

To: Humboldt County Planning Commission

Agenda – July 29, 2021

Re: Continued permitting of large Cannabis farms that rely on un-stored groundwater pumped from wells.

Dear Planning Commissioners,

This week you are looking at applications for Cannabis Farms that plan to use over 1,000,000 gallons of un-stored water pumped from ground water wells.

Most of these farms are in the Southeastern part of Humboldt County, which is experiencing a Severe Drought.

Please consider the possible negative impacts that could occur with so much new groundwater pumping in the upland areas of our watersheds. We have not had the analysis we need to understand the possible connection to surface water, springs, seeps and wetlands.

Also the continued permitting of cannabis farms that rely on generators increases the fire danger in an area with the fire severity rating of Very High. Continuing to permit farms that rely on generators also goes in the opposite direction of Humboldt County's Climate Action Plan.

Sincerely,
Robie Tenorio
Citizens for a Sustainable Humboldt

I am enclosing a Press Release from UCCE regarding the use of wells for Cannabis.

July 22, 2021

CONTACT: Pam Kan-Rice, (510) 206-3476,

pam.kanrice@ucanr.edu

EDITORS: Photos can be downloaded at <https://bit.ly/3eLfmG2>

Cannabis farms irrigating with groundwater may affect stream flows

The legalization of marijuana for recreational use in California has encouraged growers to expand plantings of the lucrative crop. Like any plant, cannabis requires water to grow. A new study from the Cannabis Research Center at UC Berkeley examined where cannabis growers in California are getting water for their crops,

highlighting significant gaps in cannabis cultivation policy.

Environmental advocates have expressed concern that cannabis farms are diverting water from rivers and streams, which could harm fish and other wildlife.

The researchers studied water use in 11 of the state's top cannabis-producing counties – Humboldt, Lake, Mendocino, Monterey, Nevada, San Luis Obispo, Santa Barbara, Santa Cruz, Sonoma, Trinity, and Yolo.

Using California state cannabis permitting data, the researchers found that cannabis farms rely primarily on groundwater wells, not streams, for their irrigation needs. But pumping groundwater could also have an undesirable effect on wildlife.

"Wells drilled near streams in upland watersheds have the potential to cause rapid streamflow depletion similar to direct surface water diversions," said co-author Ted Grantham, UC Cooperative Extension specialist and co-director of the Cannabis Research Center.

The Sustainable Groundwater Management Act, or SGMA, enacted in 2014, is designed to prevent overdraft of groundwater and protect water quality and supplies for agriculture, residents, fish and other wildlife.

But according to Grantham, "Most of the cannabis farms fall outside of the groundwater basins regulated under SGMA, so well use represents an important, but largely unregulated threat to streams in the region."

The researchers found that well use by cannabis farms is common statewide, exceeding 75% among farms that have permits to grow in nine of the 11 top cannabis-producing counties. In eight of the 11 counties, more than one-quarter of farms using wells are located outside of groundwater basins subject to state groundwater use regulations. Farms growing larger acreages of cannabis pumped more groundwater for irrigation, while farms with on-farm streams or located in areas that receive more rainfall were less reliant on wells

The study relied on water-source data only for cannabis farms that

have state permits to grow.

Based on models, the researchers estimate the majority (60%) of unregulated Northern California cannabis farms in Humboldt and Mendocino counties are likely to use groundwater wells if they follow the same patterns as the regulated industry.

"Our results suggest that proactive steps be taken to address groundwater use in cannabis regulations in California and call for further research into the effects of groundwater use on streamflow, especially outside of large groundwater basins," write the authors. The paper, "Cannabis farms in California rely on wells outside of regulated groundwater basins," by Christopher Dillis, Van Butsic, Jennifer Carah, Samuel C. Zipper and Grantham is published in Environmental Research Communications at <https://doi.org/10.1088/2515-7620/ac1124>.

UC Agriculture and Natural Resources brings the power of UC to all 58 California counties. Through research and Cooperative Extension in agriculture, natural resources, nutrition, economic and youth development, our mission is to improve the lives of all Californians. Learn more at ucanr.edu and support our work at donate.ucanr.edu.

MEDIA CONTACT: Ted Grantham, UC Cooperative Extension specialist and co-director of the Cannabis Research Center, tgrantham@berkeley.edu.

To read more UC ANR news, visit our newsroom at <http://ucanr.edu/News>.
Follow @UCANR on [Twitter](#)
Like us on Facebook <https://www.facebook.com/ucanr>

[Unsubscribe](#)

UC Agriculture and Natural Resources, Communication Services, 2801 Second St.,
Davis, CA 95616, CA 95618, U.S.