

How much water does cannabis use?

- Unclear, but perhaps not more than other agricultural uses using the gallons/plant approach
 - \circ Using 1,000 gallons/year/plant (a common estimate):
 - \circ Microbusiness growers (200 plant limit) 0.61 Acre Foot per Year ("AFY"). Average home uses 0.33 AFY.
 - \circ Cannabis Producers (8,000 plant limit) about 25 AFY
 - \circ An 8-acre farm in much of New Mexico about 25 AFY
 - $^{\circ}$ (An "acre-foot" is about 325,851 gallons enough to cover a football field with endzones (an acre) one foot deep)

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How much water does cannabis use, con't?

- Where meter readings are unavailable, the State Engineer uses a "greenhouse calculator:"
 - Based on square feet in the greenhouse
 - \circ Use ranges from 0.264 to 0.5 gallon/square foot/day (Based on literature, subject to revision)
 - \circ At 0.3 gallon/square foot, 24,000 square-foot greenhouse, 80% of space in plants, 12 months of production:
 - \circ Estimated diversion is 6.26 AF

How much water does cannabis use, con't?

• State Engineer values for typical crops:

Crop	Gallon/square foot/day
Cannabis	0.264 to 0.5
Bench crop (grown in a greenhouse)	0.40
Bedding plants	0.50
Potted plants	0.50
Chrysanthemum, etc.	1.50
Roses	0.70
Tomatoes	0.25
Outdoor production peth Newlin Taylor, Esq.	0.25

State Engineer rules on water for cannabis

- FAQ from OSE website (9/24/2021) (in materials):
- Domestic wells CAN be used for growing personal plants
- Domestic wells CANNOT be used for commercial plants
- Commercial water rights required for greenhouses
- Irrigation rights can be used for open fields, but fencing and other security rules are stringent
- Huge backlog for OSE permits

State Engineer stats on handling cannabis

- OSE information from July 25, 2022, presentation to the Water and Natural Resources Interim Committee:
- 212 requests for Water Right verification; 10% completed
- 8,150 staff hours spent on cannabis issues since 2021 (4 FTEs)
- 319 hours/week spent on cannabis (1 FTE per District Office)
- 138 applications filed to reconfigure a Water Right
- 17 potential compliance issues tied to cannabis

State Engineer penalties for illegal use of water for cannabis (or any over-diversion)

- "Payback" of water is required, can be up to double the amount diverted. Sec. 72-2-18 (E).
- State Engineer can issue fine up to \$250/day. Sec. 72-12-11.
- Neighbors will report suspected illegal use.
- State Engineer will eventually find out about illegal uses.
- State Engineer has power to enter private property for inspection of water wells and surface diversions. Sec. 72-8-1.

State Engineer rules on water for cannabis

- Senate Bill 100 in 2022 Legislative session would have changed the State Engineer rules:
- Eliminated upfront proof of valid water supply.Instead:
 - "A license issued ... is revocable if a licensee is using water to which the licensee does not have a legal right."

State Engineer rules on water for cannabis

- •Senate Bill 100, cont'd:
- "The [Cannabis Control] Division and the OSE shall develop a guide for water providers and cannabis licensees on water rights and the legal use of water."
- oOn Feb. 15, SB 100 passed Senate by 28-11vote
- Died in House Judiciary Committee

Other water sources for cannabis

- Municipal systems, Water Co-ops and Mutual Domestics can sell or lease water for cannabis farms
 - Letter from system adequate to show supply, but ...

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olf federal funds involved, system may be at risk

Federal rules on cannabis use

- Cannabis is on Schedule 1 of the Controlled Substances Act (1970)
- Officially, cannot use federal resources to support cannabis cultivation (RUS, BOR)
- •BUT, 2013 Cole Memo directs U.S. Attorneys not to interfere with state-sanctioned activities

Federal attitude on cannabis use

- Bureau of Reclamation (irrigation and dam projects) not actively enforcing rules against water use for cannabis
- Rural Utilities Service (funding agency)
 generally has a hands-off approach

Federal attitude on cannabis use

- •Given risk, What's a water supply system to do?
 - Contractual language in case of enforcement
 - Language can allow system to terminate contract without liability if feds say stop supplying water



Questions?