



Water Department – 212 Locust St. Santa Cruz, CA. 95060 - (831) 420-5200

Cannabis Comments c/o Matt Johnston  
Planning Department  
701 Ocean Street, 4th floor  
Santa Cruz, CA 95060

October 31, 2017

**Re: Comments on the Draft Environmental Impact Report (DEIR) for the Commercial Cannabis Cultivation and Manufacturing Regulations and Licensing Program**

Dear Mr. Johnston,

Thank you for the opportunity to comment on this DEIR. It is obvious that staff has taken this complicated policy matter very seriously and, in spite of incomplete data and an unwieldy number of interacting issues, evaluated the various projects alternatives very thoroughly. While there are many aspects of the document that we are supportive of, we will limit our comments to those issues which we feel warrant clarification or further analysis.

**1. Mapping/GIS analysis.** Many of the parcels identified for inclusion in a future program may not, in fact, be available or appropriate for that land use. For example, City of Santa Cruz lands on Newell Creek are identified as being eligible for cultivation in Figure 2-6 and federal land in Bonny Doon is also identified as eligible for cultivation in other figures. Additionally, Zayante sandhills are shown around the perimeter on the ridgetops adjacent to Loch Lomond. While we are aware of sandy/stoney soils there associated with Maymen series soils, we are unaware of Zayante sandhills being present. If the environmental review is based on analysis of GIS data then the Final Environmental Impact Report (FEIR) should include corrected maps and the analysis should be refined.

**2. Land use.** Commercial cannabis cultivation and the related concentrates manufacturing activities would be no different than other industrial agribusiness activities if not for their federally illegal status and the associated culture which has grown around the industry since the 1970s. Rather than trying to impose complicated licensing conditions upon operations that

are inherently ill-suited to their current locations in the mountains, which the County plainly admits in this document is likely to be less successful than desired, limiting this commercial activity to areas already dominated by agribusiness and industry would seem to warrant greater consideration. The existing infrastructure (the majority of the registrants) for cannabis-related activities is located in the mountains not only because the growing conditions are favorable there, but also because the illegal status and subsequently inflated value of cannabis over the decades has required defensible and secure cultivation locations. However, with cannabis now coming out of the legal shadows and the relatively new found ability to openly cultivate in greenhouses, a more environmentally protective alternative would be to focus on enforcement and consciously move industrial scale cannabis operations into existing agribusiness and industry – dominated areas of the County and out of mountainous areas which provide other more important functions for the County such as water supply, cold water fisheries, timber resources, recreation, etc.

**3. Cumulative Impacts.** The disturbance envelope of the total cannabis industry that would be eligible under various alternatives is not well addressed. Clearing of forest, compacting soils, removal of forest floor duff and exposure of bare soil will reduce the ecosystems opportunity to slow stormwater and allow recharge into shallow groundwater. Increased human activities into previously inaccessible or undevelopable landscapes will increase landslides, reduce wildlife habitat and connectivity, increase ignitions of wildfires and negatively impact water resources regardless of the rigor of implementation of the preferred alternative. Simply stated, the cumulative impact of cannabis operations will increase proportionately with the area of land that is eligible for these operations to take place. The FEIR should more thoroughly evaluate cumulative impacts in this context.

**4. Alignment with state policies.** Due to the complexity of the issues and the short turnaround time required it has (admittedly) been challenging to maintain alignment between the state and county policy making. Several of the standards in the County cultivation regulations are less stringent than policies already in place in other areas of the state and area also less stringent than currently proposed policies (10/17/17) released by the State Water Resources Control Board (SWRCB). For example, the state generally has more protective mitigations for riparian buffer widths, seasonal water diversion prohibitions and farm or water resource management plans than the currently proposed mitigations in the DEIR and associated County code standards. Currently proposed SWRCB standards can be reviewed in more detail at the following links:

[https://www.waterboards.ca.gov/board\\_info/agendas/2017/oct/101717\\_6\\_final\\_draft\\_cannabis\\_policy\\_with\\_att\\_a\\_clean\\_version.pdf](https://www.waterboards.ca.gov/board_info/agendas/2017/oct/101717_6_final_draft_cannabis_policy_with_att_a_clean_version.pdf)

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/cannabis/general\\_order/r5-2015-0113\\_att\\_a.pdf](http://www.waterboards.ca.gov/centralvalley/water_issues/cannabis/general_order/r5-2015-0113_att_a.pdf)

[http://www.waterboards.ca.gov/northcoast/board\\_decisions/adopted\\_orders/pdf/2015/15\\_0023\\_Cannabis\\_Order.pdf](http://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2015/15_0023_Cannabis_Order.pdf)

Assuming the SWRCB will adopt relatively consistent standards statewide, mitigations and the associated County code language regarding riparian buffer widths, water diversion and water resource management or farm management plans should be modified to be at least as protective as their respective state standards.

Additionally, the new Groundwater Sustainability Agencies will be required to prepare Groundwater Sustainability Plans (GSP) by 2020 under the Sustainable Groundwater Management Act (SGMA). There will be a number of mandates that will be generated from that process. The project alternatives should ensure that cannabis cultivators will need to meet all requirements that result from SGMA. The FEIR should include reference to SGMA and ensure that all HYDRO mitigations are aligned with its requirements.

**5. Market branding.** Support of a market branding program similar to those used elsewhere would be another method of protecting both the legacy of small “mom and pop” mountain grows and the natural resources potentially threatened by them in the locations where they have historically farmed. While many of the standards already proposed in the County’s regulations are equal to or superior to certified and branded cannabis from other jurisdictions, Santa Cruz County Certified branded cannabis could be further developed as a mitigation and include more rigorous environmental protection standards than more traditional cultivation methods. These standards could include, but not be limited to:

- Organic only pest control methods including strict limits on rodenticide use.
- Solventless concentrate manufacturing.
- Educational requirements for licensees such as the “Master Gardener” program.  
[http://mbmg.ucanr.edu/Learn\\_To\\_Be\\_A\\_Master\\_Gardener/](http://mbmg.ucanr.edu/Learn_To_Be_A_Master_Gardener/)
- Enhanced forest preservation, water use, erosion control and related standards.

This mitigation and related code standards would be a perfect opportunity to develop third party compliance inspections and certification programs that the Santa Cruz County Resource Conservation District or private industry could play a role in. Some examples of similar programs can be found at the following links:

<https://www.cleangreencert.org/>

<https://www.certified-kind.com/certified-kind-rules>

<http://www.certifiedsungrown.org/>

**6. Allowance for trucked water.** Not only does trucked water open up substantial amounts of additional acreage to operations that might not otherwise be possible, the ability of the County (not to mention water purveyors) to oversee a trucked water program is highly questionable when consideration is given to the nuances of water rights, use tracking and related issues. Furthermore, we are not aware of any water purveyors who have analyzed this issue at a level of complexity that would allow for thoughtful accommodation for this new system demand through their Urban Water Management, drought contingency and other related plans. This project element should be much more thoroughly vetted before it is included in a project alternative in the FEIR.

**7. Impact AT-3.** Considering all the environmental services that forestlands provide regarding retention of runoff, wildlife habitat, carbon sequestration and overall watershed functions and the fact that many of our watersheds support special status species and water supply for the majority of County residents, the impact of forest conversion or rezoning of TPZ lands could be significant. Furthermore, vegetation community shifts due to climate change predicted by Point Reyes Bird Observatory<sup>1</sup> indicate that redwood forests may be severely limited in the County in the future, thereby exacerbating this issue. Including more rigorous mitigation for this impact such as prohibiting rezoning of TPZ parcels for commercial cannabis cultivation, prohibiting expansion of the agricultural use of TPZ zoned parcels for commercial cannabis cultivation, requiring evidence of ongoing timber management commitments for TPZ parcels, prohibiting all commercial cannabis operations on TPZ zoned parcels or other mitigations which would further protect our valuable timber lands should be evaluated in the FEIR.

**8. Impact Bio-1 – MM BIO-1.1b. Habitat Compensation.** Many permitting authorities use a 3:1 ratio for mitigation rather than a 1:1 ratio. Consideration of a more rigorous mitigation bank concept seems appropriate given the scale of impacts associated with this project. Implementation of any such program will obviously be very challenging and success may be a speculative, remote possibility. Also, while these sorts of mitigations are standard practice for many permitting processes, engineering habitat or relocating species is generally less successful than protecting habitat outright. However, understanding that some sort of offsite mitigation program will inevitably be part of the licensing process, this may (again) be an opportunity to partner with an outside conservation organization such as the Resource Conservation District who is uniquely qualified to facilitate these kinds of programs. This

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<sup>1</sup> <http://data.prbo.org/cadc2/index.php?page=154>

mitigation could also be extended to provide coverage for instream impacts related to water diversion and stream sedimentation caused by cultivation. Finally, creative leveraging of this mitigation to provide improvements on other public lands, which currently have insufficient resources to do so (State Parks, County Parks, etc.) and habitat mitigation banking criteria that have enough flexibility to trade impacts in non-similar areas (for example: trade impacts in upland areas for mitigation in riparian areas) may help facilitate the overall success of this mitigation and help address long-standing degradation of riparian zones that has otherwise been challenging to restore.

**9. MM BIO-1.1h. Water Draw Restrictions.** We strongly support this mitigation, however it is not entirely consistent with state standards, nor will it necessarily be entirely protective of instream flows and related aquatic biota. The SWRCB is currently proposing to prohibit surface water diversion from April 1 – October 31 as well as diversion during the November to March period if reference compliance stream gages indicate that flows are below certain thresholds required to support instream biota. Aquatic baseflow minimums for these periods are also currently being proposed by the SWRCB to trigger further restrictions on groundwater pumping. If it is determined that groundwater diversions have the potential to significantly affect surface flows, forbearance periods may extend to groundwater diverters as well. For the San Lorenzo River, these thresholds are the following:

<b>Gage</b>	<b>Nov. Min Flow (cfs)</b>	<b>Dec. Min Flow (cfs)</b>	<b>Jan. Min Flow (cfs)</b>	<b>Feb. Min Flow (cfs)</b>	<b>March Min Flow (cfs)</b>	<b>Aquatic Base Flow (cfs)</b>
<b>Santa Cruz</b>	57	83	144	159	119	17
<b>Big Trees</b>	52	71	129	145	110	16

In Santa Cruz County there are already instream flow problems during the winter period in some creeks, particularly during drought periods. The SWRCB’s proposed reference compliance gage strategy – while more stringent than the currently proposed mitigations in the DEIR - may not adequately protect other streams in the County as many of our streams have unique geology, land use and microclimates which affect their hydrology that won’t be reflected by reference compliance gages. Furthermore, the relationship between surface flow and groundwater levels is not well understood in many of our streams. Therefore, aligning this mitigation with state standards, but also developing additional reference compliance gaging stations, utilizing all SGMA-related data to support licensing decisions about cultivation and manufacturing - related water use in overdrafted groundwater basins and developing instream flow targets based on site-specific habitat-flow relationships would make this mitigation more rigorous. Of course, water rights validated by the SWRCB and Streambed Alteration

Agreements that include habitat/flow relationship-based instream flow bypass requirements for any surface water diversions will also be necessary to make this mitigation meaningful.

Finally, sharing of all water use data obtained through the proposed licensing program with local agencies involved in developing and implementing GSPs under SGMA and requiring licensees to share an equitable burden for implementation of GSPs will further strengthen this mitigation.

**10. MM BIO 4.2. No Cannabis Activities allowed within Sandhills Habitat or Salamander Protection Zone.** We strongly support this mitigation as well. It is notable that this mitigation may also serve as mitigation for hydrologic impacts by reducing the groundwater pumping associated with the project in overdrafted groundwater basins such as the Santa Margarita groundwater basin. Given that the streams that drain the Santa Margarita groundwater basin support anadromous salmonids such as coho salmon, this mitigation could also support other biological mitigations already proposed in the DEIR. Finally, given that development activities in the sandhills disproportionately contribute sediment and nutrients to the San Lorenzo River, this mitigation also addresses other impacts.

**11. MM BIO-4.1. Avoidance of Conflict with an Approved HCP.** The City of Santa Cruz has a commitment to watershed protection not only because its drinking water is derived solely from local watersheds but also because the City has strong environmental protection values in and feels an obligation to operate in a way that is protective of other water beneficial uses and the natural environment in general. It is likely that the City of Santa Cruz will have an approved Anadromous Salmonid (e.g. coho and steelhead) HCP that includes instream flow standards for the protection of these species for the San Lorenzo River, Newell Creek, Laguna Creek, Liddell Creek and Majors Creek within the next two years. Any licenses granted subsequent to that time in these watersheds need to not only acknowledge the City's existing water rights seniority, but should also include prohibition on any activities which affect these instream flows or otherwise affect aquatic habitat to the extent that there are conflicts with the implementation of this HCP. This may also be true for other water purveyors in the future.

**12. Impact HYDRO-1. Commercial cannabis cultivation under the Program could introduce sediment and other pollutants to surface flows and groundwater, which would cause water resource contamination. With mitigation, this impact would be less than significant.** Given that several public and private water sources are located adjacent to "M" zoned parcels in karst terrain where commercial cultivation and manufacturing appear to be possible and that karst geology often provides important cold perennial flow (even in drought) to streams which support special status species such as coho salmon and water supply for a large percentage of the County's residents, this impact is currently not sufficiently mitigated. Karst protection standards could include but not be limited to:



- Site-specific geologic investigations
- Setback for any structures, roads and manufacturing from sinkholes or other karst features.
- Routing drainage away from karst features

See the following link for more information on this issue:

<https://www.americangeosciences.org/sites/default/files/karst.pdf>

The County is already considering karst protection language for several existing regulations<sup>2</sup> and inclusion of karst protection standards in commercial cannabis cultivation regulations and inclusion of karst protection standards mitigation measures in the FEIR seems appropriate as well.

**13. Impact HYDRO-2. Commercial cannabis cultivation under the Program could adversely affect groundwater supplies and groundwater recharge. This impact would be less than significant with mitigation.** The additional water demand posed by allowance of tankered water, groundwater pumping and diversion of surface water, particularly during drought during both the wet and dry seasons, are not thoroughly analyzed in this document, nor have they been thoroughly analyzed by local water purveyors. Therefore the impacts cannot be well-understood at this time. Furthermore, new greenhouse construction could potentially increase runoff rates and reduce groundwater recharge, though it is not clear what analysis has been conducted to characterize this issue and provide commensurately appropriate mitigation in the DEIR. This has been a significant issue in other groundwater basins, particularly the Oxnard Plain, where greenhouse-based cultivation practices have replaced row crops or other agricultural practices that do not result in development of landscape-scale impervious surfaces. Given the existing water supply status in the County and the mitigations currently proposed, it seems speculative to say that this impact is less than significant with mitigation. Further analysis of the demand posed by the program would facilitate a more rigorous evaluation of alternatives in the FEIR.

**14. MM-HYDRO-2.1. Water Efficiency for Cannabis Cultivation.** While we strongly support this mitigation, implementation success of the mitigation will take an ongoing, long-term commitment and significant resource allocation. The success of such a mitigation may be enabled by the involvement of a third party such as the Resource Conservation District. Again, RCDs have a long history of success with such programs. Furthermore, the success of this mitigation measure would be better aligned with SGMA and much more successful if it included a requirement for metering groundwater pumping.

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<sup>2</sup> [http://santacruzcountyca.iqm2.com/Citizens/Detail\\_LegiFile.aspx?ID=2578&highlightTerms=karst](http://santacruzcountyca.iqm2.com/Citizens/Detail_LegiFile.aspx?ID=2578&highlightTerms=karst)

**15. MM HYDRO-2.3. Water Tank Supply Management.** It is not clear if this mitigation applies to water used for irrigation as well as water used for firefighting purposes. However, as previously mentioned, we support the surface water forbearance period water diversion and tank filling. However, there may also be non-forbearance period flow issues to consider and consistency with SWRCB standards that need further consideration in development of this mitigation. Obviously, the standards for the County's program will need to parallel the state standards, if only because state permits are required for water diversions.

**16. Impact UE-1. The Program could increase demand or result in the expansion of facilities for water, wastewater, or solid waste services within the County due to licensing of commercial cannabis cultivation and product manufacturing activities. This impact would be less than significant with mitigation.** Given the existing situation with water supply in the County and the mitigations currently proposed, it seems speculative to say that the impact is less than significant with mitigation. Water purveyors such as the City of Santa Cruz are increasingly committed to maintaining instream flow improvements for anadromous salmonids, recharging overdrafted groundwater basins and reducing customer demand to minimize their overall effect on the environment. The additional water demand posed by allowance of tankered water, groundwater pumping and diversion of surface water (particularly during drought during both the wet and dry seasons) are not thoroughly analyzed in this document, nor have they been thoroughly analyzed by local water purveyors. Reduction in instream flows due to the effects of commercial cultivation in drinking water source watersheds will have an undetermined effect on the ability of water purveyors to maintain historic raw water production volumes from these watersheds, may exacerbate the existing need to explore additional supply development and may have effects on anadromous salmonids that effectively increase the environmental regulatory burden on water purveyors. Additionally, all diversions associated with commercial cannabis cultivation and manufacturing will have to abide by the state's water rights laws. The DEIR is unclear regarding the mechanisms for ensuring protection of water rights seniority, validating legitimacy of claimed water rights associated with licensing, management of instream flows during low flow periods and related matters. Therefore the impacts on water utilities cannot be well-understood at this time. Further analysis of the demand posed by the various alternatives would facilitate a more rigorous discussion of the true impacts on water utilities in the FEIR.

**17. Sustained (and enhanced) enforcement program.** The most permissive alternative may be the most expedient way to get operations into the licensing program, but it seems like a logical stretch to say that it is therefore the environmentally superior alternative. The County will have serious challenges with program implementation on licensed grows and especially with enforcement on unlicensed grows with any project alternative. As the DEIR itself states, it is quite likely that even with the most permissive project illegal grows will be rampant due to



the complexity of the license process, perceptions of excessive taxation, temptation of illegal out of state markets and related issues. These illegal grows operating in the shadows of legal grows will be even more difficult to enforce if they are scattered county-wide and the standards for legal grows are so low that differentiating between legal and illegal grows is challenging. Because the City of Santa Cruz Water Department is primarily a surface water purveyor and our drinking water source watersheds are almost entirely under County jurisdiction, we have an ongoing interest in watershed protection and an associated need to work closely with County Code Compliance on issues that impact those watersheds. While our recent experience with Code Compliance has been mostly positive, it has also been our experience over the years that frequently there have been times when there were insufficient resources for Code Compliance to be adequately responsive to enforcement needs. At the very least, dedication of cannabis licensing and sales - related tax revenue should be implemented to help ensure some long-term viability of an enforcement program that is commensurate with the scale of the industry in the County, be it legal or not. Without these measures it seems speculative to conclude that impacts will be mitigated to a less than significant with mitigation level by a sustained and enhanced enforcement program.

Thank you for your consideration of these important issues. Please do not hesitate to contact me if you have any questions or concerns about these comments.

Sincerely,



Rosemary Menard  
Director – City of Santa Cruz Water Department

cc: WAC, SqCWD, SLVWD, PVWMA, SVWD