In a prior blog post, I discussed how California's experiment in legalizing cannabis has not been as effective as hoped for in bringing cultivators into the legal regulatory system. Low levels of compliance might be undermining the possibility of improved environmental outcomes - proponents of legalization argued that bringing formerly illegal cannabis cultivation into a legal regulatory system would also mean these cultivators would comply with environmental regulations, reducing impacts to California's wildlife, waters, and land. But these improved outcomes depend on cultivators entering into compliance, while to this point only a fraction have done so.

As I described in that earlier blog post, we have survey data indicating that a major factor driving cultivators to not enter into the legal market is the cost and complexity of California's cannabis regulatory system. That burden of cost and complexity in regulatory compliance might fall heaviest on small cultivators - they won't have the expertise, money, or time to learn the regulations, upgrade their facilities to meet stringent new standards, or hire consultants to help them navigate the process. Thus, the regulatory process might be favoring large operations - even though legalization specifically sought to protect small growers, including with caps on the size of permits that could be issued.

Recent work by a team of researchers (including me) provides some insight into whether the California cannabis regulatory program is really benefiting larger farms at the expense of smaller farms. We compiled data from state water quality permits for compliant cannabis cultivators in eleven counties that are at the center of cannabis cultivation in the state.

We found a strong trend that farms that are new - in other words, that began after legalization - are on average larger than "legacy" farms, farms that had been in existence before legalization. In particular, while there were more permitted farms in counties that were the center of the cannabis industry before legalization (Humboldt, Mendocino, and Trinity), the largest increase in permitted production area occurred in counties in the Central Coast of California that have seen the rise of new farms, such as Monterey and Santa Barbara. This provides some real evidence that the regulatory program is encouraging larger farm size. It is also consistent with research by other members of our team that found that farms that applied for permits in Humboldt County were larger on average than farms did not.

We also found that legacy farms may face steeper compliance costs - permitted operations located in Humboldt and Mendocino Counties were located in areas that had steeper slopes than operations in other counties. This dynamic makes sense, since locating in remote, steep areas would make legacy farm operations less likely to be detected by law enforcement when cannabis cultivation was illegal. But now it makes compliance more

difficult – steep slopes trigger stricter regulations under California's water quality system, for instance.

This data indicates that small cultivators may be left behind by the move to legalization in California's cannabis system. That might be a problem because small cultivators may be an important component of the local economy in rural California counties, ensuring economic stability and growth in locations that have felt the lost of extractive industries such as logging. Moreover, we might feel an obligation to these legacy growers who survived prohibition, and provide them with the ability to enter into a newly legal system. Making California's cannabis regulatory system work better for small cultivators should be a key goal as the state looks to reform and improve that system.

The article I discuss in this blog post is available <a href="here">here</a>