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BOARD OF SUPERVISORS

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Board of Supervisor's Chambers
Humboldt County Courthouse
825 5th St.
Eureka CA, 95501

December 3rd 2015



JERE MELO FOUNDATION

Address:

PO Box 118, Fort Bragg, CA 95437

Email:

jermelofoundation@gmail.com

Website:

jermelofoundation.org

Board Members:

John Andersen
Maribelle Anderson
Roy Kornmeyer
Madeleine Melo
Heather Morrison
Lindy Peters
Dick Royat
Mike Tadlock
Paul Trouette

Executive Director:

Anna Borcich

*We are registered 501(c) 3 non-profit
organization and all sponsorships or
donations are tax deductible.*

Federal Tax ID # 45-3987417

Dear County Supervisors,

The Jere Melo Foundation was founded to educate the community about the need for safety and environmental health in our forest lands and open space on public and private property. At the last Planning Commission meeting many motions were passed to support lax conditions on marijuana growers in our valuable forestlands.

Based on our review of the Planning Commission process, we do not believe that the recommendations proposed are sufficient to adequately ensure environmental resources are protected. In developing a land use ordinance, we urge the county to consider the following recommendations:

- **Regulate Water Diversions:** Drought and dry season, unregulated water diversions are one of the most pressing environmental issues facing the county's water resources. Any water diversions need to be permitted through the California Department of Fish and Wildlife as with any other diversion in the state.
- **Protect Forest Resources:** Lands zoned as Timber Production Zone (TPZ) should be managed as such. Any successful ordinance should prohibit marijuana growing activities on these lands as they have proven to be significant impacts to the forest environment. Several state and federal agencies oversee timber management on these parcels to ensure the sustainable management of timber resources while ensuring the protection of other forest values. Marijuana should be grown outside of these parcels where it, too, can be regulated like forest management activities.
- **Place a Cap on Total Number of Operations:** The County should impose a cap on the total number of permitted operations. A cap on operations may best be facilitated through a limited enrollment period followed by a moratorium on new operations; or by establishing a maximum number of licenses that would be issued, followed by a moratorium period. After a period of three years, the County should revisit where it could assimilate additional cannabis operations based scientific data and watershed carrying capacity.
- **Ensure Adequate Funding:** The regulation of cannabis is dependent on adequate funding of inspection and enforcement. While we understand the desire to complete a land use ordinance first to meet the state March 1, 2016 deadline, we urge the county to diligently pursue a separate funding measure so it may be included on the June 2016 ballot for voter approval.

It is our sincere hope the Humboldt County Board of Supervisors will take these recommendations seriously.

Sincerely,

John Andersen
Chair, Jere Melo Foundation



December 9, 2015

Chairperson Fennell
Humboldt County Board of Supervisors
Humboldt County Courthouse
825 5th St.
Eureka CA, 95501

Dear Chairperson Fennell and Members of the Board:

As a large timberland owner, we are very familiar with the environmental impacts associated with illegal trespass marijuana cultivation on our property. As Humboldt County considers how to regulate marijuana cultivation we ask you consider the points made to you by the Jere Mello Foundation.

- **Regulate Water Diversions:** Drought and dry season, unregulated water diversions are one of the most pressing environmental issues facing the county's water resources. Any water diversions need to be permitted through the California Department of Fish and Wildlife as with any other diversion in the state.
- **Protect Forest Resources:** Lands zoned as Timber Production Zone (TPZ) should be managed as such. Any successful ordinance should prohibit marijuana growing activities on these lands as they have proven to be significant impacts to the forest environment. Several state and federal agencies oversee timber management on these parcels to ensure the sustainable management of timber resources while ensuring the protection of other forest values. Marijuana should be grown outside of these parcels where it, too, can be regulated like forest management activities.
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- **Ensure Adequate Funding:** The regulation of cannabis is dependent on adequate funding of inspection and enforcement. While we understand the desire to complete a land use ordinance first to meet the state March 1, 2016 deadline, we urge the county to diligently pursue a separate funding measure so it may be included on the June 2016 ballot for voter approval.

We believe a thorough consideration and adoption of these measures will have meaningful and significant impact in the reduction of environmental impacts associated with the cultivation of marijuana.

Sincerely:

/s/ Dennis Thibeault

Dennis Thibeault
Vice President Forestry

Hayes, Kathy

From: Carol Conaway <carolcon25@gmail.com>
Sent: Tuesday, December 15, 2015 1:41 AM
To: Hayes, Kathy
Subject: Cannabis legislation

Dec 14, 2015

Humboldt County Board of Supervisors,

Estelle Fennell, Chairperson,

In reading materials prior to the December 15th meeting of the Humboldt Board of Supervisors, a couple of points highlighted in a letter by Robert E. Morris, Chairman of the Planning Commission, raised red flags. While Mr. Morris makes many excellent points in his letter, I believe his recommendation to treat existing growers the same as new applicants in a new, legal permit process, could result in some unintended and undesirable consequences for Humboldt County as does the recommendation regarding permitting cannabis grows on TPZ lands.

Briefly:

One of the things that makes Humboldt County unique is the proportion of locally owned concerns relative to vertical economic ties. This is particularly true in the farming sector. While the North Coast is not immune to the effects of outside interests, and never has been, the qualitative difference between the economic and environmental effects of smaller family farms versus corporate farming is dramatic. Denying local farmers some preference in the permit process will inevitably result in fewer farms owned locally.

Corporate concerns typically purchase from suppliers who can provide highly discounted products and services for multiple sites. Any policy that does not favor current growers with established local ties will inevitably result in more low-wage farm jobs than family farms, diminishing the local economic impact.

Another reason to prioritize applications from current growers is that a number have already, in good faith, enrolled in the currently voluntary Cannabis Cultivation Waste Discharge Regulatory Program. In February of next year, registration becomes mandatory for cannabis growers cultivating more than 2,000 square feet. By not recognizing current efforts by growers to come into some kind of regulatory compliance, we lose gains already made by the state to improve the environmental impact of these grows.

It is also important to remember that Humboldt County is about more than just cannabis. If land currently zoned as TPZ is allowed to be repurposed as cannabis farms, *the economic incentive will be such that we will lose a significant part of what brings people to Humboldt County.* The impact of this would be felt by us all, and economically by the many businesses and people who depend on tourism. For that reason I request that the Board rethink allowing the repurposing of land currently zoned for timber in the case of this particular crop.

As we all move towards what we hope will be a more economically and environmentally healthy relationship with what has been, up to now, an unregulated underground economy, we need to think pragmatically in terms of cause and effect. It is my hope that the Humboldt County Board of Supervisors will acknowledge and consider on the front end the potential unintended consequences of the permit process currently proposed.

Sincerely,

Carol Gothe Conaway, MA

Former researcher with the Center for Community Building and Neighborhood Action, The University of Memphis, Memphis Tennessee (retired)

1111 Vista Drive

Fortuna, CA 95540

Hayes, Kathy

From: Carol Conaway <carolcon25@gmail.com>
Sent: Tuesday, December 15, 2015 1:41 AM
To: Hayes, Kathy
Subject: Cannabis legislation

Dec 14, 2015

Humboldt County Board of Supervisors,

Estelle Fennell, Chairperson,

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Briefly:

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It is also important to remember that Humboldt County is about more than just cannabis. If land currently zoned as TPZ is allowed to be repurposed as cannabis farms, *the economic incentive will be such that we will lose a significant part of what brings people to Humboldt County.* The impact of this would be felt by us all, and economically by the many businesses and people who depend on tourism. For that reason I request that the Board rethink allowing the repurposing of land currently zoned for timber in the case of this particular crop.

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Sincerely,

Carol Gothe Conaway, MA

Former researcher with the Center for Community Building and Neighborhood Action, The University of
Memphis, Memphis Tennessee (retired)

1111 Vista Drive

Fortuna, CA 95540

Hayes, Kathy

From: bill trush <bill.trush@gmail.com>
Sent: Monday, December 14, 2015 11:28 PM
To: Hayes, Kathy
Subject: Re: Comment Submittal on Cultivation Ordinance
Attachments: William Trush Ordinance Commentary 14December2015.pdf

Sorry for the confusion: I sent you (a few minutes ago) a pdf of my draft comments and not my final comments. Please use the enclosed pdf document as my comment submittal. Bill Trush

On Mon, Dec 14, 2015 at 11:17 PM, bill trush <bill.trush@gmail.com> wrote:
Please accept this pdf document as a comment submittal of the Final Draft Medical Marijuana Land Ordinance.
Thank-you, Bill Trush



December 14, 2015

Humboldt State University River Institute
Department of Environmental Science and Management
1 Harpst Street
Arcata, CA 95521

Dear _____

I'm Dr. William Trush, Co-Director of the HSU River Institute and river ecologist. My scientific focus is on integrating annual hydrographs, animal/plant habitat and life history needs, and channel hydraulics into ecological processes necessary for restoring/protecting stream ecosystems and their watersheds. I've been quantifying cumulative watershed effects (CWEs) on North Coast California stream ecosystems and anadromous fish populations since the early 1990's.

In reading the opening 55.4.2 Purpose and Intent of Title III of the Humboldt County Code relating to the commercial cultivation, processing, manufacturing, and distribution of cannabis for medical use (SECTION 1. Section 313-55.4 of Chapter 3 of Division 1 of Title III), I was encouraged by phrases such as *"to limit and control such cultivation"*, *"to protect the environment from harm to streams, fish, and wildlife,"* and *"prevent adverse effects of any new commercial cannabis activities."* Conspicuous impacts to our watersheds, such as culverts impeding migrating salmon and steelhead or point sources of water pollution, are perceived as the most harmful to watershed and fish population health. But for most North Coast watersheds chronic impacts originating from (1) fine sediment inputs generated by land uses and roads, (2) excessive late-spring through early-autumn water diversions, and (3) encroached/degraded riparian areas and floodplains are the real culprits. Commercial cultivation has the potential to significantly accelerate all three chronic impacts. So these

phrases (and others) in the Ordinance's purpose and intent statement were needed and welcome.

But after reading the entire Ordinance, I was extremely disappointed that it does not integrate the potential for highly significant chronic watershed impacts into its permitting process or provide meaningful enforcement measures.

Under 55.4.10(d) (reproduced below), the requirement for an operational plan would seem to be a positive step toward preventing/curbing environmental impacts.

- d) A cultivation and operations plan that meets or exceeds minimum legal standards for water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; and proper use and storage of fertilizers, pesticides, and other regulated products to be used on the parcel, and a description of cultivation activities (outdoor, indoor, mixed light), the approximate date(s) cannabis cultivation activities have been conducted on the parcel prior to the effective date of this ordinance, if applicable, and schedule of activities during each month of the growing and harvesting season.

Unfortunately the Ordinance's plan focuses on streamlining the permitting of individual parcels and not on preventing the potential environmental impact resulting from many parcels permitted in a specific tributary watershed. Most watershed impacts from land use practices become environmentally significant as they accumulate farther downstream. Five parcels distributed roughly evenly throughout a 5 mi² watershed will have considerably less potential environmental impact than the same five parcels concentrated in one 1.5 mi² tributary watershed. The potential impact of a single parcel cannot be evaluated by ignoring the cumulative impacts of adjacent parcels.

One particularly troublesome off-site, cumulative impact is downstream water quality impairment as a consequence of excessive fine sediment generated upstream. Each parcel generates fine sediment and therefore must be evaluated within the context of fine sediment sources in neighboring parcels. This draft Ordinance makes no provision for this essential 'planning' element. Instead, it relies primarily on unquantifiable standards governing important environmental consequences such as 'habitat protection' and 'conservation.' Recovering water quality in many of our North Coast will be essential to salmon population recovery. But in my reading of the Final Draft, the proposed Ordinance would not be equipped to protect/perpetuate these hard-earned gains. Instead, this Ordinance plans on ... completely relies-on ... a game of 'hot-potato' with the North Coast Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW). Local state-agency staff are being put into the difficult (untenable) position of taking the proposed paperwork and making it some-how environmentally relevant. An example of hot-potato is in 55.4.10(h) stating:

- h) If any on-site or off-site component of the cultivation facility, including access roads, water supply, grading or terracing impacts the bed or bank of any stream or other watercourse, a copy of the Streambed Alteration Permit obtained from the Department of Fish & Wildlife.

CDFW simply does not, and likely will not, have the resources to come close to applying the Streambed Alteration Permit process (the 'If' in (h)) across the North Coast landscape. Recommending that FPR guidelines for roads be applied to cultivation activities seems obvious (why invent new guidelines), but there would be little if any oversight/enforcement over most the landscape.

Incorporating management guidelines curbing/preventing cumulative watershed impacts isn't easy (e.g., the ongoing struggle with the Forest Practice Rules (FPR)). Best management practices referenced in the Ordinance, often considered the cure to cumulative impacts from landuse, are only as good as they are enforced. And even then, the best practices still 'leak' fine sediment downstream and cannot prevent significant impacts if the intensity of upstream landuse is too high (i.e., an accumulation of many relatively small leakages). Without providing explicit and quantitative thresholds for landuse in specific watersheds, there is no planning. Simply approving parcels as they come in is not planning. Yet this façade of environmental planning is what the County would be endorsing with this Ordinance.

Another behind-the-back potato toss to CDFW is 555.4.10(n) (p.27 in an earlier Ordinance draft)[reproduced below].

- n) Acknowledge that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed in which the cultivation area is located will not support diversions for irrigation.

This 'right', removed from the Final Draft, yet could be a primary tool for minimizing future cumulative impacts. The Ordinance avoids establishing thresholds ... which is the primary tool for minimizing cumulative environmental impacts.

A second cumulative environmental impact from cultivation is excessive, localized water diversions during receding summer streamflows. The Ordinance attempts (via potato toss to state agencies) to regulate water diversions in 55.4.10(l) [reproduced below].

- 1) Where surface water diversion provides any part of the water supply for irrigation of cannabis cultivation, the applicant shall either: 1) consent to forebear from any such diversion during the period from May 15th to October 31st of each year and establish on-site water storage for retention of wet season flows sufficient to provide adequate irrigation water for the size of the area to be cultivated, or 2) submit a water management plan prepared by a qualified person such as a licensed engineer, hydrologist, or similar qualified professional, that establishes minimum water storage and forbearance period, if required, based upon local site conditions, or 3) obtain approval from the RWQCB through enrollment pursuant to NCRWQB Order No. 2015-0023 and/or preparation of a Water Resources Protection Plan.

Does "surface water diversion" include springs? Why is subsurface pumping excluded? Who will "require" consensual forbearance? As a scientist I want to see the analysis of projected diversion volume/timing as a function of parcel size, permit type, and watershed area. Presumably, the Ordinance's Permit Types were founded on such an analysis, but I'm aware of no cumulative effects analysis. Forbearance from May 15th through October 31 will require extensive storage facilities that will leave a significant footprint on the landscape.

There is no requirement that all parcels in a given tributary watershed be considered collectively before approving individual permits in 55.4.10(I). This necessity is at the heart of preventing cumulative impacts to streamflow locally and downstream. A daily diversion threshold in total gallons/min will be necessary to objectively, quantitatively evaluate cumulative effects of water withdrawal. The Ordinance's solution for preventing diversion impacts is another hot-potato toss to the 'qualified person such as' referenced in 55.4.10(I) above. Considerable progress has been made toward prescribing a maximum allowable daily diversion rate during the late-spring through mid-autumn recession hydrograph. But there is no approved methodology for our 'qualified person' to follow. CDFW is doing its best to grapple with this difficult issue. Meanwhile, the Ordinance will be encouraging even greater intrusion onto the landscape.

I own a house on five acres in Fieldbrook. Under the Ordinance's *Table of Humboldt County Commercial Cannabis Cultivation Permit Types*, a type III Use Permit would allow cultivating up to 43,560 ft² (i.e., one acre, or a fifth of my property). Given many years of research on instream flows and cumulative impacts, I likely would be a 'qualified person' under 55.4.10(I), though there are no guidelines as to how that would be affirmed. The drainage area of 'my' tributary watershed to Lindsay Creek is 1.02 mi² at my downstream property line. My stream, Davenport Creek (not labeled on a USGS topo map), supports annual coho spawning and juvenile rearing. Today is Sunday 13December2015, and I've checked the stream twice to see if adults have arrived on the latest storm now just barely beginning to recede. Diverting to conservatively meet cultivation water needs would begin impacting Davenport Creek by early-to mid-June. Forbearance would be required. The extent of required storage (and not just the storage tanks' total footprint) would necessitate clearing at least another acre (remembering

that a square acre is 209 ft by 209 ft). If three upstream neighbors upstream (each with 5 acre parcels) desired maximum utilization under III Use Permits, the potential for cumulative impacts to Davenport Creek would rise very sharply. Yet the only substantive environmental protection 'my' Coho salmon would be entitled to must come CDFW and the Regional Board, not the Ordinance which approves individual parcels independently.

I'll be investigating the procedural and environmental ramifications of permitting multiple cultivation parcels in my backyard watershed this winter and spring. Before Ordinance approval, all steps necessary for permitting at least 10 parcels (for different permit types and environmental settings) should be documented and provided to the public. Only in this manner, can we (residents of Humboldt County) realistically evaluate how/if the Ordinance would work. This would reveal what parts of the Ordinance are real and which are not. For example, what is a real permitting timeline?

In conclusion, proponents may consider this Final Draft a good first step forward, politically, but the Ordinance is clearly a step backward, environmentally, for the County's watersheds and uncertain future of its salmon and steelhead populations. This Ordinance will be highly susceptible to litigation for not protecting Humboldt County's watersheds and anadromous fishery against onsite and downstream cumulative environmental impacts. At minimum, a very good, quantitative programmatic EIR is needed. Humboldt County residents that value watershed health, including its wildlife and salmon populations, should expect more County guidance than this environmentally irresponsible Ordinance provides.



William Trush
Co-Director HSU River Institute
wt1@humboldt.edu

Hayes, Kathy

From: bill trush <bill.trush@gmail.com>
Sent: Monday, December 14, 2015 11:17 PM
To: Hayes, Kathy
Subject: Comment Submittal on Cultivation Ordinance
Attachments: Trush Ordinance Comment 14December 2015.pdf

Please accept this pdf document as a comment submittal of the Final Draft Medical Marijuana Land Ordinance.
Thank-you, Bill Trush

Hayes, Kathy

From: Idiane <Idiane@sonic.net>
Sent: Monday, December 14, 2015 10:48 PM
To: Hayes, Kathy
Cc: Bohn, Rex; Sundberg, Ryan; Fennell, Estelle; Lovelace, Mark; Bass, Virginia
Subject: Proposed Medical Marijuana Land Use Ordinance Comments
Attachments: Marijuana Proposed Land Use Ordinance Comment.docx

Please see the attached. Comments to the proposed ordinance before the Board, tomorrow December 14th.

Thank you.

Lisa

Sent via email to on date shown below

December 15, 2015

Board of Supervisors' Chambers
Humboldt County Courthouse
825 5th St.
Eureka CA, 95501

Re: CEQA Concerns Regarding Proposed Cannabis Regulations

Dear Supervisors,

Thank you for your continued attention towards developing necessary cannabis regulation to both reduce environmental harms associated with cannabis production. We are writing today to discuss our concerns with recommendations made by the Planning Commission.

Based on the recommendations provided by the Planning Commission, we are concerned about CEQA compliance. As you know, the County has decided to progress with cannabis regulations under a mitigated negative declaration. While use of a mitigated negative declaration would allow the county to proceed with new regulations at an expedited pace, compared to having to prepare a full environmental impact report, use of a mitigated negative declaration also limits the scope of a new regulation as a mitigated negative declaration is only appropriate where "[t]here is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment." 14 Cal. Code Regs. § 15070.

In practical terms, the limitation inherent with proceeding with a mitigated negative declaration means the proposed cannabis regulation cannot encourage new operations, either in total or in concentration in particular areas without corresponding mitigation measures which would reduce impacts below a level of significance. We do not, however, believe that sufficient mitigation measures currently exist to mitigate against substantial new numbers of operations. To ensure that future regulations are legally defensible, we advise that the County attempt to keep the total number of operations within the normal background level against which environmental impacts are considered. This approach, to address background level effects or so-called "existing" operations is the approach taken by the North Coast Regional Water Quality Control Board in their cannabis waiver program.¹

Based on the recommendations made by the Planning Commission, two CEQA concerns particularly stand out: (1) cannabis production within Timber Production Zone (TPZ) lands; and (2) encouragement of new operations, and therefore, new impacts.

Expansion of Cannabis on TPZ is Inappropriate under Mitigated Negative Declaration

The County's initial draft provided that, "No use permits shall be issued for *new* cannabis cultivation in FR, TC or TPZ zones." See § 55.4.8.2(b) (emphasis added). Further, for existing operations as of September 1, 2015, the County's initial draft would require a conditional use permit. *Id.* Lastly, the initial draft limited cultivation on TPZ zoned land to 10,000 sq. ft. or less. See § 55.4.8.2(a).

¹ The Water Board's waiver program is addressed at existing operations only and not new operations. In that manner, as the waiver only seeks to improve already existing impacts, the waiver cannot be said to create new impacts not already felt on the ground.

By contrast, the Planning Commission recommends removing restrictions on TPZ zoned lands, other than providing a copy of a less-than-3-acre conversion exemption or timberland conversion permit. We are concerned that this would not only conflict with the Timberland Productivity Act of 1982,² but would also violate CEQA by permitting additional conversion of forests without sufficient mitigation measures. Furthermore, the Mitigated Negative Declaration circulated by the County was based on the County's original exclusion of new cultivation on TPZ. If the County were to expand cultivation on TPZ from the County's original draft, the County would need to analyze potential impacts and recirculate a new Mitigated Negative Declaration.

As such, we recommend the County maintain language in the first draft ordinance limiting cannabis cultivation on TPZ to those already on such lands. For these pre-existing parcels, the County will likewise need to address how these operations are compatible with timber production.

Minimizing Impacts from "New" Operations

Both the County's draft and the recommendations provided by the Planning Commission allow for "new" operations, which present a potential problem for a Mitigated Negative Declaration. Allowing additional cultivation sites raises the potential risk to the environment, as measured from the baseline; and without adequate mitigation measures, a Mitigated Negative Declaration is inappropriate. Additional cultivation may be especially impactful, as such the County needs to examine potential environmental impacts under a theoretical "full build out"—that is, assuming that all legal parcels zoned for cannabis cultivation, of which there are 28,545 parcels, could apply for a license, and that individual cultivators will likely maximize production allowable under the proposed ordinance.

To mitigate against potential increased risk to the Mitigated Negative Declaration, the County should impose of a cap on the number of licenses available. A cap program could work in various manners. The County could issue a cap on the total number of licenses, without consideration of the size of the operation. Alternatively, the County could issue a cap on the number of operations by operation size measured in square footage.

* * *

In closing, one of our organizations' highest priorities in developing a new cannabis cultivation ordinance is the ordinance be legally defensible. We do not believe the recommendations made by the Planning Commission are permissible under CEQA. Thank you for your attention to this critical issue.

If you have any questions about the contents of this letter, please contact Natalynne DeLapp at Natalynne@wildcalifornia.org or (707) 822-711.

Sincerely,

Natalynne DeLapp
Executive Director, Environmental Protection Information Center

Jennifer Kalt
Director, Humboldt Baykeeper

Larry Glass,
President, NEC & Executive Director, SAFE

² Please see comments made by Baldwin, Blomstrom, Wilkinson and Associates, Inc. on December 11, 2015 on whether cannabis is a "compatible use" with TPZ land.

December 15, 2015

Board of Supervisors' Chambers
Humboldt County Courthouse
825 5th St.
Eureka CA, 95501

Dear County Supervisors,

We, the undersigned organizations, businesses, and individuals, are concerned with the ongoing attempts by the County Planning Commission to regulate medical cannabis production.

Based on our review of the Planning Commission process, we do not believe that the recommendations proposed are sufficient to adequately ensure environmental resources are protected. In developing a land use ordinance, we urge the county to consider the following recommendations:

- **Mandatory Water Forbearance Between May 15 through October 31:** Drought and dry season water diversions are one of the most pressing environmental issues facing the county's water resources. Wet season diversions and rainwater catchment protects water quality and quantity. There should be no surface water diversions between May 15 to October 31.
- **Protect Forest Resources:** One goal of a successful ordinance should be to bring as many cultivators, including those cultivating on Timber Production Zone (TPZ) and other Forest Zones, who are willing to take immediate action to ensure baseline environmental standards are met, into compliance with all applicable laws, and stop the further proliferation of cannabis operations on TPZ land by prohibiting new operations.
- **Place a Cap on Total Number of Operations:** The County should impose a cap on the total number of permitted operations. A cap on operations may best be facilitated through a limited enrollment period followed by a moratorium on new operations; or by establishing a maximum number of licenses that would be issued, followed by a moratorium period. After a period of three years, the County should revisit where it could assimilate additional cannabis operations based scientific data and watershed carrying capacity.
- **Ensure Adequate Funding:** The regulation of cannabis is dependent on adequate funding of inspection and enforcement. While we understand the desire to complete a land use ordinance first to meet the state March 1, 2016 deadline, we urge the county to diligently pursue a separate funding measure so it may be included on the June 2016 ballot for voter approval.

These recommendations reflect the joint policy recommendations of the undersigned organizations, businesses, and individuals. Signatories may make additional, more specific policy recommendations, in their individual capacity.

Thank you for your consideration of our comments. We look forward to cannabis farmers being able to come into the regulatory light, legitimizing the craft and custom of North Coast farmers and improving environmental conditions for all.

Sincerely,

Natalynne DeLapp
Executive Director, EPIC

Jen Kalt
Executive Director, Humboldt Baykeeper

Larry Glass
Board President, NEC

Larry Glass
Executive Director, SAFE

Dave Feral
Executive Director, Mad River Alliance

Paul Harper
Associate Forester, Baldwin, Blomstrom, Wilkinson & Associates

Sunshine Johnson
Sunboldt Grown

Karyn Wagner
Paradigm Cannabis

Brian Shields
Humboldt Medical Cannabis Union

Jennifer Metz
Burning Leaf Productions

Hayes, Kathy

From: natalynnedelapp@gmail.com on behalf of Natalynne DeLapp
<Natalynne@wildcalifornia.org>
Sent: Monday, December 14, 2015 4:49 PM
To: Bohn, Rex; Bass, Virginia; Sundberg, Ryan; Fennell, Estelle; Lovelace, Mark
Cc: Larry Glass; Hayes, Kathy; Tom Wheeler; Lazar, Steve; Jen Kalt
Subject: Comments regarding: MMLUO
Attachments: County letter 12.14 EPIC.pdf; County Cannabis Ordinance Sign on Letter 12-15-15.pdf

Dear Supervisors,

Please accept and consider two letters regarding the County's Commercial Medical Marijuana Land Use Ordinance. The first is written by EPIC, NEC, SAFE and Humboldt Baykeeper related specifically to CEQA Compliance with the ordinance. The second letter is a letter signed by environmental, timber, and cannabis organizations that support four major points of a successful ordinance.

Respectfully,

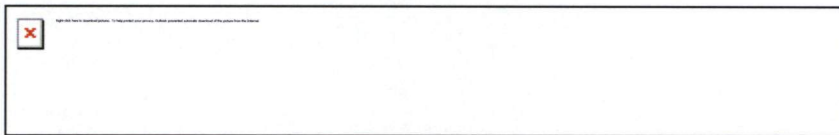
Natalynne

--

Natalynne DeLapp
Executive Director

epic
Environmental Protection Information Center--keeping Northwest California wild since 1977

145 G Street, Suite A
Arcata, CA 95521
707-822-7711



Hayes, Kathy

From: Mary Ann Madej <maryann.madej@gmail.com>
Sent: Monday, December 14, 2015 2:22 PM
To: Hayes, Kathy
Subject: MJ cultivation ordinance

December 14, 2015

To: Humboldt County Board of Supervisors

Re: New ordinance to regulate commercial medical marijuana cultivation

I am a geologist and a Humboldt County resident who has spent the last 37 years studying the impacts of various land uses on river health in our North Coast region. Many of our watersheds are still dealing with legacy effects of erosion and sedimentation from earlier, poorly regulated road construction and timber harvest (Madej and Ozaki, 2009). Much of Humboldt County is underlain by unstable bedrock, leading to high rates of landsliding and gullyng. The effects of excess sedimentation (still so evident in the Elk River and other watersheds) have been exacerbated by California's recent drought conditions, resulting in shallow pools, high stream temperatures, and reduced water quality. Salmon habitat has been severely damaged in many of our rivers and the recovery of this habitat is threatened by the proliferation of widespread marijuana cultivation across our timberlands and prairies. I urge you to place stricter regulations on medical marijuana grows, as proposed by the Northcoast Environmental Center, Humboldt Baykeeper, and other concerned organizations. It is much easier to loosen regulations in the future, if warranted, rather than reining in a Wild West mentality later. I support their proposed cap on total amounts of permits, limited grow sizes, prohibition of pesticides and new cultivation in Timber Protection Zones, and an assessment of the cumulative effect of marijuana cultivation on the health of our local watersheds. Let us learn from past mistakes to protect our fragile and precious Humboldt County environment.

Mary Ann Madej, Ph.D.

Geomorphology Consultant

maryann.madej@gmail.com

Madej, M.A., and Ozaki, V., 2009, Persistence of effects of high sediment loading in a salmon-bearing river, northern California, in James, L.A., Rathburn, S.L., and Whittecar, G.R., eds., Management and Restoration of Fluvial Systems with Broad Historical Changes and Human Impacts: Geological Society of America Special Paper 451, p. 43–55, Boulder, CO. doi: 10.1130/2008.2451(03).



JERE MELO FOUNDATION

Address:

PO Box 118, Fort Bragg, CA 95437

Email:

jeremelofoundation@gmail.com

Website:

jeremelofoundation.org

Board Members:

John Andersen
Maribelle Anderson
Roy Kornmeyer
Madeleine Melo
Heather Morrison
Lindy Peters
Dick Royat
Mike Tadlock
Paul Trouette

Executive Director:

Anna Borcich

We are registered 501(c) 3 non-profit organization and all sponsorships or donations are tax deductible.

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RECEIVED
BOARD OF SUPERVISORS

DEC 07 2015

AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

Board of Supervisor's Chambers
Humboldt County Courthouse
825 5th St.
Eureka CA, 95501

December 3rd 2015

Dear County Supervisors,

The Jere Melo Foundation was founded to educate the community about the need for safety and environmental health in our forest lands and open space on public and private property. At the last Planning Commission meeting many motions were passed to support lax conditions on marijuana growers in our valuable forestlands.

Based on our review of the Planning Commission process, we do not believe that the recommendations proposed are sufficient to adequately ensure environmental resources are protected. In developing a land use ordinance, we urge the county to consider the following recommendations:

- **Regulate Water Diversions:** Drought and dry season, unregulated water diversions are one of the most pressing environmental issues facing the county's water resources. Any water diversions need to be permitted through the California Department of Fish and Wildlife as with any other diversion in the state.
- **Protect Forest Resources:** Lands zoned as Timber Production Zone (TPZ) should be managed as such. Any successful ordinance should prohibit marijuana growing activities on these lands as they have proven to be significant impacts to the forest environment. Several state and federal agencies oversee timber management on these parcels to ensure the sustainable management of timber resources while ensuring the protection of other forest values. Marijuana should be grown outside of these parcels where it, too, can be regulated like forest management activities.
- **Place a Cap on Total Number of Operations:** The County should impose a cap on the total number of permitted operations. A cap on operations may best be facilitated through a limited enrollment period followed by a moratorium on new operations; or by establishing a maximum number of licenses that would be issued, followed by a moratorium period. After a period of three years, the County should revisit where it could assimilate additional cannabis operations based scientific data and watershed carrying capacity.
- **Ensure Adequate Funding:** The regulation of cannabis is dependent on adequate funding of inspection and enforcement. While we understand the desire to complete a land use ordinance first to meet the state March 1, 2016 deadline, we urge the county to diligently pursue a separate funding measure so it may be included on the June 2016 ballot for voter approval.

It is our sincere hope the Humboldt County Board of Supervisors will take these recommendations seriously.

Sincerely,

John Andersen
Chair, Jere Melo Foundation

Hayes, Kathy

From: Jonathan Lee <jlee@humboldt1.com>
Sent: Monday, December 14, 2015 11:06 AM
To: Hayes, Kathy
Subject: Medical Marijuana Cultivation

Dear Kathy Hayes,

I agree with the Northcoast Environmental Center comments concerning the medical marijuana cultivation policy. My primary concern is that too many grows will dewater the hills causing great environmental damage. I also oppose marijuana grows on TPZ land.

Thank you,

Jon Lee
2337 15th Street
Eureka, CA 95501
707-441-9347



December 9, 2015

Chairperson Fennell
Humboldt County Board of Supervisors
Humboldt County Courthouse
825 5th St.
Eureka CA, 95501

Dear Chairperson Fennell and Members of the Board:

As a large timberland owner, we are very familiar with the environmental impacts associated with illegal trespass marijuana cultivation on our property. As Humboldt County considers how to regulate marijuana cultivation we ask you consider the points made to you by the Jere Mello Foundation.

- **Regulate Water Diversions:** Drought and dry season, unregulated water diversions are one of the most pressing environmental issues facing the county's water resources. Any water diversions need to be permitted through the California Department of Fish and Wildlife as with any other diversion in the state.
- **Protect Forest Resources:** Lands zoned as Timber Production Zone (TPZ) should be managed as such. Any successful ordinance should prohibit marijuana growing activities on these lands as they have proven to be significant impacts to the forest environment. Several state and federal agencies oversee timber management on these parcels to ensure the sustainable management of timber resources while ensuring the protection of other forest values. Marijuana should be grown outside of these parcels where it, too, can be regulated like forest management activities.
- **Place a Cap on Total Number of Operations:** The County should impose a cap on the total number of permitted operations. A cap on operations may best be facilitated through a limited enrollment period followed by a moratorium on new operations; or by establishing a maximum number of licenses that would be issued, followed by a moratorium period. After a period of three years, the County should revisit where it could assimilate additional cannabis operations based scientific data and watershed carrying capacity.
- **Ensure Adequate Funding:** The regulation of cannabis is dependent on adequate funding of inspection and enforcement. While we understand the desire to complete a land use ordinance first to meet the state March 1, 2016 deadline, we urge the county to diligently pursue a separate funding measure so it may be included on the June 2016 ballot for voter approval.

We believe a thorough consideration and adoption of these measures will have meaningful and significant impact in the reduction of environmental impacts associated with the cultivation of marijuana.

Sincerely:

/s/ Dennis Thibeault

Dennis Thibeault
Vice President Forestry

December 11, 2015

Chair Estelle Fennel
Humboldt County Board of Supervisors
825 5th Street, Room 111
Eureka, CA 95501

**Letter regarding the proposed Medical Marijuana Land Use Ordinance and
Mitigated Negative Declaration**

As forestry consultants managing thousands of acres on the north coast, our primary interest in this issue is how the cultivation of marijuana on TPZ land impacts adjacent timberland owners' ability to effectively manage timberland for forest resources and other related ecosystem benefits.

In our experience, cultivation of marijuana on TPZ land conflicts with managing forests for timber and wildlife habitat. A brief description of the conflicts that we have observed is described below.

1. **Conversion to Non-Forest Use:** Establishing marijuana cultivation sites on TPZ land requires the removal of all of the trees on and around the sites, converting them to non-forested areas. This continual degradation of forest habitat is contrary to the original intent of TPZ land use and complicates the analysis of cumulative effects and habitat suitability as required by CEQA for timber harvest on adjacent parcels.
2. **Additional Residences:** Marijuana cultivation sites require construction of housing for workers and processing of marijuana. The increased residential use comes with trash generation, septic systems, free roaming pets, noise from generators and additional stakeholders to engage during timber harvesting activities. All of these side effects impact wildlife habitat quality and/or the ability to harvest timber on adjacent parcels.
3. **Year Round Road Use:** Marijuana cultivation typically requires year round access on a network of roads designed only to accommodate dry season traffic (seasonal roads). Roads used to access cultivation sites are not required to meet the strict requirements of the Forest Practice Rules, as would be required for timber harvest on these TPZ lands. The additional, year-round traffic compromises the ability of adjacent timberland owners to meet the road use and condition requirements of their timber harvest permits and in many cases directly impacts water quality.
4. **Water Theft:** Marijuana cultivation requires a reliable water supply, which often comes from illegal water diversions on the neighboring TPZ lands. We have observed numerous instances where marijuana cultivation sites either steal water from adjacent timberland parcels, route waterlines across adjacent parcels and/or locate water supplies

BALDWIN, BLOMSTROM, WILKINSON AND ASSOCIATES, INC.

Implementing Ecosystem Forestry in Northwestern California

P.O. Box 702, Arcata, CA 95518, 707-825-0475 (V), 707-825-9359 (F) pharper@bbwassociates.com

(tanks) on adjacent parcels. Again this compromises the timberland owner's ability to meet permit requirements related to stream flow and competes with timberland managers ability to withdraw water to meet dust abatement requirements associated with log hauling.

5. **Obnoxious Security:** As marijuana is a high value commodity, security around cultivation sites is often heightened to the point where foresters and biologists working on neighboring parcels or on common roads are regularly exposed to gun fire warning shots, hostile verbal assaults and/or vicious dogs from cultivation sites. In addition, gates are a common flash point for problems on the interface between timber and marijuana management. Gates on our clients' properties are regularly vandalized, locks cut, new gates installed in wrong locations, etc.
6. **Effects of Cultivation Extend Beyond 3-Acre Envelope:** The afore-mentioned items have effects that ripple far beyond the dirt flats where such operations occur. As shown on the attached aerial images the concentration and density of adjacent marijuana cultivation sites has a cumulative effect not considered in the ministerial 3 acre conversion permits issued by CALFIRE.
7. **Inflated Land Values:** Marijuana cultivation generates far more income per acre than timber production. This has led to rural land values increasing dramatically, which has made it profitable for timberland owners to sell to marijuana cultivators and residential users, but has made it very difficult for landowners to acquire additional lands for timber management.
8. **Increased Management Costs:** All of these aforementioned items lead to increased costs to manage lands for commercial timber production. Specifics include, increased security patrols to detect water theft and cultivation trespass, requiring two forestry technicians to work together for safety sake around grow sites rather than one, difficulty in retaining crew members willing to be exposed to hazards posed by working near grow sites (basically personal safety), re-installing water bars compromised by inappropriate use by growers, removing trash and water systems from remote locations, etc.
9. **Marijuana cultivation on lands zoned TPZ is not compatible with Public Resources Code 51104) California Timberland Productivity Act of 1982. State law identifies compatibles uses as :**
 - h) *"Compatible use" is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the following, unless in a specific instance such a use would be contrary to the preceding definition of compatible use:*
 - (1) *Management for watershed.*
 - (2) *Management for fish and wildlife habitat or hunting and fishing.*
 - (3) *A use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas.*

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(4) The erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities.

(5) Grazing.

(6) A residence or other structure necessary for the management of land zoned as timberland production.

Commerical cannabis has the potential to “significantly detract” from the use of the property for, or inhibit, growing and harvesting timber. The Mitigated Negative Declaration associated with the draft ordinance falls short of full analysis of the potential and cumulative effects that this land use ordinance enables.

Our consulting forestry firm is opposed to increasing the presence of marijuana cultivation on TPZ lands because it decreases the economic feasibility of timber harvesting on adjacent TPZ lands. Timber remains an important part of the local economy and this ordinance will create conditions that will negatively affect timber management and timberland resources.

We have attached a photographic exhibit of the rapid and dramatic change in land use associated with marijuana cultivation on TPZ lands adjacent to one of our clients parcels for your additional consideration.

Sincerely,

BBW Owners/Principals

Kenneth Baldwin, RPF #1855

Greg Blomstrom, RPF #1877

Bill Wilkinson, RPF #2463

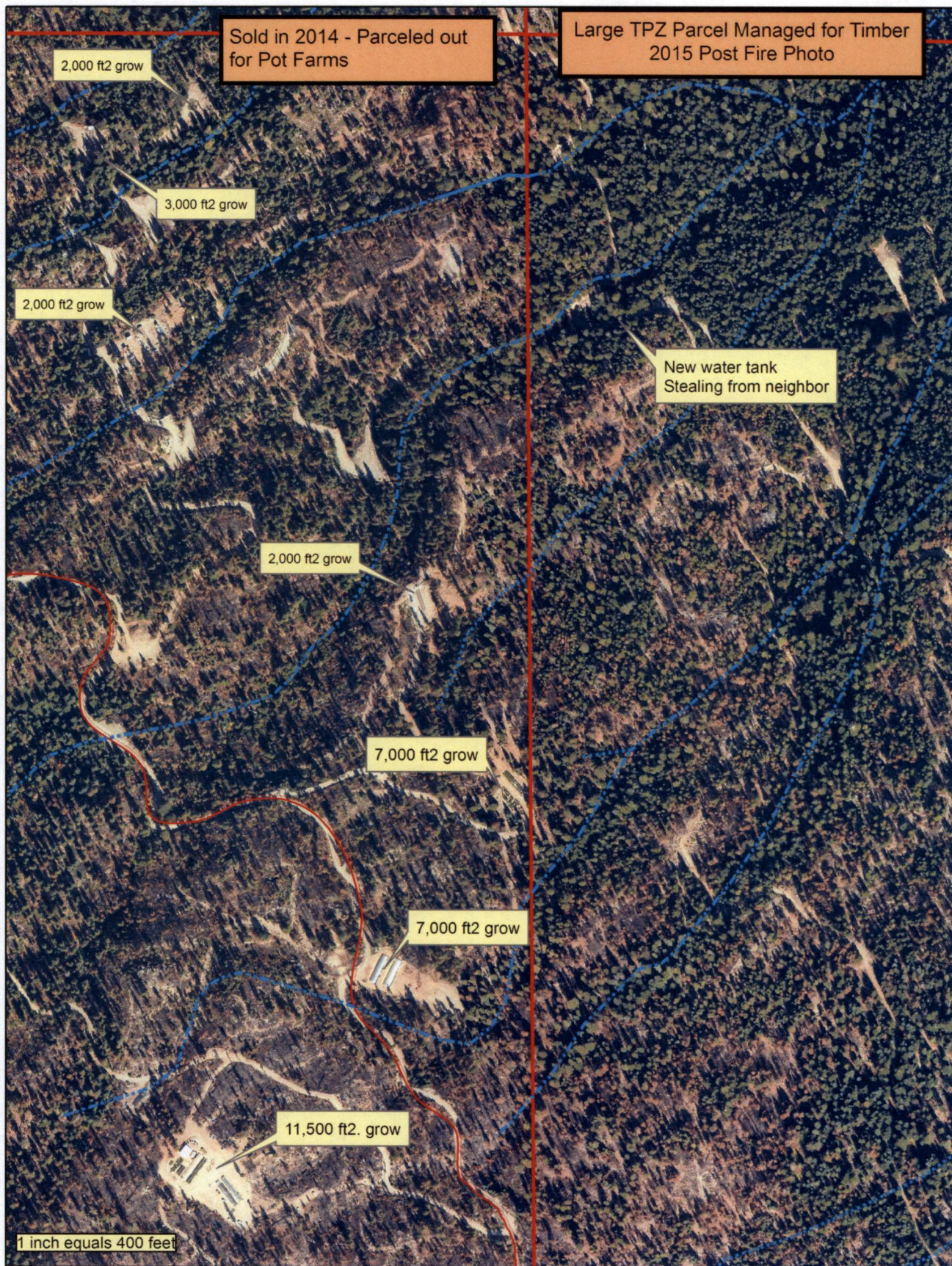
Paul Harper, RPF #2672

Jared Gerstein, RPF #2826

Mark Lancaster, RPF #2462

Mark Andre, RPF #2391





To: Humboldt County Board of Supervisors
From: Bonnie Blackberry (CLMP)
Date: December 11, 2015

RE: Board of Supervisors December 15, 2015 meeting on MMLUO Phase IV

Dear Chairperson Fennell and Members of the Board.

The Planning Commission made a number of changes to the ordinance, many of which were improvements. Some changes went to far in allowing for large grows with only a Zoning Clearance Certificate. The regulations from the State and County will be much more difficult for the small, mom and pop growers who don't have the investors and money to comply with all the regulations and get the necessary licenses and permits.

Please consider the following in your review of the ordinance.

The pre registration has many uncertainties. Requiring people to fill out a form, admitting to previous violations of the law and the intent to continue, in order to be in good standing is something many people have strong reservations about doing, especially since the regulations/rules are not clear.

The strict regulations set by the State which are only required for all commercial medical cannabis cultivators may turn out to be a big disincentive. Is there any other specialty crop that is required to comply with a **water forbearance** program for 5 months during the growing season or get a special permit with a water plan and more permits for water storage? Setting arbitrary dates for the forbearance period is easy to do, but it's not based on science and the actual flow, as done by the Mattole forbearance program. What about equal treatment under the law?

The **200 foot stream set back** for any size of "operation" is extreme. Logging operations in most cases only requires a 100ft set back. Small grows which are less than 2,000 square feet shouldn't be held to same hoops and loops as the bigger, more impactful operations.

Recommend: Support Humboldt Heritage Permit

There is widespread support for the Humboldt Heritage Permit by the local mom and pop growers who believe it is important for the preservation of the small organic grower.

Diversity and small organic farms need to be encouraged. Many small growers will have a much more beneficial effect on the county economics, spreading the profits and spending throughout the communities, than consolidated large operations financed and profited by a few who may have no interest in living in Humboldt County, with main focus on making money.

55.4.11 Performance Standards... Performance Standards for Mixed-Light Cultivation

Item "u) *The noise produced by a generator used for cannabis cultivation shall not be audible from neighboring residences. The decimal level for generators at the property line shall be no more than 60 decimals.*"

This provision should apply to all cannabis cultivation activities, as the noise from generators used for cannabis cultivation is not restricted to Mixed-Light Cultivation. Other uses

include but not limited to, water and feeding pumps and fans, as well as electrical needs of workers.

Also setting the decimal level at 60 decimals at the property line, in most cases will be audible by the neighboring residences. According to the decimal chart in the GPU draft section on Noise, 60 decimals is similar to being 10ft from a vacuum cleaner and the lesser 50 decimals is similar to auto traffic near freeway. Out in the hills noise carries a long distance. That level of noise will not only disturb the human neighbors, and what about the wildlife?

Recommend: Please apply this provision to all cannabis cultivation activities and set the decimal level at 30 decimals.

Recommend: Moratorium on new and expanded grows until the state and county have what is currently regarded the problem more in line. Adding new and expanding current operations seems to be adding to the problem, rather than diminishing it.

Recommend: Encourage small grows, under 3,000 square feet, put a cap on large grows. Just because grows are happening in inappropriate locations is not a good reason to legitimize them. Larger grows in neighborhoods should be required to have a discretionary permit, with an opportunity for input by the neighbors who will be most impacted by the activities. It would be easier to allow larger grows later, than allowing them now and then cutting back the size later.

Recommend: Require Humboldt County residency for cannabis licenses and permits.

Respectfully submitted,

Bonnie Blackberry
Civil Liberties Monitoring Project

Hayes, Kathy

From: Neal Latt <neallatt@hotmail.com>
Sent: Saturday, December 12, 2015 4:52 PM
To: Sundberg, Ryan; Bohn, Rex; Fennell, Estelle; Lovelace, Mark; Bass, Virginia; Hayes, Kathy
Subject: Proposed Medical Marijuana regulations

Dear Board of Supervisors,

I urge you to amend the Planning Commission's proposed large grow regulations and insert the following sensible safeguards to protect the environment and economy of our county:

No New Cultivation on TPZ lands: The County should stop the further proliferation of marijuana cultivation on TPZ (Timber Production Zone) land by prohibiting new operations while existing cultivation sites are cleaned up and brought into compliance; clearing hillsides and building more roads will only exacerbate these problems.

Decrease the Grow Sizes Allowed Without Special or Conditional Use Permits:
A CUP should be required for all grows larger than 10,000 square feet. The draft ordinance recommended on Dec. 3 by the Planning Commission is significantly out of balance and would allow much larger grows than even proposed by California Cannabis Voice Humboldt (CCVH).

Limit Generator-Dependent Cultivation:
Noise and light from generators in the hills impacts wildlife and quality of life in rural areas. Allowing unlimited indoor and "mixed light" greenhouse grows to run generators day and night to power lights and fans is unacceptable.

Prohibit pesticide use: The County should explicitly prohibit pesticides (including rodenticides, fungicides, insecticides, and herbicides) use on and around cannabis cultivation operations. This can be achieved by requiring that medical marijuana be grown consistent with organic standards, which will protect the environment as well as marijuana workers and consumers.

Address Carrying Capacity of Watersheds:
The County's draft ordinance does nothing to address the cumulative impacts of cultivation activities within a watershed. As a whole, existing operations are resulting in unacceptable impacts to waterways, fish and wildlife, and downstream communities. Allowing an unlimited number of permits per watershed is unacceptable.

Ensure Adequate Funding: Meaningful regulation of commercial marijuana cultivation is dependent on adequate funding for inspection and enforcement. We urge the County to pursue a marijuana tax to be placed on the June 2016 ballot for voter approval.

Impacts from illegal water diversion, irresponsible grading, and clearing of forests for grow sites have expanded exponentially in recent years. Salmon streams are particularly hard hit from the combined impacts of drought, decades of harmful logging practices, and unchecked marijuana operations. It is long past time to bring the marijuana industry into compliance with state and local environmental regulations.

Ms. Hayes: Please insert my comments into the public record.

Respectfully,

Neal Latt,
Eureka

Sent from [Outlook Mobile](#)

Hayes, Kathy

From: Bill Thorington <tcgroup@suddenlink.net>
Sent: Sunday, December 13, 2015 1:15 PM
To: Hayes, Kathy; Bohn, Rex; Fennell, Estelle; Lovelace, Mark; Bass, Virginia; Sundberg, Ryan
Cc: nec@yournec.org; scott@eelriver.org; epic@wildcalifornia.org
Subject: General Comments & Suggestions to BOS for regulating Medical Cannabis Cultivation

Dec 12, 2015

Ladies and Gentlemen:

After reading the County Planning Commission's recommendation for Commercial Cultivation of Medical Cannabis, I feel there are additional safeguards that the BOS should and must incorporate into their proposed ordinance. While we know, although less than official, there are in excess of 3,000 parcels of land larger than 1 AC that appear to be currently growing some form of Cannabis. These are largely if not entirely unregulated and unsupervised and operate ONLY under the operator's own values and protection for the environment, wildlife, water, their employees and the ultimate end-user. So I agree that an overall regulation ordinance is an essential first step and applaud the process.

Please attempt to be moderate and downscale the limits in this first attempt, and not allow a tidal wave of permittees to operate under the guise of regulation. *With current staffing it would probably take about 5 years to process 1500 Conditional Use Permits.* We all know there will be abuse of the rules & regulations and we DO NOT HAVE THE MANPOWER OR RESOURCES TO SUPERVISE, thus most anything you issue will be on the so-called "Honor System". If things go well, we can always modify and reward those that made an honest effort to curtail abuse and comply with the spirit of the ordinance.

The follow list are areas I felt the Planning Commission's recommendation was lacking:

1. Protect the environment is paramount:

- a. Prohibit the use of herbicides, rodenticides and fungicides at cultivation sites and within a designated perimeter. Our county's product should be known for it being grown naturally or grown organically.

- b. Limit the use of Generators (Light, Noise, Exhaust and Fuel associated damage should be considered).
- c. WATER, WATER, WATER: Not Easy, but Water diversions MUST be stopped. Use of rain harvesting should be encouraged. Tight regulation on water storage devices, especially where grading or construction is required. Please consider the "CUMULATIVE EFFECT" resulting from thousands of diversions or storage devices.

2. Start smart and small, we can always grow and improve the ordinance:

- a. Limit the number of permits for the 1st 3 years, as to not promote a permit rush that will we will not be able to monitor or regulate.
- b. Limit the size of the cultivation areas.... I was surprised to see that in many cases the Planning Commission's recommendations were greater than the State guidelines. It is much easier to allow larger cultivation later, but nearly impossible to reduce it....Everyone will request to be "grandfathered".
- c. Lower the grow size when no CUP is required and USE the CUP process intelligently to protect all #1 items above.
- d. Prohibit any cultivation on Public Lands (although that should be a given) and DO NOT issue permits on TPZ lands.

3. The draft an ordinance should be comprehensive, with manageable supervision and oversight, staff to process, and funding to make this process work, even if it is basically funded by the applicants and taxes/fees applied to their ultimate production. While I'd like to see a very thoughtful and comprehensive ordinance I know it cannot be paid for from the General Fund and the general citizenry should not be asked to pay the bill. Every aspect of this Ordinance, permitting, supervision and enforcement should be a user financed operation.

Good Luck,

William Thorington, Principal
Thorington Consulting Group
tcgroup@suddenlink.net

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Hayes, Kathy

From: Eugene Perricelli <ceperr@sbcglobal.net>
Sent: Sunday, December 13, 2015 3:46 PM
To: Hayes, Kathy
Subject: For the Board: For the discussion on pot regulations.

I am horrified that we are contemplating grandfathering in greed and environmental degradation, all in the name of "protecting property rights" or "encouraging compliance".

It seems that the rights being ignored are the rights of everyone BUT the growers, the rights of the ecosystem itself and all, human and otherwise, who rely upon it, and most of all, the rights of people who come after us to have a decent environment in which to live.

Our current batch of planning commissioners leans heavily toward the rights of the individuals who currently own property and ignore long term well being of the property itself and of those who come after. NONE of us has the right to steal from our neighbors, our wildlife, our earth's and progeny's futures.

Please listen to the informed opinions of the local environmental community, folks who base their suggestions on knowledge and science, and actually try to speak for the earth and its current and future inhabitants. Please take action to make this actual regulation, not a farce.

Thank you for your attention and reflection on the greater good rather than the greater greed.

Claire Perricelli

Eureka

Hayes, Kathy

From: Fennell, Estelle
Sent: Sunday, December 13, 2015 4:08 PM
To: Paul Harper; Hayes, Kathy
Cc: Lazar, Steve
Subject: RE: MMLUO comment letter

Dear Paul,

Thank you for your input. I will ask the Clerk of the Board to make sure that the full board has a copy of your comments.

Sincerely,

Estelle Fennell
Second District Supervisor
Chair of the Board

Humboldt County Board of Supervisors
825 5th Street
Eureka, CA 95501

(707) 476 2392
Efennell@co.humboldt.ca.us

From: Paul Harper [pharper@bbwassociates.com]
Sent: Friday, December 11, 2015 2:10 PM
To: Fennell, Estelle; Hayes, Kathy
Cc: Lazar, Steve
Subject: MMLUO comment letter

Dear Ms. Fennell,
Please consider the attached letter from our forestry consulting firm regarding the proposed marijuana land use ordinance.

Sincerely,
Paul Harper

--
Paul D. Harper
Associate Forester, RPF#2672
Baldwin Blomstrom Wilkinson Associates Inc.
P.O. Box 702
Arcata, CA 95518
(707) 825-0475
www.bbwassociates.com

Hayes, Kathy

From: Fennell, Estelle
Sent: Sunday, December 13, 2015 4:34 PM
To: Hayes, Kathy
Cc: Fred Bauer; Lazar, Steve
Subject: FW: Cannabis Ordinance

Hi Kathy,
Can you please make sure that all Board members have a copy of this input.

Thanks a lot,

Estelle

Estelle Fennell
Second District Supervisor
Chair of the Board

Humboldt County Board of Supervisors
825 5th Street
Eureka, CA 95501

(707) 476 2392
Efennell@co.humboldt.ca.us

From: Fred Bauer [fredbauer@luminknow.net]
Sent: Saturday, December 12, 2015 8:47 PM
To: Fennell, Estelle
Subject: Cannabis Ordinance

To: Humboldt County Board Of Supervisors

It is understandable that most of the voices you are hearing on what the opening of the door of legal cannabis cultivation should look like are above all seeing money for themselves. This is completely natural. But it is your responsibility to have that door lead to what will benefit all of the People of Humboldt County for years to come, not just those few that speak the loudest now.

The dam that was placed in the flow of cannabis use for medicine and pleasure has silted up and burst. That force is unstoppable. It is a matter of what effect it will have downstream. Will it be just another washout of long term opportunity like logging and fishing, or will it be the cultivation of a new fertile plain? It is up to you to see that potential and set policy that allows for a sustainable future.

Humboldt County is very special in many ways. One of its unique realities is its worldwide reputation for having initiated and created the highest quality cannabis for both medical use and enjoyment. That uniqueness deserves preservation, as it is the key for an economic future here. We have the expertise; we have the perfect climate to be special in this coming industry. You can buy a two-dollar bottle of wine and you can buy a two hundred dollar bottle of wine. There are buyers that will pay two

hundred dollars for that low-production, superior product. We cannot compete with corporate cannabis production. We can create a market for the highest quality cannabis in the world.

How do we do that?

Limit the size for each operation (3000 sq. ft.)

Require owner residency, keep it personal.

Allow the smallest growers to continue production through zoning and fee structure (they have not been the problem).

Require organic certification and strict water conservation.

Create official recognition with Humboldt Heritage certification.

It's up to you. See past the dazzle of short-term cash flow. Be the policy makers that will be credited with having set the stage for the preservation of a key element of what makes Humboldt truly special.

Fred Bauer
Hummap

Hayes, Kathy

From: Jane Wilson <jainilei@yahoo.com>
Sent: Sunday, December 13, 2015 8:51 PM
To: Hayes, Kathy
Subject: Comment on new ordinance to regulate medical marijuana

The board of supervisors must ensure that the ordinance protects the environment by bringing the marijuana industry into compliance with state and local environmental regulations.

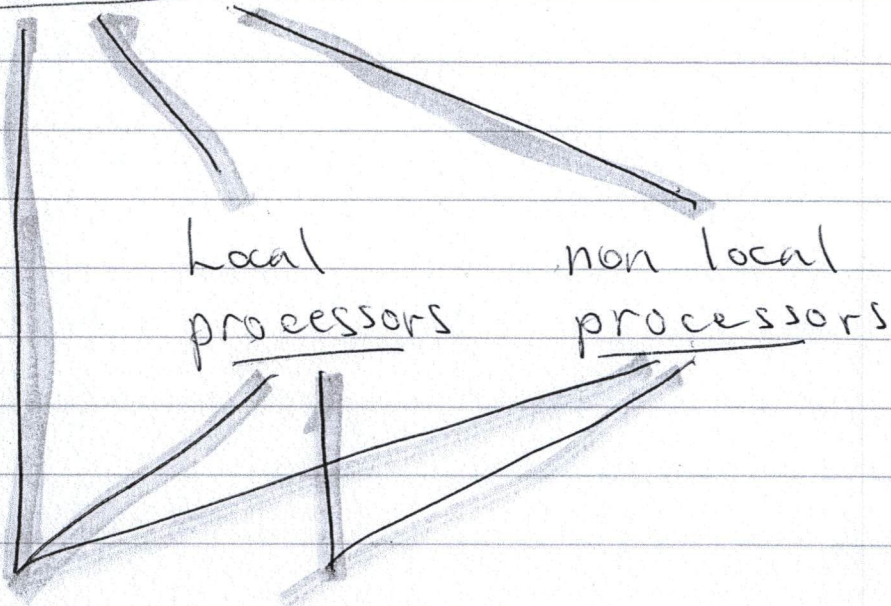
I ask that the new ordinance include these points:

A cap on the total number of permits of 2500 in the first 3 years; Decrease grow size allowed without special and conditional permits; Limit generator dependent cultivation; Prohibit pesticide use, including rodenticides, fungicides, insecticides, herbicides; No new cultivation on TPZ lands; Address carrying capacity of watersheds; Ensure adequate funding for inspection & enforcement, placing a marijuana tax on the ballot for voter approval.

Thank you. Richard and Jane Wilson

Sent from my iPad

Retail outlets



Buds Trim

Distributor

Buds & Trim

Trim room

Hemp material
processors

Stems

Buds fluff buds
small leaves

growers

 = All
the times
that transportation
is necessary.

maybe a
compost market
will develop.

big leaves, wet

Processors

Or: Markets for trim

1. Butane extraction hash, solids to oils
2. cold water extraction hash; Bubble hash
3. Candy and assorted edibles
4. Medicinals in assorted forms

<u>Butane</u>	<u>Bubble</u>	<u>Candy</u>	<u>Medicine</u>
May require permits for explosive gas. Specially designed work areas are needed.	Advanced silk-screen process that is done with cold water and ice.	marijuana is usually boiled in butter to extract desired THCs.	Extraction is usually done by soaking in oil or alcohol.

Then the butter is used in recipes.

I Due to several factors involved in growing marijuana plants for buds the plants must be tied up so the branches are supported. This means whole plants are not cut at harvest. According to the supporting method the plants will be harvested in sections as small as one branch. And a lot of them.

The buds at harvest can not be smashed by the weight of other plants because the buds will flatten and not recover. The retail market is not interested in flat buds.

And time makes a difference when it comes to removing big leaves. Time wilts plants. Big leaf stems will snap off a fresh cut plant but are difficult to remove from a wilted plant.

So the drying facility should be no more than several minutes from the cultivation area.

II Removing big leaves:

There are long stemmed large leaves that go by various names. The removal of these aids in quicker drying. And the non-removal will lead to more costly trim bills in the plans of the future.

III Trim rooms will charge according to how many pounds of vegetation are entered. Not just the sellable pounds produced.

So farmers will have a sorting system ensuring that paying for transportation and trimming is of maximum profit.

A suggestion in giving names to procedures would be that the steps the farmer will have to do from harvest to transportation should not be called processing.

And the procedures in the trim room should not be called processing.

These are the fundamental steps that the crop must go through so there is a market.

Now the word processor can go to operations that have the same basic needs which will aid in writing rules governing behavior.

And farmers will have the ability to do what assures the quality they are proud of.

John from Dinsmore

1. FAIR ARGUMENT STANDARD

Legal standard for determining the significance of impacts; whether a "fair argument" can be made that a "substantial adverse change in physical conditions" will occur.

EIR is required if fair argument exists that a project may have a significant effect on the environment.

Fair argument must be backed by substantial evidence

Generally does not matter how much evidence supports a less-than-significant effect, when a "fair argument" exists

If competing evidence exists, lead agency must prepare an EIR

2. SUBSTANTIAL EVIDENCE DEFINED

Includes fact, reasonable assumption predicated upon fact, or expert opinion supported by fact

Does not include argument, speculation, unsubstantiated opinion, erroneous information, or evidence of social or economic impact that do not cause or contribute to physical environmental effects (PRC §21080(e))

3. TYPES OF SUBSTANTIAL EVIDENCE

Agency staff reports, opinions

Expert opinion based on facts

Technical studies

Public comments

Prior planning documents, prior EIRs

4. SUBSTANTIAL EVIDENCE AND FAIR ARGUMENT EXERCISE

Could a significant water quality impact occur?

Which is basis for substantial evidence supporting a fair argument?:

Opinion of camper based on visual evidence?

RWQCB staff opinion?

Study by local engineer?

5. TOOLS FOR DETERMINING SIGNIFICANCE

- a. Adopted thresholds (CCR §15064.7)
 - b. "Cumulatively considerable" contributions
(CCR §15355, §15130)
 - c. Mandatory findings of significance PRC §21083(b), CCR §15065)
 - i. § 15065. Mandatory Findings of Significance.
- (a) A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur:

(1) The project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.

(2) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

(3) The project has possible environmental effects that are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

(4) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

(b)(1) Where, prior to the commencement of preliminary public review of an environmental document, a project proponent agrees to mitigation measures or project modifications that would avoid any significant effect on the environment specified by subdivision (a) or would mitigate the significant effect to a point where clearly no significant effect on the environment would occur, a lead agency need not prepare an environmental impact report solely because, without mitigation, the environmental effects at issue would have been significant.

(2) Furthermore, where a proposed project has the potential to substantially reduce the number or restrict the range of an endangered, rare or threatened species, the lead agency need not prepare an EIR solely because of such an effect, if:

(A) the project proponent is bound to implement mitigation requirements relating to such species and habitat pursuant to an approved habitat conservation plan or natural community

conservation plan;

ii. MANDATORY FINDINGS: ENDANGERED, RARE, OR
THREATENED SPECIES

Where a project may substantially reduce the number or

(B) the state or federal agency approved the habitat conservation plan or natural community conservation plan in reliance on an environmental impact report or environmental impact statement; and

(C) 1. such requirements avoid any net loss of habitat and net reduction in number of the affected species, or

2. such requirements preserve, restore, or enhance sufficient habitat to mitigate the reduction in habitat and number of the affected species to below a level of significance.

(c) Following the decision to prepare an EIR, if a lead agency determines that any of the conditions specified by subdivision (a) will occur, such a determination shall apply to:

(1) the identification of effects to be analyzed in depth in the environmental impact report or the functional equivalent thereof,

(2) the requirement to make detailed findings on the feasibility of alternatives or mitigation measures to substantially lessen or avoid the significant effects on the environment,

(3) when found to be feasible, the making of changes in the project to substantially lessen or avoid the significant effects on the environment, and

(4) where necessary, the requirement to adopt a statement of overriding considerations.

d. Appendix G checklist questions

APPENDIX D

Listed/Proposed Threatened and Endangered Species for Humboldt County

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Listed/Proposed Threatened and Endangered Species for Humboldt County (Candidates Included)

April 6, 2007

Document number: 836171297-6207

KEY:

(PE) Proposed Endangered Proposed in the Federal Register as being in danger of extinction

(PT) Proposed Threatened Proposed as likely to become endangered within the foreseeable future

(E) Endangered Listed in the Federal Register as being in danger of extinction

(T) Threatened Listed as likely to become endangered within the foreseeable future

(C) Candidate Candidate which may become a proposed species Habitat Y = Designated, P = Proposed, N = None Designated

* Denotes a species Listed by the National Marine Fisheries Service

Type	Scientific Name	Common Name	Category	Critical Habitat
Plants				
	<i>Erysimum menziesii</i>	Menzies' wallflower	E	N
	<i>Layia carnosa</i>	beach layia	E	N
	<i>Lilium occidentale</i>	western lily	E	N
	<i>Thlaspi californicum</i>	Kneeland Prairie penny-cress	E	Y
Fish				
	<i>Eucyclogobius newberryi</i>	tidewater goby	E	P
*	<i>Oncorhynchus kisutch</i>	S. OR/N. CA coho salmon	T	Y
*	<i>Oncorhynchus mykiss</i>	Northern California steelhead	T	Y
*	<i>Oncorhynchus tshawytscha</i>	CA coastal chinook salmon	T	Y
Reptiles				
*	<i>Caretta caretta</i>	loggerhead turtle	T	N
*	<i>Chelonia mydas</i> (incl. <i>agassizi</i>)	green turtle	T	N
*	<i>Dermochelys coriacea</i>	leatherback turtle	E	Y
*	<i>Lepidochelys olivacea</i>	olive (=Pacific) ridley sea turtle	T	N
Birds				
	<i>Brachyramphus marmoratus</i>	marbled murrelet	T	P
	<i>Charadrius alexandrinus nivosus</i>	western snowy plover	T	P
	<i>Coccyzus americanus</i>	Western yellow-billed cuckoo	C	N
	<i>Haliaeetus leucocephalus</i>	bald eagle	T	N
	<i>Pelecanus occidentalis</i>	brown pelican	E	N
	<i>Phoebastria albatrus</i>	short-tailed albatross	E	N
	<i>Strix occidentalis caurina</i>	northern spotted owl	T	Y
Mammals				
*	<i>Balaenoptera borealis</i>	sei whale	E	N
*	<i>Balaenoptera musculus</i>	blue whale	E	N
*	<i>Balaenoptera physalus</i>	fin whale	E	N
*	<i>Eumetopias jubatus</i>	Steller (=northern) sea-lion	T	Y
	<i>Martes pennanti pacifica</i>	Pacific fisher	C	N
*	<i>Megaptera novaengliae</i>	humpback whale	E	N
*	<i>Physeter macrocephalus</i>	sperm whale	E	N

Listed/Proposed Threatened and Endangered Species for the EUREKA Quad (Candidates Included)

April 6, 2007

Document number: 836368223-62136

KEY:

(PE) Proposed Endangered Proposed in the Federal Register as being in danger of extinction

(PT) Proposed Threatened Proposed as likely to become endangered within the foreseeable future

(E) Endangered Listed in the Federal Register as being in danger of extinction

(T) Threatened Listed as likely to become endangered within the foreseeable future

(C) Candidate Candidate which may become a proposed species Habitat Y = Designated, P = Proposed, N = None Designated

* Denotes a species Listed by the National Marine Fisheries Service

Type	Scientific Name	Common Name	Category	Critical Habitat
Plants				
	<i>Erysimum menziesii</i>	Menzies' wallflower	E	N
	<i>Layia carnosa</i>	beach layia	E	N
	<i>Lilium occidentale</i>	western lily	E	N
Fish				
	<i>Eucyclogobius newberryi</i>	tidewater goby	E	P
*	<i>Oncorhynchus kisutch</i>	S. OR/N. CA coho salmon	T	Y
*	<i>Oncorhynchus mykiss</i>	Northern California steelhead	T	Y
*	<i>Oncorhynchus tshawytscha</i>	CA coastal chinook salmon	T	Y
Reptiles				
*	<i>Caretta caretta</i>	loggerhead turtle	T	N
*	<i>Chelonia mydas (incl. agassizi)</i>	green turtle	T	N
*	<i>Dermochelys coriacea</i>	leatherback turtle	E	Y
*	<i>Lepidochelys olivacea</i>	olive (=Pacific) ridley sea turtle	T	N
Birds				
	<i>Brachyramphus marmoratus</i>	marbled murrelet	T	P
	<i>Charadrius alexandrinus nivosus</i>	western snowy plover	T	P
	<i>Coccyzus americanus</i>	Western yellow-billed cuckoo	C	N
	<i>Haliaeetus leucocephalus</i>	bald eagle	T	N
	<i>Pelecanus occidentalis</i>	brown pelican	E	N
	<i>Phoebastria albatrus</i>	short-tailed albatross	E	N
	<i>Strix occidentalis caurina</i>	northern spotted owl	T	Y
	<i>Synthliboramphus hypoleucus</i>	Xantus's murrelet	C	N
Mammals				
*	<i>Balaenoptera borealis</i>	sei whale	E	N
*	<i>Balaenoptera musculus</i>	blue whale	E	N
*	<i>Balaenoptera physalus</i>	fin whale	E	N
*	<i>Eumetopias jubatus</i>	Steller (=northern) sea-lion	T	Y
*	<i>Megaptera novaengliae</i>	humpback whale	E	N
*	<i>Physeter macrocephalus</i>	sperm whale	E	N

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Portrait
Humboldt County

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 <i>Abronia umbellata</i> ssp. <i>breviflora</i> pink sand-verbena	PDNYC010N2			G4G5T2	S2.1	1B.1
2 <i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040			G5	S3	SC
3 <i>Accipiter gentilis</i> northern goshawk	ABNKC12060			G5	S3	SC
4 <i>Accipiter striatus</i> sharp-shinned hawk	ABNKC12020			G5	S3	SC
5 <i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020			G2G3	S2	SC
6 <i>Ancotrema voyanum</i> Hooded lancetooth	IMGAS36130			G1G2	S1S2	
7 <i>Anomobryum julaceum</i> slender silver-moss	NBMUS80010			G4	S1.3	2.2
8 <i>Antrozous pallidus</i> pallid bat	AMACC10010			G5	S3	SC
9 <i>Aquila chrysaetos</i> golden eagle	ABNKC22010			G5	S3	SC
10 <i>Arborimus albipes</i> white-footed vole	AMAFF23010			G3G4	S2S3	SC
11 <i>Arborimus pomo</i> Sonoma tree vole	AMAFF10030			G3	S3	SC
12 <i>Arctostaphylos canescens</i> ssp. <i>sonomensis</i> Sonoma manzanita	PDERI04066			G3G4T2	S2.1	1B.2
13 <i>Ardea alba</i> great egret	ABNGA05010			G5	S4	
14 <i>Ardea herodias</i> great blue heron	ABNGA04010			G5	S4	
15 <i>Ascaphus truei</i> western tailed frog	AAABA01010			G4	S2S3	SC
16 <i>Astragalus agnicidus</i> Humboldt milk-vetch	PDFAB0F080		Endangered	G2	S2.1	1B.1
17 <i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i> coastal marsh milk-vetch	PDFAB0F7B2			G2T2	S2.2	1B.2
18 <i>Astragalus umbraticus</i> Bald Mountain milk-vetch	PDFAB0F990			G4	S2.3	2.3
19 <i>Atractelmis wawona</i> Wawona riffle beetle	IICOL58010			G1G3	S1S2	
20 <i>Bensoniella oregona</i> bensoniella	PDSAX02010		Rare	G3	S2.2	1B.1
21 <i>Bonasa umbellus</i> ruffed grouse	ABNLC11010			G5	S4	SC
22 <i>Boschniakia hookeri</i> small groundcone	PDORO01010			G5	S1S2	2.3

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Natural Diversity Database
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Humboldt County

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
23 Carex arcta northern clustered sedge	PMCYP030X0			G5	S1S2	2.2
24 Carex lenticularis var. limnophila lakeshore sedge	PMCYP037A7			G5T5	S1S2.2	2.2
25 Carex leptalea flaccid sedge	PMCYP037E0			G5	S2?	2.2
26 Carex lyngbyei Lyngbye's sedge	PMCYP037Y0			G5	S2.2	2.2
27 Carex praticola meadow sedge	PMCYP03B20			G5	S2S3	2.2
28 Carex saliniformis deceiving sedge	PMCYP03BY0			G2	S2.2	1B.2
29 Carex viridula var. viridula green sedge	PMCYP03EM3			G5T5	S1.3	2.3
30 Castilleja affinis ssp. litoralis Oregon coast Indian paintbrush	PDSCR0D1V0			G4G5T4	S2.2	2.2
31 Castilleja ambigua ssp. humboldtensis Humboldt Bay owl's-clover	PDSCR0D402			G4T2	S2.2	1B.2
32 Castilleja mendocinensis Mendocino coast Indian paintbrush	PDSCR0D3N0			G2	S2.2	1B.2
33 Charadrius alexandrinus nivosus western snowy plover	ABNNB03031	Threatened		G4T3	S2	SC
34 Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101			G5T2	S1	
35 Clarkia amoena ssp. whitneyi Whitney's farewell-to-spring	PDONA05025			G5T2	S2.1	1B.1
36 Coastal Douglas Fir Western Hemlock Forest	CTT82410CA			G4	S2.1	
37 Coastal Terrace Prairie	CTT41100CA			G2	S2.1	
38 Coastal and Valley Freshwater Marsh	CTT52410CA			G3	S2.1	
39 Cordylanthus maritimus ssp. palustris Point Reyes bird's-beak	PDSCR0J0C3			G4?T2	S2.2	1B.2
40 Corynorhinus townsendii Townsend's big-eared bat	AMACC08010			G4T3T4	S2S3	SC
41 Cypseloides niger black swift	ABNUA01010			G4	S2	SC
42 Didymodon norrisii Norris' beard-moss	NBMUS2C0H0			G2G3	S2.2	2.2
43 Egretta thula snowy egret	ABNGA06030			G5	S4	
44 Empetrum nigrum ssp. hermaphroditum black crowberry	PDEMP03021			G5T5	S2?	2.2
45 Empidonax traillii willow flycatcher	ABPAE33040		Endangered	G5	S1S2	
46 Emys (=Clemmys) marmorata marmorata northwestern pond turtle	ARAAD02031			G3G4T3	S3	SC

California Department of Fish and Game
Natural Diversity Database
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Humboldt County

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
47 <i>Epilobium oreganum</i> Oregon fireweed	PDONA060P0			G2	S2.2	1B.2
48 <i>Erigeron maniopotamicus</i> Mad River fleabane daisy	PDASTE1050			G1	S1.2	1B.2
49 <i>Erysimum menziesii</i> ssp. <i>eurekaense</i> Humboldt Bay wallflower	PDBRA160E2	Endangered	Endangered	G3?T1	S1.1	1B.1
50 <i>Erythronium revolutum</i> coast fawn lily	PMLIL0U0F0			G4	S2.2	2.2
51 <i>Eucephalus vialis</i> wayside aster	PDASTEC0A0			G3	S1.2	1B.2
52 <i>Eucyclogobius newberryi</i> tidewater goby	AFCQN04010	Endangered		G3	S2S3	SC
53 <i>Falco peregrinus anatum</i> American peregrine falcon	ABNKD06071	Delisted	Endangered	G4T3	S2	
54 <i>Fissidens pauperculus</i> minute pocket-moss	NBMUS2W0U0			G3?	S1.2	1B.2
55 <i>Gilia capitata</i> ssp. <i>pacifica</i> Pacific gilia	PDPLM040B6			G5T3T4	S2.2?	1B.2
56 <i>Gilia millefoliata</i> dark-eyed gilia	PDPLM04130			G2	S2.2	1B.2
57 <i>Glyceria grandis</i> American manna grass	PMPOA2Y080			G5	S1.3?	2.3
58 <i>Haliaeetus leucocephalus</i> bald eagle	ABNKC10010	Threatened	Endangered	G5	S2	
59 <i>Helminthoglypta arrosa monticola</i> Mountain shoulderband	IMGASC2035			G2G3T1	S1	
60 <i>Helminthoglypta talmadgei</i> Trinity Shoulderband	IMGASC2630			G1G3	S1S3	
61 <i>Hesperervax sparsiflora</i> var. <i>brevifolia</i> short-leaved evax	PDASTE5011			G4T3	S3.2	2.2
62 <i>Iliamna latibracteata</i> California globe mallow	PDMAL0K040			G3	S2.2	1B.2
63 <i>Juga orickensis</i> Redwood juga	IMGASK4190			G2	S1S2	
64 Klamath/North Coast Fall/Winter Run Chinook Salmon River	CARB2332CA			G?	S?	
65 Klamath/North Coast Interior Headwater Fishless Stream	CARB2220CA			G?	S?	
66 Klamath/North Coast Rainbow Trout Stream	CARB2312CA			G?	S?	
67 <i>Lathyrus biflorus</i> two-flowered pea	PDFAB25180			G1	S1.1	1B.1
68 <i>Lathyrus japonicus</i> sand pea	PDFAB250C0			G5	S1.1	2.1
69 <i>Lathyrus palustris</i> marsh pea	PDFAB250P0			G5	S2S3	2.2

California Department of Fish and Game
Natural Diversity Database
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Humboldt County

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70 Layia carnosa beach layia	PDAST5N010	Endangered	Endangered	G1	S1.1	1B.1
71 Lewisia cotyledon var. heckneri Heckner's lewisia	PDPOR04052			G4T2	S2.2	1B.2
72 Lilium occidentale western lily	PMLIL1A0G0	Endangered	Endangered	G1	S1.2	1B.1
73 Lupinus constancei The Lassics lupine	PDFAB2B490			G1	S1.2	1B.2
74 Lupinus elmeri South Fork Mtn. lupine	PDFAB2B1G0			G1	S1.2	1B.2
75 Lycopodiella inundata bog club-moss	PPLYC03060			G5	S1?	2.2
76 Lycopodium clavatum running-pine	PPLYC01080			G5	S3.2	2.2
77 Martes americana humboldtensis Humboldt marten	AMAJF01012			G5T2T3	S2S3	SC
78 Martes pennanti (pacifica) DPS Pacific fisher	AMAJF01021	Candidate		G5	S2S3	SC
79 Meesia triquetra three-ranked hump-moss	NBMUS4L020			G5	S3S4.2	4.2
80 Microseris borealis northern microseris	PDAST6E030			G4?	S1.1	2.1
81 Mielichhoferia elongata elongate copper-moss	NBMUS4Q022			G4?	S2.2	2.2
82 Mitella caulescens leafy-stemmed mitrewort	PDSAX0N020			G5	S4.2	4.2
83 Monardella villosa ssp. globosa robust monardella	PDLAM180P7			G5T2	S2.2	1B.2
84 Monotropa uniflora Indian-pipe	PDMON03030			G5	S2S3	2.2
85 Montia howellii Howell's montia	PDPOR05070			G3G4	S3.2	2.2
86 Myotis evotis long-eared myotis	AMACC01070			G5	S4?	
87 Myotis yumanensis Yuma myotis	AMACC01020			G5	S4?	
88 North Central Coast Summer Steelhead Stream	CARA2634CA			G?	S?	
89 Northern Coastal Salt Marsh	CTT52110CA			G3	S3.2	
90 Northern Foredune Grassland	CTT21211CA			G1	S1.1	
91 Noyo intersessa Ten Mile Shoulderband	IMGASC5070			G2	S2	
92 Nycticorax nycticorax black-crowned night heron	ABNGA11010			G5	S3	
93 Oceanodroma furcata fork-tailed storm-petrel	ABNDC04010			G5	S1	SC

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Portrait
Humboldt County

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
94 <i>Oenothera wolfii</i> Wolf's evening-primrose	PDONA0C1K0			G1	S1.1	1B.1
95 <i>Oncorhynchus clarkii clarkii</i> coast cutthroat trout	AFCHA0208A			G4T4	S3	SC
96 <i>Oncorhynchus kisutch</i> Coho salmon - southern Oregon / northern California esu	AFCHA02032	Threatened	Threatened	G4T2Q	S2?	
97 <i>Oncorhynchus kisutch</i> Coho salmon - central California esu	AFCHA02034	Threatened	Endangered	G4	S2?	
98 <i>Oncorhynchus mykiss irideus</i> summer-run steelhead trout	AFCHA0213B			G5T4Q	S2	SC
99 <i>Oncorhynchus tshawytscha</i> spring-run spring-run chinook salmon	AFCHA0205A	Threatened	Threatened	G5T1Q	S1	
100 <i>Pandion haliaetus</i> osprey	ABNKC01010			G5	S3	SC
101 <i>Plethodon elongatus</i> Del Norte salamander	AAAAD12050			G4	S3	SC
102 <i>Puccinellia pumila</i> dwarf alkali grass	PMPOA531B0			G4?	S1.1?	2.2
103 <i>Rallus longirostris obsoletus</i> California clapper rail	ABNME05016	Endangered	Endangered	G5T1	S1	
104 <i>Rana aurora aurora</i> northern red-legged frog	AAABH01021			G4T4	S2?	SC
105 <i>Rana boylei</i> foothill yellow-legged frog	AAABH01050			G3	S2S3	SC
106 <i>Rhyacotriton variegatus</i> southern torrent salamander	AAAAJ01020			G3G4	S2S3	SC
107 <i>Riparia riparia</i> bank swallow	ABPAU08010		Threatened	G5	S2S3	
108 <i>Romanzoffia tracyi</i> Tracy's romanzoffia	PDHYD0E030			G4	S1.3	2.3
109 <i>Rorippa columbiae</i> Columbia yellow cress	PDBRA27060			G3	S1.1	1B.2
110 <i>Sanguisorba officinalis</i> great burnet	PDROS1L060			G5?	S2.2	2.2
111 <i>Scirpus subterminalis</i> water bulrush	PMCYP0Q1G0			G4G5	S2S3	2.3
112 <i>Sedum divergens</i> Cascade stonecrop	PDCRA0A0B0			G5?	S1.3	2.3
113 <i>Senecio bolanderi</i> var. <i>bolanderi</i> seacoast ragwort	PDAST8H0H1			G4T4	S1.2	2.2
114 <i>Sidalcea malachroides</i> maple-leaved checkerbloom	PDMAL110E0			G3G4	S3S4.2	4.2
115 <i>Sidalcea malviflora</i> ssp. <i>patula</i> Siskiyou checkerbloom	PDMAL110F9			G5T1	S1.1	1B.2
116 <i>Sidalcea oregana</i> ssp. <i>eximia</i> coast checkerbloom	PDMAL110K9			G5T1	S1.2	1B.2

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Portrait
Humboldt County

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
117 Sisyrinchium hitchcockii Hitchcock's blue-eyed grass	PMIRI0D0S0			G2	S1.1	1B.1
118 Sitka Spruce Forest	CTT82110CA			G1	S1.1	
119 Spergularia canadensis var. occidentalis western sand-spurrey	PDCAR0W032			G5T4?	S1.1	2.1
120 Speyeria zerene behrensii Behren's silverspot butterfly	IILEPJ6088	Endangered		G5T1	S1	
121 Sphagnum Bog	CTT51110CA			G3	S1.2	
122 Thermopsis robusta robust false lupine	PDFAB3Z0D0			G2Q	S2.2	1B.2
123 Thlaspi californicum Kneeland Prairie pennycress	PDBRA2P041	Endangered		G1	S1.1	1B.1
124 Tracyina rostrata beaked tracyina	PDAST9D010			G1G2	S1S2.2	1B.2
125 Trichodon cylindricus cylindrical trichodon	NBMUS7N020			G4G5	S2.2	2.2
126 Upland Douglas Fir Forest	CTT82420CA			G4	S3.1	
127 Vespericola karokorum Karak hesperian (=Karak Indian snail)	IMGASA4040			G2G3	S2S3	
128 Viburnum ellipticum oval-leaved viburnum	PDCPR07080			G5	S2.3	2.3
129 Viola palustris marsh violet	PDVIO041G0			G5	S1S2	2.2

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Portrait
Eureka and adjacent quads

Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1 Abronia umbellata ssp. breviflora pink sand-verbena	PDNYC010N2			G4G5T2	S2.1	1B.1
2 Arborimus albipes white-footed vole	AMAFF23010			G3G4	S2S3	SC
3 Arborimus pomo Sonoma tree vole	AMAFF10030			G3	S3	SC
4 Ardea alba great egret	ABNGA05010			G5	S4	
5 Ardea herodias great blue heron	ABNGA04010			G5	S4	
6 Ascaphus truei western tailed frog	AAABA01010			G4	S2S3	SC
7 Astragalus pycnostachyus var. pycnostachyus coastal marsh milk-vetch	PDFAB0F7B2			G2T2	S2.2	1B.2
8 Carex arcta northern clustered sedge	PMCYP030X0			G5	S1S2	2.2
9 Carex leptalea flaccid sedge	PMCYP037E0			G5	S2?	2.2
10 Carex lyngbyei Lyngbye's sedge	PMCYP037Y0			G5	S2.2	2.2
11 Carex praticola meadow sedge	PMCYP03B20			G5	S2S3	2.2
12 Castilleja affinis ssp. litoralis Oregon coast Indian paintbrush	PDSCR0D1V0			G4G5T4	S2.2	2.2
13 Castilleja ambigua ssp. humboldtensis Humboldt Bay owl's-clover	PDSCR0D402			G4T2	S2.2	1B.2
14 Charadrius alexandrinus nivosus western snowy plover	ABNNB03031	Threatened		G4T3	S2	SC
15 Cicindela hirticollis grvida sandy beach tiger beetle	IICOL02101			G5T2	S1	
16 Cordylanthus maritimus ssp. palustris Point Reyes bird's-beak	PDSCR0J0C3			G4?T2	S2.2	1B.2
17 Egretta thula snowy egret	ABNGA06030			G5	S4	
18 Emys (=Clemmys) marmorata marmorata northwestern pond turtle	ARAAD02031			G3G4T3	S3	SC
19 Erysimum menziesii ssp. eurekaense Humboldt Bay wallflower	PDBRA160E2	Endangered	Endangered	G3?T1	S1.1	1B.1
20 Erythronium revolutum coast fawn lily	PMLIL0U0F0			G4	S2.2	2.2
21 Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered		G3	S2S3	SC
22 Fissidens pauperculus minute pocket-moss	NBMUS2W0U0			G3?	S1.2	1B.2

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23 <i>Gilia capitata</i> ssp. <i>pacifica</i> Pacific gilia	PDPLM040B6			G5T3T4	S2.2?	1B.2
24 <i>Gilia millefoliata</i> dark-eyed gilia	PDPLM04130			G2	S2.2	1B.2
25 <i>Haliaeetus leucocephalus</i> bald eagle	ABNKC10010	Threatened	Endangered	G5	S2	
26 <i>Hesperervax sparsiflora</i> var. <i>brevifolia</i> short-leaved evax	PDASTE5011			G4T3	S3.2	2.2
27 <i>Lathyrus japonicus</i> sand pea	PDFAB250C0			G5	S1.1	2.1
28 <i>Lathyrus palustris</i> marsh pea	PDFAB250P0			G5	S2S3	2.2
29 <i>Layia carnosa</i> beach layia	PDAST5N010	Endangered	Endangered	G1	S1.1	1B.1
30 <i>Lilium occidentale</i> western lily	PMLIL1A0G0	Endangered	Endangered	G1	S1.2	1B.1
31 <i>Lycopodium clavatum</i> running-pine	PPLYC01080			G5	S3.2	2.2
32 <i>Martes americana humboldtensis</i> Humboldt marten	AMAJF01012			G5T2T3	S2S3	SC
33 <i>Mitella caulescens</i> leafy-stemmed mitrewort	PDSAX0N020			G5	S4.2	4.2
34 <i>Monotropa uniflora</i> Indian-pipe	PDMON03030			G5	S2S3	2.2
35 <i>Montia howellii</i> Howell's montia	PDPOR05070			G3G4	S3.2	2.2
36 <i>Myotis evotis</i> long-eared myotis	AMACC01070			G5	S4?	
37 Northern Coastal Salt Marsh	CTT52110CA			G3	S3.2	
38 Northern Foredune Grassland	CTT21211CA			G1	S1.1	
39 <i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010			G5	S3	
40 <i>Oncorhynchus clarkii clarkii</i> coast cutthroat trout	AFCHA0208A			G4T4	S3	SC
41 <i>Oncorhynchus kisutch</i> Coho salmon - southern Oregon / northern California esu	AFCHA02032	Threatened	Threatened	G4T2Q	S2?	
42 <i>Pandion haliaetus</i> osprey	ABNKC01010			G5	S3	SC
43 <i>Phalacrocorax auritus</i> double-crested cormorant	ABNFD01020			G5	S3	SC
44 <i>Rallus longirostris obsoletus</i> California clapper rail	ABNME05016	Endangered	Endangered	G5T1	S1	
45 <i>Rana aurora aurora</i> northern red-legged frog	AAABH01021			G4T4	S2?	SC

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46 <i>Rhyacotriton variegatus</i> southern torrent salamander	AAAAJ01020			G3G4	S2S3	SC
47 <i>Sidalcea malachroides</i> maple-leaved checkerbloom	PDMAL110E0			G3G4	S3S4.2	4.2
48 <i>Sidalcea malviflora</i> ssp. <i>patula</i> Siskiyou checkerbloom	PDMAL110F9			G5T1	S1.1	1B.2
49 <i>Sidalcea oregana</i> ssp. <i>eximia</i> coast checkerbloom	PDMAL110K9			G5T1	S1.2	1B.2
50 <i>Spergularia canadensis</i> var. <i>occidentalis</i> western sand-spurrey	PDCAR0W032			G5T4?	S1.1	2.1
51 <i>Viola palustris</i> marsh violet	PDVIO041G0			G5	S1S2	2.2

CNPS Inventory of Rare and Endangered Plants

Status: Plant Press Manager window with 157 items - Fri, Apr. 6, 2007, 05:28 b

Reformat list as: Standard List - with Plant Press controls

STATUS and RARITY REPORT

scientific	family	CNPS	R-E-D	STATE	State Rank	FEDERAL	Global Rank
<u>Abronia umbellata</u> <u>ssp. breviflora</u>	Nyctaginaceae	List 1B.1	2- 3- 2	None	S2.1	None	G4G5T2
<u>Allium hoffmanii</u>	Liliaceae	List 4.3	1- 1- 3	None	S3.3	None	G3
<u>Allium siskiyouense</u>	Liliaceae	List 4.3	1- 1- 1	None	S3.3?	None	G4
<u>Angelica lucida</u>	Apiaceae	List 4.2	1- 2- 1	None	S2S3	None	G5
<u>Anomobryum julaceum</u>	Bryaceae	List 2.2	3- 2- 1	None	S1.3	None	G4
<u>Antennaria flagellaris</u>	Asteraceae	List 4.2	1- 2- 1	None	S3.2	None	G5?
<u>Antennaria suffrutescens</u>	Asteraceae	List 4.3	1- 1- 2	None	S3.3?	None	G4
<u>Arabis rigidissima</u> <u>var. rigidissima</u>	Brassicaceae	List 4.3	1- 1- 3	None	S3.3	None	G3T3
<u>Arctostaphylos canescens</u> ssp. <u>sonomensis</u>	Ericaceae	List 1B.2	2- 2- 3	None	S2.1	None	G3G4T2
<u>Arctostaphylos hispidula</u>	Ericaceae	List 4.2	1- 2- 2	None	S3.2	None	G3
<u>Arnica cernua</u>	Asteraceae	List 4.3	1- 1- 2	None	S3.3	None	G5
<u>Arnica spathulata</u>	Asteraceae	List 4.3	1- 1- 2	None	S3.3	None	G3?
<u>Astragalus agnicidus</u>	Fabaceae	List 1B.1	2- 3- 3	CE	S2.1	None	G2
<u>Astragalus pycnostachyus</u> var. <u>pycnostachyus</u>	Fabaceae	List 1B.2	3- 2- 3	None	S2.2	None	G2T2
<u>Astragalus rattanii</u>	Fabaceae	List	1- 1-	None	S3.3	None	G4T3

var. rattanii		4.3	3				
<u>Astragalus umbraticus</u>	Fabaceae	List 2.3	2- 1- 1	None	S2.3	None	G4
<u>Bensoniella oregona</u>	Saxifragaceae	List 1B.1	3- 3- 2	CR	S2.2	None	G3
<u>Boschniakia hookeri</u>	Orobanchaceae	List 2.3	3- 1- 1	None	S1S2	None	G5
<u>Calamagrostis bolanderi</u>	Poaceae	List 4.2	1- 2- 3	None	S3.2	None	G3
<u>Calamagrostis foliosa</u>	Poaceae	List 4.2	1- 2- 3	CR	S3.2	None	G3
<u>Carex arcta</u>	Cyperaceae	List 2.2	2- 2- 1	None	S1S2	None	G5
<u>Carex buxbaumii</u>	Cyperaceae	List 4.2	1- 2- 1	None	S3.2	None	G5
<u>Carex geyeri</u>	Cyperaceae	List 4.2	1- 2- 1	None	S3.2	None	G5
<u>Carex inops ssp. inops</u>	Cyperaceae	List 3.3	?- 1- 1	None	S3?	None	G5T4?
<u>Carex lenticularis var. limnophila</u>	Cyperaceae	List 2.2	3- 2- 1	None	S1S2.2	None	G5T5
<u>Carex leptalea</u>	Cyperaceae	List 2.2	3- 2- 1	None	S2?	None	G5
<u>Carex lyngbyei</u>	Cyperaceae	List 2.2	2- 2- 1	None	S2.2	None	G5
<u>Carex praticola</u>	Cyperaceae	List 2.2	2- 2- 1	None	S2S3	None	G5
<u>Carex saliniformis</u>	Cyperaceae	List 1B.2	2- 2- 3	None	S2.2	None	G2
<u>Carex viridula var. viridula</u>	Cyperaceae	List 2.3	3- 1- 1	None	S1.3	None	G5T5
<u>Castilleja affinis ssp. litoralis</u>	Scrophulariaceae	List 2.2	2- 2- 1	None	S2.2	None	G4G5T4
<u>Castilleja ambigua ssp. humboldtiensis</u>	Scrophulariaceae	List 1B.2	2- 2- 3	None	S2.2	None	G4T2
<u>Castilleja mendocinensis</u>	Scrophulariaceae	List 1B.2	2- 2- 2	None	S2.2	None	G2
<u>Ceanothus</u>			1-				

<u>gloriosus</u> var. <u>exaltatus</u>	Rhamnaceae	List 4.3	1-3	None	S3.3	None	G3G4T3
<u>Clarkia amoena</u> ssp. <u>whitneyi</u>	Onagraceae	List 1B.1	3-3-3	None	S2.1	None	G5T2
<u>Clarkia gracilis</u> ssp. <u>tracyi</u>	Onagraceae	List 4.2	1-2-3	None	S3.2	None	G5T3
<u>Collinsia corymbosa</u>	Scrophulariaceae	List 1B.2	2-2-3	None	S1.2	None	G1
<u>Collomia tracyi</u>	Polemoniaceae	List 4.3	1-1-3	None	S3.3	None	G3
<u>Coptis laciniata</u>	Ranunculaceae	List 2.2		None	S3.2	None	G4G5
<u>Cordylanthus maritimus</u> ssp. <u>palustris</u>	Scrophulariaceae	List 1B.2	2-2-2	None	S2.2	None	G4?T2
<u>Cypripedium californicum</u>	Orchidaceae	List 4.2	1-2-2	None	S3.2	None	G3
<u>Cypripedium fasciculatum</u>	Orchidaceae	List 4.2	1-2-2	None	S3.2	None	G4
<u>Cypripedium montanum</u>	Orchidaceae	List 4.2	1-2-2	None	S4.2	None	G4
<u>Dicentra formosa</u> ssp. <u>oregana</u>	Papaveraceae	List 4.2	1-2-2	None	S3.2	None	G5T4
<u>Didymodon norrisii</u>	Pottiaceae	List 2.2	2-2-2	None	S2.2	None	G2G3
<u>Discelium nudum</u>	Disceliaceae	List 2.2	3-2-1	None	S1.2	None	G3G4
<u>Draba howellii</u>	Brassicaceae	List 4.3	1-1-2	None	S3.3	None	G4
<u>Eleocharis parvula</u>	Cyperaceae	List 4.3	1-1-1	None	S3.3	None	G5
<u>Empetrum nigrum</u> ssp. <u>hermaphroditum</u>	Empetraceae	List 2.2	3-2-1	None	S2?	None	G5T5
<u>Epilobium oreganum</u>	Onagraceae	List 1B.2	2-2-2	None	S2.2	None	G2
<u>Epilobium septentrionale</u>	Onagraceae	List 4.3	1-1-3	None	S3.3	None	G3
<u>Erigeron biolettii</u>	Asteraceae	List 3	?-?-3	None	S3?	None	G3?
<u>Erigeron</u>			1-				

<u>decumbens</u> var. <u>robustior</u>	Asteraceae	List 4.3	1-3	None	S3.3	None	G4T3
<u>Erigeron maniopotamicus</u>	Asteraceae	List 1B.2	3-2-3	None	S1.2	None	G1
<u>Erigeron petrophilus</u> var. <u>viscidulus</u>	Asteraceae	List 4.3	1-1-2	None	S3.3	None	G4T3
<u>Erigeron supplex</u>	Asteraceae	List 1B.2	3-2-3	None	S1.1	None	G1
<u>Eriogonum umbellatum</u> var. <u>bahiiforme</u>	Polygonaceae	List 4.2	1-2-3	None	S3.2	None	G5T3
<u>Erysimum menziesii</u> ssp. <u>eurekense</u>	Brassicaceae	List 1B.1	3-3-3	CE	S1.1	FE	G3?T1
<u>Erythronium citrinum</u> var. <u>citrinum</u>	Liliaceae	List 4.3	1-1-1	None	S3.3	None	G4T4
<u>Erythronium revolutum</u>	Liliaceae	List 2.2	2-2-1	None	S2.2	None	G4
<u>Eucephalus vialis</u>	Asteraceae	List 1B.2	3-2-2	None	S1.2	None	G3
<u>Fissidens pauperculus</u>	Fissidentaceae	List 1B.2	2-2-3	None	S1.2	None	G3?
<u>Fritillaria purdyi</u>	Liliaceae	List 4.3	1-1-3	None	S3.2	None	G3
<u>Gentiana plurisetosa</u>	Gentianaceae	List 1B.3	1-1-2	None	S2S3.2	None	G2G3
<u>Gilia capitata</u> ssp. <u>pacifica</u>	Polemoniaceae	List 1B.2	2-2-2	None	S2.2?	None	G5T3T4
<u>Gilia millefoliata</u>	Polemoniaceae	List 1B.2	2-2-2	None	S2.2	None	G2
<u>Glehnia littoralis</u> ssp. <u>leiocarpa</u>	Apiaceae	List 4.2	1-2-1	None	S3.2	None	G5T5
<u>Glyceria grandis</u>	Poaceae	List 2.3	3-1-1	None	S1.3?	None	G5
<u>Hemizonia congesta</u> ssp. <u>tracyi</u>	Asteraceae	List 4.3	1-1-3	None	S3.3	None	G5T3
<u>Hesperevax sparsiflora</u> var. <u>brevifolia</u>	Asteraceae	List 2.2	2-2-1	None	S3.2	None	G4T3
<u>Hesperolinon adenophyllum</u>	Linaceae	List 1B.2	2-2-3	None	S2.3	None	G2

<u>Horkelia sericata</u>	Rosaceae	List 4.3	1- 1- 1	None	S3.3	None	G3G4
<u>Iliamna latibracteata</u>	Malvaceae	List 1B.2	2- 2- 2	None	S2.2	None	G3
<u>Iris longipetala</u>	Iridaceae	List 4.2		None	S3.2	None	G3
<u>Iris tenax ssp. klamathensis</u>	Iridaceae	List 4.3	1- 1- 3	None	S3.3	None	G4G5T3
<u>Juncus supiniformis</u>	Juncaceae	List 2.2	2- 2- 2	None	S2.2?	None	G5
<u>Lathyrus biflorus</u>	Fabaceae	List 1B.1	3- 3- 3	None	S1.1	None	G1
<u>Lathyrus glandulosus</u>	Fabaceae	List 4.3	1- 1- 3	None	S3.3	None	G3
<u>Lathyrus japonicus</u>	Fabaceae	List 2.1	3- 3- 1	None	S1.1	None	G5
<u>Lathyrus palustris</u>	Fabaceae	List 2.2	2- 2- 1	None	S2S3	None	G5
<u>Layia carnosa</u>	Asteraceae	List 1B.1	3- 3- 3	CE	S1.1	FE	G1
<u>Leptosiphon acicularis</u>	Polemoniaceae	List 4.2	1- 2- 3	None	S3.2	None	G3
<u>Leptosiphon latisectus</u>	Polemoniaceae	List 4.3	1- 1- 3	None	S3.3	None	G3
<u>Lewisia cotyledon var. heckneri</u>	Portulacaceae	List 1B.2	2- 2- 3	None	S2.2	None	G4T2
<u>Lewisia cotyledon var. howellii</u>	Portulacaceae	List 3.2	2- 2- 2	None	S3?	None	G4T4Q
<u>Lilium bolanderi</u>	Liliaceae	List 4.2	1- 2- 1	None	S3.2	None	G4
<u>Lilium kelloggii</u>	Liliaceae	List 4.3	1- 1- 2	None	S3.3	None	G3
<u>Lilium occidentale</u>	Liliaceae	List 1B.1	3- 3- 2	CE	S1.2	FE	G1
<u>Lilium pardalinum ssp. vollmeri</u>	Liliaceae	List 4.3	1- 1- 1	None	S3.3	None	G5T4
<u>Lilium rubescens</u>	Liliaceae	List 4.2	1- 2- 3	None	S3.2	None	G3

<u>Lilium washingtonianum ssp. purpurascens</u>	Liliaceae	List 4.3	1- 1- 1	None	S3.3	None	G4T4
<u>Listera cordata</u>	Orchidaceae	List 4.2	1- 2- 1	None	S3.2	None	G5
<u>Lomatium tracyi</u>	Apiaceae	List 4.3	1- 1- 2	None	S3.3	None	G3
<u>Lotus formosissimus</u>	Fabaceae	List 4.2	1- 2- 1	None	S3.2	None	G4
<u>Lotus yollabollensis</u>	Fabaceae	List 4.3	1- 1- 3	None	S3.3	None	G3
<u>Lupinus constancei</u>	Fabaceae	List 1B.2	3- 2- 3	None	S1.2	None	G1
<u>Lupinus elmeri</u>	Fabaceae	List 1B.2	3- 2- 3	None	S1.2	None	G1
<u>Lupinus lapidicola</u>	Fabaceae	List 4.3	1- 1- 3	None	S3.3	None	G3
<u>Lupinus tracyi</u>	Fabaceae	List 4.3	1- 1- 2	None	S3.3	None	G4
<u>Lycopodiella inundata</u>	Lycopodiaceae	List 2.2	3- 2- 1	None	S1?	None	G5
<u>Lycopodium clavatum</u>	Lycopodiaceae	List 2.3	2- 1- 1	None	S3S4.2	None	G5
<u>Lycopus uniflorus</u>	Lamiaceae	List 4.3	1- 1- 1	None	S3.3	None	G5
<u>Meesia triquetra</u>	Meesiaceae	List 4.2	2- 2- 1	None	S3S4.2	None	G5
<u>Melica spectabilis</u>	Poaceae	List 4.3	1- 1- 1	None	S3.3	None	G5
<u>Microseris borealis</u>	Asteraceae	List 2.1	3- 3- 1	None	S1.1	None	G4?
<u>Mielichhoferia elongata</u>	Bryaceae	List 2.2	2- 2- 1	None	S2.2	None	G4?
<u>Minuartia decumbens</u>	Caryophyllaceae	List 1B.2	3- 2- 3	None	S1.2	None	G1
<u>Mitella caulescens</u>	Saxifragaceae	List 4.2	2- 1- 1	None	S4.2	None	G5
<u>Monardella villosa ssp. globosa</u>	Lamiaceae	List 1B.2	2- 2- 2-	None	S2.2	None	G5T2

3							
<u>Moneses uniflora</u>	Ericaceae	List 4.3	1- 1- 1	None	S3.3	None	G5
<u>Monotropa uniflora</u>	Ericaceae	List 2.2	2- 2- 1	None	S2S3	None	G5
<u>Montia howellii</u>	Portulacaceae	List 2.2	3- 2- 1	None	S3	None	G3G4
<u>Navarretia sinistra</u> <u>ssp. pinnatisecta</u>	Polemoniaceae	List 4.3	1- 1- 3	None	S3.3	None	G4G5T3
<u>Oenothera wolfii</u>	Onagraceae	List 1B.1	3- 3- 2	None	S1.1	None	G1
<u>Orthocarpus cuspidatus</u> ssp. <u>cuspidatus</u>	Scrophulariaceae	List 4.3	1- 1- 2	None	S3.3	None	G5T3T4
<u>Oxalis suksdorfii</u>	Oxalidaceae	List 4.3	1- 1- 1	None	S3.3	None	G4
<u>Pinguicula vulgaris</u> <u>ssp. macroceras</u>	Lentibulariaceae	List 2.2	2- 2- 1	None	S3.2	None	G5T4Q
<u>Piperia candida</u>	Orchidaceae	List 4.3	1- 1- 1	None	S3.3	None	G3G4
<u>Piperia michaelii</u>	Orchidaceae	List 4.2	1- 2- 3	None	S3.2	None	G3
<u>Pityopus californicus</u>	Ericaceae	List 4.2	1- 2- 1	None	S3.2	None	G4G5
<u>Platanthera stricta</u>	Orchidaceae	List 4.2	1- 2- 1	None	S3.2?	None	G5
<u>Pleuropogon refractus</u>	Poaceae	List 4.2	1- 2- 1	None	S3.2?	None	G4
<u>Puccinellia pumila</u>	Poaceae	List 2.2	3- 2- 1	None	S1.1?	None	G4?
<u>Ribes laxiflorum</u>	Grossulariaceae	List 4.3	1- 1- 1	None	S3.3	None	G5
<u>Ribes marshallii</u>	Grossulariaceae	List 4.3	1- 1- 2	None	S3.3	None	G4
<u>Ribes roezlii</u> var. <u>amictum</u>	Grossulariaceae	List 4.3	1- 1- 3	None	S3.3	None	G3G4T3
<u>Romanzoffia tracyi</u>	Hydrophyllaceae	List 2.3	3- 1- 1	None	S1.3	None	G4
3-							

<u>Rorippa columbiae</u>	Brassicaceae	List 1B.2	2-2	None	S1.1	None	G3
<u>Sanguisorba officinalis</u>	Rosaceae	List 2.2	2-2-1	None	S2.2	None	G5?
<u>Sanicula peckiana</u>	Apiaceae	List 4.3	1-1-1	None	S3.3	None	G4
<u>Sanicula tracyi</u>	Apiaceae	List 4.2	1-2-3	None	S3.2	None	G3
<u>Scirpus subterminalis</u>	Cyperaceae	List 2.3	2-1-1	None	S2S3	None	G4G5
<u>Sedum divergens</u>	Crassulaceae	List 2.3	3-1-1	None	S1.3	None	G5?
<u>Sedum laxum</u> ssp. <u>flavidum</u>	Crassulaceae	List 4.3	1-1-3	None	S3.3	None	G5T3Q
<u>Sedum laxum</u> ssp. <u>heckneri</u>	Crassulaceae	List 4.3	1-1-2	None	S3.3	None	G5T3Q
<u>Senecio bolanderi</u> var. <u>bolanderi</u>	Asteraceae	List 2.2	3-2-1	None	S1.2	None	G4T4
<u>Senecio macounii</u>	Asteraceae	List 4.3	1-1-1	None	S3.3	None	G5
<u>Sidalcea malachroides</u>	Malvaceae	List 4.2	2-2-2	None	S3S4.2	None	G3G4
<u>Sidalcea malviflora</u> ssp. <u>patula</u>	Malvaceae	List 1B.2	3-2-2	None	S1.1	None	G5T1
<u>Sidalcea oregana</u> ssp. <u>eximia</u>	Malvaceae	List 1B.2	3-2-3	None	S1.2	None	G5T1
<u>Silene marmorensis</u>	Caryophyllaceae	List 1B.2	2-2-3	None	S2.2	None	G2
<u>Sisyrinchium hitchcockii</u>	Iridaceae	List 1B.1	3-3-2	None	S1.1	None	G2
<u>Spergularia canadensis</u> var. <u>occidentalis</u>	Caryophyllaceae	List 2.1	3-3-1	None	S1.1	None	G5T4?
<u>Stellaria littoralis</u>	Caryophyllaceae	List 4.2	1-2-3	None	S3S4.2	None	G3G4
<u>Stellaria obtusa</u>	Caryophyllaceae	List 4.3	1-1-1	None	S3.3	None	G5
<u>Tauschia glauca</u>	Apiaceae	List 4.3	1-1-1	None	S3.3	None	G4

<u>Thermopsis gracilis</u> var. <u>gracilis</u>	Fabaceae	List 4.3	1- 1- 1	None	S3.3	None	G4T3T4
<u>Thermopsis robusta</u>	Fabaceae	List 1B.2	2- 2- 3	None	S2.2	None	G2Q
<u>Thlaspi californicum</u>	Brassicaceae	List 1B.1	3- 3- 3	None	S1.1	FE	G1
<u>Tiarella trifoliata</u> var. <u>trifoliata</u>	Saxifragaceae	List 3	?- ?- 1	None	S2S3	None	G5T5
<u>Tracyina rostrata</u>	Asteraceae	List 1B.2	3- 2- 3	None	S1S2.2	None	G1G2
<u>Trichodon cylindricus</u>	Ditrichaceae	List 2.2	2- 2- 1	None	S2.2	None	G4G5
<u>Trifolium howellii</u>	Fabaceae	List 4.3	1- 1- 1	None	S3.3	None	G4
<u>Veratrum insolitum</u>	Liliaceae	List 4.3	1- 1- 1	None	S3.3	None	G3
<u>Viburnum ellipticum</u>	Caprifoliaceae	List 2.3	2- 1- 1	None	S2.3	None	G5
<u>Viola palustris</u>	Violaceae	List 2.2	3- 2- 1	None	S1S2	None	G5
<u>Wyethia longicaulis</u>	Asteraceae	List 4.3	1- 1- 3	None	S3.3	None	G3

CNPS Inventory of Rare and Endangered Plants

Status: Plant Press Manager window with 27 items - Fri, Apr. 6, 2007, 06:26 b

Reformat list as: Standard List - with Plant Press controls

STATUS and RARITY REPORT

scientific	family	CNPS	R-E-D	STATE	State Rank	FEDERAL	Global Rank
<u>Abronia umbellata</u> <u>ssp. breviflora</u>	Nyctaginaceae	List 1B.1	2- 3- 2	None	S2.1	None	G4G5T2
<u>Astragalus pycnostachyus</u> <u>var. pycnostachyus</u>	Fabaceae	List 1B.2	3- 2- 3	None	S2.2	None	G2T2
<u>Carex arcta</u>	Cyperaceae	List 2.2	2- 2- 1	None	S1S2	None	G5
<u>Carex leptalea</u>	Cyperaceae	List 2.2	3- 2- 1	None	S2?	None	G5
<u>Carex lyngbyei</u>	Cyperaceae	List 2.2	2- 2- 1	None	S2.2	None	G5
<u>Carex praticola</u>	Cyperaceae	List 2.2	2- 2- 1	None	S2S3	None	G5
<u>Castilleja affinis</u> <u>ssp. litoralis</u>	Scrophulariaceae	List 2.2	2- 2- 1	None	S2.2	None	G4G5T4
<u>Castilleja ambigua</u> <u>ssp. humboldtiensis</u>	Scrophulariaceae	List 1B.2	2- 2- 3	None	S2.2	None	G4T2
<u>Cordylanthus maritimus</u> <u>ssp. palustris</u>	Scrophulariaceae	List 1B.2	2- 2- 2	None	S2.2	None	G4?T2
<u>Erysimum menziesii</u> <u>ssp. eurekaense</u>	Brassicaceae	List 1B.1	3- 3- 3	CE	S1.1	FE	G3?T1
<u>Erythronium revolutum</u>	Liliaceae	List 2.2	2- 2- 1	None	S2.2	None	G4
<u>Fissidens pauperculus</u>	Fissidentaceae	List 1B.2	2- 2- 3	None	S1.2	None	G3?
<u>Gilia capitata</u> <u>ssp. pacifica</u>	Polemoniaceae	List 1B.2	2- 2- 2	None	S2.2?	None	G5T3T4
<u>Gilia millefoliata</u>	Polemoniaceae	List 1B.2	2- 2- 2	None	S2.2	None	G2
<u>Hesperevax sparsiflora</u> <u>var.</u>	Asteraceae	List	2- 2-	None	S3.2	None	G4T3

<u>brevifolia</u>		2.2	1				
<u>Lathyrus japonicus</u>	Fabaceae	List 2.1	3- 3- 1	None	S1.1	None	G5
<u>Lathyrus palustris</u>	Fabaceae	List 2.2	2- 2- 1	None	S2S3	None	G5
<u>Layia carnosa</u>	Asteraceae	List 1B.1	3- 3- 3	CE	S1.1	FE	G1
<u>Lilium occidentale</u>	Liliaceae	List 1B.1	3- 3- 2	CE	S1.2	FE	G1
<u>Lycopodium clavatum</u>	Lycopodiaceae	List 2.3	2- 1- 1	None	S3S4.2	None	G5
<u>Monotropa uniflora</u>	Ericaceae	List 2.2	2- 2- 1	None	S2S3	None	G5
<u>Montia howellii</u>	Portulacaceae	List 2.2	3- 2- 1	None	S3	None	G3G4
<u>Puccinellia pumila</u>	Poaceae	List 2.2	3- 2- 1	None	S1.1?	None	G4?
<u>Sidalcea malviflora</u> <u>ssp. patula</u>	Malvaceae	List 1B.2	3- 2- 2	None	S1.1	None	G5T1
<u>Sidalcea oregana</u> <u>ssp. eximia</u>	Malvaceae	List 1B.2	3- 2- 3	None	S1.2	None	G5T1
<u>Spergularia canadensis</u> var. <u>occidentalis</u>	Caryophyllaceae	List 2.1	3- 3- 1	None	S1.1	None	G5T4?
<u>Viola palustris</u>	Violaceae	List 2.2	3- 2- 1	None	S1S2	None	G5

Planning Commission Public Hearing ~~November 5, 2015, Dec. 8, 2015 and 12-15-15~~
Subject: Zoning Ordinance Amendments
Medical Marijuana Land Use Ordinance – Phase IV
Commercial Cultivation of Cannabis for Medical Use (CCCMU)
Case Number OR 15-003

#1) Regarding Coastal Zone Marijuana Cultivation:

SECTION 1. Section 313-55.4 of Chapter 3 of Division 1 of Title III:

313-55.4 Commercial Cultivation of Cannabis for Medical Use Coastal Zone Land Use Regulation

55.4.1 Authority and Title

Provides for the regulation of commercial cultivation of cannabis for medical use (“CCCMU”), as defined in this Code, located in the coastal zone of the County of Humboldt.

Comment: Any cannabis or medical marijuana cultivation within Humboldt County’s Coastal Zone should Not be allowed. These lands are limited in area and use and should be preserved as they currently exist. These lands are sensitive areas where pollution from cultivation would negatively harm these environments as well as the quality of life appreciated therein.

#2) Recommendations regarding Marijuana Cultivation Ordinance on parcels five (5) acres or larger:

- A. There should be a 10-year moratorium on any marijuana grow over 1000 square feet.
- B. It should be limited to indoors without the use of CO2.
- C. At least 20% of the energy used should be natural light or renewable.
- D. No one under 21 is allowed in the agricultural or retail process.
- E. Use is limited to cultivation, harvesting and packaging of medical marijuana only.
- F. Medical marijuana shall be dispensed by a licensed, bonded pharmacist.
- G. No edible marijuana bakery, candy or sweet treat should be allowed in the county.
- H. It should be limited to areas served by municipal water.
- I. All electrical and plumbing must be to code and conducted by a licensed contractor.
- J. It should be limited to property owners that are the owner/operator residing in Humboldt County.
- K. It should be limited to a legal resident of the United States in good standing without a felony conviction, with a history to income tax filings and payments, not using government welfare or aid, in good standing with child and spousal support payments and without a history of DUIs.
- L. It should be limited to one owner per property grow.
- M. If any soil or plant amendments are used the water discharged must be treated.
- N. No one convicted of a federal offense is eligible to cultivate, harvest, or retail.
- O. All grows must pay for all public staff for code compliance, inspections, and other such regulating activities
- P. Activities associated with medical marijuana cannot be within any livable structure or residence.
- Q. It cannot be permitted in residential, TPZ, public facility, coastal zone, retail or mixed use areas.
- R. If the area for cultivation is within ~~¼ mile (1,320 ft.)~~ should be changed to ½ mile of a school, school bus stop, church or other place of religious worship, public park, or Traditional Native American Cultural, the site plan shall include dimensions showing that the distance from the location of such features to the nearest point of the cultivation area is at least ~~600 feet~~ ¼ mile (1,320 ft.).

Karen Brooks comments continued.

A tremendous amount of taxpayer resources are being used for an industry that does not support the public good. There should be zero tolerance for abuse going forward. All violations must be borne by permitted and unpermitted growers.

We are essentially living in a community that has legalized marijuana use and that use is negatively affecting the quality of life for many residents as it:

- Harms our environment on multiple and devastating levels.
- Creates a criminal and violent culture.
- Contributes to homelessness and food insecurity for those employed in the industry.
- Deploys first responders for illegal activities and away from life-saving activities.
- Reduces the property values for neighboring properties and contributes to blight.
- Robs our tax base and increases the tax burden for the rest of the community.
- Harms the ability of law abiding residents their ability to "enjoy their castle."
- Creates a culture of fear as neighbors and neighbors are plagued by home invasions and robberies.
- Roads are less safe from marijuana impaired drivers who harm themselves, other vehicles, drivers and property.
- Drives up our insurance as these destructive activities increase our community risk.
- This lawlessness and pervasive culture shuns legitimate investment, recruitment of professionals and their families as well as the tourism.

Who bears the liability of the quality and effectiveness of this so-called medicine? Who prescribes it and for what ailment and for how long? How would anyone seek remedy for bad medicine? What happens years from now when the side effects create permanent health problems?

The county is trying to regulate a tremendously harmful industry, one that negatively harms the environment and our quality of life, and why? How is any of this a societal good?

Lastly, has anyone asked the youth of our area how they feel about the future we are creating for them to inherit? Many that have spoken to me about this do not want this future and we owe it to them to allow this voiceless sector of our community to participate in an outcome we are forcing on them.

No one is trying to take the greed out of this industry. I understand regulation but this is acquiesce to the abusers. Basic regulations need to be addressed first:

- No grandfathering.
- No coastal zone grows.
- No large grows over 1000 sf.
- Pay as you grow industry focus.
- Severe penalties for violators.
- Treat industry as a toxic activity.
- Provide a bond for future lawsuits.
- Seek FDA approval for medical uses.

Respectfully,

Karen Brooks, P.O. Box 730, Bayside, CA 95524

Hayes, Kathy

From: Fennell, Estelle
Sent: Tuesday, December 15, 2015 12:58 PM
To: Hayes, Kathy
Subject: FW: Medical Marijuana Ordinance

Hi Kathy,

Did you get this one?

Estelle Fennell
Second District Supervisor
Chair of the Board

Humboldt County Board of Supervisors
825 5th Street
Eureka, CA 95501

(707) 476 2392
Efennell@co.humboldt.ca.us

From: Douglas Fir [mailto:dfir@asis.com]
Sent: Monday, December 14, 2015 6:25 PM
To: Fennell, Estelle
Subject: Medical Marijuana Ordinance

Dear Estelle,

As you know I have a long-standing interest in protecting and preserving our community, its economy and culture.

The Board of Supervisors is about to begin debate on an ordinance that will regulate the medical cannabis industry.

This ordinance will have extraordinary ramifications. If its provisions are extended into governing legal recreational cannabis as well (soon coming) this board action will determine in large measure the economic health and stability of the county well into the foreseeable future. The ordinance will also deeply affect the culture of Humboldt County.

The choice is between two opposing models. One model – that which is embodied in the ordinance reported by the Planning Commission – allows for relatively large grows (one acre, with a four permit limit per person) by relatively few growers. The second model, which would require considerable revision of the ordinance presented to the Board by the Commission, would limit grow sizes significantly and encourage a large number of permits distributed widely throughout the county. The first model concentrates profits, creates a clear division between permit holders and labor, and potentially transfers money out of the county. The second model distributes profits, supports local families, and keeps much of the money local.

I'm not an economist, but it seems clear to me that the second model creates both stronger long and short-term benefit to the county's economy. The concept of widely distributed small farms harkens back to the days of the yeoman farmer. It was then, and is now, a powerfully successful model in which families make an adequate living from their land, are strongly invested in the communities in which they live, participate in community institutions and activities and create a diverse tax base with substantial purchasing power to fuel the multiplier effect.

The above -- as opposed to creating a couple of hundred millionaires who employ numbers of people at prevailing wages -- will certainly bring more money into the county. It will also keep more money in the county because growers will be spending it within their communities.

Let's play with some numbers. These figures are arbitrary but illustrate my point.

Say the county gave out 200 permits to growers intent on cultivating an acre or more (through the provision that each person can receive four permits). This would put up to 800 acres under cultivation. If these growers averaged one million dollars in annual income, that would amount to \$200,000,000 per year. The fact that the ordinance does not require these permit holders to live in the county begs the question of how much of those profits would recycle within the county's economy.

This group might employ an average of 20 full-time equivalent workers per year. If these workers (who are simply that: wage earners who do not have a landed stake) were paid an average of \$15/hour, that would yield gross wages of \$120,000,000 annually. So, the limited number of large permittees would yield \$320,000,000 in annual income in the county.

On the other hand if the county issued 4,000 permits and limited grow sizes to 5,000 sq ft, we have a very different picture. The total acreage under cultivation (assuming all grew the maximum) would be 460 acres (less acreage, fewer environmental impacts). The annual profit (based on an \$80,000/year income, precisely the average family farm income in the U.S. currently) would be \$320,000,000 or two-thirds more than in the previous model.

If each family employed 1.5 FTE workers, the labor income in the county would be \$180,000,000. The total annual income in the county would therefore be \$500,000,000.

As I said, these numbers are arbitrary. Also there are several other metrics that have not been applied, such as variations in the price of cannabis. But I believe that no matter how one scales it -- being ever conscious of best practices, environmental stewardship, community health and well-being -- that the small farmer model wins.

So why on earth would the county adopt an ordinance that benefits a relative few, creates economic and social inequalities, and provides fewer benefits to the county than are available? Could it be because some of the loudest voices in this debate come from groups and individuals that do not have deep roots in this county, that have come to make a killing from our natural resources, that do not understand our culture of independence and self-reliance? Haven't we seen this happen before with outcomes that were clearly negative (remember Charles Hurwitz)?

Come on, honorable Supes. Do right by the county that you obviously love.

--Put much more stringent size limits on grows (5,000 sq. ft. or less).

--Require growers to be residents of the parcels they grow on or at the very least residents of the county in order to acquire permits.

--Build in longer terms for the compliance agreements, perhaps five years or more.

--Link water storage obligations to stream health and salmon requirements such as has been done on the Mattole (rather than an arbitrary date for pumping to cease, forbearance on the Mattole begins when the river reaches a certain streamflow).

—Include the Humboldt Heritage provision introduced by HUMMAP in any ordinance passed.

In this way you will be acting in the long-term interests of the county and its present residents. Thank you for your consideration of this point of view as you weigh this most weighty matter. Do the right thing!

Sincerely,

Douglas Fir



FRIENDS OF THE EEL RIVER

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

Tuesday, December 15, 2015

Board of Supervisors' Chambers
Humboldt County Courthouse
825 5th St.
Eureka CA, 95501

RE: Medical Marijuana Land Use Ordinance

Dear Supervisors,

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, nominally for medicinal purposes, in the Eel River watershed.

As a result of cannabis-related development, the Eel River has suffered significant impacts to watershed health and to its fisheries, including harms which amount to take of coho salmon, a species listed as Threatened under both the California and federal Endangered Species Acts. 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.

FOER offered extensive general comments to the Planning Commission regarding the historic challenge Humboldt County faces in finally moving to regulate its commercial marijuana industry. As those comments may usefully inform the Board's deliberations as well, we have enclosed additional copies with these comments. We have also included copies of our comments to the Regional Board on their waiver program for commercial marijuana operations, as they provide background germane to the concerns we note below.

In our comments to the Planning Commission, we noted that County staff's draft came pretty close to what, in our view, the County is trying to accomplish here: to set out at least the first iteration of an effective program to regulate the commercial cannabis industry, and above all to insure that its watershed impacts are reduced to a sustainable level. We noted a number of areas where the staff draft of the ordinance needed to be tightened up to meet

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PO Box 4945, Arcata, CA 95518 • 707.822.3342

PETALUMA OFFICE

David Keller, Bay Area Director • dkeller@eelriver.org
1327 I Street, Petaluma, CA 94952 • 707.763.9336

the requirements of an action taken pursuant to a Mitigated Negative Declaration under the California Environmental Quality Act (CEQA), as this ordinance has been proposed. Those changes included:

- enforceable forbearance from water diversions;
- a cap on the overall number of permits;
- reasonable scale for operations;
- a ban on the use of pesticides;
- tightly restricted use of artificial lights; and
- mechanisms and resources for enforcement sufficient to implement a meaningful regulatory program at the scale presented by Humboldt's cannabis industry.

With such changes to the staff draft, the County could fulfill its ambition to have regulations that protect the county's natural legacy in place by its March 2016 deadline.

However, the Planning Commission has chosen, in the draft now before you, to take a very different path. They have dramatically increased the size of operations that will be allowed across the landscape, without any planning for the consequences for watersheds already overtaxed by development. They have refused to implement a cap on the number of operations that will be permitted under the new program. They insist not only that the system must be so inviting as to persuade existing growers to join in, but that it must admit new growers without restriction as well.

Even in the one area where the Planning Commission did move toward a true sustainability requirement – requiring forbearance from water diversion, and banning water trucks – their aversion to meaningful enforcement, and eagerness to allow very large grows as a matter of right, dramatically undermine the benefits of the forbearance requirement.

Indeed, there is little indication in the Planning Commission's draft that the county will ever enforce its requirements. The Commission's majority seems to believe that the County can defer to state agencies the burden of enforcement, and the liability for nonenforcement, of the County's own regulations. But regulating land use is the County's fundamental power and responsibility, one it cannot abdicate to state agencies.

The Planning Commission's changes to the draft ordinance make it impossible to sustain the County's claim, in its Mitigated Negative Declaration, that its program will not result in potentially significant environmental impacts. As presented to the Board, the ordinance will allow continued dramatic increases in the number of commercial marijuana cultivation operations across Humboldt County. The Planning Commission's striking increases in the size of operations that will be allowed, over both recent averages and the staff proposal, will provide substantial incentives for continued rapid development of both new and enlarged operations.

This means more operations overall, continuing the trends of the last decade, which have been associated with sharply increasing watershed impacts. To ensure that these new and enlarged operations are properly sited and constructed, the county is proposing only the most limited enforcement – an annual inspection. Thus, the County will rely not on its own

staff and resources, but on already-overcommitted state agencies, to enforce the rules which, in theory, will mitigate the harms attendant on the development the County will allow and encourage. The county is proposing no additional sanctions for operators who choose to cultivate without benefit of a permit.

We would respectfully suggest that, to have any hope of defending the proposed ordinance under a Mitigated Negative Declaration, the Board of Supervisors must substantially revise the draft, in at least the following areas:

- **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.
- **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.
- **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.

However, even assuming that the County chooses to proceed under a limited program defensible under a MND at present, the need to conduct a full Environmental Impact Report (EIR) will remain. As well, the need to engage in a more comprehensive program not only of regulation and enforcement, but of watershed restoration, will continue in the years and decades to come. We don't expect to get this right at the outset, but we must insist that we face the problems squarely.

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. It is clear that the County is liable under the federal Endangered Species Act for harms to listed species incidental to the activities it will be permitting under its commercial marijuana cultivation regulations. However, because the cumulative impacts of widespread cannabis cultivation, especially the watershed-wide impacts of fine sediment production on salmon and steelhead reproduction and survival, are so consequential for listed fish species, the County must, under CEQA, consider both legal and illegal, permitted and unpermitted operations, in analyzing the impacts of the operations it permits.

A single 5,000 square foot operation, considered in isolation, may appear to have little risk of significant impact – until one looks at a map, and sees that it is surrounded by many

similar operations. 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.

In the proposed draft, the County is creating a legal umbrella that would effectively shield the vast majority of current black market growers from significant scrutiny. Again, the program would rely on incentives to persuade existing growers to obtain permits. 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.

Thank you for your kind attention.

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

Attachments:

FOER Comments to Humboldt County Planning Department on Medical Marijuana Land
Use Ordinance

FOER Comments on Regional Board Waiver



FRIENDS OF THE EEL RIVER

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

Wednesday, November 4, 2015

Humboldt County Planning & Building Department
Attn: Steve Lazar, Senior Planner
3015 H Street
Eureka, CA 95501-4484
slazar@co.humboldt.ca.us

RE: Medical Marijuana Land Use Ordinance – Phase IV

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, nominally for medicinal purposes, in the Eel River watershed.

Over the last several years, the South Fork Eel River, focus of decades of restoration work undertaken at significant public expense, has 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.¹ Not only does each fish killed by dewatered streams amount to a 'take' under the Endangered Species Act, these losses threaten to so severely undermine the viability of coho in the region as to constitute 'jeopardy' – the highest level of threat under the ESA.

The central causes of the harms to our streams and fisheries come down to people taking too much water out of creeks, and allowing too much dirt, and even poisons, to go into the water. However, the range of operations and practices generating these harms are wide and diverse.

Many small-scale growers operate in a generally reasonable way. Most are likely to be operating in violation of state water law, and to be causing unnecessary environmental

¹ 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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harms. But by storing their water and forbearing from dry-season pumping, fixing relatively inconsequential grading, drainage, and road maintenance issues, and following the suite of best management practices outlined in the North Coast Regional Water Quality Control Board's (Regional Board) waiver, most can reasonably be expected to effectively minimize their watershed impacts. The County should permit such operations, but must effectively regulate them.

Other growers operate at similar scales, but use artificial lights to grow inside houses and other structures. "Indoor" grows require very large amounts of electric power, incurring substantial, wholly unnecessary carbon footprints where fossil fuels are used to produce electricity. Because indoor grows create excellent conditions for plant pests, they are often associated with the use of pesticides and fungicides that have been detected at alarming levels in marijuana products. The county should not permit indoor or 'mixed light' grows, with the sole exception of nursery operations. Moreover, allowing indoor operations on TPZ and agricultural zoned parcels, as the County's current draft provides, is wholly irresponsible under a mitigated negative declaration as the impact of further conversion of resource lands to other uses – and, specifically, the net loss of prime agricultural land – has not been addressed. Nursery operations should be closely regulated, restricted to industrial sites serviced by the electrical grid, and required to fully offset their carbon footprints.

Other operations, generally at larger scales, often involve substantial amounts of unpermitted grading on steep, unsuitable sites; poorly designed road construction and maintenance; inadequate stream crossings; and ponds that have not been properly engineered or appropriately sited. Many such operations need to be removed and remediated to effectively protect public trust values, particularly including clean water.

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.

At the furthest extreme, but sometimes established in conjunction with the more abusive large-scale operations on private parcels, are very large plantations grown without landowners' permission, and generally described as "trespass" grows. Trespass grows present the most severe problems associated with pesticides and fertilizers, including the widespread use of rat poisons now rippling through regional ecosystems, causing alarming increases in the mortality of already-threatened predator species like the Pacific fisher and northern spotted owl.² The county may not permit such operations, of course, but it should actively discourage trespass grows where it can do so.

² See, e.g. Gabriel et al, *Patterns of Natural and Human-caused Mortality Factors of a Rare Forest Carnivore, the Fisher (Pekania pennanti) in California*, PLoS ONE, 11/04/15; *Scientists say illegal pot farming operations are poisoning threatened weasels* at <https://www.washingtonpost.com/news/energy-environment/wp/2015/11/04/scientists-charge-that-illegal-marijuana-farms-are-poisoning-threatened-weasels/>

County regulations must ensure permitted grows at larger scale don't generate significant environmental impacts. If significant impacts can't be prevented with a reasonable level of certainty, CEQA requires that the county prepare an Environmental Impact Report (EIR), and consider mitigations capable of reducing impacts to a less than significant level.

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.

It is hard to overstate the challenge Humboldt County faces in moving from laissez-faire governance and an anything-goes culture to responsible management and accountable stewardship. Decades of inconsistent enforcement and generations of spirited outlawry mean neither the county nor its citizens have much experience of effective land-use regulation. The Green Rush has attracted thousands of people to the North Coast whose primary interest appears to be making a great deal of money as quickly as possible. Substantial numbers of Green Rush growers appear to be entirely indifferent to the whole question of legalization and regulation, except as it may affect their ability to sell their product. But the moment is upon us.

Overall Comments

Against this daunting backdrop, the county's initial draft ordinance measures up surprisingly well. The contrasts with the half draft put forward by California Cannabis Voice – Humboldt are notable, and entirely for the better. Where CCV-H proposed to allow mega-grows as a matter of right, the draft ordinance declares that marijuana cultivation without a permit is a public nuisance – an important recognition, and a critical assertion of the county's powers and responsibilities under the ancient doctrine of nuisance. Where CCVH seeks to secure the economic interests of the big growers who fund them, the county is offering a tiered system of conditional permits that would allow reasonable current growers to keep growing reasonably and some large-scale operators to open up in legally and environmentally appropriate locations.

As well, the county's draft would bar the establishment of future grows on TPZ land; concedes at the very least the necessity of following CEQA and preventing significant environmental impacts; requires, at least in theory, forbearance from dry-season pumping for growers dependent on surface water diversions; and asserts the county's power to reduce the size of permits if necessary to protect watersheds. These are all important shifts that will help to establish an effective regulatory program capable of protecting Humboldt county's magnificent natural resources.

However, critical gaps in the draft ordinance still must be tightened up if the final package is to protect public trust values, public health and safety, and indeed the Humboldt 'brand' on which so many are so eager to capitalize. The most critical of these gaps are the loophole allowing water trucking; the failure to ban the use of pesticides; and the weakness of enforcement mechanisms. Similarly, the demand by CCV-H that operations of up to 10,000 ft² be granted ministerial permits would substantially diminish the effectiveness of the proposed ordinance in limiting environmental impacts.

Legal Sufficiency of Mitigated Negative Declaration

As noted above, the environmental problems the county confronts in regulating its commercial marijuana industry are complex, widespread, and have been increasing rapidly over the last decade, particularly in the last five years. 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.³ C chlorpyrifos is one many pesticides and fungicides recently detected in

³ See *EPA Proposes to Revoke Chlorpyrifos Food Residue Tolerances* at <http://www2.epa.gov/pesticides/epa-proposes-revoke-chlorpyrifos-food-residue-tolerances>

tests of concentrated cannabis product sold in Oregon.⁴) 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).

The current 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.

It is important to note that though CEQA requires public agencies to consider mitigation of potentially significant environmental impacts, the MND and ordinance do not actually propose, much less secure, mitigations of the impacts associated with existing sites and the commercial marijuana industry that now exists. Rather, what's proposed is essentially compliance with the suite of best management practices (BMPs) established under the Regional Water Board's waiver program. While those prescriptions are rather good as far as they go, the Regional Board's striking lack of capacity to actually enforce its waiver program in any detail means that the county may not rely on the beneficial effects of BMP implementation except to the extent that its own regulatory program will ensure those BMPs are actually followed.⁵

There do exist a number of feasible mechanisms by which the county could effectively mitigate the harms associated with its commercial marijuana industry. To comply with the letter and spirit of our clean water and wildlife-protection laws, as well as the disclosure and environmental protection requirements of the California Environmental Quality Act (CEQA), the county should adopt and enforce regulations that will immediately reduce both the size and scale, and thus the impacts, of the current industry. Optimally, the county would systematically use the contemplated ordinance to shut down and force remediation

⁴ 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/>

⁵ See FOER comments to Regional Board re waiver program (attached).

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.

Effective mitigation could also be done by requiring analysis, upgrading, and appropriate maintenance of the private road networks that service multiple parcels and are a very significant source of sediment inputs. Similarly, the county could require growers to invest in watershed restoration efforts, or could fund such efforts directly as a form of mitigation. Finally, though CEQA might not recognize it as a directly relevant form of mitigation, funding effective programs to prevent and clean up trespass grows would help to reduce the serious environmental harms entailed by those operations.

Humboldt County may not be technically responsible under CEQA for the impacts of operations it does not permit. 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. Now that marijuana legalization has finally come to California, not only by passage of state laws regulating the ‘medical’ marijuana industry, but also with Congressional actions and federal court decisions that make it clear that the state may regulate marijuana production despite the plant’s status under federal law, we have run out of excuses either to commit environmental abuses to grow pot, or to tolerate them.

Under a MND, the county must insure cumulative effects of actions taken under its proposed program will be limited to a less than significant level. Given the clear evidence that potentially significant impacts will continue in the absence of regulatory program stronger than the one proposed in the county’s draft, CEQA requires that an Environmental Impact Report be prepared.

Specific Comments on Proposed Ordinance

Forebearance Period and Water Trucking

FOER strongly supports the requirement that growers dependent on surface water diversions agree to forbear from dry-season diversions. We agree with DFW that the period should be designated May 15 – October 31.

However, we must respectfully insist that the county not permit any operations which use ‘imported water deliveries.’ This loophole renders the otherwise excellent forbearance requirement a hollow gesture, as, in practice, it will allow permittees to maintain inadequate storage, then to choose freely between filling their tanks with water deliveries or the water diversions they’ve pledged to forbear from. In either case, potentially significant environmental impacts are entailed, and are almost impossible to address through direct regulation. In either case, the county will have failed to prevent a set of environmental harms – harms that are entirely foreseeable because they are happening today.

Water trucking implicates at least three kinds of potentially significant impacts: unpermitted pumping from surface waters; sediment increases from very heavy vehicles (often overloaded) on roads not engineered for such loads; and the carbon impact of unnecessary use of fossil fuels. It should not escape the notice of county staff and decision-makers that water trucks are causing very severe impacts to county roads as well, to the collective detriment of water quality, fisheries, and the county's woefully inadequate road maintenance budget.

The difficulty of storing large volumes of water on many sites is an additional, important reason to limit 'ordinary' operations to a manageable scale. Water trucking should be allowed only for critical domestic uses and genuine, unforeseeable emergencies where otherwise adequate water storage has been lost due to circumstances beyond the permittee's control (e.g., a tree falls on a water tank).

All commercial cultivation should be subject to some form of discretionary review, and a Conditional Use Permit should indeed be required for operations larger than 2000 square feet.

Because of the significant impacts associated with the commercial marijuana industry today, and because the details are often of real significance in evaluating and correcting these impacts, it is not only appropriate that all commercial cultivation operations be subject to some form of discretionary review – it is a necessity. However, FOER sees the value in creating a streamlined permitting process for operations in the 500-2000 ft² range. We support the draft ordinance in requiring a Special Permit for operations in this range, and making such permits subject to a discretionary administrative process unless neighbors object and call for full Planning Commission review.

For the county to allow operations of up to 5000 ft² under ministerial permits, as some suggest, would be to virtually ensure that the average grow on the Humboldt landscape continues to get bigger, with an attendant increase in impacts. It is very difficult to square such continued increases with the reduction in environmental impacts the county claims will result from adoption of this ordinance. While it makes a lot of sense to provide a ministerial permitting pathway for smaller operations that are relatively easier to make sustainable, big grows and big growers should not get a free pass.

It is entirely appropriate that persons wishing to establish larger-scale operations should be required to obtain a Conditional Use Permit, and to prove that all of their development activity fully complies with all state and local laws. A great deal of evidence exists that people who get involved with large operations, established with the intent of making the largest possible amount of money, are especially prone to shortcuts, evasions, and even deception to secure their anticipated returns. Effective government oversight is the only feasible way to ensure such operations do not succumb to the powerful temptation to cut corners. Moreover, a discretionary permit process would allow for input from neighbors and other agencies with on-the-ground experience that may otherwise be missed through a ministerial process.

Large commercial site restrictions are appropriate.

FOER strongly supports the proposed site requirements for operations in excess of 10,000 ft². Such operations need to be located in appropriate, low-impact areas. They should also be capped in number, particularly as the county works out the kinks in its regulatory program. It will always be easier to allow more later than to reduce improvidently granted permissions in the future.

TPZ limits

FOER appreciates the attempt to limit additional operations on TPZ land. However, it would be far better for our watersheds, and more consistent with the purpose of TPZ lands, which enjoy a substantial tax advantage, to phase out commercial marijuana production on TPZ lands over time. In any instance, operations on TPZ land should be subject to a reasonably low upper limit rather than having that set on a case-by-case basis.

Operations must be measured by cultivation area, not canopy.

Cultivation area is by far the more reasonable method to measure marijuana growing operations. Canopy is highly variable and highly subjective. A canopy-based standard would fail to provide the bright-line guidance that growers and law enforcement need to make a regulatory system work.

Caps on total number of operations.

The county can most effectively insure that its program will reduce the impacts of the currently existing commercial marijuana industry by capping the number of permits to be issued under the proposed ordinance. We believe that this would be most effectively done at the subwatershed scale, and that such caps should be developed in consultation with appropriate state agencies. We believe that whatever scale at which a capping system is applied, the number of operations permitted must be below current baseline conditions.

Given that the current number of parcels with commercial growing is very likely in the range of 2500-3200 parcels, FOER would strongly support a cap of no more than 1500 ministerial permits for 'ordinary' grows of less than 2000 ft², with perhaps another 100 permits available for large scale grows on appropriate sites, processing operations, and nurseries. Once the county has established that it can implement the new system effectively and environmental impacts have been reduced to a level below potential significance, the county may wish to consider auctioning a smaller number of additional permits to qualified applicants and parcels in future years.

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.⁶ 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.

Processing only in industrial zones.

Similarly, FOER would support a provision requiring processing to be conducted in designated industrial zones. Such a requirement would substantially advance the public interest in seeing such operations subject to close oversight, would reduce the unnecessary impacts of having workers travel long distances on inadequate roads into the back country, and would help reduce some of the threats to public health and safety that the commercial marijuana industry currently entails.

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 ft² 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 ft² should be subject, however, to fines of up to \$250,000; those smaller than 10,000 ft² 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

⁶ See Evan Mills, Ph.D., *ENERGY UP IN SMOKE: THE CARBON FOOTPRINT OF INDOOR CANNABIS PRODUCTION*, Lawrence Livermore Labs April 2011

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. However, FOER would also support a provision that went the other direction: if watershed conditions are steadily improving such that fish and wildlife are being adequately protected, permits in that watershed could justly be expanded to encourage such action.

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.

Ban pesticides

Pesticide use is rampant in the commercial marijuana industry, presents real threats to workers and consumers, and not insignificant threats to fish, wildlife, and environmental quality, and is in any event flatly illegal under federal law. Pesticides, fungicides, herbicides, and other such compounds may only be used on crops for which they are registered, in the manner specified for that crop. None are so designated to be used on marijuana. While Humboldt County may not directly regulate the use of pesticides, it can certainly make possession of any such substance by a permittee or on the premises of a permitted operation, or detection of any such substance in product testing, a violation of permit terms. Permittees should only be allowed to use the legal substances and techniques for pest control detailed by the Regional Board in its waiver order.

Would you eat at a restaurant knowing it received 24 hours notice before an inspection?

While it is entirely appropriate that commercial marijuana operations be subject to inspection, it is ludicrous to limit such inspections to a single annual inspection, with at least 24 hours notice, during regular business hours. We subject restaurants and organic producers to far more exacting snap inspection requirements, for good reasons that apply to an even greater extent in the context of the commercial marijuana industry. Any permitted operation should be subject to inspection at any time, without notice.

Conclusion

No waiver of liability or disclaimer can protect Humboldt County's reputation if we become known for pesticide-soaked, salmon-killing "medical" marijuana.

Thank you very much for your thoughtful consideration.

Sincerely,



Scott Greacen
Executive Director

Attachment: FOER comments to Regional Board re waiver program



FRIENDS OF THE EEL RIVER

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

June 8, 2015

Matthias St. John
Executive Officer
North Coast Regional Water Quality Control Board

by email

Re: Comments on Draft Order R1-2015-0023, Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Marijuana Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region

Dear Mr. St John,

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.

Although we are unable to support the proposed program in its current form, we do very much appreciate the Regional Board staff's thoughtful and realistic approach to the complex problems raised by the increasing and severe watershed and fisheries impacts associated with marijuana cultivation in the Eel River watershed and across the North Coast. The proposed waiver is an important step in the right direction. That it is not adequate to fulfill the Board's duty to protect water quality and beneficial uses is largely a consequence of the agency's lack of capacity to implement and enforce it.

As the Draft Waiver accurately notes, increased marijuana cultivation throughout the North Coast Region since passage of Prop 215 and AB 420, but especially over the last decade, "has resulted in significant waste discharges and a loss of instream flows associated with improper development of rural landscapes on privately-owned parcels, and the diversion of springs and streams, to the cumulative detriment of beneficial uses of water." Even this alarming summary may understate the magnitude and severity of our present challenges. The ongoing boom in the number and size of marijuana cultivation operations, and accompanying increases in stream diversions and sediment inputs, has overlapped, for the last four years, with our historically unprecedented severe drought. The result has been the loss of critically important year-classes of coho salmon and steelhead in streams in the Eel River watershed that have been the focus of fisheries restoration efforts

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for decades, a dramatic setback for the hope of coho recovery not just in the Eel but across the region.

New operations are being established as we speak, and expansion of existing operations continues apace, with no real hint of interest from local government in addressing hundreds of obvious violations of state and local laws, including Humboldt County's grading ordinance. Despite the overwhelming evidence that the booming marijuana industry, at least in its present form and current practices, has already overshot the carrying capacity of many North Coast watersheds, cannabis cultivators are pressing a proposal in Humboldt County that would allow cultivation by right of up to 10,000 square feet of cannabis canopy on every private parcel larger than five acres in the county, regardless of site conditions. It is thus vitally important that an effective system of regulation be established for this industry as soon as practicable.

The implementation and enforcement strategy for the waiver was not outlined in the draft waiver, but has been expounded by the Regional Board Chair during the public comment period. Mr. Corbett has declared his intention to issue "5000 licenses in the next year"¹ following the model of the practices employed by the Humboldt County Assessor's office to collect property taxes: identification of operations using aerial imagery; issuance of notice letters to the owners of record of identified parcels; and the issuance of fines and, where necessary, liens to secure compliance with the waiver's requirements that fees be paid, and that mitigation plans be prepared and followed, for every instance in which more than six marijuana plants are being grown across the region.

While it is impossible to know in advance how successful such an approach might prove in generating the budget Mr. Corbett hopes to secure "based upon the number of people that are enrolling,"² the history of efforts to regulate both water quality generally and the booming, black-market focused marijuana industry in the Emerald Triangle in particular, strongly suggest that voluntary compliance with such a program will be far less than complete, and not just because the Regional Board will be asking pot growers, who are after all subject to potentially serious sanctions for federal felonies, to do something quite a bit more complicated than simply paying property taxes. Piling up a stack of plans from those willing to cooperate will probably help improve water quality, but without resources and will sufficient to bring nearly every significant operation into compliance, there is no assurance that the program will actually protect water quality and beneficial uses that are now degraded, and being further harmed, by the industry's impacts.

However, when Mr. Corbett explains "(t)hat doesn't mean that we won't enforce against the few bad apples," he gives the game away: the Board's scant enforcement resources are not, in this perspective, a problem, because they will only be needed to deal with "the few bad apples," rather than with ensuring that the thousands of operations now causing significant individual and cumulative impacts to water quality and the beneficial

¹ Personal communication.

² As quoted in the Willits News, <http://www.willitsnews.com/general-news/20150605/regulatory-agencies-continue-to-move-forward-to-bring-growers-into-compliance>

uses of our streams and rivers are effectively regulated. This picture is contradicted by the Board's own reporting on the industry's impacts. It is wishful thinking elevated to a strategy.

In fact, even if the draft waiver secures an entirely unprecedented level of voluntary cooperation from an industry that has evolved in open defiance of legal prohibitions and constraints for many decades, and only a few hundreds or thousands of operations (of the thirty thousand cultivation operations estimated in the region) remain outside the program, it would still take the Board decades to address the scofflaws with its existing enforcement resources. That fact alone strongly suggests that many cultivators will do the math themselves and choose to risk continue operating without the benefit of a permit from the Board.

The gross mismatch between the scale of the industry and its impacts and the Board's enforcement capacity means that the Board cannot assure the public that its program will actually be effective in protecting water quality and beneficial uses. Rather, the proposed waiver, for all its virtues, must be understood and analyzed as unenforceable in at least some degree, given existing resources. Because it is unenforceable, the mitigations assumed effective in reducing the admittedly significant impacts associated with the commercial cannabis industry today must be discounted. Thus, the use of a Mitigated Negative Declaration (MND) under the California Environmental Quality Act (CEQA) is clearly inappropriate, and a full Environmental Impact Report (EIR) must be prepared.

Even if, *arguendo*, we assume that the Board's waiver would accomplish the impossible, by securing full, immediate, and heartfelt compliance from every party to whom a notice letter is directed, an EIR would still be required, because the draft waiver does not show that existing, and rapidly growing, cumulative effects will be effectively addressed by the proposed mitigations. It cannot, because the draft waiver does not fully characterize those impacts, nor the dramatic rate at which they are increasing. Because the number of operations is so large and the enforcement team so small, the Board will not even have the capacity to closely review thousands of filings to ensure their adequacy as documents, much less oversee their implementation to insure that water quality is actually being protected. If the Board means to issue thousands of permits in the near future, it is impossible to avoid the conclusion that at least some of those permits will be issued to operations that are now harming, and will continue to impair, water quality to the detriment of beneficial uses, and particularly to the increasingly threatened coho salmon and steelhead of the Eel River watershed.

Of course, some compliance is certain under any reasonable system, because there are many cannabis farmers pressing for a scheme that will allow them to operate as legitimate businesses, to follow all environmental laws, and to protect our watersheds and other natural resources. That's a big part of why it is important to get the large parts of this effort as right as possible – it is the low-impact, conscientious, sustainable farmers who are most likely to cooperate, and most likely to suffer economic harm from a system that allows large-scale, high-impact operations to continue – whether under legal permit or otherwise. If a system only regulates the lower-impact operators, the watershed will still be

suffering many of the impacts that drove the creation of the proposed waiver in the first place, and the board will have failed to protect water quality.

What is uncertain, in the extreme, is the likely extent and effectiveness of compliance with the proposed waiver. It is essential that policy makers and the public are informed of the impacts associated with the industry, the rate at which those impacts are increasing, and the implications for beneficial uses, particularly for ESA-listed fisheries. This information is critical if we are to understand how those impacts are likely to be reduced under varying levels of successful implementation of the proposed waiver's substantive requirements. Both questions must be addressed in an EIR in order to assess what additional measures, including increased enforcement resources, are likely to prove necessary to protect water quality in our already-degraded streams and rivers.

Given the parlous state of coho and steelhead in the Eel River, at least some of the impacts associated with cannabis cultivation should now certainly be considered "take" of listed species, and the current operations of the cannabis industry as jeopardizing the survival and recovery of these runs. Such impacts would include dewatering, which has led to the loss of coho from China Creek, and threatens to extinguish the runs in Redwood and Sprowel Creeks. Coho are very unlikely to recover in the South Fork Eel River without substantial recovery of populations in Sprowel and Redwood Creeks, so the loss of those runs is a blow to the potential recovery of coho across the region extending from the Eel to Oregon's Rogue River. Similarly, sediment impacts associated with marijuana cultivation are clearly impairing reproduction and juvenile feeding in areas where fish are hanging on. Because its implementation and mitigations are so uncertain, the Board cannot show that the proposed waiver will prevent jeopardy or even mere take of these species, let alone that such impacts would be reduced below the level of significance. Thus, a Mitigated Negative Declaration is wholly inappropriate, and an EIR must be prepared.

Even before 2000, anthropogenic sediment sources were approximately equal in magnitude to natural sediment sources in the South Fork Eel. As Regional Board staff appreciate, the Eel has among the very highest levels of natural sediment sources for North American rivers, so that's a lot of additional sediment. But it is clear that since 2000, substantial additional roadbuilding, site clearing, and increases in the intensity of use have taken place across many areas of the North Coast, including areas with steep slopes and unstable soils and landforms. It is thus much more likely than not that anthropogenic sediment inputs are now significantly higher in many watersheds than they were in the 1990s.

It is important to be clear that despite the growing conversation about legalizing recreational use and sales of marijuana in California, the black market remains at the heart of the North Coast's pot industry. The industry exists here primarily because of prohibition; it responds poorly, if at all, to civil authority in large measure because of the risks of criminal prosecution; and those risks themselves engender the substantial financial incentives which drive the continuing boom in cultivation across the region.

Because the industry is likely to continue its rapid growth and evolution absent effective intervention, the draft waiver's provision of a five-year sunset period seems quite

sensible. Regulatory systems will need to be redesigned as the industry responds to pending legalization and other changes in the legal and political landscape. A related point is that, given that significant changes in the overall legal status of marijuana and the market for the plant and its products are likely to occur in the next five years, there is little logic to creating systems to manage marijuana cultivation on unsustainable sites. This is particularly true for large-scale operations; legalization will make agricultural land available where those operations are seen as desirable.

FOER strongly opposes any suggestion that the 2000 square foot limit in Tier 1 be raised. An operation of that scale can produce 100 pounds of finished product in a season, worth roughly \$100,000 at today's prices. Allowing operations five times that size, as some have suggested, would create powerful incentives to develop many sites that may not be suitable or sustainable.

The three-tiered structure outlined in the Draft Waiver offers important opportunities to drive cleanup and recovery across watersheds. Counties and/or the state could incorporate these categories, as established and evaluated by the Regional Board, into their frameworks for permitting commercial marijuana cultivation. We would suggest that permits be issued for commercial cultivation – ie, operations larger than 2000 square feet – only in watersheds where all Tier 2 and Tier 3 sites have been effectively addressed to the satisfaction of Regional Board staff and other interested agencies. Third party entities probably have the best chance to effectively coordinate between individual parcel owners. If focused efforts were made to immediately address these problems, we could well see dramatic improvements in watershed conditions in the relatively near term.

Once all Tier 2 and 3 sites are addressed and water quality goals met, it may make sense to look to the possibility of expanding the existing industry on existing or additional sites on truly sustainable templates. However, until we reach that goal, further expansion of the industry should be discouraged with all available policy tools.

Unfortunately, it is likely that the majority of existing operations significantly larger than 2000 square feet are Tier 3. We frankly wish the Regional Board would – or maybe the word here is could – shut all such damaging, large-scale operations down in this fourth year of our ongoing drought. The fact that we're not considering such an option, that there's no agency in the state that appears capable of actually enforcing such a decision, says a lot about the fundamental mismatch between the scale of the challenges on the ground and in the creeks, as against the political will and resources needed to address those challenges.

Where the harms are likely to be greatest, and cooperation least forthcoming, in Tier 3 sites over 2000 sq ft in size, and where there is evidence of wilful violations, the Regional Board and all other agencies should make it an overriding priority to identify and close those operations. Failure to respond to this order, or deceptive responses, should be taken as evidence of wilful violation of this order and other applicable laws. To allow such operations to continue under any color of official sanction is to reward scofflaws and those abusing our watersheds with an unearned competitive advantage over people who are not only playing by the rules and protecting our streams and fish, but risking losses and incurring costs by complying with regulations.

Similarly, we would advise that parcels with operations significantly above 2000 ft be considered ineligible for T1 status for at least two years as a disincentive to increase the size of established operations. While we understand the Board's desire to adopt a cooperative, non-confrontational approach to working with willing landowners, given the scale of the industry and its history of non-cooperation, we strongly encourage the Board to carefully consider ways to increase the persuasive effect of its proposed regulatory structure. Consider, for example, assessing penalties on 3rd contact (ie, first contact is informational, second is warning, third is fine) as a general rule, with escalating schedule of fines to encourage rapid compliance.

To protect water quality, a regulatory framework for marijuana cultivation must ban the use of water trucks to supply pot farms. Water trucking should be allowed only for critical domestic uses. Given their impact on water quality through both illegal, unpermitted diversions and sediment delivery from very heavy trucks traversing roads not engineered for those loads, the use of water trucks by any marijuana cultivation operation should constitute a violation of the standard conditions and should result in both the operator and the property being ineligible for a permit for at least several years.

Finally, If the Board is going to protect water quality in these areas, it must address high-impact roads, including both chronic sediment sources and those which present risk of catastrophic failure. A comprehensive framework should not only assess road conditions, surface maintenance, and crossings, but also road location. Streamside and midslope roads are subject to higher failure rates and cause significantly greater harm to watersheds that ridgetop routes. Similarly, roads constructed on unstable landforms are often major sources of sediment that can be redirected to provide access at much lower impact. The private landscape the draft waiver seeks to regulate here is often networked with road systems adapted from logging roads first established in the second half of the twentieth century, but often many decades ago. On industrial timberlands, much of that older road system has been the rightful focus on decades of work to relocate roads, upgrade and armor stream crossings, and ensure that roads are designed and maintained to meet the needs for which they are created. We are long overdue for a similarly systematic effort to address road systems across the private landscape. Of course, such an effort will have significant benefits for public safety and transportation as well as stream health.

Thank you for your consideration of these comments.

Sincerely yours,

/s/
Robert Scott Greacen
Executive Director
Friends of the Eel River