

TABLE 1 - IRRIGATION AND NUTRIENT MANAGEMENT FOR GROUNDWATER PROTECTION

	Option from March/May 2019	Location in Order
Phasing or Prioritization	<u>Phasing</u>	Order Part 1, Section B. <i>Phasing and Prioritization</i>
Quantifiable Milestones* (Numeric Limits)	<u>Discharge Limit</u> <u>Application Limits</u>	<u>Discharge Targets and Discharge Limits</u> Order Part 2, Section C.1. <i>Nitrogen Discharge Targets and Limits</i> <u>Application Limits</u> Order Part 2, Section C.1. <i>Fertilizer Application Limits</i>
Time Schedule*	<u>Discharge Target</u> (<i>lbs/ac/ranch/year</i>) $A_{FER} + A_{IRR} - R$ OR $A_{FER} = R$ <u>Discharge Limit</u> (<i>lbs/ac/ranch/year</i>) $A_{FER} + A_{IRR} - R$ OR $A_{FER} = R$ <u>Application Limit</u>	<u>Discharge Target</u> Order Part 2, Section C.1. <i>Quantifiable Milestones and Time Schedules</i> Order Table C.1-2 <i>Time Schedule for Nitrogen Discharge Targets and Limits</i> <u>Discharge Limit</u> Order Part 2, Section C.1. <i>Quantifiable Milestones and Time Schedules</i> Order Table C.1-2 <i>Time Schedule for Nitrogen Discharge Targets and Limits</i> <u>Application Limit</u> Order Part 2, Section C.1. <i>Quantifiable Milestones and Time Schedules</i> Order Table C.1-1 <i>Time Schedule for Fertilizer Application Limits</i>
Monitoring and Reporting*	<u>Irrigation & Nutrient Management Plan</u> <i>Total Nitrogen Applied (TNA)</i> <i>Removal</i> <i>Irrigation</i> <i>Management Practices</i>	<u>Irrigation & Nutrient Management Plan</u> <i>Total Nitrogen Applied (TNA)</i> Order Part 2, Section C.1. <i>Monitoring and Reporting</i> MRP Section B. <i>Total Nitrogen Applied (TNA)</i> and Section C <i>Irrigation and Nutrient Management Plan (INMP)</i> <i>Removal</i> Order Part 2, Section C.1. <i>Monitoring and Reporting</i> MRP Section C. <i>Irrigation and Nutrient Management Plan (INMP)</i> <i>Irrigation</i> Order Part 2, Section C.1. <i>Monitoring and Reporting</i> MRP Section B. <i>Total Nitrogen Applied (TNA)</i> , MRP Section C. <i>Irrigation and Nutrient Management Plan (INMP)</i> , MRP Section D. <i>Irrigation Wells</i>

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	Option from March/May 2019	Location in Order
	<p><u>Individual Discharge to Groundwater</u> <i>Discharge volume and concentration</i></p> <p><u>Drinking Water Supply Well</u></p> <p><u>Groundwater Quality Trends</u></p>	<p><i>Management Practices</i> Order Part 2, Section C.1. <i>Irrigation and Nutrient Management for Groundwater Protection</i> MRP Section F. <i>Annual Compliance Form (ACF)</i></p> <p><u>Individual Discharge to Groundwater</u> Order Part 2, Section C.1. <i>Monitoring and Reporting</i> MRP Section D. <i>Ranch-Level Groundwater Discharge</i></p> <p><u>Drinking Water Supply Well</u> Order Part 2, Section C.1. <i>Monitoring and Reporting</i> MRP, Section D. <i>Domestic Wells</i></p> <p><u>Groundwater Quality Trends</u> Order Part 2, Section C.1. <i>Monitoring and Reporting</i> MRP Section D. <i>Groundwater Quality Trends</i></p>
Incentives	<ul style="list-style-type: none"> -Pump & fertilize -Compost nitrogen -Increasing nitrogen removal -Third parties 	<p><i>Pump & fertilize, compost, and increasing nitrogen removal</i> Order Part 2, Section C.1. <i>Nitrogen Discharge Targets and Limits</i> MRP Section B. <i>Total Nitrogen Applied (TNA)</i> and Section C <i>Irrigation and Nutrient Management Plan (INMP)</i></p> <p><i>Third parties</i> Order Part 2, Section C.1. <i>Irrigation and Nutrient Management for Groundwater Protection - Nitrogen Discharge Targets and Limits</i> Order Part 2, Section F. <i>Third Parties</i></p>
Definitions	<p><i>-A_{FER} is the amount of nitrogen applied in fertilizers, compost, and other amendments</i></p> <p><i>-A_{IRR} is the amount of nitrogen applied through the irrigation water based on the groundwater nitrate concentration</i></p> <p><i>-A_{FER} + A_{IRR} = the total amount of nitrogen applied</i></p> <p><i>-R is the amount of nitrogen removed through harvest, pruning, or other methods, plus nitrogen sequestered in permanent/semi-permanent crops</i></p> <p><i>*Required elements; other elements are included because they can help improve the effectiveness of the Order</i></p>	

Table 2 - IRRIGATION AND NUTRIENT MANAGEMENT FOR SURFACE WATER PROTECTION

	Ag Order 4.0 - Updated Option	Location in Order
Phasing or Prioritization	<u>Prioritization</u>	Order Part 1, Section B. <i>Phasing and Prioritization</i>
Quantifiable Milestones* (Numeric Limits)	<u>Receiving Water Limit and Discharge Limit</u> <i>Nitrate, as N; Ammonia (un-ionized), Orthophosphate, as P</i> <u>Application Limit</u>	<u>Receiving Water Limit and Discharge Limit</u> Order Part 2, Section C.2. <i>Quantifiable Milestones and Time Schedules.</i> <u>Application Limit</u> Order Part 2, Section C.1. <i>Fertilizer Application Limits</i>
Time Schedule*	<u>Receiving Water Limit and Discharge Limit</u> <u>TMDL Areas</u> <u>Other Areas</u>	<u>Receiving Water Limit and Discharge Limit (TMDL and Other Areas)</u> Order Part 2, Section C.2. <i>Quantifiable Milestones and Time Schedules</i> Order Table C.2-1 <i>Time Schedule for Nutrient Limits (TMDL)</i> Order Table C.2-2 <i>Time Schedule for Nutrient Limits (Non-TMDL)</i>
Monitoring and Reporting*	<u>Irrigation Nutrient Management Plan & Report</u> <i>Discharge characteristics, management practices</i> <u>Surface Water Quality Trends</u> <u>Follow-Up Receiving Water Monitoring</u> <u>Individual Discharge to Surface Water</u> <i>Discharge flow rate and volume, discharge nutrient concentrations</i>	<u>Irrigation Nutrient Management Plan & Report</u> Order Part 2, Section C.2. <i>Irrigation and Nutrient Management for Surface Water Protection</i> MRP Section B. <i>Total Nitrogen Applied (TNA)</i> and Section C <i>Irrigation and Nutrient Management Plan (INMP)</i> MRP Section F. <i>Annual Compliance Form</i> <u>Surface Water Quality Trends</u> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> MRP Section E. <i>Surface Water Quality Trends</i> <u>Follow-Up Receiving Water Monitoring</u> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> MRP Section E. <i>Follow-Up Surface Receiving Water</i> <u>Individual Discharge to Surface Water</u> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> MRP Section E. <i>Ranch-Level Surface Discharge</i>
Incentives	Third parties	<i>Third parties</i> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> Order Part 2, Section F. <i>Third Parties</i> MRP Section E. <i>Follow-up Receiving Water; Ranch-Level Surface Discharge</i>
Definitions	<i>*Required elements; other elements are included because they can help improve the effectiveness of the Order</i>	

Table 3 - PESTICIDE MANAGEMENT FOR SURFACE WATER PROTECTION		
	Ag Order 4.0 - Updated Option	Location in Order
Phasing or Prioritization	<u>Prioritization</u>	Order Part 1, Section B. <i>Phasing and Prioritization</i>
Quantifiable Milestones* (Numeric Limits)	<u>Receiving Water Limit and Discharge Limit</u> <i>Pesticide concentrations, toxicity tests, and toxic units</i>	<u>Receiving Water Limit and Discharge Limit</u> Order Part 2, Section C.3. <i>Quantifiable Milestones and Time Schedules</i>
Time Schedule*	<u>Receiving Water Limit and Discharge Limit</u> <u>TMDL Areas</u> <u>Other Areas</u>	<u>Receiving Water Limit and Discharge Limit</u> Order Part 2, Section C.3. <i>Quantifiable Milestones and Time Schedules</i> Order Table C.3-1 <i>Time Schedule for Pesticide and Toxicity Limits (TMDL)</i> Order Table C.3-2 <i>Time Schedule for Pesticide and Toxicity Limits (Non-TMDL)</i>
Monitoring and Reporting*	<u>Pesticide Management Plan & Report</u> <i>Application characteristics, discharge characteristics, management practices</i> <u>Surface Water Quality Trends</u> <u>Follow-Up Receiving Water Monitoring</u> <u>Individual Discharge to Surface Water</u> <i>Discharge flow rate and volume, discharge pesticide concentrations, discharge toxicity</i> <u>Drinking Water Supply Well</u>	<u>Pesticide Management Plan & Report</u> Order Part 2, Section C.2. <i>Pesticide Management for Surface Water Protection</i> MRP Section F. <i>Annual Compliance Form</i> <u>Surface Water Quality Trends</u> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> MRP Section E. <i>Surface Water Quality Trends</i> <u>Follow-Up Receiving Water Monitoring</u> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> MRP Section E. <i>Follow-Up Surface Receiving Water</i> <u>Individual Discharge to Surface Water</u> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> MRP Section E. <i>Ranch-Level Surface Discharge</i> <u>Drinking Water Supply Well</u> Order Part 2, Section C.1. <i>Groundwater Monitoring</i>
Incentives	Third parties	<i>Third parties</i> Order Part 2, Section C.3. <i>Monitoring and Reporting</i> Order Part 2, Section F. <i>Third Parties</i> MRP Section E. <i>Follow-up Receiving Water; Ranch-Level Surface Discharge</i>
Definitions	*Required elements; other elements are included because they can help improve the effectiveness of the Order	

Table 4 - SEDIMENT AND EROSION MANAGEMENT FOR SURFACE WATER PROTECTION

	Ag Order 4.0 - Updated Option	Location in Order
Phasing or Prioritization	<u>Prioritization</u>	Order Part 1, Section B. <i>Phasing and Prioritization</i>
Quantifiable Milestones* (Numeric Limits)	<u>Receiving Water Limits and Discharge Limits</u> <i>Turbidity</i> <i>Impermeable surfaces</i>	<u>Receiving Water Limit and Discharge Limit</u> Order Part 2, Section C.4. <i>Quantifiable Milestones and Time Schedules</i> Order Part 2, Section C.4 <i>Impermeable Surfaces</i>
Time Schedule*	<u>Receiving Water Limit and Discharge Limit</u> <u>TMDL Areas</u> <u>Other Areas</u>	<u>Receiving Water Limit and Discharge Limit</u> Order Part 2, Section C.4. <i>Quantifiable Milestones and Time Schedules</i> Order Table C.4-1 <i>Time Schedule for Sediment Limits (TMDL)</i> Order Table C.4-2 <i>Time Schedule for Turbidity Limits (Non-TMDL)</i>
Monitoring and Reporting*	<u>Sediment & Erosion Management Plan</u> <i>Discharge characteristics, management practices, stormwater management, sizing and design of control measures</i> <u>Surface Water Quality Trends</u> <u>Follow-Up Receiving Water Monitoring</u> <u>Individual Discharge to Surface Water</u> <i>Discharge flow rate and volume, discharge turbidity</i>	<u>Sediment & Erosion Management Plan</u> Order Part 2, Section C.2. <i>Sediment and Erosion Management for Surface Water Protection</i> MRP Section F. <i>Annual Compliance Form</i> <u>Surface Water Quality Trends</u> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> MRP Section E. <i>Surface Water Quality Trends</i> <u>Follow-Up Receiving Water Monitoring</u> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> MRP Section E. <i>Follow-Up Surface Receiving Water</i> <u>Individual Discharge to Surface Water</u> Order Part 2, Section C.2. <i>Monitoring and Reporting</i> MRP Section E. <i>Ranch-Level Surface Discharge</i>
Incentives	- Third parties	<i>Third parties</i> Order Part 2, Section C.4. <i>Monitoring and Reporting</i> Order Part 2, Section F. <i>Third Parties</i> MRP Section E. <i>Follow-up Receiving Water; Ranch-Level Surface Discharge</i>
Definitions	<i>-Impermeable surfaces include materials such as plastic mulch and hoop houses; here, impermeable surfaces do not refer to soils</i> <i>*Required elements; other elements are included because they can help improve the effectiveness of the Order</i>	

Table 5 - RIPARIAN AREA MANAGEMENT FOR WATER QUALITY PROTECTION		
	Ag Order 4.0 – Updated Option	Location in Order
Phasing or Prioritization	<u>Prioritization</u>	Order Part 1, Section B. <i>Phasing and Prioritization</i>
Quantifiable Milestones* (Numeric Limits)	<u>Setback Width and Native Vegetative Cover</u> <i>Priority Areas</i>	<u>Setback Width and Vegetative Cover</u> Order Part 2, Section C.5. <i>Quantifiable Milestones, Time Schedules, and Monitoring and Reporting for Ranches in Riparian Priority Areas</i> (four compliance pathways available) Order Table C.5-1, Table C.5-2
	<i>Non-Priority Areas</i> <u>Prohibition</u>	Order Part 2, Section C.5. <i>Quantifiable Milestones, Time Schedules, and Monitoring and Reporting for Ranches in All Areas</i> <u>Prohibition</u> Order Part 2, Section C.5. <i>Quantifiable Milestones, Time Schedules, and Monitoring and Reporting for Ranches in All Areas</i>
Time Schedule*	<u>Setback Width and Native Vegetative Cover Establishment</u> <i>Priority Areas</i>	<u>Setback Width and Native Vegetative Cover Establishment</u> Order Part 2, Section C.5. <i>Quantifiable Milestones, Time Schedules, and Monitoring and Reporting for Ranches in Riparian Priority Areas</i> (four compliance pathways available) MRP Section F. <i>Annual Compliance Form</i>
	<u>Setback Width Establishment</u> <i>Non-Priority Areas</i>	<u>Setback Width Establishment</u> Order Part 2, Section C.5. <i>Quantifiable Milestones, Time Schedules, and Monitoring and Reporting for Ranches in All Areas</i>
Monitoring and Reporting*	<u>Riparian Management Reporting</u> <i>Individual Approaches</i> <i>Cooperative Approach</i>	<u>Riparian Management Reporting</u> Order Part 2, Section C.5. <i>Quantifiable Milestones, Time Schedules, and Monitoring and Reporting for Ranches in Riparian Priority Areas</i> (four compliance pathways available) MRP success criteria tables
	<u>Surface Water Quality Trends</u> <i>Bioassessment</i>	<u>Surface Water Quality Trends</u> MRP Section E. <i>Surface Water Quality Trends</i>
Incentives	-Cooperative Approach	Order Part 2, Section C.5. - Four compliance pathways available, including Cooperative Approach
Definitions	- <i>Riparian is defined as vegetation, habitat, or ecosystems that are associated with bodies of water (creeks, streams, or lakes) or are dependent on the existence of perennial, intermittent, or ephemeral surface or subsurface water drainage</i> *Required elements; other elements are included because they can help improve the effectiveness of the Order	