

This is the first document (DRC2018-00018) I've come across that actually states the number of plants, 800 in a 5,000 sq-ft greenhouse. What's important to take away from this is all my CEQA CHALLENGE GREENHOUSE calculations rely on a single plant in a 16 sq-ft area. With THIS statement they are allowing a single plant over a 6.25 sq-ft area. This means that if the SLO plant to sq-ft values stand, ALL MY GREENHOUSE water demand calculations can be increased by 87%. Of course this would make an already BAD APPLICANT STATED acre-feet/year situation worse. I'm not going to adjust my numbers but it is worth noting that SLO, and no other county I can find as of this writing, factors into their calculations to show how many plants will be in that given space. The point of ALL THIS is we NEED FLOW METERS on the incoming and discharge water for ALL OF THESE PROJECTS!!!

c yards of fill material;  
 drainage, sedimentation  
 o prepare a SWPPP,  
 es;  
 body;

- ✓ Stockpiles would be properly managed during construction to avoid material loss due to erosion;
- ✓ All hazardous materials and/or wastes would be properly stored on-site, which include secondary containment should spills or leaks occur.

Implementation of these County standards would reduce the project's water quality impacts to less than significant.

**Water Quantity**

Water Demand: As discussed in the Setting, above, the project site is located in an area where a 1:1 water use offset is required. A water use offset clearance involves crop conversion on a single site with a single owner. A property owner may choose to apply for an offset clearance when they are currently growing one crop, but wish to switch to a different crop. The current acreage devoted to vineyard would be reduced to offset the additional water consumption from the cannabis activity thereby fulfilling the offset requirements of LUO 3246.

The applicant has prepared a Water Consumption Offset study which calculated water usage based on the proposed activities and the existing vineyard activities.

A single 5,000-square foot greenhouse would cultivate 800 plants; cycling every 13 weeks (grow cycle per plant lasts 13 weeks), thereby consuming 33,600 gallons of water annually. Given that the total greenhouse use consists of four, 5,000-square foot greenhouses, annual water consumption is 403,200 gallons of water. This equates to a cannabis-related water demand of 1.23 acre feet per year of water. Tables illustrating water demand are shown below in Tables 3, 4, and 5.

**Table 3 – Water Use - Gallons Per Plant**

One Plant			
Grow Cycle 13 Weeks	Gallons Per Day	Days	Total Gallons
Week 1 ending Week 2	0.125	14	1.75
Week 3 ending Week 4	0.250	14	3.5
Week 5 ending Week 6	0.375	14	5.25
Week 7 ending Week 13	0.750	14	31.50
Total Cycle Seed to Harvest		84	42.00

**Table 4 – Water Use – 800 Plants Per Greenhouse**

Greenhouses – 800 Plants – 5,000 Square Feet			
Grow Cycle 13 Weeks	Gallons Per Day	Days	Total Gallons 800 Plants
Each Plant - 0.125	100	14	1,400
Each Plant - 0.250	200	14	2,800
Each Plant - 0.375	300	14	4,200
Each Plant - 0.750	600	42	25,200
Each Plant – 1.5		84	33,600

**Table 5 – Water Use – All Greenhouses**

Greenhouses – 800 Plants – 5,000 Square Feet			
3-13 Week Cycles	Gallons Per Cycle	Cycles	Total Gallons 800 Plants
1 Greenhouse	33,600	3	100,800
2 Greenhouses	67,200	3	201,600
3 Greenhouses	100,800	3	302,400
4 Greenhouses	134,400	3	403,200

I take exception to the STATED 3 cycles per year. At 84 days per cycle that totals 252 days out of the year to grow. This leaves 113 days unaccounted for. I will be adding the 4th cycle in and another 134,400 gal to account for the ACTUAL 537,600 gal (1.65 acre-feet/year not the 1.23 as STATED) annual water demand for this project.

4 537,600  
 changes in compliance with Groundwater offset ratio, a removal of 85,210 square feet net change in water demand from the project would not result in an increased demand with the County's 1:1 water offset

**Water Supply:** Water on-site is supplied by a domestic well producing 15 to 20 gallons per minute

There are 4 greenhouses each with a STATED 5,000 sq-ft canopy for a total of 20,000 sq-ft of canopy.

Each greenhouse has a STATED total of 800 plants each. With 4 greenhouses that totals 3,200 plants.

**Seiche/Tsunami/Mudflow**

The project site is located approx the Coastal Zone. Due to proximity with seiche potential is Lake Nacimiento east. Since the project site is not in the Coastal Zone it would be insignificant.

537,600 (gal/yr) ÷ 20,000 (sq-ft) = 26.88 (gal/sq-ft/yr)  
 365 (days/yr) ÷ 26.88 (gal/sq-ft/yr) = 0.07 gal/sq-ft/day  
 16 (sq-ft) x 0.07 (gal/sq-ft/day) = 1.12 gal/day  
 As a grower I'm not willing to accept that number as an average. In all my CEQA challenges I factored 2 gal/day as the safety factor that needs to be built into this equation to account for varying locations and times of year. If the STATED ANNUAL WATER DEMAND for any of these applications, which is the basis for the approval, comes in too low when the project is actually measured real time metered water through a BIM system then environmental penalties should apply. Currently there are no penalties for using more water than what the applicant projected in their project submittals and like this situation where the applicant only stated 3 cycles per year, that should have been a red flag to those in charge of granting that license.

