



# FRIENDS OF THE EEL RIVER

*Working for the recovery of our Wild & Scenic River, its fisheries and communities.*

Tuesday, May 9, 2017

Humboldt County Planning & Building Department  
Attn: Steve Lazar, Senior Planner  
3015 H Street  
Eureka, CA 95501-4484

via email to [slazar@co.humboldt.ca.us](mailto:slazar@co.humboldt.ca.us)

**Re: Scoping Comments – Environmental Impact Report for Amendments to Humboldt County Code Regulating Commercial Cannabis Activities**

Dear Mr. Lazar,

The following comments are offered on behalf of the board, staff, and supporters of Friends of the Eel River. FOER advocates for the protection and restoration of our Wild and Scenic Eel River, with a focus on the fisheries that are the keystone of ecosystem health in our watershed. FOER has been working for years to identify effective solutions to the environmental impacts resulting from the ongoing explosion in commercial marijuana cultivation, until now nominally for medicinal purposes, in the Eel River watershed.

The South Fork Eel River has been the focus of decades of restoration work undertaken at significant public expense. Though already listed under §303(d) of the Clean Water Act for both high temperatures and excess sediment, tributaries of the South Fork Eel River vital to the recovery of coho have been subject to significant diversions even in historic drought, and to unplanned development that often results in significant and continuing increases in fish-killing sediment loads throughout the watershed.

As a consequence, key South Fork tributaries have suffered the loss of several year-classes of coho salmon in tributaries critical to the hope of population recovery as diversions to marijuana gardens continued despite severe drought.<sup>1</sup> Because Eel River coho and steelhead, as well as chinook salmon, are listed under the federal Endangered Species Act as a Threatened species, not only does each fish killed by dewatered or dirt-filled streams, and every instance in which salmon and steelhead reproduction is impaired, amount to a 'take' under the Endangered Species Act, these losses threaten to so severely undermine

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<sup>1</sup> See, e.g., *State Water Board Comments on Sproul Creek Inspection at* <http://www.willitsnews.com/article/NR/20150220/NEWS/150229984>

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the viability of coho in the region as to constitute 'jeopardy' – the highest level of threat under the ESA. It is long past time that the County initiated consultation with the National Marine Fisheries Service (NMFS) to insure that jeopardy will be avoided and take limited to the extent possible by Humboldt County's commercial cannabis industry.

We have repeatedly written to the County on these matters, expressing variations on a theme we have repeated many times in our public statements: the existing marijuana industry in Humboldt County is causing significant, often effectively irreversible, impacts to key public trust resources in the Eel River watershed, especially to the fisheries of coho salmon and steelhead. The rapid rate of increase in the number of new growing operations, and their average size and concomitant impacts, generally shorthanded as the Green Rush, is making these problems worse, and more intractable, every year.

While we strongly support legalization and regulation as the best hope of addressing these impacts, we must continue to insist that regulation which fails to effectively address the overwhelmingly larger black market industry must fail to protect the public trust resources, including clean water and functional fish habitat, for which the county and the state are jointly responsible.

We outlined the nature of the impacts that most concern us in our comments to the Planning Commission in November of 2015:

*There can be no question that substantial evidence exists of the significant environmental harms which have accompanied the dramatic expansion of commercial marijuana cultivation, for allegedly medical purposes, in Humboldt County since Proposition 215 provided a defense to growers charged under state law.*

*These harms include a dramatic increase in sediment loads in creeks which had previously been laboriously restored after decades of abusive industrial logging; streams diminished, and even entirely dewatered, by unpermitted water diversions; and by loss of their habitat, runs of native fish lost to extinction, with potentially catastrophic implications for the recovery of coho salmon and steelhead in the Eel River watershed, among others. Poorly designed and maintained roads, stream crossings, grading sites, and ponds have, are now, and will continue to discharge sediment into tributaries of the Eel River, all of which are already listed by the State Water Board under §303(d) of the Clean Water Act as "impaired" by both sediment and high water temperature.*

*As well, there is substantial evidence that the use of pesticides and fungicides by commercial marijuana growers has led to the release into the ecosystem of highly toxic substances, including poisons deadly to fish at very low levels, as well as bioaccumulating rodenticides that are causing predator mortality to increase rapidly, and that workers and consumers are being exposed to potentially harmful levels of quite dangerous materials. (Note, for example, that the EPA is now moving to ban the*

*use of chlorpyrifos, a neurotoxin used to kill mites.<sup>2</sup> Chlorpyrifos is one many pesticides and fungicides recently detected in tests of concentrated cannabis product sold in Oregon.<sup>3</sup>) Even the unregulated use of less toxic materials, such as fertilizers, has led to aquatic impacts that could readily prove cumulatively significant under close scrutiny.*

*These harms rise in some instances to violations not only of the county's existing ordinances, but of state and federal law, including the Clean Water Act, the Porter-Cologne Water Quality Control Act and the associated Basin Plan; the California Fish and Game Code; and the California and federal Endangered Species Act. Such impacts are without question potentially significant under the California Environmental Quality Act (CEQA).*

Unfortunately, the County has responded to our concerns with a combination of empty assurances that state agencies will surely get right on dealing with those issues and its own "regulatory framework," which appears devised more to insure that the County collects revenue and growers who want to be legal get a permit than to actually limit the watershed impacts of Humboldt's incredibly lucrative pot industry.

Our fundamental problem appears to be that the County has no guiding vision, no articulable principles which control the construction of our new legal weed industry – other than the industry's familiar maxim: whatever you can get away with. The question is, does this mean we are looking to state agencies to set the limits? To what the land, and the rivers, and the fish, can bear? Or to the limits of the law? One fact seems indisputable: the black market industry is driving a real estate boom, which is making many of the county's elected leaders and their supporters quite happy.

The County seems more than reluctant to take any steps that will deter the golden goose from laying all she wants. But the golden goose is crapping in the creek. The real estate boom is just another face of the cumulative effects which are now, today, killing Humboldt's real treasure – its watersheds, fisheries, wildlife and wild lands.

Thus far, the County's strategy for dealing with the black market industry has been almost entirely carrots – attempts to guide behavior by incentives and rewards – combined with only a few flimsy enforcement sticks, whose lack of use only reinforces their impotence. We deserve better leadership than this. The basic questions about Humboldt's commercial cannabis industry are land use issues. It is the County's responsibility to regulate land use, even if some of its officials would prefer not to.

In our November 2015 comments to the Humboldt County Planning Commission, we noted that:

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<sup>2</sup> See *EPA Proposes to Revoke Chlorpyrifos Food Residue Tolerances* at <http://www2.epa.gov/pesticides/epa-proposes-revoke-chlorpyrifos-food-residue-tolerances>

<sup>3</sup> See *A tainted high - Lax state rules, inconsistent lab practices and inaccurate test results put pesticide-laced pot on dispensary shelves* at <http://www.oregonlive.com/marijuana-legalization/pesticides/>

*The county must provide clear means to distinguish the minority of such operations which may be permitted under an effective system of regulation from the majority which should never have been established. **Given the county's long history of feckless land-use regulation, it is particularly important that the county establish straightforward enforcement mechanisms, including the use of common-law nuisance, that can and will be used to shut down thousands of large, damaging operations which cannot be, should not be, or simply are not properly permitted.***

(emphasis added)

The County has not only failed to establish such mechanisms; it has continued to tolerate (and even to create incentives which invite) the establishment of additional new, large, commercial marijuana growing operations across the county, leading inevitably to new and increased environmental impacts.

*Optimally, the county would systematically use the contemplated ordinance to shut down and force remediation of the vast majority of the class of large operations that generate disproportionate harms. Such enforcement would itself constitute perhaps the most effective potential mitigation of the environmental impacts generated by the commercial marijuana industry.*

*But there can be no question that significant environmental harms could – and should – have been prevented if only the county had seen fit to enforce its existing regulations as the Green Rush swept over the Humboldt hills.*

In our comments to the Board in December of 2015, we wrote that:

*That those operations decline to obtain permits does not allow the County to ignore their impacts in order to determine that operations it does permit will incur no significant watershed impacts. We note here that the County's practice of ignoring violations of its grading ordinance may have some relationship to the significant sediment inputs that are causing continuing harms to the Eel River and its fisheries.*

The environmental and social consequences of a legal pot industry operating at a given scale in Humboldt cannot be meaningfully evaluated in isolation from the key questions about the (still booming, bigger this year than ever) illegal industry, which operates on the same landscape, takes water from the same sources, and puts the same dirt in the same fish habitat as the legal industry – except all at a much larger scale.

Thresholds matter. If the impacts of the illegal industry can be, and are, sharply reduced – as a whole, or at least at a watershed scale, not merely on the level of this or that specific operation – then there may be ‘room’ for the impacts of an enlarged legal industry. But if the illegal industry remains unrestrained, its impacts remain unbearably large, and the addition of even limited impacts, however legal they may be on a per-operation basis, must be considered at least potentially intolerable for watersheds already over thresholds.

For the purposes of CEQA analysis, the county has claimed the benefit of moving operations into legal status, claiming that results in net lower impacts. But if the whole industry is

actually evaluated as it actually exists, it is far from clear that the effect of the County's strategy is actually net lower impacts on the watersheds and fisheries which are the ultimate object of FOER's concerns. **By bringing many of the lower impact operations into legal status, but failing to effectively restrain the still-growing black market sector, which almost certainly generate higher impacts both on average and by their much greater number, we may not have actually reduced the amount of dirt reaching spawning grounds, or increased the number and improved the condition of the young fish that make it out of our watersheds every year.** Those are the numbers that matter to us – not how many permits the County has issued, or the fees it has collected.

Evidence of ongoing harms is abundant and readily available to the County.

The most important index of cumulative effects – the increase in the number and size of commercial cannabis operations -- is plainly visible over time on Google Earth and other remote sensing data, now widely available. The Department of Fish and Wildlife, FOER and our partners, the Regional Board, and even the Lost Coast Outpost have all conducted similar evaluations of Google Earth and other remote sensing data and reached broadly congruent conclusions about the scale and rate of growth of the marijuana industry in the county.

We must note that all these studies show the Butsic study dramatically underestimates the number of operations in the county. This is because that study chose to randomly sample watersheds to examine. Such a technique is useful and appropriate where impacts can be assumed to be evenly distributed. However, it is very clear that the marijuana industry is not randomly distributed in Humboldt County. Two of the watersheds Butsic et al did not examine – Redwood Creek and Salmon Creek – have long had some of the highest concentrations of operations found in the county. (See Fig 1 below.)

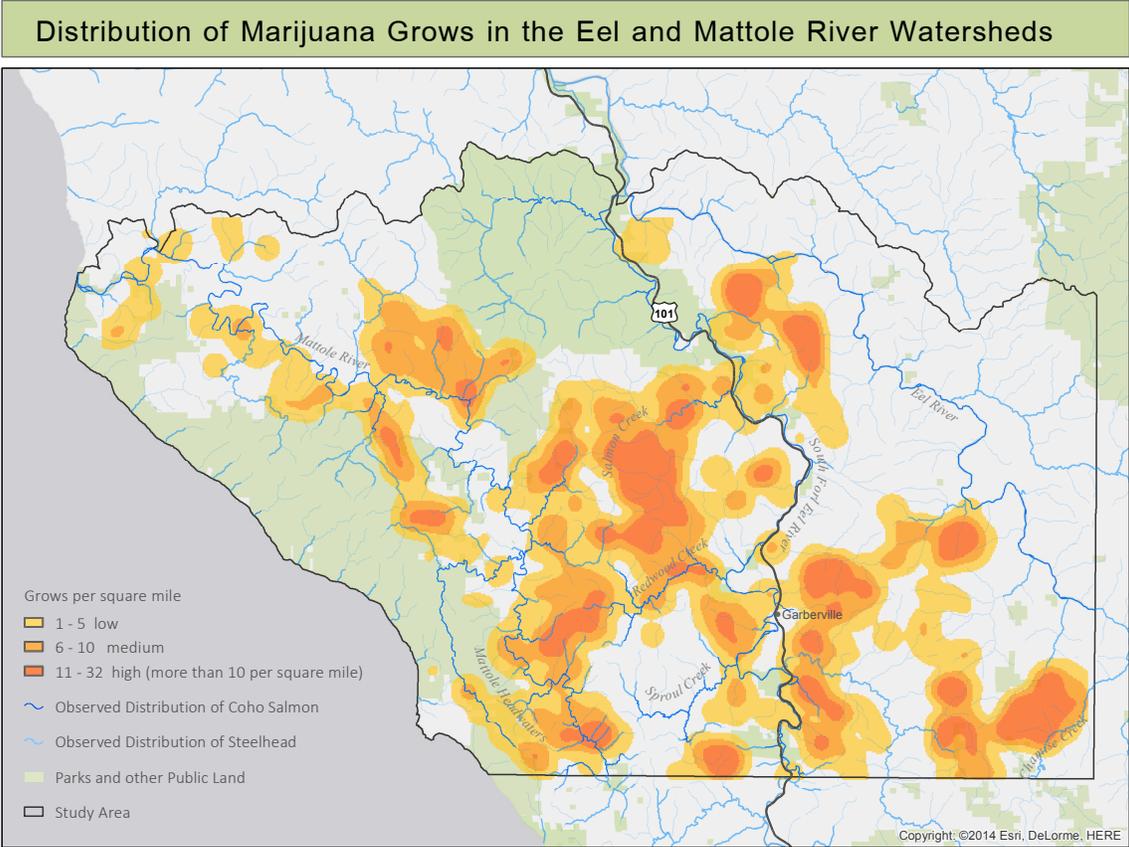
Thus, Butsic's estimates are not likely to prove useful guides for policy makers. The county should assemble all of the information and analysis available and reach its own conclusions. We note that the Assessor's office has had remarkable success in identifying structures on Humboldt County parcels when other parts of the county have been unable to do so. Maybe they can help.

In addition, the County should be considering what part Humboldt will play in California's legal marketplace. The California Growers Association has estimated that the state will need 1100 acres of legal pot production to meet the new recreational demand.<sup>4</sup> Assume they're off by a lot, and that 2000 acres will actually be needed. How many acres has Humboldt County already got in the permitting pipeline? 500? Can Humboldt reasonably expect to have fully a quarter of the whole state's production in the future? Or are we planning to permit most of the estimated 15,000 outdoor operations in the County? To what market will they be selling? How are they going to compete with places that don't need to truck in their soil?

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<sup>4</sup> "Allen said the industry estimates 1,100 acres of marijuana farms will be needed to meet the state demand." See *The push to legalize pot for all has deeply divided the medical marijuana community*, <http://www.latimes.com/politics/la-pol-ca-proposition-64-recreational-pot-opponents-20161004-snap-story.html>

**Figure 1. Concentrations of cultivation sites in Eel and Mattole Watersheds in Coho Critical Habitat. 2014 data.**



We have repeatedly noted the critical importance of understanding, and addressing, the impacts of the commercial cannabis industry as cumulative impacts. From our November 2015 comments to the Planning Commission:

*However, while controls must be implemented at the level of the individual operation, **it is not sufficient merely to insure that no single operation has significant impacts.** To insure the cumulative impacts of all permitted operations do not rise to the level of significant impacts, the county must consider how the impacts of similarly situated permitted operations will affect the environmental values at risk, at the scales appropriate to the resources at risk (e.g. at the subwatershed level for imperiled fish runs), given the number and scale of operations contemplated for permitting, and given proposed restrictions to the extent they are certain of enforcement.*

*All of these different kinds of growers are selling primarily to the black market, and the black market remains the critical driver of land and water abuse by the commercial marijuana industry. While Humboldt County cannot by itself do away with the black*

*market, it can and should build regulations that recognize the threat that continued black market operations pose to its environment, public health, and safety. A regulatory scheme that would allow most current large-scale grows to continue under a pretense of permitting will only fail to protect public health, safety, and the environment less catastrophically than today's entire absence of regulation.*

*Under these circumstances, where the County is aware of the significant impacts of the illegal industry, and declines to take even modest steps to prevent those impacts, but instead sets up a parallel, regulated legal industry – but neither accounts for nor attempts to regulate those who don't choose to seek permits – a strong argument could be made that the County must not only analyze and disclose the cumulative impacts of the industry as a whole under CEQA, but must also consult with the National Marine Fisheries Service pursuant to the requirements of the federal Endangered Species Act, and seek incidental take coverage for the entire commercial cannabis industry that is normally required where listed species will be subject to harms that cannot be prevented.*

In its EIR, the County must disclose and analyze not only the current condition of Humboldt's watersheds, fisheries, and related public trust resources, but the trends in each of the relevant metrics, and what must be done to achieve thresholds necessary for watershed and fishery recovery, at a subwatershed level.

We have emphasized the need for an enforcement program with the scope, authority, and resources necessary to rein in the Green Rush activities which are driving increased and more severe watershed impacts.

***The ... MND fails to adequately assess not only the current level of impacts, but even more critically the devastating trend line of increasing impacts. If the status quo of rapid growth continues, significant impacts to watershed and fisheries are certain to continue as well. The continuing, rapid expansion in the number and size of pot farms, and the geographic expansion of high-intensity cultivation areas, are at this point clear trends.***

***If adequate regulations controlling the activities generating these impacts are not established and effectively implemented, these serious, significant, and cumulative harms are certain to continue, and likely to worsen. Put another way, if the county adopts a regulatory scheme that allows the continued expansion of both individual operations and the industry overall, and/or fails to effectively enforce the rules once adopted, these significant environmental harms will continue, and will likely continue to get worse. Both clear, adequate rules and effective enforcement are necessary to prevent significant impacts in the near future.***

Unfortunately, we have seen neither clear, adequate rules, nor effective enforcement. It is thus unsurprising that we are continuing to see significant impacts from the ongoing increase in the number and size of commercial-scale marijuana growing operations across the County. In the pending EIR, the County should outline the scope and scale of enforcement measures reasonably necessary to reduce the watershed impacts of the

marijuana industry to a less than significant level. It should outline at least some ways in which such measures could be made relatively certain of accomplishment. It must provide at least some estimates of the cost, and probable benefits, of such enforcement measures. The County should be able to describe in at least outline form the resources necessary to, for example:

- a) provide enough code enforcement officers to inspect every permitted operation at least once a year;
- b) serve nuisance notices on a substantial fraction (say a quarter) of the existing non-permitted operations every year;
- c) enforce Humboldt County's grading ordinance.

Unless and until it does so, we will continue to assume that the County's representations regarding effective enforcement are just hollow talk.

We have outlined in some detail tools available to the County which might prove more effective in addressing unpermitted/ illegal/ black market weed operations. The County conspicuously failed even to address these suggestions, which we reiterate:

### ***Consequences of Violations***

#### ***Ineligibility***

*Persons found to have violated the county's ordinance should not be eligible for a permit for a period of at least five years. Similarly, parcels where violations of the county's ordinance have occurred should not be eligible for future permits for a period of at least five years.*

#### ***Fines***

*The county has the ordinary power to punish violations of its ordinance by fines. Given that the county needs to secure funding to support a dramatically increased oversight and enforcement program, and that deterring abusive operations will both support the establishment of a high standard for Humboldt County's products and significantly reduce environmental impacts, FOER encourages the county to consider a schedule of fines that would support the proposed regulatory framework. We would respectfully suggest that the county consider establishing fines for unpermitted cultivation that reflect the scale of the operation in question. Fines should, of course, run against the parcel where the violation took place.*

*Operations of less than 2000 ft<sup>2</sup> which do not involve other violations of law or environmental harm should be subject to a fine of up to \$10,000 for failing to obtain a county permit. Operations from 2000-5000 ft<sup>2</sup> should be subject, however, to fines of up to \$250,000; those smaller than 10,000 ft<sup>2</sup> should be subject to fines of \$500,000; and larger operations should be subject to fines of at least \$1 million. Such fines would provide the county a powerful incentive to stay on top of the large, unpermitted operations that need the most attention, and would give growers who are not*

*interested in following the county's requirements an immediate incentive to relocate their operations outside the county's borders.*

***One permit per natural person per parcel.***

*The county should issue permits to cultivate marijuana only to natural persons who are residents of Humboldt County – not to corporations or other entities. Permits should be limited to one per person, and to one per parcel. The permittee should generally be expected to be present at the permitted operation.*

***Disincentive for land splits.***

*If a parcel with a permitted operation is divided, by any legal means, the resulting parcels should only be eligible for permits that are less than or equal to the amount of production that would have been allowed on the original parcel under its permit, for a period of at least five years.*

***Continued compliance with all other permit terms to maintain county permits.***

*We assume the intent of the ordinance is to require not just compliance at permitting, but continued compliance over time, with all requirements that may be imposed by any state agency with appropriate jurisdiction. The ordinance should explicitly condition permits on such continued compliance with all legal requirements.*

***County may reduce sizes for any reason, may also increase if watershed conditions improve, continue on trend toward recovery***

*It is difficult to overemphasize the importance of the Department of Fish and Wildlife's suggestion that many watersheds, particularly in the South Fork Eel River basin, are already subject to greater impacts than their biological systems can sustain without suffering the loss of critical functions, degrading public trust values, and even losing imperiled species like coho salmon. It is particularly in these watersheds that key impacts must be reduced as quickly as possible, and effective mitigations undertaken. FOER is gravely concerned that a regulatory framework that proposes to issue permits to the vast majority of currently existing operations will necessarily be incapable of accomplishing such a reduction in impacts.*

*FOER strongly supports, and greatly appreciates, the county explicitly stating what must be true under California law: that it retains the power to reduce the size of cultivation permits where the impacts on watersheds require a reduction in impacts. It would be even better for the county to make it clear that cultivation permits issued under the contemplated ordinance do not constitute any form of property right or entitlement, and are subject to reduction if the people, through their county government, decide that's warranted.*

***Association with Trespass Grows and other heinous activities should be a permit violation.***

*Permits should be made subject to revocation if, in the judgment of inspecting staff, it is clear that a permitted operation is linked to a trespass grow, to production of methamphetamine, or to trafficking in Schedule 1 narcotics other than marijuana.*

We would further suggest that the EIR consider additional regulatory improvements, including:

- a) Unannounced inspections for all commercial permit holders;
- b) Emphasizing enforcement measures to shut down unpermitted operations which frustrate the purpose of existing regulations and impair watersheds:
  - a. large operations;
  - b. key fish watersheds;
  - c. multiple operations associated with same persons;
  - d. absentee landowners.

In our December 2015 comments to the Board of Supervisors on the drastically altered draft ordinance submitted by the Planning Commission, we noted three areas where, in FOER's view, the Board needed most to revise the draft. Unfortunately, the Board chose to ignore our advice here as well. We urge the County to reconsider, to adopt reasonable limits, and to construct effective enforcement mechanisms in its revision of its regulations.

We sought, and still seek:

- **(a) Meaningful cap on overall number of permits.** *FOER has proposed a limit of 1500 permits for the first few years, pending completion of full environmental review. Effectively administering a program of that scale should present more than sufficient challenge as the county begins to regulate its cannabis industry.*

The Board flatly refused to consider capping the number of permits, and instead has announced its intention to offer an apparently unlimited number of additional permits before we even know how it will regulate the estimated 2700 permit applications now before the county in some form. We at FOER still think 2700 is probably too much, but let's at least stop there until the County figures out what industry we actually want to have in 5-10 years.

- **Reasonable scales.** *We thought the staff draft made a lot of sense. The 3000 square foot grows advocated by HUMMAP seem workable with proper oversight as an appropriate scale for ordinary commercial cultivation. 10,000 square foot megagrows and even larger operations should be very limited in number, subject to exacting review, and restricted to sites most appropriate for large commercial operations.*

Needless to say, the County listened to the big growers, who wanted big grows. And now that's the standard. Bigger grows are providing bigger incentives to establish more black market operations. That's leading to more impacts.

• **Real enforcement tools and resources.** *FOER has proposed that the County adopt a schedule of meaningful fines for operators who choose to continue to grow large amounts of cannabis without a permit. We have also proposed that the county provide that significant violations of permit terms will result not only in the loss of the permit, but in both the permittee and the property becoming ineligible for a future permit.*

As noted above, we still think the County should seriously consider such disincentives and related policies that might be effective in limiting the watershed harms created by the Green Rush.

In our comments to the Board in December of 2015, we noted that “the County’s continuing failure to address its black market cannabis industry may result in additional liability for the environmental harms caused by its cannabis industry.” That none of us has solutions certain to work does not relieve us of the responsibility to face the problems squarely.

Because the County has failed to date to prioritize its responsibilities to effectively regulate the industry and protect public trust resources, FOER respectfully requests the County prepare an Alternative in the pending EIR which focuses on the prevention of unnecessary watershed, fisheries, and other wildlife-related and environmental impacts. We propose the County denote this Alternative the “**Watershed and Wildlife Protection Alternative.**”

This alternative should focus on reducing, and where possible, eliminating, the excessive watershed impacts of the existing marijuana industry and preventing additional or future impacts. Its central consideration should be to provide for the attainment of watershed conditions conducive to the survival and recovery of native, imperiled fisheries, as well as the management systems and enforcement tools necessary to ensure continued attainment of such conditions.

**Under this Alternative, the County should not issue additional permits for commercial cannabis cultivation** in subwatersheds which are designated as critical habitat for one or more species listed under the federal Endangered Species Act (ESA), if fisheries in that subwatershed are not showing a trend toward recovery, and if sediment and temperature levels in that subwatershed continue to be above the thresholds designated by the EPA and Regional Board for, e.g., sediment and temperature. The County should maintain a moratorium on the issuance of additional permits for commercial cannabis cultivation in such watersheds until there are no unpermitted commercial operations in the watershed, and pollutant levels are below thresholds, and fisheries are not declining.

Please note that there are a number of other environmental issues, and many social and cultural issues, on which we are not providing detailed comments. That doesn't mean they're not a problem, or that the EIR need not consider these issues. The use of pesticides remains a critical issue for workers, consumers, and others who may be exposed to these

chemicals, as well as for the harms they do to wildlife and fisheries. We strongly urge the County to take the strongest possible measures to restrict and deter the use of pesticides in cannabis cultivation beyond those outlined by the Regional Board.

The use of artificial lights is disrupting wildlife. They should be banned as a public nuisance. And despite the profitability of indoor marijuana production, there is no way to justify the carbon impacts of energy-hungry intensive lights when we are finally legalizing outdoor production. As we noted in our Planning Commission comments on *Indoor Grows and 'Mixed Light' Operations*:

*The most credible study of indoor marijuana cultivation in California to date concluded that the amount of electricity then being used to grow indoor pot in the state was approximately equal to the total reductions in energy use achieved in the state's attempt to reduce its carbon footprint.<sup>5</sup> Given these impacts alone, it is impossible to conceive of an environmental justification for growing marijuana to harvest under artificial lights. The county should not permit indoor operations except, as noted, for closely regulated nursery operations. Those should be restricted to industrial sites serviced by the electrical grid, and required to fully offset their carbon footprints. Similarly, the county should not permit 'mixed light' operations.*

If Humboldt took its rhetoric about branding and environmental consciousness even half-seriously we'd ban indoor growing altogether, and reclaim a lot of desperately needed housing in the process. Because the climate impacts of indoor cultivation are so substantial, the County must consider a **"No Indoor Cultivation, No Artificial Lights"** alternative, particularly in its greenhouse gas analysis.

### **Conclusion**

The County should consider at least two additional Alternatives as outlined above.

Thank you for your patient attention to these comments, and for your diligent efforts toward the creation of a truly sustainable cannabis industry in Humboldt County.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Scott Greacen', followed by a long horizontal line extending to the right.

Scott Greacen  
executive director

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<sup>5</sup> See Evan Mills, Ph.D., *ENERGY UP IN SMOKE: THE CARBON FOOTPRINT OF INDOOR CANNABIS PRODUCTION*, Lawrence Livermore Labs April 2011