

Discussion Paper
KEY ISSUES AND POLICY OPTIONS

CANNABIS CULTIVATION WITHIN
RESOURCES AND RURAL DEVELOPMENT (RRD) LANDS

BACKGROUND

The RRD zone is comprised of more sensitive natural resource lands, which are generally steep slopes, very remote, primarily accessed by unpaved narrow roads, have little to no groundwater resources, and designated as high fire hazard areas. The RRD zone makes up 39% of the County, with 56% of RRD zoned parcels measuring 10 acres or more.

According to the Sonoma County General Plan, *“the RRD land use allows residences at very low densities due to lack of infrastructures, greater distance from public services, poor access, conflicts with resource conservation and production, and significant physical constrain and hazards. Proposed amendments to the Land Use Map in this category shall consider all of these factors. The intent is that natural resource areas be managed and conserved and production activities avoid depletion and promote replenishment of renewable resources.”*

Industry representatives have indicated that the majority of cannabis cultivation is occurring within the RRD zone. This is likely because the parcels are large and remote and there are not many residences. For these reasons there is a reduced concern of neighborhood compatibility issues such as odor, visibility, and loss of housing stock; however, cultivation within this zone presents other challenges. The primary concerns with permitting cultivation within the RRD zone are environmental impacts, site access, security, water availability, fire hazards, and waste water discharge.

KEY ISSUES

Fire Hazards

Cannabis operations are associated with high fire risk and have been responsible for structure fires in both urban and rural areas. Indoor and mixed light cultivation utilize large amount of electricity and operations have been known to install inadequate or improper electrical equipment, which increases the likelihood of fire hazards. The Sonoma County Hazard Mitigation Plan and GP 2020 designate the majority of RRD lands within the Wildland Fire Hazard Areas as “very high” or “high.” Although cannabis cultivation operations would have to obtain proper building and electrical permits, allowing cannabis in this area would increase the number of structures and people that would potentially need emergency protection.

Emergency Services

The remote RRD zoned areas are primarily accessed by one lane gravel roads that are remnants of old logging roads. Most cultivation facilities would be required to construct paved, 2-way roads with an 18 foot minimum width, sufficient for emergency vehicle access. Water for fire suppression may also be required. Emergency response in these areas are handled by volunteer fire departments and response times vary.

Water Availability

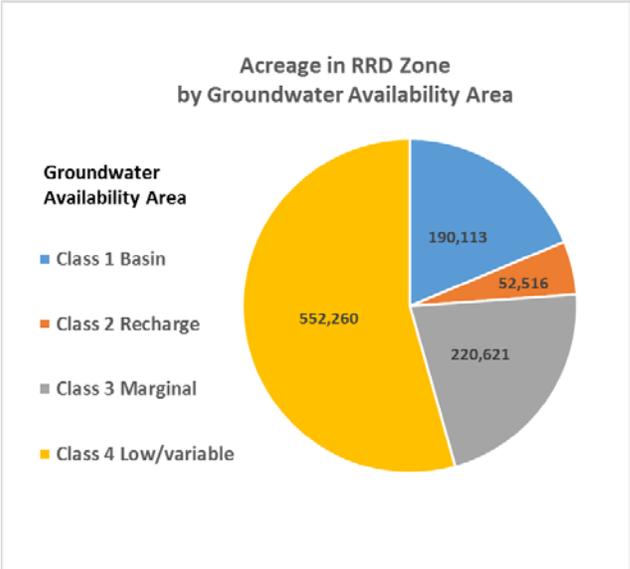
The majority of land within the RRD zone is water scarce, and designated Groundwater Availability Class 4 area with low or high variable water yield. This low availability of water is problematic because cannabis needs a sustained amount of moisture. Estimates of water use for cannabis cultivation operations range from one and six gallons per day per individual cannabis plant during the growing period. The table below provides a range of water demand depending on the size and type of operation, as supplied by various industry sources. For comparison purposes, a single family residence uses 1.5 to 2.0 acre-feet of water per year.

Table 1: Projected Water Use for Cannabis

Type of cultivation	Maximum Size	Number of Plants	Water Use (Gallons per year)	Water Use (Acre Feet Per Year)
Cottage	25 plants	25	9,125 to 54,750	0.03 to 0.2
Outdoor cultivation	5,000 sf	556	133, 440 to 800,640	0.4 to 2.5
Indoor cultivation	5,000 sf	556	202,940 to 1,217,640	0.7 to 4.0
Outdoor cultivation	10,000 sf	1,111	266,640 to 1,599,840	0.8 to 5.0
Indoor cultivation	10,000 sf	1,111	405,515 to 2,433,090	1.3 to 8.0

*Assumes a range of 1 to 6 gallons per day

Figure 1: Acreage in RRD Zone by Groundwater Availability Area



Cannabis cultivation operations may have an impact on existing groundwater resources. Within the RRD zone, Class 4 water scarce areas are typically located in the upper watershed areas with fractured rock aquifers which are difficult to characterize the extent and availability of water. The proposed Ordinance includes a strict standard that would require operations within Class 4 areas (80% of the RRD zoned parcels) to have “no net increase” in water use, achievable through implementation of water conservation measures. These could include rainwater catchment, recycled water reuse, water recharge projects, or similar measures. Of the 7,613 parcel in RRD 1,082 parcels are within Groundwater Availability Areas 1-3 and would not have to adhere to the “no net water increase” standard.

Roadways in RRD

The RRD zone is known for steep, rocky, hillsides. New road construction in steep areas may present significant hazards related to design and safety. A large addition of new roads within this zone would require ongoing maintenance and may cause erosion, sedimentation, and dust issues over the long term.

Security

The remote nature and reduced visibility of the RRD zone presents safety issues for cultivation operations. Many operations will have a 24 hour/7 days per week security guard and video surveillance. The remote locations coupled with such security measures may present safety concerns for the residents living in these areas.

Development Criteria and Operating Standards

The following abbreviated list of proposed commercial cultivation standards (Exhibit B) would reduce impacts in the RRD zone:

- A. Required adherence to Building Code and Grading Ordinance
- B. Property Setbacks (outdoor and mixed light) - 100 feet from property lines, 300 feet from occupied residences and business on adjacent properties
- C. Biotic Assessment required for sensitive habitat areas
- D. Cultivation shall not be located on slopes that exceed 15%
- E. No tree removal (unless subject to a use permit)
- F. Protection of Important Farmlands - no conversion unless offset
- G. Cultural and historic resource protection - avoid or mitigate impacts to resources
- H. Vegetation and fencing required for screening
- I. Site Security Plan
- J. All lighting shall be fully contained and not visible from off site
- K. Stormwater Management Plan and Erosion and Sediment Control Plan
- L. Fire Prevention Plan
- M. Waste Management Plan
- N. Waste Water Discharge Management Plan
- O. Renewable Energy requirements - must be 100% renewable (via power company or on site) or carbon offsets purchased (generators are prohibited)
- P. Water Supply - on site water provided by municipal, surface, or well water. Within class 4 water scarce areas there shall be no net increase in water use through implementation of conservation methods
- Q. Annual permit requirement
- R. Annual Inspections
- S. Groundwater monitoring
- T. Noise Limits- must not exceed noise limits within the General Plan

The Agricultural Commissioner will be responsible for issuing zoning permits and conducting annual inspections for outdoor cultivation areas. PRMD would be responsible for permitting and inspections for any outdoor cultivation operations requiring a use permit as well as all other types of cultivation and related support activities. Support activities such as drying, trimming, and storage would be allowed in addition to the cultivation size limitation expressed in the proposed Ordinance and Land Use Summary Table (Attachment A).

ANALYSIS AND OPTIONS

1. Cultivation Limits. The following outlines a range of policy options for the size and scale of commercial cultivation considered in the RRD zone. These terms and size limitations are consistent with the license types defined in state law.

Outdoor Cultivation

- A. **Allow All Sizes of Outdoor Cultivation:** This option would allow all sizes of outdoor cultivation up to the one acre limit in state law.

- B. **Limit the Size of Outdoor Cultivation.** This options would limit the size of outdoor cultivation in the RRD zone to either small (up to 10,000 sq. ft.) or specialty (up to 5,000 sq. ft.).

Indoor Cultivation

- C. **Limit Indoor Cultivation Size.** This option restricts indoor cultivation to cottage (500 square feet) and specialty (5,000 square feet). Larger scale indoor operations would not be permitted.
- D. **Limit Indoor Cultivation to Existing Structures.** Indoor cultivation could be limited to existing structures only in order to preserve the soils for other agricultural production.

Mixed Light Cultivation

- E. **Limit Mixed Light Cultivation Size.** This option would limit mixed light cultivation to specialty (5,000 square feet) and small scale up to 10,000 square feet.
- F. **Expand Mixed Light Cultivation Limits.** This option would expand opportunities for all sizes of mixed light cultivation up to the maximum limit allowed in state law of 22,000 square feet.

Analysis

All of the options above propose to limit indoor cultivation to some extent in order to preserve more land for potential resource uses and minimize the need for new structures. This is because indoor facilities are more industrial in nature and may not be adaptable to traditional resource uses if the cannabis use were to end, and may not be in keeping visually with the rural character of these lands. Mixed light operations, or greenhouses, may be adaptable to other types of agricultural uses, though they can also affect the scenic quality of the rural areas.

Staff Recommendation: Option A, C and D. Option A provides maximum opportunities for outdoor cultivation where standards can be met. Larger parcel sizes and topography may provide fewer compatibility concerns and allow for screening. Indoor cultivation is recommended to be limited to cottage and specialty sizes (up to 5,000 square feet) and to existing legally established structures for operations over 500 square feet. Mixed light operations are recommended up to 10,000 square feet. Staff recommends reduced scales of indoor and mixed light cultivation within this zone which will reduce the amount of grading and site development necessary for new structures, thereby reducing impacts to sensitive habitats.

2. Permit Requirements. The following policy options provide a range of permit thresholds for the recommended size of cultivation operation allowed by the previous discussion.

The following range of policy options are related to the level of permit required to allow the specified types of cultivation. The following permit thresholds are used as policy options:

- Zoning Permit – a ministerial, subject to standards, no conditioning authority
- Minor Use Permit – discretionary, can add conditions, hearing waiver if no protest
- Conditional Use Permit – discretionary, can add condition, noticed hearing

The main policy question to consider in determining appropriate permit thresholds for ministerial zoning permits is what scale of use would be consistent with the General Plan and compatible in all circumstances where the use is allowed with a ministerial permit. Special consideration should be given to cumulative impacts of ministerial land uses in determining the appropriate permit thresholds and the standards to mitigate any potential impacts. The following options are

presented for each type of cultivation by size. Refer to the table: *Summary of Allowed Land Uses and Permit Requirements for Cannabis Uses (Attachment A)*.

- A. **Require a Minor Use Permit with potential for hearing waiver.** A minor use permit is reviewed on a case by case basis and is subject to CEQA, although due to the small scale of uses, may be found exempt. Public notification (at least 300-feet) is required and the public hearing may be waived and the permit approved administratively if no protest or request for hearing is timely filed within the 10-day notice period. Minor Use Permits are processed on an at-cost basis and range from \$2,000 to \$6,000 depending upon the level of CEQA review required.
- B. **Require a Conditional Use Permit with hearing.** A conditional use permit is subject to CEQA and a mitigated negative declaration is most often prepared. Public notification (at least 300 feet and sign posted on site) is required and a public hearing is held by the Board of Zoning Adjustments. Conditional Use Permits are processed on an at-cost basis and can range from \$6,000 to \$12,000 depending on the scale, site constraints and neighborhood opposition.
- C. **Require Zoning Permits, subject to standards.** Zoning permits are ministerial permits and are not subject to CEQA. The permit is approved based on adherence to the Ordinance standards and requires no public notification. The cost of a zoning permit would be established by the Board based on the cost of administering the standards and issuing the permit. Staff estimates the costs to be from \$1,800 to \$2,500.
- D. **Require Limited Terms and Annual Renewal.** In combination with the options above, the permit would be approved for one year and would be subject to an annual renewal. This allows staff to review compliance and change conditions based on the situation or changes in the Ordinance.

Analysis

Outdoor cultivation is generally similar to other crops, except for the need for screening, fencing and other security measures (i.e. guards). Generally solid fencing is discouraged in rural areas to retain the visual and scenic quality, yet outdoor cultivation is often secured with solid 8-foot tall solid fencing and or screened to deter theft and access to youth. Indoor cultivation can require large industrial buildings that may have visual impacts on a cumulative basis and may convert land from agricultural or other resource uses or result in a loss of sensitive habitats. Mixed light cultivation likewise involves structures that can lead to visual impacts and conversion of resource lands. The siting of any new structures within the RRD zone may require significant grading, fire suppression design and infrastructure, and an increased need for emergency services.

Staff Recommendation: Options A, B and D. Staff recommends a minor use permit for all types of cottage size cultivation within the RRD zone. All larger sized operations would be required to obtain a conditional use permit, allowing close review of the site on a case by case basis. Staff recommends that the “medium” sized mixed light cultivation operations (up to 22,000 sq. ft.) be limited in Phase I due to the potential to cause significant visual impacts, and considered in Phase II once we know more about the impacts seen in less sensitive zones during Phase I. Due to the diversity of environmental issues on RRD lands, staff does not recommend the zoning permit process and instead prefers to provide the opportunity for a public hearing before the Board of Zoning Adjustments to review larger operations on a case by case basis.

3. Establish Cultivation Standards

The proposed Ordinance includes a combination of minimum parcel sizes and cultivation standards to minimize impacts. Additional policy options related to cultivation on RRD lands are provided below.

- A. **Property Setbacks.** The proposed Ordinance includes a setback for outdoor and mixed light cultivation operations of 100 feet from property lines and 300 feet from occupied residences and businesses on adjacent properties. Indoor operations would be required to meet standard setbacks for structures. The Commission could modify these limits provided that the Commission finds that equivalent mitigation is included in the ordinance. The setbacks are intended to address odor and security concerns, visual impacts, and access by youth with outdoor and mixed light operations.
- B. **Separation Criteria** The proposed Ordinance includes a 600 foot setback from sensitive uses for outdoor and mixed light operations. Sensitive uses include schools, parks, childcare centers, and alcohol or drug treatment facilities. These setbacks could be increased to 800 or 1,000 feet, similar to other jurisdictions and Sonoma County's existing dispensary ordinance, but could not be reduced below the 600 foot separation required in state law for schools. The Commission could consider changing the types of sensitive land uses that require separation other than schools (i.e. whether to include parks, or other businesses that primarily cater to children).
- C. **Minimum Parcel Sizes.** The staff recommendation includes minimum lot sizes relative to the size of the cultivation operations. The Commission could reduce or expand the minimum lot sizes for the size of operation as long as an equivalent mitigation of impacts is provided. The minimum lot sizes apply only to outdoor and mixed light or greenhouse operations as they are more apparent with greater potential for odor and security concerns. There are no minimum lot sizes proposed for indoor cultivation, which can have odor controls and are easier to secure.
- D. **Allow use of Water Trucks.** The staff recommendation includes an allowance for the trucking of recycled water with a use permit. This is due to the lack of water within the RRD zone and the related standard which requires sites within Class 4 to have "no net increase" in water use. Cultivation sites in Class 4 Areas will still need to provide a potable water supply for domestic use and employees.
- E. **Prohibit use of Water Trucks.** This option would prohibit the trucking of water, except in emergencies. The delivery of water increases the number of trips to cultivation sites which may cause traffic conflicts particularly on rural roads and a cumulative increase in air quality impacts.

Analysis

Setbacks are often used to ensure neighborhood compatibility and mitigate impacts of a particular land use such as odor, noise, or light. Setbacks are effective ways to mitigate these impacts as they focus on site design elements rather than regulating ongoing behaviors. Setback requirements would ensure space between a cultivation site and the property line and/or a neighboring structure.

Minimum lot sizes are used primarily to reduce cumulative impacts and overconcentration. They also serve to mitigate impacts associated with odor, noise, and aesthetics by providing more area to separate land uses, provide screening and attenuate noise. Larger lot sizes also reduce the potential access to children and can deter crime by providing more area for screening, fencing and on-site security. The majority of the RRD zone consists of parcels that are over 10 acres and are remote in nature. For these reasons a minimum lot size requirement would not be problematic for new operators in the RRD zone.

Due to the strict standard related to water, the staff recommendation includes an allowance for recycled water to be trucked into cultivation sites with a use permit. The use of recycled water would reduce the use of onsite groundwater. This would require cultivation sites to construct sufficient water storage containers to receive the recycled water. The allowance for trucking water

is also a deviation from existing policy that requires all uses to have an onsite water source adequate to support the proposed use.

Staff Recommendation: Options A-D The proposed Ordinance includes the implementation of setbacks, minimum lot sizes, and separation criteria to minimize impacts to land surrounding cannabis operations. The limitation on existing structures would protect resource lands and minimize land disturbance caused by new construction. The allowance of trucked recycled water would assist operators in meeting the water supply standard within the proposed Ordinance without relying solely on limited groundwater supplies. Potential impacts related to trucking and water storage would need to be evaluated further on a case by case basis through the use permit process.