To: Planning Commission

Re: Cannabis Discussion

Social Conflict with County Residents

At the last meeting, Mr. Ford mentioned the issue of social conflicts, where zoning allowing for residential property can be conflicted with competing activities in an AG zone. This has become particularly problematic with cannabis permitting, when residents are neither notified nor permitted a hearing. For those who might be notified, under special permits, only those neighbors within a few hundred feet of a property line learn about a prospective grow, which can impact neighbors for miles around.

The conflicts of course can, and likely will, involve water, including use of wells by cannabis operators that will compromise domestic or livestock water sources. Residents need to be informed about prospective permits so that they can prepare to be heard, rather than learn at the last minute, hire attorneys, and present arguments that come too late.

I ask the Commission to consider the residents in the permitting process, or to ask the Board of Supervisors to develop supplemental language that allows potentially impacted residents a seat at the table. The ordinance's and FEIR's claim to 'ensure' safety, health, and welfare of county residents cannot be fulfilled if the residents are not informed and have no chance to present their case.

Determining impact of wells on springs and streams;

A Commissioner's comment at the last meeting suggested monitoring of streams was not finding any problems with cannabis water usage. Everything was great and good. I and others are not aware of any serious official stream or river monitoring, so it would not seem possible to make such a claim. The FEIR says the county and state will jointly and regularly monitor stream flow and test for pollutants, but we are not aware either of these being done, even on salmonid streams. We have seen no monitoring or testing data, or data revealing serious problems with stream flow and pollution, which some of us have witnessed first hand. Instead, I learned last week that there may be no annual inspections; rather, Code Enforcement undertakes 'desk reviews' of self assessment claims made by growers.

The situation is even worse in that the County does not know what to do to assess impacts. Last week, we were informed by County Code Enforcement that

"--we [Code Enforcement] have no means to determine if diversions or wells have impacted [a] creek---". (Devin S)

If we have no means to determine if wells impact a stream, river, or spring, then we have no means of assessing impacts of wells. Thus, we have no means to ensure that permitted wells will do no harm. Thus, wells should not be permitted until such time as the impacts can be determined. It would not make sense to do otherwise. We know that wells remove water from watersheds, which can have multiple and cumulative impacts on the environment and on people; none of them good. Once a well is approved by permit, Code Enforcement has decided it will not investigate even such egregious incidents as stream dry offs, as seen two years in a row for a Freshwater Creek headwaters tributary. The damage is done, and there is no interest in un-doing it. Code Enforcement refused to investigate, saying

"There was nothing [Code Enforcement] can do --- if it is a permitted grow" (Warren B),

and further, Code Enforcement claims, without any evidence, that dried up streams next to cannabis grows dry up on their own, and thus, Code Enforcement is not obliged to do anything:

"--we [Code Enforcement] are not going to investigate just because a creek dried up on its own." (Devin S).

If County Planning is sending permits to Planning Commission for approval, without knowing (or having means to determine) whether diversions or wells would have any impact (or cumulative impact) on stream or river viability, then Planning Commission has, by default and in violation of CEQA, not been considering any impacts of wells on streams, rivers, etc., at all..

The big picture reveals we are facing pernicious drought and decades of increasing climate temperatures that will challenge current water policies and practices for decades to come. To face these challenges, the County clearly needs a long-term strategic plan for managing our water resources, which must include policy and action regarding use of wells to take water from the watersheds, wetlands, and rivers, as necessary and critical for domestic and public use, industry, and agriculture. The County has yet to develop such a plan. Until then, permitting wells without a reasoned, fair, and science-based approach, and without the 'means to determine impacts' will likely continue to do more damage to the environment and more harm to people.

I would propose that, for now, new permits for cannabis cultivation should be put on hold until such time as a reasoned, scientifically sound, strategic water management plan is in place, which also factors in future climate temperature increases and projected drought.

How much water is reasonable for cannabis cultivation?

At the last meeting, it became apparent that Commissioners do not know how much water should be expected to be used for cannabis cultivation. Unfortunately, there are many metrics cited, such as gallons of water per plant, per pound of product, per gallon of potting soil, etc. Only one scientific study has been found that estimates water usage for various types of cultivation in California, which included grows in Humboldt. The estimates are quite variable, due to small sample size, and may be biased low, as suggested by the high 'non response' rate. Nevertheless, these appear to be the only data available.

see: Wilson S, Bodwitch H, Carah J, Daane K, Getz C, Grantham T, Butsic V; First known survey of cannabis production practices in California University of California Agriculture and Natural Resources, vol 73, no. 3, 2021.) https://calag.ucanr.edu/Archive/?article=ca.2019a0015

Low impact wells or low cumulative impact wells?

It is not appropriate or meaningful to characterize a well as 'low or high impact'; rather the impact examined must be a cumulative one. The General Plan and CEQA both call for examination of <u>cumulative</u> impacts of water diversion, meaning the culmination of all impacts taken together, including environmental, domestic and public use, stream health, salmonid health, etc. must be taken into consideration, all in the context of repeated drought and climate warming.

Cumulative impact of cannabis activities:

The processes involved in approving permits have not considered cumulative impacts, or cumulative impact analyses; rather, they consider only an incremental impact, independent of all other impacts. When considering the impact of water taken from a watershed, all grows and other sources of

water diversion should be assessed. The impact of a grow's well on a stream's viability may be considered low (even though the County apparently has 'no means to determine' this); whereas, the cumulative impact of the wells of say four grows located on the same stream could be devastating. Here, for example, in a cumulative impact analysis, the total amount of water extracted by all cannabis operations from an area, watershed, or local ecosystem should be calculated to assess the cumulative impact on the watershed. We need to know how many acre feet of water are taken from the watershed annually, and what are all the accumulating impacts that will accrue, year after year. What will happen to the ecosystems--- flora, fauna; will they make it? There must be an analysis that assesses whether the impacts to the environments and ecosystems are acceptable or not. So far, there is none, which begs the question 'why are wells and water diversions still being permitted when we cannot evaluate the impacts?'.

The concept of cumulative impacts is foundational to CEQA:

"two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts... The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (California Code of Regulations [C.C.R.] Section 15355)

The state has not told the County to disregard CEQA's cumulative impacts requirement. So, why is it being ignored?

If County Planning has no means of determining impacts of wells on a stream, as noted above, then it cannot legitimately provide the Planning Commission any assessment, even of incremental impact, of wells on a stream, let alone any <u>cumulative</u> impact of wells. Consequently, the Planning Commission cannot fulfill its obligation to consider cumulative impacts in its decisions.

Thus, because Code Enforcement has 'no means for determining impact of wells', the permitting process and the Commission's decisions have been ignoring altogether any impact of wells on stream or river viability--- or on anything.

I see no sensible option but to discontinue actions on permits until such time as a well reasoned, scientifically sound, strategic water management plan is in place, and a functional process for assessing cumulative impacts has been developed.

Thank you.

Sincerely,

Mark Thurmond DVM, PhD Kneeland CA