NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD

DRAFT Agricultural Lands Discharge Program Scope and Framework
September 5, 2012

Program Purpose

State water quality laws and related policies require the North Coast Regional Water Quality Control Board (Regional Water Board) to develop and implement regulatory programs that address nonpoint source *discharges* of *waste* to *waters of the state.* Nonpoint source discharges associated with *agricultural operations/ownerships* (operations) in the North Coast Region have the potential to affect waters of the state. To fulfill the legal obligation to regulate these discharges, staff of the Regional Water Board are developing the Water Quality Compliance Program for Discharges from Agricultural Lands (Program). The Program will provide California Water Code and Federal Clean Water Act coverage for operations that comply with permit requirements. Operations that do not discharge or propose to discharge waste to waters of the state are not be required to participate in the Program.

Scope of Program

As detailed below, the Program will address existing and/or proposed discharges of waste that could affect waters of the state, as well as other *controllable water quality factors,* associated with agricultural operations.

Types of wastes and controllable water quality factors associated with agricultural operations include, but are not limited to:

- Nutrients
- Pesticides
- Pathogens
- Sediment
- Organic matter
- Adverse impacts to the function of *riparian areas*
- Other wastes as defined in the California Water Code

Types of discharges that may contain waste associated with agricultural operations include, but are not limited to:

- *Tailwater*
- *Stormwater*
- Infiltration to groundwater
- *Subsurface drainage water*
- *Tile drainwater*
- Frost protection water

Types of agricultural operations that fall within the Program scope are itemized below. Agricultural operations include the *production lands* and *associated facilities* and the activities conducted thereon.

Operations in Scope

- Vineyards
- Orchards
- Row crops
- Field crops
- Wholesale nurseries
- Medicinal marijuana farms
- Irrigated pasture where tailwater is discharged to waters of the state
- Forage crops where tailwater is discharged to waters of the state

Operations Out of Scope:[1]

- Operations with less than five (5) acres[2] of existing or planned production lands in the Program scope.
- 4H and FFA projects
- Academic research projects
- Medicinal marijuana operations with less than (x) plants or (y) square feet of production land (TBD)
- Dry grazing lands
- Irrigated pasture with no *tailwater* runoff to waters of the state
- Forage crops with no tailwater runoff to waters of the state

New Development, Replanting, and Construction
The Program will cover discharges associated with the development of new production lands, replanting of existing land, and/or the construction of associated facilities. Such lands and facilities will be considered part of the operation and must be enrolled in the Program prior to *disturbing ground (see ground disturbance).*

Coordination with Other Regional Water Board Programs
The Agricultural Lands Discharge Program is not intended to produce duplicative regulatory requirements. Implementation of the Program will be coordinated with other Regional Water Board programs that include agricultural lands within their scope, such as the Total Maximum Daily Load (TMDL) programs in the Scott, Shasta, and Garcia watersheds, the United States Forest Service conditional waiver, and the regionwide dairy and CAFO permitting program.

Program Fees
The annual Program fees are established by the State Water Resources Control Board and currently do not allow for flexibility to charge different fees for the different Program tiers that are described in the Program Framework below. Fees are currently charged per acre of irrigated land and vary based on whether the operator is a member of an approved group and whether that

[1] The Regional Water Board Executive Officer may require participation/enrollment in the Program for an otherwise out of scope operation if the Executive Officer determines it poses a threat to water quality.
[2] A size threshold is being used because it is an easily verifiable metric that will help make the Program more efficient and effective. The five acre threshold may be revised based on future GIS analysis.

group manages the fee collection and payment. The 2011-2012 Fee Schedules document is available online: http://www.swrcb.ca.gov/resources/fees/docs/fy1112fee_schdl_irigtd_lnds.pdf

Program Framework

The Agricultural Lands Discharge Program is organized into three tiers characterized by both the inherent risk to water quality and the level of assurance provided to the Regional Water Board that the selected management practices are adequately effective at managing water quality risks. The tiers are structured such that a lower risk to water quality and/or a greater assurance of protection equates to less stringent monitoring and reporting requirements and less direct oversight by Regional Water Board staff. [3]

Tier 1

Operations can qualify for Tier 1 coverage based on either the physical characteristics of the land and the nature of the operation (described as the "Low Risk Category" below) *or* through effective water quality management that is verified by the Regional Water Board (described as the "Water Quality Stewardship Category" below).

Tier 1 - Low Risk Category

- The Tier 1 Low Risk Category is for operations with a low level of potential for waste discharges to affect water quality based on the physical characteristics of the land and the nature of the operation. Operations qualify for the Low Risk Category of Tier 1 if they meet the following criteria: No production lands or associated facilities covered in the scope of this Program are located on slopes greater than 10% (this slope metric is subject to change based on further analysis)
- Roads covered in the Program are less than x% *hydrologically connected* to a stream
- No production lands or associated facilities are located within the riparian area of a *Class I or II stream*.
- Adequate buffers are in place to filter wastes from surface water discharges from production lands and associated facilities to all *Class III streams*, drainage ditches, or other conveyances.
- Certain pesticides are not used.[4]
- No tailwater, subsurface drainage water, or frost protection water is discharged to surface waters, either directly to waters of the state or indirectly, such as via drainage ditches or other conveyances.

If the above criteria are not met, farms can still qualify for Tier 1 by meeting the criteria defined in the Water Quality Stewardship Category below.

Tier 1- Water Quality Stewardship Category

[3] Specific monitoring requirements have not been defined and will be discussed at future meetings of the Advisory Group.

[4] The pesticides have not been identified and will be discussed at future meetings of the Advisory Group.

The Tier 1 Water Quality Stewardship Category is for operations that do not meet the Low Risk Category criteria but are effectively managing their risks through a certified plan and verified implementation. Since the planning and verification requirements provide an added level of assurance that water quality is being protected, the Water Quality Stewardship Category of Tier 1 will have fewer monitoring and reporting requirements compared to Tier 2 operations.

Enrollment in the Tier 1 Water Quality Stewardship is based on the following:

1. Certification by the Regional Water Board's Executive Officer of a *Farm Water Quality Management Plan* (Farm Plan) that is specific to the operation and meets Program requirements. Farm Plans may be developed individually or as part of a group plan or third party program. A description of what a Farm Plan must contain is provided below.
2. Verification by Regional Water Board staff or an approved third party that management practices specified in the Farm Plan are implemented and are effective at adequately managing water quality risks.

Until such certification and verification are obtained, operations shall be enrolled in Tier 2 and subject to Tier 2 requirements. Operations enrolled in Tier 1 of the Program will be subject to less oversight by Regional Water Board staff and less stringent monitoring and reporting requirements than operations enrolled in Tier 2.

Tier 2

While Tier 2 represents the same inherent risk as Tier 1 Water Quality Stewardship, it differs in that it lacks the level of assurance provided by the certification of a management plan and verification of practices. It instead relies on greater Regional Water Board staff oversight and more stringent monitoring and reporting requirements to ensure management practices are adequately effective at managing water quality risks. While enrollment in Tier 2 is based on the development and implementation of a Farm Plan as in Tier 1, the Farm Plan need not be certified nor the management practices verified upon enrollment. Permit and monitoring requirements of Tier 2 will be developed later in the Advisory Group process, together with the other Program requirements.

Tier 1 Water Quality Stewardship and Tier 2 Farm Plans

Farm Plans developed to meet Tier 1 Water Quality Stewardship and Tier 2 requirements must at a minimum include:

1) The identification of existing and threatened sources of waste discharge to waters of the state, such as:
   - Discharge of nutrients to surface and/or ground waters
   - Sediment discharges resulting from human- or livestock-caused erosion from production lands and associated facilities
   - Wastes contained in irrigation tailwater runoff
   - Wastes contained in subsurface drainage water and tile drainwater
   - Discharge of pesticides to surface and/or ground waters
   - Waste contained in stormwater runoff from production lands and associated livestock facilities containing nutrients, organic matter, and/or pathogens.

- In addition to the sources of waste, Farm Plans must also address controllable water quality factors, such as those related to riparian area management.

2) The identification of existing or planned management practices specific to the operation that address discharge sources
3) A time schedule by which planned practices will be implemented,
4) A means for monitoring and assessing the effectiveness of the practices,
5) A means for reporting implementation and monitoring results to the Regional Water Board.

Tier 3

If an operator chooses not to participate in the Program or the Regional Water Board's Executive Officer determines that waste discharges associated with the operation pose a significant enough risk to water quality, he/she will be required to submit a Report of Waste Discharge to the Regional Water Board. The Regional Water Board's Executive Officer will then determine the appropriate permitting mechanism for that operation, which may result in the adoption of individual Waste Discharge Requirements (WDRs).

Evaluating Compliance

Compliance with Program requirements is centered on the development and implementation of management practices that are effective at protecting water quality. Individual compliance with program requirements will be evaluated on a case-by-case basis. Operators are only responsible for the waste discharges and the controllable water quality factors associated with their operations. The Program will allow a reasonable amount of time for the development of required planning documents and the implementation of management practices.

APPENDIX A- DRAFT WORKING GLOSSARY OF TERMS[5]

Agronomic Rates – The land application of irrigation water and nutrients at rates of application in accordance with a nutrient management plan that will enhance soil productivity and provide the crop or forage with needed nutrients for optimum health and growth (per the General WDRs for Existing Cow Dairies R1-2012-002).

Animal Feeding Areas – Areas of 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 production lands and associated facilities, which are under sole ownership or sole control of an agricultural operator. Road acreage is not 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, appurtenant roads, staging areas, equipment storage areas, and animal feeding areas.

Class I Stream/Watercourse – See definition in 14 CCR §§916.5, 936.5, 956.5 of the Forest Practice Rules. 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 – See definition in 14 CCR §§916.5, 936.5, 956.5 of the Forest Practice Rules. 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 – See definition in 14 CCR §§916.5, 936.5, 956.5 of the Forest Practice Rules. 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.

Discharge – to emit or something that is emitted.

Discharger – The owner or operator of agricultural lands that discharges or proposes to discharge waste that could affect waters of the state.

Farm Water Quality Management Plan - Farm Water Quality Management Plans (Farm Plans) are a means for documenting compliance with Program requirements. The Farm Plan

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

includes a description of existing and planned management practices that are or will be implemented to manage risks to water quality, a time schedule by which the implementation will take place, and the monitoring and reporting that will be done to convey that information to the Regional Water Board. The specific requirements for Farm Plans will be developed later in the Advisory Group process.

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

Hydrologic Connectivity – For the purposes of this Program, 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 the application of irrigation water.

Production Lands – Production lands include lands where crops are produced or are planned for production.

Riparian Area – Riparian areas are lands that occur along watercourses and waterbodies. Typical examples include flood plains and streambanks. They are distinctly different from surrounding lands because of unique soil and vegetation characteristics that are strongly influenced by the presence of water (from NRCS webpage).

Stormwater - Stormwater runoff, snow melt runoff, and surface runoff and drainage (per 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 Drainwater – Water from subsurface drainage that removes excess water from the soil profile, usually through a network of perforated tile tubes installed below the soil surface.

Waste – Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

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 a an irrigation system.