradicated in Sequoia Kings Canyon National Park. The plants eradicated had a street value of \$170 million. In 2005, Restoration Ecologist Athena Demetry and Special Agent Eric Inman, along with members of the California Conservation Corps (CCC) and members of the Army National Guard, began a month long restoration project at Sequoia.

The goal of Demetry's group was to "restore natural conditions to wilderness areas damaged by marijuana farming." The group focused on an area within 180 acres that had been occupied by growers since 2001. The restoration work had three phases, 1) remove irrigation hoses and pesticides, 2) remove garbage from the abandoned camp sites and 3) "recontour the disturbed sites to restore natural contours." Phase 1 removed "eight miles of irrigation hose and 107 bags of garbage weighing 5,515 pounds"; phase 2 removed 2,870 pounds of solid fertilizer, "2 gallons of Sevin and 1.1 gallons of Malathion concentrate," as well as "smaller quantities of 6 additional insecticides and 3 rodenticides." The final phase fixed the terracing, soil damage and brush clearing from "fifty gardens and 13 camps, totaling 5 acres." It is hard to imagine that in a protected National Park, 2.7 tons of trash was found while cleaning up a mere 180 acres, let alone 8 *miles* of irrigation

drug plantations, said Val Jimenez, special agent in charge of the Fresno office of the state's Bureau of Narcotics Enforcement.").

<sup>156.</sup> See Marcia Rasmussen, supra note 10.

<sup>157.</sup> Id.

<sup>158.</sup> Id.

<sup>159.</sup> *Id*.

<sup>160.</sup> Id.

hose.

San Bernardino is fairing no better. In 1999, a "record 53,394 cannabis plants were discovered at 19 grow sites in the San Bernardino National Forest." The National Drug Intelligence Center, in its National Drug Threat Assessment 2007, noted that "[h]igher potency marijuana is now being produced from cannabis cultivated in large outdoor grow sites in California by Mexican and Asian criminal groups." One of the sites is San Bernardino National Forest.

#### E. The Systematic and Cumulative Environmental Damage

The amount of marijuana being grown inside our National Parks and Forests is staggering. Due to the nature of this problem, concrete figures are difficult to acquire. In 2003, out of the top ten marijuana cultivation National Forests, 162 617,202 marijuana plants were removed. 163 To put matters into perspective, using a low sum estimate that each plant's street value is \$4,000, the total value of the amount seized and destroyed by law enforcement in 2003 was in excess of \$2.4 billion. However, our public lands are facing a marijuana cultivation boom. The National Drug Intelligence Center warns that

Mexican DTOs have also begun producing higher potency marijuana (derived from cannabis cultivated in outdoor plots in California), most likely in an effort to compete with Asian DTOs for . . . market share. The result may be further increases in average marijuana potency in the United States in the near term. <sup>164</sup>

Currently, the environmental threat is staggering. The anticipated boom could be a death blow to the fragile ecologies "protected" in our public lands, predominately our National Parks and Forests. To add to this acute threat, National Park and Forest Service staffs are critically shorthanded. The National Guard and the Pentagon had been giving assistance to the Park and Forest Rangers, by loaning manpower, helicopters and logistical support. However, this is no longer the case,

<sup>161.</sup> National Drug Intelligence Center, California Central District Drug Threat Assessment (May 2001), available at http://www.usdoj.gov/ndic/pubs0/668/marijuan.htm.

<sup>162.</sup> See National Drug Intelligence Center, supra note 20 (in ranking order: Daniel Boone National Forest, Kentucky, Cleveland National Forest, California, Sequoia National Forest, California, Stanislaus National Forest, California, Shasta-Trinity National Forest, California, Los Padres National Forest, California, San Bernardino National Forest, California, Klamath National Forest, California, Mendocino National Forest, California, and Tonto National Forest, Arizona).

<sup>163.</sup> *Id*.

<sup>164.</sup> National Drug Intelligence Center, National Drug Threat Assessment 2007 (Oct. 2006), http://www.usdoj.gov/ndic/pubs21/21137/21137p.pdf.

because this anticipated boom is occurring "at a time when significant National Guard eradication resources were curtailed because of overseas deployments and Hurricane Katrina relief." <sup>165</sup>

It is difficult to assess, cumulatively, the extent of environmental damage done to our public lands. However, marijuana "grow" sites, and their accompanying environmental destruction, take place across the United States. 166

# V. The Inadequacies of Current Criminal and Environmental Laws

Not only are there insufficient law enforcement and ranger personnel to discover grow sites, police the parks and prevent the farming of marijuana on public lands, but also current criminal and environmental laws are incapable of addressing the crises. Currently, there are no federal laws that address destroying public lands for cultivation of marijuana and heightened penalties for doing so. <sup>167</sup> The current criminal penalties for such an act, or participating as a confederate or accomplice in such an act, nets little criminal liability.

As discussed above, the participants in marijuana cultivation are usually poor, illegal alien farm hands, usually directed by an overseer who may or may not report to a drug trafficking organization. In the spring of 2004, in the Northern District of Georgia, Mr. Cox, Mr. Vargas-Hernandez and Mr. Quezadas-Fierros met, conspired and planted over 1,000 marijuana plants on Forest Service property. Forest Rangers found the grow site, recovered over 724 marijuana plants, and arrested Mr. Vargas-Hernandez and Mr. Quezadas-Fierros. Mr. Cox, the American citizen and ringleader, was not located. Vargas-Hernandez and Quezadas-Fierros were both charged and subsequently pled guilty to one count of conspiracy to manufacture marijuana. Mr. Vargas-Hernandez was sentenced to 24 months imprisonment; to be followed by four years of supervised release and a fine of \$1,000. Mr. Quezadas-

<sup>165.</sup> Id.

<sup>166.</sup> See National Drug Intelligence Center, supra note 20 (Oct 8, 2004 in Dixie National Forest, 814 marijuana plants, 764 plants in the drying stage, 50 pounds of processed marijuana; Jul. 18, 2003 8,700 marijuana plants seized in the Wasatch-Cache National Forest in a 6,000 square foot plot; Oct. 21, 2003, 5,100 marijuana plants seized in Umpqua National Forest).

<sup>167.</sup> A search was done by the author through Titles 16, 18 and 21 of the U.S. Code.

<sup>168.</sup> United States v. Andrew Cox, Criminal Indictment No. 2:05-CR-002, United States District Court for the Northern District of Georgia, Gainesville Division, (filed in Chambers, Jan. 11, 2005) (on file with author).

<sup>169.</sup> Press Release, US Attorney's Office Northern District of Georgia, Quezadas Sentenced for Growing Marijuana in National Forest, (June 14, 2005), http://www.usdoj.gov/usao/gan/press/2005/06-14-2005.html.

<sup>170. 21</sup> U.S.C. §§ 846 and 841(b)(1)(B)(viii) (2006).

Fierros was sentenced to 60 months; to be followed by five years of supervised release and a fine of \$1,500. Mr. Vargas-Hernandez has been released. Mr. Quezadas-Fierros was supposed to be incarcerated in Federal Correction Institution (FCI) Yazoo City, a low security facility, until November 17, 2008. <sup>171</sup> He was released on April 24, 2007. <sup>172</sup>

Mr. Vargas-Hernandez and Mr. Quezadas-Fierros entered our public lands, destroyed the natural flora and fauna, which damaged the environment, and planted over a 1,000 marijuana plants. Mr. Vargas served 1 year, 2 months, 10 days. His confederate, Mr. Quezadas-Fierros served only a bit more time. Had he not been caught, and had he, with his confederate(s), successfully harvested his crop of 1,000 plants, the three partners would have been looking at a harvest worth \$4 million dollars on the street. With a profit margin like that, a slight risk of capture, and a light sentence even if captured, is it any wonder that our Public Lands are being turned into marijuana fields?

It is well known that there are a myriad of environmental laws on the books. The books. Some of these laws are very potent. CERCLA, for example, makes a broad class of parties liable for the cost of responding to the release, or the substantial threat of release, of any hazardous substance. Hence, Mr. Cox and his co-conspirators, had they used hazardous chemical fertilizers and sullied the public land on which they planted the marijuana, as well as those who do in fact sully the land in San Bernardino and SEKI, would be liable to pay for the environmental remediation.

However, the absurdity of this environmental law and its protections, when applied to individuals planting marijuana, as opposed to major corporations like Dupont, is obvious. Mr. Vargas-Hernandez can not pay for the remediation of the land he damaged, and in the National Parks and Forests across the land, the drug trafficking organizations, illegal aliens and the other criminals who foul the public lands with poisons, pesticides, fertilizers and nonnative weed certainly, cannot and will not pay remediation costs after a civil CERCLA suit. It is impossible, realistically and practically, to get the Arellano Félix Cartel, responsible for many grow sites across California, to pay remediation fees to the U.S. Forest Service. For these unenforceability reasons and other obvious impracticalities, environmental laws are

<sup>171.</sup> Federal Bureau of Prisons, Inmate Locator, www.bop.gov/inmate\_locator/index.jsp (last visited Jan. 20, 2007).

<sup>172.</sup> Id.

<sup>173.</sup> Environmental Protection Agency, Major Environmental Laws, http://www.epa.gov/epahome/laws.htm (last visited Jan. 20, 2007).

<sup>174.</sup> ROBERT PERCIVAL ET AL, ENVIRONMENTAL REGULATION: LAW, SCIENCE AND POLICY 369 (Aspen Publishers, 5th Edition 2006).

useless against marijuana growers who exploit our natural treasures.

New criminal laws, severely increasing the prison sentence for those caught, is *not* the solution to the problem. American prisons are bursting at the seams, setting new incarceration records. In December 2006, ABC reported that "7 million people or 1 in every 32 American adults were behind bars, on probation or on parole by the end of last year." Furthermore, a lot of the marijuana grow sites are located in California, a state that has an acute prison overpopulation. In fact, some California prisons are at 200% capacity. This environmental crisis will not be solved by jailing the polluters. The United States does not have the jail space or the money. As it is now, "the United States annually spends about \$60 billion on prisons." With a war raging in Afghanistan and Iraq, costing billions upon billions of dollars, a destroyed Gulf Coast still not revitalized, budget cuts across the board and under funded budgets for vital agencies, including the National Park Service, there simply is not enough money.

# VI. An Environmentally Friendly Sin Tax to End this Growing Problem

In 1998 one of the most prestigious health journals in the world, *The Lancet*, in an editorial column, remarked,

The desire to take mood-altering substances is an enduring feature of human societies worldwide and even the most draconian legislation has failed to extinguish this desire... on the medical evidence available, moderate indulgence in cannabis has little ill-effect on health, and that decisions to ban or to legalize cannabis should be based on other considerations. <sup>179</sup>

For the United States, that other consideration has surfaced: the environment and the fate of our Public Lands. Marijuana is in great demand, and this demand creates a massive market with no legal outlet. Because of this, the black market for marijuana is immensely lucrative. The drug is derived from a weed that requires, when grown naturally,

<sup>175.</sup> Kasie Hunt, 1 in 32 Americans in Jails, On Parole, THE ASSOCIATED PRESS (Nov. 30, 2006), available at http://abcnews.go.com/US/LegalCenter/wireStory?id=2689183.

<sup>176.</sup> Edward B. Colby, *Prison Population Sets Record, Few Notice*, CJR DAILY (Dec. 5, 2006), *available at* http://www.cjrdaily.org/behind\_the\_news/prison\_population\_sets\_record.php.

<sup>177.</sup> Michael Powell, Despite Fewer Lockups, NYC Has Seen Big Drop in Crime, WASH. POST, Nov. 24, 2006, at A03.

<sup>178.</sup> Even more dismal are the projections that the war could end up costing the United States \$1.2 trillion. See David Leonhardt, What \$1.2 Trillion Can Buy, N.Y. TIMES, Jan. 17, 2007, at C1.

<sup>179.</sup> Editorial, Dangerous Habits, 352 THE LANCET, 1566 (Nov. 14, 1998).

only soil, water and sunlight. After satisfying these three requirements, anybody can grow marijuana.

Simultaneously, the citizens and the government of the United States have recognized that our natural environment must be preserved for our posterity—open spaces, filled with the natural biota, animal life, trees and streams, must be set aside for generations to come. We attempted to further this goal by creating National Parks and Forests. These massive lands were given protectors: park rangers and forest rangers under the command of the Departments of Interior and Agriculture, respectively. For a time, when the greatest threats to these bastions of preservation were poachers or loggers, these protectors were able to conserve and protect these environmental treasures, rich in soil, water and sunlight, using laws and environmental compromises. The tools and staff of yesteryear will not work when employed against the new danger: marijuana growers.

The cross border importation of illicit drugs has become more difficult for drug trafficking organizations post 9/11. Thus, cartels and other narco profiteers decided to grow marijuana, a bulky substance difficult to transport clandestinely across borders, in the U.S., close to the market. These marijuana growers needed a place secluded, rich in soil, water and sunlight. They found our National Parks and Forests, and the result has been commented upon above. It must be stopped and a solution is not that complicated.

Essentially, if there are other lawful places to grow marijuana, there would be no reason to grow it clandestinely on public lands. The State of California must petition the United States Congress to exempt the State of California and all the public lands within the state, for environmental reasons, from the federal ban on marijuana under the Controlled Substances Act. This will not be the first time California is vested a right that no other state has, for environmental reasons.

Every state in the Union, except California, is bound by federal emission standards for engines and vehicles. 42 U.S.C. § 7543(a) (2006), states that, "[n]o State or any political subdivisions thereof shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part." However, the State of California has the right to adopt its own emission regulations, which are often more stringent than the federal rules. Engine and vehicle emission regulations are adopted by the California Air Resources Board (ARB), a regulatory body within the California Environmental Protection Agency. Hence, California, alone, under 42 U.S.C. § 7543(b) (2006), is exempt from the provisions

of § 7543(a) (2006). <sup>181</sup> This waiver recognizes the great environmental challenge emissions regulation is for a giant state like California. The growing of marijuana on Public Lands in the state is another massive environmental challenge, a waiver recognizing this challenge is in order.

The recently retired Justice Sandra Day O'Conner recognized, in her dissent in *Gonzales v. Raich*, <sup>182</sup> the vital role of the principle of federalism, "[o]ne of federalism's chief virtues... is that it promotes innovation by allowing for the possibility that 'a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country."<sup>183</sup> It is time to let California address the environmental disaster that is plaguing the Public Lands within its state. The process is simple in concept, but arduous in application.

The solution requires California to be exempt from federal enforcement of a single aspect of the Controlled Substances Act, that is 21 U.S.C. § 812(c)(17) (2006), tetrahydrocannabinols. A rider to this waiver should further provide that California implement a Cannabis Advisory Board, similar in statutory power and construct to the California Air Resources Board. Once this is accomplished, the State of California must follow, in lockstep, with the path the Netherlands took in regards to marijuana control. This will take an Act of Congress and the cooperation and assistance of the California Legislature and Executive branches.

Contrary to popular lore, drugs are not legal in the Netherlands, and one can still face stiff fines for possession or sale of controlled substances. However, long ago the Government of the Netherlands recognized the difference between "hard" and "soft" drugs. The United States has lagged behind, and now the victims of our antiquated narcotics policy are the environment and our National Parks and Forests.

<sup>181.</sup> There are specifics as to the scope and the limitations of this waiver. However, it is a powerful waiver that allows California to do things no other state is entitled to do because of California's unique environmental circumstances. *See generally* Rachel L. Chanin, California's Authority to Regulate Mobile Source Greenhouse Gas Emissions, 58 N.Y.U. ANN. SURV. AM. L. 699 (2003).

<sup>182. 545</sup> U.S. 1 (2005).

<sup>183.</sup> Raich, 545 U.S. 1 at 42 (O'Conner, J., dissenting) (quoting New State Ice Co. v. Liebman, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting)); see also Kathleen M. Sullivan, A Tribute to Justice Sandra Day O'Conner, 119 HARV. L. REV. 1251 (2006).

<sup>184.</sup> The Opium Act (Staatsblad [Bulletin of Acts and Decrees] 2002, 520) (Arts. 2 and 3 establish limits to possession of drugs in lists I and II).

<sup>185.</sup> Peter Cohen, The Case of the Two Dutch Drug Policy Commissions: An Exercise in Harm Reduction 1968-1976. Paper presented at the 5th International Conference on the Reduction of Drug related Harm, March 7-11, 1994, Addiction Research Foundation, Toronto, available at http://www.cedro-uva.org/lib/cohen.case.html (last visited Jan. 14, 2007) (revised in 1996).

The consumption of marijuana is not even close to the evil and danger that is presented by heroin and cocaine. Yet they are all listed together as Schedule I Controlled Substances. Further, as the Dutch Baan Commission reported, "[c]onsumption [of cannabis] without risks for the individual or society can only take place during recreation." The government must eliminate the black market for marijuana and thereby deprive the Mexican DTO's from the lucrative incentive to plant large wholesale bumper crops of marijuana in the National Parks and Forests.

Once the federal government enacts legislation waiving the State of California, and all the federal lands located therein, from the provisions of 21 U.S.C. § 812(c)(17)(2006); California can take two major environmental steps: the first, grant provisional licenses to farmers allowing them to grow hemp. This major move will create a thriving market and have sales and export benefits. 188 The second step is to set up state approved growing facilities and for marijuana to be sold at state licensed "shops." The shop rules would be analogous to the Dutch rules, 189 if not stricter, as set by the Cannabis Advisory Board. The program would pay for itself, as the taxes levied at the shops and the taxes from the hemp industry would be substantial. A majority of these excess funds must be mandated to go to restoration, protection and conservation projects. Essentially, the black market for marijuana would be eliminated, the growers would be driven out by a legitimate market, and the damage done to the National Parks and Forests could be repaired by the legal, regulated sale of a weed that is currently destroying them.

#### VII. Conclusion

Thirty years ago Mr. Justice Douglas dissented in the now infamous case of *Sierra Club v. Morton*. <sup>190</sup> Justice Douglas articulated that he found it odd that ships and corporations, non-living legal fictions, could

<sup>186. 21</sup> U.S.C. § 812 (2006).

<sup>187.</sup> See Dangerous Habits, supra note 179 (quoting from Achtergronden en Risico's van Druggebruik, Dutch Government Baan Report 1972).

<sup>188.</sup> Cal. Assembly H.R. 32, 1999-2000 Reg. Sess. (1999).

<sup>189.</sup> See generally AC Company, The Judicial System in the Netherlands, http://www.ac-company.org/en/country\_en/nl\_en/nl\_law\_en.html (last visited Jan. 20, 2007) (The Netherlands has a rule known as the AHOJ-G Criteria vis-à-vis "shops"—AHOJ-G = A no advertising for the sales of soft drugs, H no hard drugs on the premises, not for sale and not for personal use, O no "overlast," meaning no public nuisance (loud music, customers hanging round et cetera), J no youths, customers are not allowed in if under 18 years of age, G no big quantities, coffee shops are not allowed to sell more than 5 grams, per person, per day. At the same time coffee shops are not allowed to stock more than a maximum of 500 grams in cannabis.).

<sup>190. 405</sup> U.S. 727 (1972).

sue in their own "name," but living organisms like animals, trees and lakes could not. He noted, "[c]ontemporary public concern for protecting nature's ecological equilibrium should lead to the conferral of standing upon environmental objects to sue for their own preservation." Justice Douglass was right thirty-five years ago, and despite his pleas, federal law still provides standing to only one *living* organism: a human being. Complicating matters further is the myriad of rules relating to Art. III standing requirements that must be met before a particular individual is even allowed to sue to stop environmental dangers. 192

The environmental problem addressed in this comment is controversial: it pits two explosive issues head to head, environmental preservation and drug control. The war on drugs has taken many victims over the years; it now adds another victim, our National Forests and Parks. Clandestine marijuana fields are being planted in record numbers within the National Parks and Forests, and budget strapped agencies are outmanned, outgunned and powerless to protect vast stretches of land from these eco-narco terrorists.

It is a sad day indeed when the Forest Supervisor of the Sequoia National Forest (adjacent to SEKI and the Inyo National Forest), testifying before Congress, remarks not on the revival of Bald Eagles or fresh water fish, but, instead says, "[w]e are fortunate that most marijuana gardens are in remote locations that are more lightly used by the public. Still, we are concerned that as marijuana cultivation intensifies on national forests, there is greater potential for Forest visitors or employees to be seriously injured or killed." <sup>193</sup>

The solution offered in this comment is not foolproof, and sadly is not likely to be adopted or followed for years, if ever. However, this comment focuses a spotlight on an issue that has escaped popular attention despite being one of the biggest threats to the National Parks and Forests, especially in the State of California. Whoever responds that this crisis can be met by policing the parks and increasing the criminal

<sup>191.</sup> Id. at 742.

<sup>192.</sup> Federal law is rather strict, as set forth in Friends of the Earth, Inc. v. Laidlaw Environmental Services (TOC), Inc., "to satisfy Article III's standing requirements, a plaintiff must show (1) it has suffered an "injury in fact" that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision." 528 U.S. 167, 180-181 (2000) (quoting Lujan v. Defenders of Wildlife, 504 U.S. 555, 560-561 (1992).

<sup>193.</sup> See Hearings, supra note 7 (statement of Art Gaffrey, Forest Supervisor, Sequoia National Forest, California Forest Service, United States Department of Agriculture).

penalties is indeed wearing rosy colored glasses. Not only is that suggestion impractical, but also logistically and financially impossible. The resources, man power and resolve is lacking.

The ultimate conclusion to this comment is that two major Non Governmental Organizational ideologies, the National Organization for the Reform of Marijuana Laws (NORML) (anti-prohibition on marijuana) and the class Sierra Club of organizations (environmentalists), must unite, now that they have a common goal. For one, NORML, it is to legalize marijuana in a responsible, sensible matter; for the other, the purely environmental organizations, the Sierra Club class, it is to get marijuana out of our National Parks and Forests. This is because their presence there is destroying the parks ecosystem, environment and compromising public safety.

This unique alliance may be the last hope for the fragile ecologies and the soon to be irretrievably compromised environments of our National Parks and Forests. Sadly, as the Forest Service itself warned, "[f]orest Service and local law enforcement resources are not large enough to detect and eradicate all of these gardens." The combined forces of the environmentalists and the marijuana reform organizations may be able to cast a big enough spotlight on this issue and create a public outcry. The hard part is to legitimize this effort for what it is: vital to the preservation of our National Parks and Forests.

<sup>194.</sup> United States Department of Agriculture, Business Plan for the Stanislaus National Forest (Oct. 2005), http://www.fs.fed.us/r5/business-plans/stanislaus/pdfs/businessplan.pdf.