January 22, 2021

FROM: Mendocino County Climate Action Advisory Committee (MCCAAC) Shai Larsen, Secretary Albion, CA 95410 shailarsen3@gmail.com

TO: Mendocino County Board of Supervisors 501 Low Gap Rd. Ukiah, CA 95482 bos@mendocinocounty.org

Re: The Mendocino County Cannabis Cultivation Ordinance and Effects on Climate Change

Dear Chair Gjerde and Members of the Board;

The Mendocino County Climate Action Advisory Committee (MCCAAC) would like to draw your attention to the potential consequences, both positive and negative, of the County's cannabis cultivation program on the three county-wide goals of the MCCAAC: reduce greenhouse gas (GHG) emissions, increase carbon storage capacity in the County, and prepare to cope better with the economic and environmental impacts of climate change processes already underway.

Impacts of Expanded Cannabis Industry

Land use decisions relative to the cannabis industry significantly affect all three of these goals. The legal cannabis industry provides a powerful impetus for infrastructure development wherever this activity is allowed. These impacts extend far beyond the actual cultivation area itself. Depending on the location, there could be a need for road improvement and/or new road construction; development of water source and irrigation delivery systems; and clearing and grading for construction of associated structures including buildings for storing and processing. Depending on the size of the operation, employee housing and other employee facilities could be needed. There will be impacts from vegetation clearing for improved road access and fire protection, as well as from the use of artificial soils, fertilizers, pesticides, and plastics for ground covers, planting containers and hoop houses. If not already connected to an existing power grid, increased cannabis cultivation will require power generation either through an extension of the grid or from some other source. Additionally, there will be a need for proper on-site waste management, and the need for public services such as routine and regular inspections; convenient waste disposal facilities; law enforcement and fire protection; and, depending on the location, protection from wildfires.

Importance of Restricting Cannabis Cultivation to Zones Already Impacted by Commercial or industrial Development

The same resource conservation and climate action principles that promote in-fill development in urban areas apply equally to this new economic enterprise. For this reason we strongly support

the prohibition of new commercial cannabis operations into the County's resources lands, including the County's rangeland zoning district (RL), contained in the existing cannabis cultivation Ordinance. We also support the underlying long term goal of directing new commercial cannabis cultivation to areas of the County already developed with roads, electricity, existing water sources, and other human impacts, i.e. RR-10, UR, Ag, Commercial and Industrial zones in the current Ordinance. We support the Ordinance's goal of re-directing new cannabis cultivation into Ag zoning districts with the caveat that cultivation practices do not displace food and fiber production or degrade the food and fiber productivity of agricultural soils and water resources through the use of quasi-industrial production practices such as the use of ground coverings using plastic, aggregate or other similar materials, permanent indoor grow facilities on concrete pads, etc., practices common to many cannabis cultivation operations. These types of operations should be restricted to Commercial or Industrial zones.

In addition, we strongly oppose recent efforts to open the County's entire 700,000 + acres of RL to new commercial cannabis operations either by amending the existing Ordinance, or more recently, by writing an entirely new Ordinance that would open the RL districts to new cannabis cultivation. The MCCAAC recognizes that there may be legitimate exceptions to the existing zoning limitations, but we recommend that such situations be considered on an individual basis and that site-specific remedies be sought, if warranted, rather than weakening the strong environmental and climate action protections of the existing Ordinance.

Carbon Storage and Greenhouse Gas (GHG) Emissions

By not encouraging a new wave of remote rural development, the existing Ordinance has the potential to further the mission of the MCCAAC to preserve the carbon storage capacity of County resource lands, including the County's rangeland's limited and critical water sources, and the carbon-holding capacity of its grasslands* and oak and mixed forest woodlands**. The existing Ordinance also avoids increasing GHG emissions through encoded land use decisions that result in fewer cannabis cultivation related vehicle miles travelled (VMT) for producers, distributors, inspectors, public service providers, employees, commercial deliveries, and travel to waste disposal facilities, (and fewer toxic garbage dumps throughout the County!).

Reduction of Fire Risk

Finally, the zoning limitations of the current Ordinance will not decrease the County's ability to be prepared for and to cope with wildland fires. In contrast, encouraging more remote rural development would create more opportunities for human-caused wildfire ignition. It could hamper efforts to introduce controlled burning across wildfire-prone landscapes, and given CalFire's mandate to protect property from wildfire, would add to CalFire's and the public's burden to provide ever more funding and personnel in an effort to defend private property threatened by wildfire. Ironically, during this last fire season, as the Board was directing staff to work on a new draft ordinance that would open the County's rangelands (RL) to cannabis cultivation, the August Fire was burning across two thirds of the rangelands of the 3rd District, and Covelo, Willits and Laytonville were bracing for an influx or surrounding evacuees.

The MCCAAC urges the Board to recognize the inextricable relationship of the recommended land use decisions contained herein on climate change and the public welfare.

The MCCAAC would also like to recommend amendments to the existing Ordinance that we think would further reduce GHG emissions from commercial cannabis operations and bring this new agricultural and industrial enterprise closer to being "carbon neutral", and in the case of inthe-ground, sun-grown farms, a potential net sequester of carbon:

- 1. Do not permit cannabis cultivation operations that use generators as a primary source of power, and allow generators only as backup power during a defined emergency such as a temporary power outage. Revisit Section 10A.17.070(F) of the Ordinance, which Section was amended to extend the generator "phase out" period for indoor and "mixed light" operations from two years to six years. We recommend reinstating the 2-year time period for phasing out generator use.
- 2. Do not permit cannabis cultivation operations that depend on the use of trucked-in water for cannabis cultivation or other cannabis cultivation-related water use. Not only do the water trucks emit significant GHG's as they rumble night and day to remote areas of the County, they are contributing to the rapid deterioration of both County and neighborhood-maintained roads. We recommend that commercial cannabis cultivation be permitted only, among other requirements, where a proven on-site water source is adequate to support the cultivation site and all associated cannabis activities, as well as residential uses, if applicable, and where it has been demonstrated by a qualified professional that there will be no negative impacts to neighboring properties or to the natural ecosystems of the watershed.
- 3. Due to their energy-intensive requirements**, limit indoor and "mixed light" cannabis operations to Commercial and Industrial zoning districts only, and require that all power use for such cultivation facilities be from renewable energy sources.

Thank you for your interest in and attention to these recommendations.

Respectfully Submitted,

Shai Larsen, Secretary for the Mendocino County Climate Action Advisory Committee

It was moved by Committee Member Cathy Monroe, and seconded by Committee Member Randal MacDonald, that the above letter be sent to the Mendocino County Board of Supervisors, and carried this 15th day of January, 2021, by the following vote:

Ayes: 10 Noes: 0

Absent/vacant seats: 1 absent members, 4 vacant seats

Cortified: Secretary of the Mendocino County Climate Action Advisory Committee

- * Pawlok, Dass et al. 2018. Grasslands may be more reliable sinks than forests in California. Environ. Res. Let. Vol. 13, Number 7.
- * Minnesota Board of Water and Soil resources, 2019. Carbon Sequestration in Grasslands.
- * New York Times article, Science section, 12-3-12, by C. Claiborne Ry.
- *Chelsea J. Carey. Et al. Supporting Evidence varies for rangeland management practices that seek to improve soil properties and forage production. California Agriculture Vol 74, #2. (http://calag.ucaur.edu April-June 2020.
- * Statement from California wildlife Foundation/California Oaks Executive Director. Protecting and sustaining oak ecosystems is good climate policy. California Oaks newsletter Fall/Winter 2020. (www.californiaoaks.org)
- **Mills, Evan. 2012. The carbon footprint of indoor Cannabis production. Energy Policy 46 (2012).
- **Power Consumption for Cannabis Growers. Energy News. July 2019.