

**Excerpt of Proposed Revisions to
Winterization Requirements 127 and 128 of the Cannabis Policy and Staff Report
(Released for Public Comment, January 10, 2019)**

The following is an excerpt from the proposed updates to the ***Cannabis Cultivation Policy – Principles and Guidelines for Cannabis Cultivation (Cannabis Policy): Attachment A, Section 2 Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation and Cannabis Cultivation Policy Staff Report (Staff Report)***. The full proposed updates to the Cannabis Policy document, which was previously released for public comment on September 28, 2018, is available online at: https://www.waterboards.ca.gov/water_issues/programs/cannabis/docs/policy_sept272018.pdf

Information on how to provide comments on these proposed revisions to winterization Requirements 127 and 128 of the Cannabis Policy, by the deadline of 12:00 P.M. (noon) on January 25, 2019, is available in the Notice.

Proposed Revisions to Requirements 127 and 128 of Cannabis Policy:

127.	<p>Cannabis cultivators shall not operate heavy equipment of any kind at the cannabis cultivation site during the winter period, unless authorized <u>(1) in a site management plan as described below, or (2)</u> for emergency repairs contained in an enforcement order issued by the State Water Board, Regional Water Board, or other agency having jurisdiction. <u>Use of heavy equipment (e.g. agricultural equipment) for routine cannabis cultivation soil preparation or planting may be authorized in a site management plan approved by the applicable Regional Water Board Executive Officer or designee if both of the following conditions are met:</u></p> <ul style="list-style-type: none"> <u>a) all soil preparation and planting activities occur outside of the riparian setbacks; and</u> <u>b) all soil preparation and planting activities are located on an average slope equal to or less than five percent (5%) (e.g., valley floor).</u> 								
128.	<p>Cannabis cultivators shall apply linear sediment controls (e.g., silt fences, wattles, etc.) along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow length^[29 26] at the frequency specified below <u>or as authorized in a site management plan approved by the applicable Regional Water Board Executive Officer or designee.</u></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Slope (percent)</th> <th style="padding: 5px;">Sheet Flow Length Not to Exceed (feet)</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">0 – 25</td> <td style="padding: 5px;">20</td> </tr> <tr> <td style="padding: 5px;">25 – 50</td> <td style="padding: 5px;">15</td> </tr> <tr> <td style="padding: 5px;">>50</td> <td style="padding: 5px;">10</td> </tr> </tbody> </table>	Slope (percent)	Sheet Flow Length Not to Exceed (feet)	0 – 25	20	25 – 50	15	>50	10
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^[29 26] Sheet flow length is the length that shallow, low velocity flow travels across a site.

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Proposed Updates to Staff Report:

On page 50 add:

Winterization Requirements

In California rainstorm events that create sediment transporting flows on upland slopes and in channels typically occur during the winter period or non-growing season for outdoor cannabis cultivation. One of the main water quality concerns during the winter period is the increased potential for sediment transport due to storm water or water flow from cannabis cultivation activities, especially in areas that are considered “hilly” or “mountainous”. The frequency and risk of erosion or sediment transport on upland slopes can be correlated to average slope of the land. As summarized in Table 4. Slope Gradient Thresholds for Erosion and Deposition, the risk of erosion, potential for sediment transport into stream channels, and the need for additional best management practices proportionately increases as slope increases above five percent (5%).

Table 4 – Slope Gradient Thresholds for Erosion and Deposition

<u>Average Land Slope</u>	<u>Expected Sediment Transport Type</u>
<u>>20%</u>	<u>Erosion: Flows with enough magnitude to transport sediment should result in erosion without significant deposition. Land management goals need to cover significant erosion.</u>
<u>5% – 25%</u>	<u>Transitional (Erosion and Deposition): Flows with enough magnitude to transport sediment should result in both erosion and deposition as land slopes decrease. Land management goals need to cover both erosion and deposition.</u>
<u><10%</u>	<u>Depositional: Flows from higher slopes transporting sediment become primarily depositional, with the most deposition occurring between 2% - 6% slope. Land management goals need to cover deposition of sediment from higher properties.</u>

Benda et al. (2005) “Geomorphology of Steepland Headwaters: the Transition from Hillslopes to Channels.”

The State Water Board has determined that the use of heavy equipment (e.g., agriculture equipment) during the winter period for soil preparation and planting activities on land with average slopes equal to or less than five percent (5%) have a lower risk for erosion and sediment transport and that risk can be mitigated through best management practices developed as part of a Site Management Plan approved by the applicable Regional Water Board. In addition, this requirement is consistent with the California Regional Water Board San Francisco Bay Region’s *General Waste Discharge Requirements for Vineyard Properties in the Napa River and Sonoma Creek Watersheds* (Order No. R2-2017-0033), which requires additional performance standards to control storm runoff from vineyards and sediment discharge from roads on hillslope vineyard

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parcels where the average slope of the planted area is greater than five percent (5%)
(California Regional Water Quality Control Board, San Francisco Region, 2017).

REFERENCES

On page 88 add:

Benda et al. 2005. “Geomorphology of Steepland Headwaters: the Transition from Hillslopes to Channels.” Journal of the American Water Resources Association. Available at: http://geog.uoregon.edu/amarcus/geog607w09/Readings/Benda-et-al2005_JAWRA.pdf

On page 89 add:

California Regional Water Quality Control Board, San Francisco Region. 2017. “General Waste Discharge Requirements for Vineyard Properties in the Napa River and Sonoma Creek Watersheds”. Available at: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/agriculture/vineyard/final_docs/Vineyard%20General%20WDRs%20-%202017-17.pdf