Cannabis Propagation

Myths vs. Facts & Real-Life Case Study

By Margro Advisors

Propagation Area

The propagation process is about nurturing plants prior to planting them in the final cultivation area.

Myth: "More propagation area means more plants"

Fact: The final Cultivation Area, which is fed by the propagation process, is FIXED by the permitting and licensing regulations.

Keep in Mind: The number of plants used for Cannabis farming is based on the fixed cultivation area NOT the propagation area. This is why the State of California does NOT limit propagation area and does NOT include it in cultivation size.

Water Impacts

The propagation process uses significantly less water than cultivation irrigation.

Myth: "More propagation area means a significant impact to already low water levels"

Fact: With additional propagation the number of plants allowed has not changed, so the amount of water usage remains the same as prior years.

Keep in Mind: The amount of plants used for propagation is based on the <u>fixed</u> cultivation area. As these are small growing plants they are watered significantly less than when placed in the gardens for cultivation.

Energy Impacts

Minimal supplemental lighting is needed to help the crop remain stable during the vegetative cycle.

Myth: "More propagation area means significantly more power usage"

Fact: Dedicated greenhouses use minimal lighting, approximately four hours a day for eight weeks. Expanding the area does not automatically require significantly more lighting, the impacts of which are already minimal.

Keep in Mind: A longer or wider propagation greenhouse does not necessarily mean significantly more lighting. In addition, the light itself is only used a for small part of the season.

Taxation

The cultivation area is taxed by the county whether a crop is successful or fails, and the product is taxed by the state at a high fixed rate when sold, regardless of the sales price.

Myth: "Propagation area should be taxed"

Fact: Except for commercial nurseries, propagation is an expensive, labor intensive process which generates NO revenue.

Keep in Mind: More propagation does not generate more revenue itself, but it does lower cost to the farmer. By increasing the healthy environment for the plant, it improves efficiency with less likelihood of lost plants, which cause wasted water, nutrients, and labor costs. More space means more effective farming.

State Alignment

Dedicated propagation areas are not limited by size or usage of lighting by the State of California.

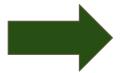
Myth: "Propagation area should only be allowed in the permitted cultivation areas"

Fact: Forcing propagation into existing cultivation areas would not only grossly misalign with state regulations, but would be detrimental to farms by removing a proportion of their already limited cultivation space for vegetation activities.

Keep in Mind: Forcing them to reduce cultivation area results in lost revenue for the farmer, county, and the state.

Real Farm Example: 10% Propagation

A 11,600 Sq Ft permitted farm



Can support up to 2,100 mature plants

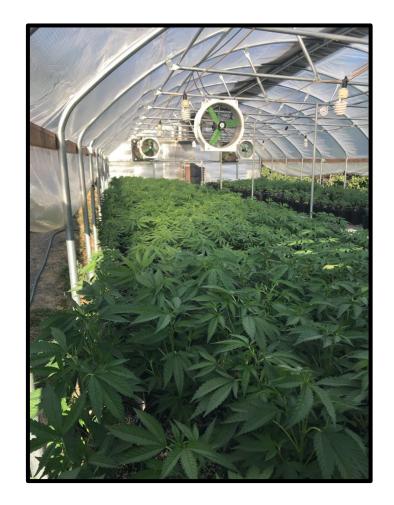


- Currently has a 1,000 square foot nursery greenhouse to stay below 10%
- The nursery can properly support about 1,000 immature plants
- Farmer is forced to overfill with 1,300 plants at most

Real Farm Example: Overcrowded Nursery

Nursery overcrowding is a risky practice:

- Prime environment for Mold & Mildew
- Restricted plant growth
- Ineffective application of water and nutrients due to lack of accessibility
- Delayed removal of weak or diseased plants due to lack of visibility
- Delayed response to pest infestation due to lack of visibility



Overcrowding = Lost Plants

Real Farm Example: 10% - Results

- On average at least 10% of plants are lost to overcrowding
- Of the 1,300 planted, 1,170 plants will remain
- Only 7,000 sq ft is planted = 60% of permitted space
- The farmer filed a county reduction form for past two years
- = \$4,600 **lost** expected **tax revenue** to Humboldt County per year
- = Up to 40% lost revenue to the farmer (1,170 instead of 2,100 plants)
- = **10% of wasted water**, **nutrients**, **and labor** from plant failure due to overcrowding
- = Up to 40% lost tax revenue for the State of California

Real Farm Example: 25% Propagation

11,600 Sq Ft Permitted farm



Can support up to 2,100 mature plants

Farmer uses a 2,500 Sq Ft Nursery



Greenhouse will support the 2,100 immature plants needed for cultivation

- 0% of plants will be lost to overcrowding
- ∼2,100 immature plants will remain

Real Farm Example: 25% - Results

Farmer is able to **utilize** their **farm** to **full potential** which was already **permitted and approved** for water source, energy use, and responsible resource management.

- 0% of plants are lost to overcrowding
- 0% wasted water, plants, nutrients, or labor to overcrowding
- 2,100 plants remain
- Full 11,600 permitted area is cultivated
- Full farm revenue opportunity is utilized
- No County reduction filing needed
- 100% expected tax revenue is remitted to the county
- 100% tax opportunity is provided to the State of California

Conclusion - Focus on Solutions

- Allow the 25% propagation area needed for Cannabis farming
- Utilize a portion of the \$18M CA state local jurisdiction assistance grant to provide incentives for water storage and conservation measures
- Streamline and prioritize land use and building permitting for rain catchment ponds
- Review water use practices on ALL farms, not just
 Cannabis

Final Ask - Acknowledge the Challenge

Legal Cannabis farms are often being blamed for the atrocities of illegal grows, historic logging damage, and now climate change water shortages

Acknowledge the reductions in surface diversions, chemicals, pesticides, and wastes accomplished by the legal Cannabis farm community

Acknowledge the **adoption** of a variety of conservation and **sustainability measures** these farmers have done over the past five years

-drip irrigation, rain catchment systems, solar fans, living soils, natural pest management, water quality best practices, road improvements, and more.

Thank You

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