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Subject: revision of the non-GMO ordinance

#### Honorable Supervisors:

I am advocating for a GMO ban with qualifications. I would like to see this issue revisited in the future as more research is done and as the newly regulated cannabis industry evolves. I support revising the county ordinance banning GMO organisms to include gene editing. However I would like to bring reason and common sense to the discussion. There are a few arguments floating around regarding this issue that don't stand up to closer scrutiny.

### Lack of accessibility

While it is true that this technology is not directly accessible to the typical small farmer, the technology itself has been around long enough that it is not particularly challenging to employ. What's lacking is an appropriate research lab to handle it. It wouldn't be beyond the reach of a local entity, e.g. Flow Kana, to establish such a facility. There are a lot of things directly inaccessible to the small farmer, such as testing. This is no different.

## Risking our local genetic resource pool

It is asserted that working with a "genomics entity" to take advantage of gene editing would put the genetics of the party working with such an entity at risk. This is nonsense. This is a very common business practice, where "intellectual property" (IP) is involved in product development and research. Confidentiality and non-disclosure agreements are the tool used in these instances to protect that IP. Cannabis genetics is no different. The real problem putting those resources at risk is ignorance and lack of experience in the business world where no steps are taken to protect these unique genetics. Phylos Bioscience is one company that offers the service of reading a plant's unique genetics (DNA sequencing) and thus establishing prior ownership.

# Appropriating and patenting local genetics

It is asserted that gene editing offers a method to make small changes which then can be patented and used to co-opt the original genetics. This is a dubious interpretation of patent law (changes have to be 'non trivial") but more to the point, there is nothing in the proposed new ordinance that will prevent this. After all this is a county ordinance. Anyone can buy a gram or two of local weed and do gene editing somewhere else. What will prevent this is the IP protection discussed above.

# Potential for rapid infiltration of county production by gene edited plants due to widespread use of clones

This is a head scratcher for me. The mechanism by which this infiltration would occur is not described, but I assume it would involve pollen contamination. But, since clones are taken from a "mother" plant, that mother would have to be the product of a seed from a "native" female and a errant pollen particle from a GMO male. At the same time the female is "dusted" with high pollen concentrations from the desired male. If the progeny from this cross is going to supply the next "mother" then already there is a very low probability the small amount of errant pollen will result in a seed producing that "mother". At the same time existing genetics are not affected as far as clones are concerned because there is no breeding involved. So, unless I'm missing something, this argument seems to have little or no scientific or rational basis.

## Consumer preference for non-GMO

The one argument that I wholeheartedly agree with is the public perception of non-GMO. The cachet of a product being non-GMO has become a prominent sales feature, along with organic and sustainable, for many products. Maintaining the status of this county as GMO-free can only help the small farmer, and this is the chief reason I support the updating of the ordinance to include genetic modification through gene editing. I'm sure everyone realizes this is not just a cannabis issue. Every agricultural product in this county is quite likely potentially affected by this technology. There exists a real potential for dramatic improvement in many aspects of agricultural production. In the past we have seen the catastrophic effects of such products as "Roundup Ready" GMOs. Moving to the future, caution is the best way to proceed. There is much research on the safety of gene editing left to be done. There are also market trends which may be much different a few years from now. Let's update this ordinance but maintain an open mind. I think the best way to proceed is to revisit this matter sometime in the future. A sunset clause, maybe five years in the future? Let's put aside our prejudices, try to keep our minds open, and look at this issue again when there is much more data available.

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