

From: [Carlene M. Cogliati](#)
To: [Planning Clerk](#)
Subject: Cannabis & Water
Date: Wednesday, September 29, 2021 9:50:09 AM

Dear Planning, County Board of Supervisors and all others involved with Cannabis and Water:

I am writing this to address two specific issues.

First, know that I voted For prop. 64, for numerous reasons. A major one was to ensure water protection.

There are two things that are known and documented:

1. - There is an option allowed by law to pump water from a non-diversionary groundwater well - *Only non-diversionary* (hydrologically separate, unaffected by surface water.)

[<https://www.lawinsider.com/dictionary/water-diversion> **Water Diversion** means the act of diverting water, and all infrastructure used to store or intercept surface flow and hydrologically connected subsurface flow, such as **wells**.]

2. - **Surface and groundwater are interconnected and must be managed together.**

The last line came from information documented for the Humboldt County's Board of Supervisors meeting, Feb. 24, 2015, on the Sustainable Groundwater management Act.

You do not have to rely just on that statement -

<https://www.sciencedirect.com/topics/earth-and-planetary-sciences/groundwater-surface-water-interaction>

"The hydrologic science dealing with groundwater-surface water interaction is quite well developed, as is evident from the 1980 publication of UNESCO that dealt with the subject (Wright, 1980)."

<https://www.americangeosciences.org/critical-issues/faq/how-do-groundwater-and-surface-water-interact>

"Streams interact with groundwater in three basic ways: streams gain water from inflow of groundwater through the streambed, streams lose water by outflow through the streambed, or they do both depending upon the location along the stream. It is the groundwater contribution that keeps streams flowing between precipitation events or after snowmelt."

https://ton.sdsu.edu/the_myth_of_groundwater_resource_evaluation.html

"Surface water replenishes readily, with a global recycling time averaging 11 days (L'vovich, 1979).

In contrast, groundwater takes much longer to replenish. Recycling times for groundwater vary widely, from days, to years, to centuries, to millennia, depending on aquifer location, type, depth, and properties."

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKFwi-1r246qPvAhUCXc0KHdvGCOoQFjACegQIAxAD&url=https%3A%2F%2Fhumboldt.gov.org%2FDocumentCenter%2FView%2F52639&usg=AOvVaw3u7h91w-OstanZAQ0Vi1Y> (PDF)

"The term "groundwater" refers to water that occurs beneath the land surface in saturated layers of sediment deposits or fractured rock. While groundwater is primarily recharged by precipitation infiltrating through the soil, groundwater and surface water are directly linked in the hydrologic cycle. Typically, groundwater discharges to streams during dry conditions, but the direction of flow is reversed under wet conditions when streams contribute to groundwater recharge."

[Environmental Research Letters, Volume 14, Number 6](#) Citation Marc F P Bierkens and Yoshihide Wada 2019 *Environ. Res. Lett.* 14 063002

"The result of these trends has been the steady increase of the use of non-renewable groundwater resources and associated high rates of aquifer depletion around the globe. . . ."

https://www.usgs.gov/special-topic/water-science-school/science/groundwater-decline-and-depletion?qt-science_center_objects=0#qt-science_center_objects

"There is more of an interaction between the water in lakes and rivers and groundwater than most people think. Some, and often a great deal, of the water flowing in rivers comes from seepage of groundwater into the streambed. . . Excessive pumping of such aquifer systems has resulted in permanent subsidence and related ground failures. . . As California farms and cities drill deeper for groundwater in an era of drought and climate change, they no longer are tapping reserves that percolated into the soil over recent centuries. They are pumping water that fell to Earth during a much wetter climatic regime—the ice age. - Such water is not just old. It's prehistoric. - It is one more sign that some parts of California are living beyond nature's means, with implications that could ripple into the next century and beyond as climate change turns the region warmer and robs moisture from the sky."

And those are just drops in the sea of information available on the interconnection of ground and surface water. Our well water is simply Not non-diversionary, therefore not allowed by law. Yes, other places are doing it. That does not make it legal or in our best interests.

It is your job to protect our resources – everyone's. Although marijuana growers may not believe you are protecting them by refusing water from wells to be used for growing, considering that they too will be sitting out in the countryside with no water to

drink, or wash with, or flush with, or Fight Fires with, and have their property become worthless, if and when wells go dry, just as much as everyone else.

That doesn't mean growing must cease; it means you need to rethink the options. I am totally in favor of surface water being collected and stored during the allowed wet months. That water is comparatively easy to monitor – both the amount collected and its effect on other surface water.

Another very important thing I would like to point out:
The benefit of developing ocean water desalinization plants.

As our groundwater is decreasing, ocean water is increasing. The demand on freshwater is only going to increase. People are looking at growing marijuana as a tax benefit for our county. But selling anything which is in great demand will do the same thing. At present, the glut of pot on the market is slashing prices, therefore slashing profits and taxes from it. The demand on water is only going up! Wells are drying up in Southern Humboldt and northwards, not to mention the rest of the state - and countries around the world. We have the opportunity to create a water source for everyone here, as well as for export. Look at the big picture; if you do your job properly, everyone will benefit, now and long into the future.

First and foremost – protect our groundwater now!

Sincerely, C. M. & Antony Coglaiti

P.S.

You have the ability to change existing permits.

Cannabis Cultivation Policy (PDF)

(p 26) Continuing Authority to Amend Water Rights