

NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD


DRAFT Agricultural Lands Discharge Program Scope and Framework ~~June 8~~July 6, 2012

Scope of Program


The North Coast Regional Water Quality Control Board (Regional Water Board) Agricultural Lands Discharge Program (Program) is expected to address waste discharges from agricultural lands as defined below. Additionally, this effort is intended to augment, but not supersede, existing Regional Water Board programs, such as the total maximum daily load (TMDL) programs in the Scott, Shasta, and Garcia watersheds, the United State Forest Service conditional waiver, and the Dairy Permitting Program. Permit conditions for the Program will be defined in such a way that compliance can be combined with other water quality programs to simultaneously meet all regulatory requirements.

This section describes the specific activities proposed for inclusion in the Program. This program will cover all discharges to waters of the State (including groundwater) associated with the following activities:

Land Use Types and Agricultural Activities in Scope¹


- Vineyards
- Orchards
- Row crops
- Field crops
- Nurseries
- Medicinal marijuana farms ~~with x or more plants~~
- Irrigated pasture with tailwa
- Cultivated forage crops with ground disturbance
- Associated facilities²
- Activities with discharges to waters of the state (including groundwater)

Out of Scope³

- Farming activities that result in a land disturbance of less than one acre
- 4H and FFA projects
- Academic research projec
- Medicinal marijuana farms under x plants or y square feet (TBD)
- Dryland grazing⁴

¹ Permit holders will have the option of voluntary comprehensive water quality coverage for nonpoint source discharges outside of the scope of the Program (such as those associated with dryland grazing and all roads).

² See glossary in Appendix A.

³ The Regional Water Board Executive Officer may require participation/enrollment in the Program  farm/operation identified as an out-of-scope activity/farm/operation if it poses a threat to water quality.

Program Framework

The Program is organized around risk based tiers. The tiers are intended to characterize risk to water quality based on either physical characteristics of a given agricultural operation or management plans/practices designed to mitigate or, where possible, eliminate that risk. Tiers range from Tier 1 (lowest risk) to Tier 3 (highest risk). Because higher risk operations will likely require more oversight and direct involvement with Regional Water Board staff, the higher risk tiers will likely carry larger fees and more stringent monitoring requirements.⁵

Tier 1

Tier 1 agricultural operations represent the lowest threat to water quality of those agricultural operations included in the scope of the Program. Agricultural operations can qualify for Tier 1 based on either the physical characteristics of their land (described as “Low Risk” below) *or* the active management of land/operations such that agricultural activities pose a minimal threat to water quality (described as “Water Quality Stewardship” below). Operations in Tier 1 are likely to have minimal interaction with the Regional Water Board, fewer monitoring requirements and minimal/no fees.^{4,5}

Tier 1 Low Risk Category

Agricultural operations fall into the “low risk” category of Tier 1 if, based on their topography and other easily identifiable physical characteristics, they pose a de minimus risk to water quality.

- No agricultural activities covered by the scope of this Program or associated facilities⁶ on slopes greater than 10% (this slope metric could change based on GIS analysis, and is meant for discussion purposes only)
- Roads less than x% hydrologically connected to a stream
- No land or facility within riparian zone, or 35 feet of a Class I or II stream, whichever is greatest
- No land or facility within 35 feet of a Class III stream or other conveyance to Class I or II stream⁷
- No use of certain pesticides
- No tailwater, surface drainage water, or frost water discharge to surface water, either direct or indirect

⁴ Management practices for dryland grazing are not included in this Program unless specifically required by other existing water quality programs, such as the Scott and Shasta TMDLs. ~~All growers/operators will have the option of including any and all grazing operations in Farm Water Quality Management Plans for this Program to minimize permit redundancy. See Appendix A for the definition of Farm Water Quality Management Plans.~~

⁵ Specific monitoring requirements and fee structures have not been defined at this time. Input from the Program Stakeholder Advisory Group will be required in August/September to determine specific requirements. Fee structures require approval by the State Water Resources Control Board; an alternate fee structure acknowledging the requirements of this Program is being discussed.

⁶ See Appendix A for definition of associated facilities

⁷ See Appendix A for definition of Class I, II, and III streams

Tier 1 Water Quality Stewardship Category

Agricultural operations fall into the “water quality stewardship” category of Tier 1 if, based on specific management plans/practices, the risk to water quality is ~~reduced to a de minimus level~~ low. Unlike the low risk category described above, periodic monitoring to ensure management practices are functioning properly will be required under the water quality stewardship category. Although one goal of this category is to minimize/eliminate fees for growers/operators, this periodic monitoring may require limited interaction with the Regional Water Board and an associated fee.

Enrollment in the water quality stewardship category of Tier 1 is based on Regional Water Board verification that an approved Farm Water Quality Management Plan (Plan) is in place and associated Best Management Practices (BMPs) are effectively managing water quality risks.⁸ More information on the Plan approval process is discussed in Tier 2 below.

Tier 2



Tier 2 represents those agricultural operations that pose a moderate risk to water quality. Risk may be considered “moderate” if it does not fall under Tier 1. Many agricultural operations may find that, upon initial enrollment in the Program, they will fall in Tier 2 because no approved Plan exists or water quality risk is not actively managed.

Growers/operators in Tier 2 will be subject to more oversight by the Regional Water Board and higher fees than those operations in Tier 1. Once a Plan is developed and approved, and BMPs have been proven to be effective/protective of water quality, growers will be able to move into Tier 1 and subject to reduced monitoring requirements and lower fees. Plans will be based on the following criteria:

- Growers/operators will implement a Plan that was submitted to and approved by the Regional Water Board Executive Officer. To streamline the Plan development process, growers/operators may choose to enroll in pre-approved third-party certification programs. All Plans are expected to address the following sources (and associated activities) as needed based on the specific circumstances of a farm/operation:
 - Nutrients
 - Sediment
 - Roads
 - Irrigation
 - Drainage water
 - Riparian Zone (including riparian grazing)
 - Pesticide application
 - Pathogens
- Best Management Practices (BMPs) as described by the Plan are constructed/implemented
- BMPs are operating effectively to minimize risk to water quality. Effective operation must be verifiable

⁸ See definition of Farm Water Quality Management Plan in Appendix A

Tier 3 (Individual Waste Discharge Requirements)

If a grower/operator chooses not to participate in the Program or the waste discharges associated with the operation pose a significant enough risk to water quality, they may be required to work with the Regional Water Board to develop an individual Waste Discharge Requirements (WDR) permit. It is assumed that  given the substantial amount of Regional Water Board oversight required by this Tier,  will be significantly higher than in the other two tiers. Additionally, given the likely substantial risk to water quality, monitoring requirements will be higher than in the other two tiers.

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APPENDIX A- DRAFT WORKING GLOSSARY OF TERMS⁹

Animal Feeding Areas – Any bare ground (i.e., land free of significant cover from forage crops or other ground cover) where animals are fed.

Appurtenant Roads - Roads that access farmed acreage only, and must be under sole ownership of a single agricultural operator. Road acreage will not be used to calculate fees for the Program.

Associated Facilities - Facilities associated with the farming activities covered in the scope of the program, and could include, but are not necessarily limited to, buildings, roads, staging areas, equipment storage areas, and animal feeding areas.

Class I Stream/Watercourse – According to 14 CCR §§916.5, 936.5, 956.5 of the Forest Practice Rules, as may be amended from time to time, water class characteristics or key indicator beneficial uses of Class I watercourses include watercourses which contain (1) domestic water supplies, including springs, on site and/or within 100 feet downstream of the operation area; and/or (2) have fish always or seasonally present onsite, including habitat to sustain fish migration and spawning. Class I stream include historically fish-bearing streams.

Class II Stream/Watercourse – According to 14 CCR §§916.5, 936.5, 956.5 of the Forest Practice Rules, as may be amended from time to time, water class characteristics or key indicator beneficial uses of Class II watercourses include watercourses which (1) have fish always or seasonally present offsite within 1000 feet downstream; and/or (2) contain aquatic habitat for non-fish aquatic species. Class II waters do not include Class III waters that are directly tributary to Class I waters.

Class III Stream/Watercourse – According to 14 CCR §§916.5, 936.5, 956.5 of the Forest Practice Rules, as may be amended from time to time, water class characteristics or key indicator beneficial uses of Class III watercourses include watercourses which do not have aquatic life present, but show evidence of being capable of sediment transport to Class I and II waters under normal high flow conditions during and after completion of land management activities.

De Minimis – Latin for “of minimum importance” or “trifling.” In this context, de minimis is the level below which there is minimal concern and minimal significance of negative water quality impacts.

Discharge - Surface water and groundwater discharges, such as irrigation return flows, tailwater, drainage water, or subsurface drainage generated by irrigating crop land or by installing and operating drainage systems to lower the water table below irrigated lands (tiles drains), stormwater runoff flowing from irrigated lands, stormwater runoff conveyed in channels or canals resulting from the discharge from irrigated lands, runoff resulting from frost control, and/or operational spills containing waste.

⁹ Glossary will be expanded and refined as needed through conversations with the Advisory Group and Regional Water Board.

Discharger – The owner or operator of agricultural lands that discharges or have the potential to discharge waste that could directly or indirectly reach waters of the State.

Farm Water Quality Management Plan - Farm Water Quality Management Plans developed for the purposes of this Program shall be developed so as to achieve the following water quality principles. If a grower/operator has already developed plans and implemented BMPs to address these issues before this Program is finalized, the grower/operator will be considered in compliance upon verification by the Regional Water Board.

The principles include:

- Riparian areas are managed in a manner that maintains their essential functions supporting beneficial uses (e.g. sediment filtering, woody debris recruitment, streambank stabilization, nutrient cycling, pollutant filtering, shade, etc.).
- Management practices (e.g. buffer strips, cover crops, etc.) are in place to prevent excess irrigation water and other pollutants (e.g., increased sediment, nutrient, and pathogen) from reaching waters of the state.
- Pesticides and other chemical substances are applied in a manner that prevents the substances from reaching groundwater and surface waters.
- Roads and related infrastructure are constructed and maintained in a manner that minimizes the discharge of sediment.

Plans must define the management practices implemented to address the following elements, as needed, in order to achieve the water quality principles above:

- Nutrients
- Sediment
- Roads
- Irrigation
- Drainage water
- Riparian Zone (including riparian grazing)
- Pesticide application
- Pathogens

Ground Disturbance – Activities resulting in the removal, addition, or erosion of soil including (but not limited to) clearing, excavating, grading, grubbing, tilling, and plowing.

Hydrologic Connectivity - The direct transport of water discharged from a given road or facility to a water body.

Irrigation Runoff or Return Flow – Surface and subsurface water that leaves the field following application of irrigation water.

Riparian Zone– Vegetation affected by the surface water or groundwater of adjacent perennial or intermittent streams, lakes, or other waterbodies. Vegetation species may be distinctly different from adjacent areas or may be similar to adjacent areas.

Stormwater - Stormwater runoff, snow melt runoff, and surface runoff and drainage, as defined in 40 CFR 122.26(b)(13).

Subsurface Drainage Water – Water generated by installing drainage systems to lower the water table below irrigated lands. The drainage can be generated by subsurface drainage systems, deep open drainage ditches, or drainage wells.

Tailwater – Runoff of irrigation water flowing off an irrigated field.

Tile Drains - Subsurface drainage which removes excess water from the soil profile, usually through a network or perforated tile tubes installed 2 to 4 feet below the soil surface. This lowers the water table to the depth of the tile over the course of several days. Drain tiles allow excess water to leave the field. Once the water table has been lowered to the elevation of the tiles, no more water flows through the tiles.

Waters of the State - Any surface water or groundwater, including saline waters within the boundaries of the state as defined in the Water Code §13050 subsection (e), including all waters within the boundaries of the State, whether private or public, in natural or artificial channels, and waters in an irrigation system.

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