

ATTACHMENT 2

Preliminary Draft Report Staff Recommendations For Agricultural Order
February 1, 2010

Preliminary Draft Agricultural Order Summary Table of Changes Related to Existing Conditional Waiver

Topic	Existing 2004 Conditional Waiver	Proposed Changes Preliminary Draft Agricultural Order
Regulatory Tool; See Preliminary Draft Order General Findings.	Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands.	<UNCHANGED>
Time frame; See Preliminary Draft Order General Findings.	5 year term	<UNCHANGED>
Intent; See Preliminary Draft Order General Findings.	The intent of the 2004 Conditional Waiver was to "regulate discharges from irrigated lands to ensure that such discharges are not causing or contributing to exceedances of any Regional, State, or Federal numeric or narrative water quality standard".	<p><CLARIFICATION> Findings to explicitly identify Water Board's intent to directly address the discharges of waste from irrigated lands by requiring Dischargers to comply with the terms and conditions set forth in Attachment B, which is hereby incorporated into this Order, including compliance schedules to:</p> <ol style="list-style-type: none"> 1. Reduce nutrient discharges to surface waters and groundwater to meet applicable nutrient and biostimulatory water quality standards, and maintain existing high quality water; 2. Reduce toxic discharges of agricultural pesticides to surface waters and groundwater to meet applicable toxicity water quality standards, and maintain existing high quality water; 3. Reduce sediment discharges from agriculture lands to meet applicable standards, including turbidity

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		<p>and sediment water quality standards, and maintain existing high quality water;</p> <p>4. Protect aquatic habitat (riparian areas and wetlands) and meet applicable water quality standards including, but not limited to, temperature, turbidity, and dissolved oxygen, and maintain existing high quality water;</p>
<p>Relevant Plans; See Preliminary Draft Order Attachment A- Applicable Water Quality Control Plans And Definitions.</p>	<p>Central Coast Basin Water Quality Control Plan (Basin Plan); SWRCB Anti-Degradation Policy (Res. No. 68-16);</p>	<p><CLARIFICATION, ADDITIONS> SWRCB <i>Water Quality Control Policy for the Enclosed Bays and Estuaries of California</i> Res. No. 74-43; SWRCB <i>Sources of Drinking Water Policy</i> Res. No. 88-63; SWRCB <i>Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program</i>, May 2004, SWRCB <i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP)</i>, February 2005; SWRCB <i>Water Quality Control Plan for Ocean Waters of California (CA Ocean Plan)</i>, April 2005; SWRCB <i>Water Quality Enforcement Policy</i>, February 2002, USEPA <i>National Toxics Rule</i>, 40 CFR 131.36, 57 FR 60848, December 1992; USEPA <i>California Toxics Rule</i>, 40 CFR 131.38, 65 FR 31682, May 2000. These regional, state and federal water quality plans are implemented and required by reference in the Basin Plan.</p>
<p>Definitions; See Preliminary Draft Order Attachment A- Applicable Water Quality Control Plans And Definitions</p>	<p>Defines Discharge, Dischargers, Farm Plans, Irrigated Lands, Irrigation Return Flow, Low-Threat Discharge, Tailwater, Stormwater Runoff, Subsurface Drainage, Discharge, Discharger, Requirement of Applicable Water Quality Control Plans, Monitoring, Waters of the</p>	<p><CLARIFICATION AND ADDITIONS> Anti-degradation, Aquatic Habitat, Basin Plan, Beneficial Uses, Concentration, Discharge, Discharger, Discharges of Waste from Irrigated Lands, Ephemeral Stream, Erosion, Erosion and Sediment Control</p>

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	State	Practices, Exceedance, Farm Plans, Groundwater, Groundwater Protection Practices, Integrated Pest Management Program, Intermittent Stream, Irrigated Lands, Irrigation, Irrigation Management Practices, Irrigation Runoff or Return Flow, Irrigation System Distribution Uniformity, Load, Low-Risk Discharge, Monitoring, Nitrate Hazard Index, Nonpoint Source Pollution, Nonpoint Source Management Measures, Nutrient, Nutrient Management Practices, Operational Spill, Perennial Stream, Pesticides with a High Potential to Degrade/Pollute Surface Water, Pesticide Management Practice, Point Source, Pollutant, Quality of the Water, Receiving Waters, Requirements of Applicable Water Quality Control Plans, Riparian Area, Riparian Buffer, Stormwater, Subsurface Drainage, Subsurface Runoff, Sustainable Land Management, Tailwater, Tile Drains, Total Maximum Daily Load, Waste, Water Quality Control, Water Quality Criteria, Water Quality Objectives, Water Quality Standard, Waters of the State, Wetland.
Water Quality Standards; See Preliminary Draft Order Attachment A- Applicable Water Quality Control Plans And Definitions, and Attachment B- Terms and Conditions, Part D.	Findings that generally reference applicable water quality standards: "Dischargers must comply with all requirements of applicable water quality control plans", "Dischargers shall not cause or contribute to exceedances of any Regional, State, or Federal numeric or narrative water quality standard".	<CLARIFICATION > Findings and table that explicitly clarify applicable water quality standards. No additional standards. General numeric interpretations included for narrative standards for temperature, toxicity, and biostimulatory substances.
Discharge Prohibitions; See Preliminary Order Attachment B- Terms and	Discharge of any waste not regulated by the 2004 Conditional Waiver was prohibited.	<CLARIFICATION AND ADDITIONS> 1. (Clarification) Landowners and operators of irrigated cropland are prohibited from discharging waste that

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Conditions, Part B.		<p>could affect the quality of any surface water or groundwater, if the Discharger does not have WDRs or has not enrolled in this Conditional Waiver.</p> <p>2.(Clarification) The discharge of any waste not specifically regulated by the Conditional Waiver described herein is prohibited.</p> <p>3. (Clarification) The discharge of any waste at a location or in a manner different from that described in the approved Notice of Intent (NOI) is prohibited.</p> <p>4. (Clarification) The discharge of waste that creates conditions of pollution or nuisance is prohibited.</p> <p>5. (Clarification) Discharge of waste from irrigated lands to groundwater with the beneficial use of municipal or domestic water supply in excess of maximum contaminant levels (MCLs) for primary and secondary drinking water standards established by the United States Environmental Protection Agency (USEPA) or California Department of Public Health (CDPH), whichever is more stringent, is prohibited.</p> <p>6. (Addition) Excessive use or over-application of fertilizer in excess of crop needs is prohibited.</p> <p>7. (Addition) The discharge of agricultural rubbish, refuse, irrigation tubing, or other solid wastes into surface waters or at any place where they would contact or where they could be eventually transported to surface waters is prohibited.</p>

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		<p>8. (Addition) Application of any chemical directly to surface waterbodies designated in the Basin Plan, for the purposes of breaking down applied pesticides or reducing associated toxicity, is prohibited, unless approved by the Executive Officer.</p> <p>9. (Addition) Degradation of existing perennial, intermittent, or ephemeral streams or riparian or wetland area habitat that results in discharges of waste to waters of the state is prohibited, unless authorized by the Central Coast Water Board.</p> <p>10. (Addition) The discharge of waste that results, or has reasonable potential to result in degradation of existing high quality water is prohibited.</p>
Enrollment; See Preliminary Draft Order Attachment B- Terms and Conditions; Part C.	All Dischargers were required to enroll.	<CLARIFICATION AND ADDITION > Additions to content of Notice of Intent (NOI). Additional focus on landowner (in addition to operator).
Education; See Preliminary Draft Order General Findings.	All Dischargers were required to complete 15 hours of education.	<DELETION> Water quality education encouraged rather than required.
Farm Plan; See Preliminary Draft Order Attachment B- Terms and Conditions; Part C.	All Dischargers were required to submit a Farm Plan. Farm Plan must include implementation of practices to address irrigation management, pesticide management, nutrient management, and erosion control to protect water quality. Farm Plan must include schedule for implementation of practices.	<CLARIFICATION AND ADDITION > Farm Plan must focus on resolving priority water quality issues related to individual operations and the watershed. Farm Plan must include irrigation management, pesticide management, nutrient management, salinity management, sediment and

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	Dischargers were required to keep Farm Plan on site and available for inspection by operating personnel.	<p>erosion control, and aquatic habitat protection. Farm Plan must identify and schedule implementation of practices to eliminate or minimize discharge of waste using best practicable treatment or control. Farm Plan nutrient management plan element must be certified by professional to be protective of water quality. Farm Plan must be updated at least annually. Upon notice by the Executive Officer, Farm Plan must be submitted to the Water Board. Discharger must modify Farm Plan upon notice by the Executive Officer.</p> <p>Farm Plan must include photo documentation of aquatic habitat.</p>
Management Practice Implementation Requirements Discharge Elimination; See Preliminary Draft Order Attachment B- Terms and Conditions; Part E.	Farm Plans include management measures to protect water quality and an implementation schedule.	<p><CLARIFICATION AND ADDITION> Minimum management measures and implementation schedule specified.</p> <p>1. Within 2 years from the adoption of this Order, all Dischargers adjacent, in close proximity (within 1000 feet) or otherwise discharging to an impaired surface waterbody identified on the Impaired Waters List, or discharging to tributaries to such waterbodies, must implement management practices sufficient to eliminate irrigation runoff from their farming operation**.</p> <p>2. Within 2 years from the adoption of this Order, all Dischargers adjacent or in close proximity (within 1000 feet) to any surface waterbody (creek, stream, river, slough, lake, pond, or other body of water) designated in the Basin Plan, or to tributaries to such waterbodies must implement management practices sufficient to</p>

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		<p>eliminate toxicity in irrigation runoff or eliminate the discharge of irrigation runoff from their farming operation **.</p> <p>3. Within 3 years from the adoption of this Order, all Dischargers adjacent or in close proximity (within 1000 feet) to any surface waterbody (creek, stream, river, slough, lake, pond, or other body of water) designated in the Basin Plan or to tributaries to such waterbodies must implement management practices sufficient to eliminate sediment and turbidity above water quality standards in irrigation runoff or eliminate the discharge of irrigation runoff from their farming operation **.</p> <p>4. Within 4 years from the adoption of this Order, all Dischargers adjacent or in close proximity (within 1000 feet) to any surface waterbody (creek, stream, river, slough, lake, pond, or other body of water) designated in the Basin Plan, or to tributaries to such waterbodies must implement management practices sufficient to eliminate nutrients and salts to meet water quality standards in irrigation runoff or eliminate the discharge of irrigation runoff from their farming operation **.</p> <p>5. Within 6 years from adoption of this Order, all Dischargers must implement management practices sufficient to eliminate or minimize nitrate and salt in groundwater discharges to meet water quality standards **.</p> <p>** Alternatively, Dischargers may provide water quality data and information to demonstrate that any irrigation</p>

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		runoff has been sufficiently treated or controlled to meet water quality standards for the specific impairment or is of sufficient quality where it will maintain existing high quality water, and not cause or contribute to exceedances of any water quality standards in waters of the State.
Management Practice Implementation; See Preliminary Draft Order Attachment B- Terms and Conditions; Part E.	Farm Plans required to include any necessary management practices needed to address water quality. References provided for management practices. Specific selection of appropriate management practices not stated in Order. Various general practices were recommended including irrigation efficiency, nutrient budgeting and nutrient management, erosion control, and integrated pest management. Dischargers were required to identify management practices in Farm Plans and include schedule for implementation.	<p><CLARIFICATION AND ADDITIONS></p> <p><i>Irrigation Management-1.</i> Dischargers must install and maintain irrigation systems to minimize or eliminate irrigation runoff and percolation to groundwater beyond the root zone that may transport pollutants from irrigated lands to waters of the State. At a minimum, the irrigation system distribution uniformity must be designed and operated to achieve the following efficiencies: 0.70 for furrow, 0.75 for hand-move sprinkler, 0.80 for solid sprinkler systems, 0.85 for drip and micro-sprinkler systems.</p> <p>2. Dischargers must implement appropriate irrigation scheduling duration and frequency, in consideration of weather factors such as wind and precipitation, to reduce or eliminate the discharge of irrigation runoff and to minimize percolation of water and waste below the root zone.</p> <p>3. Dischargers must maintain the irrigation delivery system to eliminate operational spills such as overflows from standing pipes or water remaining from previously operated gravity flow delivery systems.</p>

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		<p><i>Pesticide Runoff/Toxicity Elimination-</i></p> <p>4.To protect surface water from pesticide drift, the following agricultural uses of pesticides are prohibited, consistent with any related requirements of DPR; Dischargers using pesticides with a high potential to contaminate surface water and persons performing pest control using such pesticides for the Discharger, must comply with the following prohibitions:</p> <ul style="list-style-type: none"> a. Ground applications must not be made within 50 feet of any surface waterbody; b. Airblast, high-pressure wand or hand gun applications must not be made within 100 feet of any surface waterbody; c. Aerial applications must not be made within 150 feet of any surface waterbody; <p>5. Dischargers must not apply any chemical directly to surface waterbodies designated in the Basin Plan, for the purposes of breaking down applied pesticides or reducing associated toxicity, is prohibited, unless approved by the Central Coast Water Board.</p> <p><i>Nutrient and Salt Management –</i></p> <p>6. Dischargers that use leaching to control salt in the soil profile must not cause or contributes to exceedance of water quality standards. Leaching must not be performed to wash nitrate based salts from the soil profile.</p> <p>7. Dischargers must cease all foliar fertilizer applications a minimum of 72 hours before any forecasted rain event and up to 72 hours after a rain</p>

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		<p>event has occurred.</p> <p>8. Dischargers must implement proper handling, storage, disposal and management of fertilizer to prevent discharge of waste to waters of the State.</p> <p>9. Dischargers must report nitrate concentration of irrigation water.</p>
<p>Commercial Nursery, Nursery Stock Production and Greenhouse Requirements; See Preliminary Draft Order Attachment B- Terms and Conditions; Part E.</p>	<p>Commercial Nursery, Nursery Stock Production and Greenhouse operations generally covered.</p>	<p><ADDITIONS></p> <p>1. Dischargers who own or operate commercial nurseries, nursery stock production and greenhouse operations that have point-source discharges as defined in Clean Water Act, and fully contained greenhouse operations (those that have no groundwater discharge due to impervious floors) are not covered under this Order and must apply for individual WDRs.</p> <p>2. Commercial nursery, nursery stock production and greenhouse operation Farm Plans must comply with any applicable stormwater permit.</p> <p>3. Dischargers who own or operate commercial nurseries, nursery stock production and greenhouse operations that grow crops in pots and/or containers must implement management practices that keep rainwater and/or stormwater separated from wastewater and irrigation runoff, and prevent rainwater from coming into contact with containerized plants.</p>
<p>Groundwater Protection Requirements;</p>	<p>Discharges included discharges to groundwater through percolation.</p>	<p><UNCHANGED>.</p>

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<p>See Preliminary Draft Order Attachment B- Terms and Conditions; Part F.</p>	<p>Wastewaters percolated to groundwater were required to be of such quality at the point where they enter the ground so as to assure the protection of all actual or designated beneficial uses of all groundwaters of the basin.</p> <p>Wastes discharged to groundwater were required to be free of toxic substances in excess of maximum contaminant levels (MCLs) for primary and secondary drinking water standards established by USEPA and CDPH, whichever is more stringent; taste, odor, or color producing substances; and nitrogenous compounds in quantities which could result in a groundwater nitrate concentration (as nitrate) above 45 mg/L.</p> <p>Dischargers required to include nutrient management practices in Farm Plans to ensure that current discharges to groundwater do not further degrade groundwater. Farm Plans required to account for specific nitrate concentrations in irrigation water in determining agronomic nitrogen application rates.</p> <p>Statement that Dischargers will not be held liable for historical groundwater quality</p> <p>Groundwater monitoring not required.</p>	<p><UNCHANGED></p> <p><CLARIFICATION OF EXISTING> Discharge of waste from irrigated lands to groundwater with the beneficial use of municipal or domestic water supply in excess of maximum contaminant levels (MCLs) for primary and secondary drinking water standards established by the United States Environmental Protection Agency (USEPA) or California Department of Public Health (CDPH), whichever is more stringent, are prohibited.</p> <p><UNCHANGED></p> <p><DELETION></p> <p>< ADDITIONS> 1. Dischargers that fertigate, chemigate, or apply any chemicals through the irrigation system connected to a groundwater well, must install and properly maintain backflow prevention device(s) to prevent the discharge</p>

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		<p>of waste to groundwater.</p> <p>2. Dischargers must destroy all abandoned groundwater wells, exploration holes or test holes, as defined by DWR Bulletin 74-81 as revised in 1988, in such a manner that they will not produce water or act as a conduit for mixing or otherwise transferring of groundwater between permeable zones or aquifers.</p> <p>3. Dischargers must construct and maintain ponds, reservoirs or other water containment structures to avoid leaching of waste to groundwater.</p> <p>4. Pursuant to Water Code Section 13267, the Executive Officer may require Dischargers to conduct sampling of private domestic wells in or near agricultural areas with high nitrate in groundwater and submit technical reports evaluating the sampling results. In addition, pursuant to Water Code Section 13304, the Central Coast Water Board may require Dischargers to provide alternative water supplies or replacement water service, including wellhead treatment, to affected public water suppliers or private domestic well owners.</p>
Aquatic Habitat Requirements; See Preliminary Draft Order Attachment B- Terms and Conditions; Part G.	Requires protection of beneficial uses, including aquatic life (warm or cold freshwater habitat, wildlife habitat). No specific requirements related explicitly to aquatic habitat.	<ADDITIONS> Proposed requirements include 1) protection of existing perennial, intermittent, or ephemeral streams or riparian or wetland area habitat; 2) minimum buffers widths for perennial and intermittent streams; 3) Minimum buffer widths for lakes, wetlands, and estuaries. OPTION to

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		minimum buffer requirements is development and implementation of a Riparian Function Protection and Restoration Plan; 4) identification of aquatic habitat on ranch maps and photo documentation.
Monitoring and Reporting; See Preliminary Draft Order General Findings and Attachment B- Terms and Conditions; Part A, Part C, Part E and Part F.	<p>Watershed scale monitoring implemented by a Cooperative Monitoring Program (CMP) to evaluate water quality trends in agricultural areas. Additional requirement to conduct follow-up monitoring.</p> <p>Individual discharge (e.g., irrigation runoff) monitoring and groundwater monitoring (e.g., irrigation source water from wells) not required.</p>	<p><ADDITIONS></p> <ol style="list-style-type: none"> 1. Dischargers must conduct waste specific monitoring and reporting that includes Individual Discharge Characterization Monitoring, Individual Discharge Monitoring, Watershed (receiving water) Monitoring, and Additional Monitoring, as required by the Executive Officer. 2. Dischargers must submit a plan to monitor groundwater quality in agricultural areas to evaluate long term trends in groundwater quality and protection of beneficial uses, including drinking water. 3. Dischargers may elect to conduct monitoring and reporting by participating in a monitoring program conducted by a third-party and approved by the Executive Officer (e.g. Cooperative Monitoring Program (CMP), if applicable). 4. The Executive Officer may postpone individual reporting of Individual Discharge Monitoring data (including but not limited to irrigation runoff and percolation to groundwater) in cases where all Dischargers in a watershed or subwatershed are achieving collective progress towards compliance and meeting milestones (e.g. tailwater reduction or elimination) per the defined time schedule. In this case,

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		<p>Dischargers must report individual monitoring data collectively as a group (including average, minimum, and maximum values for flow volume and waste concentrations or loads).</p> <p>5. Dischargers must sample their irrigation source water for total nitrogen and report the nitrate concentration of irrigation source water on their NOI and Annual Acreage Update.</p> <p>6. Dischargers must report information on groundwater wells (location, use, construction, and monitor water quality).</p> <p>7. Dischargers must monitor and report on water quality for any containment structures.</p>
<p>Compliance Time Schedule; See Preliminary Draft Order Attachment B- Terms and Conditions; Part H.</p>	<p>Compliance time schedule required for enrollment, education, development of Farm Plans, and initiation of CMP.</p> <p>No compliance time schedule included for water quality standards are implementation of specific management practices to eliminate or reduce discharges of waste</p>	<p>< ADDITION > Time schedule added that specifies when requirements must be implemented or conditions met; requires compliance sooner for discharges to impaired surface waterbodies.</p> <p>The compliance time schedule identifies when water quality objectives must be met in irrigation. All other water quality objectives must be met in receiving. This Order anticipates timeframes beyond the term of this Order to achieve water quality objectives in receiving water.</p>

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