

**CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
INITIAL STUDY
FOR
GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
COMMERCIAL AGRICULTURAL OPERATIONS IN
THE SCOTT RIVER AND SHASTA RIVER WATERSHEDS**

PREPARED BY:

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I. PROJECT BACKGROUND

North Coast Regional Water Quality Control Board (North Coast Water Board) staff intend to recommend that the North Coast Water Board adopt General Waste Discharge Requirements (WDRs) for Commercial Agricultural Operations in the Scott River and Shasta River Watersheds (Figure 1). These watersheds contain over 640,000 acres of Agricultural Land¹ of which nearly 46,000 acres is considered Important Farmland² for the purposes of CEQA. As of 2021, approximately 73,701 acres in Scott and Shasta watersheds are classified as Pasture by the Department of Water Resources (DWR) Land Use Program, approximately 12,856 acres are classified as Hay and Grain Crops, approximately 714 acres are classified as Field Crops, approximately 499 acres are classified as Truck Nursery and Berry Crops, and approximately 3,317 acres of agricultural land was classified as Idle Agricultural Operations. Commercial Agricultural Operations have the potential to discharge wastes to surface water and groundwater as well as affect controllable water quality factors identified in the Scott River Watershed Total Maximum Daily Load (TMDL) for Sediment and Temperature (Scott TMDL) and the Shasta River Watershed TMDL for Temperature and Dissolved Oxygen (Shasta TMDL), collectively Scott and Shasta TMDLs.

General WDRs for Commercial Agricultural Operations in Scott River and Shasta River Watersheds (hereafter the Scott and Shasta Order or “Project”) will regulate discharges from specific Agricultural Operations³ and will implement the plans, policies, and requirements set forth in the Water Quality Control Plan for the North Coast Region (Basin Plan), including applicable TMDLs, and the State Water Resources Control Board (State Water Board) Irrigated Lands Regulatory Program (ILRP) objectives and precedential requirements⁴. Implementation of the Scott and Shasta Order fulfills the objectives of the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (Nonpoint Source Policy)⁵, which requires WDRs, a waiver of WDRs, or prohibitions for nonpoint source activities, and achieves the goal of improving water quality associated with agricultural activities on private lands by revising existing

¹ Government Code Section 65560 subd. (c) defines agricultural land as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land.

² For environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland constitute 'agricultural land' (Public Resources Code Section 21060.1).

³ An “Agricultural Operation” is defined by a parcel or parcels under the same ownership, each of which has been developed to conduct actions to produce agricultural products including but not limited to livestock, forage, alfalfa, and grain.

⁴ The State Water Board’s ILRP precedential requirements as set forth in State Water Board WDRs General Order No. WQ-2018-0002 for Growers Within the Eastern San Joaquin River Watershed that are Members of the Third-Party Group.

⁵https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iepolicy.pdf

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permitting programs as necessary to improve water quality protections as identified in the 2020-2025 Nonpoint Source Program Implementation Plan⁶. Additionally, the Scott and Shasta Order will implement the TMDL Policy Statement for Sediment-Impaired Receiving Waters in the North Coast Region (Sediment Policy), the Antidegradation Policy Resolution 68-16, and The Policy for the Implementation of the Water Quality Objective for Temperature (Temperature Policy), which are contained within Chapter 4 of the Basin Plan. In addition to the technical analysis supporting the Sediment and Temperature Policies⁷, the Scott⁸ and Shasta TMDLs⁹ identify agricultural operations as nonpoint source activities that contribute to watershed impairments.

II. INTRODUCTION

This Initial Study has been prepared pursuant to the California Environmental Quality Act of 1970 (CEQA), and State CEQA Guidelines at California Code of Regulations (CCR), Title 14, Div. 6, Chap. 3. The Lead Agency for the Project, as defined by CEQA, is the North Coast Water Board.

Commercial Agricultural Operations can discharge or threaten to discharge wastes to surface water and groundwater and impair beneficial uses of those waters. Stormwater runoff can result in soil erosion and deliver excess sediment to nearby streams and may also exhibit the potential to carry additional pollutants adhered to soil particles, such as manure, pesticides, and nutrients to receiving water. The removal and suppression of shade-providing trees and vegetation, via tillage, grazing, and other anthropogenic interventions along watercourses can result in increases to in-stream temperatures, reductions to the sediment and pollutant trapping potential that these areas provide, degradation of geomorphic function, simplified channel geometry, and insufficient habitat or food for critical species.

Diversions of surface water and pumping of groundwater interconnected with surface waters can deplete cold water necessary for achieving the water quality objective for temperature. Flood irrigation can also prevent achievement of the water quality objective for temperature as a result of spreading water shallowly across the landscape, reducing its thermal mass and heating it quickly from exposure to direct solar radiation and high atmospheric temperatures, and discharging heat loads contained in tailwaters to surface waters. Flood irrigation can mobilize nutrients, fine sediments, and manure,

⁶https://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/NPS%202020-25%20Accessible%20MH%203.9.21.pdf

⁷https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/120204-0087.pdf
[https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/160802/R1-2014-0006 Att 1.pdf](https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/160802/R1-2014-0006_Att_1.pdf)

⁸https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/scott_river/060307/bpl/Basin_Plan_Language.pdf

⁹https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/shasta_river/060707/finalshastatmdlactionplan.pdf

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and when not managed appropriately can result in discharges of waste in irrigation tailwater directly to surface water and groundwater.

Cumulative effects of concurrent pumping of groundwater interconnected with surface water by multiple users include lowering the water table below the rootzone of riparian plant species, which can impact their survival rates and further degrade riparian corridors. Pumping of groundwater interconnected with surface water can also reduce instream accretions of groundwater that would otherwise prolong flow in the summer and/or support cold-water refugial areas. Finally, excessive pumping of groundwater interconnected with emergent cold-water springs can reduce spring flows that create critical over-summer refugia for cold-water species.

This Initial Study analysis considers reasonably foreseeable management practices as examples of how the Scott and Shasta Order could be implemented and the associated potential impacts on the environment. The analysis does not, however, constitute an absolute outcome or certainty in the determinations made. Some impacts may not be identified or mitigated through the Scott and Shasta Order because it is not possible to exactly predict who will take action in response to the Scott and Shasta Order, or what action(s) they will take. Therefore, this analysis is set at a programmatic level and is more general in nature to consider impacts from implementing reasonably foreseeable management practices. In some cases, the types of actions that would be undertaken by Commercial Agricultural Operations subject to the Scott and Shasta Order would be consistent with management practices already being implemented under the Scott and Shasta Conditional Waivers¹⁰ first adopted in 2006 and voluntary state and federal conservation programs. In some cases, implementation of management practices might be subject to another regulatory process which would entail identification and mitigation of any significant environmental effects. Therefore, other regulatory mechanisms can be expected to provide additional opportunities for minimizing and avoiding significant environmental effects. However, the Scott and Shasta Order contains requirements to implement management practices (e.g. riparian zones and irrigation management) which in some cases, may not be possible to mitigate impacts to a less-than-significant level.

While CEQA regulations require consideration of a “reasonable range” of the potential environmental impacts, an examination of every site is not required, only consideration of a reasonably representative sample of them. Potential impacts of the Scott and Shasta Order are evaluated in this Initial Study relative to the existing physical conditions (i.e., “baseline conditions”).

Adoption of the Scott and Shasta Order may result in adverse effects on the

¹⁰ Refer to findings in [R1-2023-0005, Short-Term Renewal of Order Nos. R1-2018-0018 Scott River and R1-2018-0019 Shasta River](#)

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environment from the potential conversion of Important Farmland¹¹ to a non-agricultural use and may result in conflicts with existing zoning for agriculture use or a Williamson Act contract. These two impacts may occur as a result of riparian zone requirements that implement the Policy for Implementation of the Water Quality Objectives for Temperature and the Scott and Shasta TMDLs as well as requirements that require implementing management practices to prevent or minimize increases in stream temperatures from diversions of surface waters and/or groundwater interconnected with surface waters. Through adoption of Resolution R1-2014-0006, the North Coast Water Board found the potential conversion of Important Farmland to a non-agricultural use and the potential conflict with existing zoning for agriculture use or a Williamson Act contract from implementing riparian buffers as significant and unavoidable. Adoption of the Scott and Shasta Order has the potential to significantly impact Agricultural Resources with no feasible mitigation.

Impacts of the Project on Cultural Resources and Tribal Cultural Resources are expected to be less than significant with mitigations. No Impact or Less than Significant Impacts from the Project to Aesthetics, Air Quality, Biological Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Geology and Soils, Land Use/Planning, Mineral Resources, Noise, Population/Housing, Public Services, Recreation, Transportation/Traffic, Wildfire, Utilities/Service Systems are expected.

III. PROJECT SUMMARY

The Scott and Shasta Order would involve the adoption of General WDRs for Commercial Agricultural Operations in the Scott River and Shasta River watersheds. The Scott and Shasta Order would regulate discharges from Commercial Agricultural Operations that meet any of the following criteria:

- Agricultural operations conducted on the subject property include livestock grazing, pasture cultivation, alfalfa cultivation, or other Commercial Agricultural Operations not currently regulated by an existing North Coast Water Board or State Water Resources Control Board permit and the total property held by the Enrollee that is under active cultivation, irrigation, or grazing is greater than 100 acres.
- Agricultural operations, including tillage, livestock grazing, and cultivation occur adjacent to or within the riparian zone.
- Agricultural operations, including tillage, livestock grazing, and cultivation occur

¹¹ Section 21095 of the CEQA statute and the State CEQA Guidelines Appendix G define three of the FMMP's Important Farmland categories—Prime Farmland, Farmland of Statewide Importance, and Unique Farmland—as agricultural lands for purposes of CEQA analysis and acknowledge that their conversion to nonagricultural uses may be considered a significant impact.

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within or adjacent to wetlands.

- Enrollee is a member of an irrigation district, water user association, or other company organized to convey and deliver water for agricultural beneficial use in the Project Area, including but not limited to unincorporated associations; or discharger's agricultural water is derived from overlying or appropriative groundwater rights.
- Enrollee's method of irrigation results in a discharge of irrigation tailwater to waters of the state or Enrollee is a member of an irrigation district, water user association, or other company organized to convey and deliver water fuses including irrigation whose method of conveyance and delivery of irrigation water results in a discharge of irrigation tailwater to waters of the state.

Key elements of the Scott and Shasta Order include the following:

- Irrigation, Nutrient, and Pesticide Management for Surface Water Protection
- Riparian Zone Management for Surface Water Protection
- Sediment and Erosion Control for Surface Water Protection
- Irrigation, Nutrient, and Pesticide Management for Groundwater Protection
- Monitoring and Reporting Requirements

The purpose of the Scott and Shasta Order is to fulfill the following objectives:

Objective No. 1 – Attain and maintain water quality conditions protective of beneficial uses established in Chapter 2 and consistent with the water quality objectives (WQOs) established in Chapter 3 of the Basin Plan, and implement the Scott and Shasta TMDL Action Plans by:

- Minimizing or preventing nitrate and pesticide discharges to groundwater.
- Minimizing or preventing nutrient, oxygen consuming, and pesticide discharges surface water.
- Minimizing or preventing sediment discharges to surface water.
- Minimizing or preventing temperature impacts to surface water from loss of riparian shade, tailwater discharges, and depletion of surface waters.

Objective No. 2 - Effectively track and quantify achievement of the stated objectives over a specific, defined time schedule.

Objective No. 3 - Implement with the State Nonpoint Source Policy, the State

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Antidegradation Policy, the precedential language in the Eastern San Joaquin Agricultural Order, the North Coast Basin Plan, and other relevant statutes and water quality plans and policies, including the Temperature Implementation Policy, the Sediment TMDL Implementation Policy, and the Scott River and Shasta River TMDL Action Plans.

IV. SCOTT AND SHASTA ORDER COMPLIANCE MEASURES

Many Commercial Agricultural Operations in the Scott River and Shasta River watersheds are already implementing management practices for water quality protection for a variety of reasons including: 1) as part of receiving coverage under the Scott and Shasta Waivers first adopted in 2006; 2) voluntary state and federal conservation programs associated with the Scott River Watershed Council (SRWC), Shasta Watershed Conservation Group (SWCG), Scott River Water Trust, California Trout (CalTrout), Siskiyou Land Trust, The Nature Conservancy, Siskiyou County Farm Bureau, Siskiyou and Shasta Valley Resource Conservation Districts (SRCD and SVRCD, respectively), University of California Cooperative Extension (UCCE), California Department of Fish and Wildlife (CDFW), United States Fish and Wildlife Service (USFWS), the National Oceanographic and Atmospheric Administration's National Marine Fisheries Service (NOAA NMFS), and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). Compliance with the Scott and Shasta Order is expected to result in an increase in the implementation of many commonly used, effective, and conventional Best Management Practices (BMPs) to prevent or minimize nutrient and heat loading from tailwater discharges, soil erosion and sediment discharge, depletion of interconnected surface waters contributing to elevated stream temperatures, and other discharges of waste from Commercial Agricultural Operations.

Although it is impossible to predict the exact locations or nature of actual management practices that will be implemented because of the Scott and Shasta Order, the types of actions that may occur would be consistent with those commonly used at existing Commercial Agricultural Operations within the Scott River and Shasta River watersheds, as well as the greater North Coast Region. The Scott and Shasta Order would not specify or prescribe specific management practices that enrollees must undertake to reduce discharges. Rather, Enrollees would have the flexibility to implement the management practices that are most suitable for their specific situation or otherwise choose how they would comply with requirements.

This Initial Study considers the potential environmental impacts associated with five categories of possible actions that include:

Irrigation, Nutrient, Oxygen-Consuming Material, and Pesticide Management for Surface Water Protection

Enrollees would be required to implement management practices to prevent and minimize discharges of nutrients, oxygen-consuming materials, and pesticides as well

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as heat loads from irrigation tailwaters to surface waters. Additionally, Enrollees pumping groundwater interconnected with surface water and/or diverting surface water would be required to implement management practices to prevent and minimize their water extractions from dewatering surface waters or causing or contributing to an exceedance of the water quality objective for temperature, dissolved oxygen, and/or pH in receiving waters. Reasonably foreseeable management practices with the greatest potential for environmental impacts include the following:

Runoff management features: This includes vegetated riparian buffers, filter strips, contour farming, vegetated treatment areas, and grassed swales. Construction/installation of these features may include light disking, use of a “no till” or grass drill for seeding the proposed vegetated area, soil amendments, and associated transport of materials and equipment. Minor excavation and off-haul of soils may be required for construction of swales. Maintenance of runoff management features may include general vegetation management (e.g., mowing, weeding, etc.).

Retention/Detention basins: This includes basins constructed from an embankment or excavation to capture and retain/detain irrigation tailwaters or stormwater. Construction of basins requires use of heavy equipment, such as dozers, hydraulic excavators, trenchers, dump trucks, scrapers, etc. Engineered fill material may need to be imported to the site for construction of the embankment and/or excavated material may need to be hauled off from the site and disposed of at a landfill. Maintenance activities may include periodic inspections of the basin, removal of accumulated sediment, removal of debris/trash, replacement of damaged parts, and vegetation management.

Irrigation efficiency improvements such as replacing less efficient methods with more efficient method of applying irrigation water. This may include developing and implementing an irrigation water management plan in addition to infrastructure improvements such as pumps, pipes, and sprinkler systems (e.g., center pivot, wheel line).

Changes in timing, rate, and volume of groundwater and surface water extractions. This may result in a net reduction in the application of irrigation water to Important Farmland. A reduction in applied irrigation water to Important Farmland may result in the conversion from higher water use agriculture to lower water use agriculture and/or a fallowing of Important Farmland.

Riparian Zone Management for Surface Water Protection

Enrollees would be required to implement Riparian Zone requirements based on waterbody type. Requirements include prohibitions, setbacks, allowing natural succession of riparian vegetation, and grazing management. Reasonably foreseeable management practices with the greatest potential for environmental impacts include the following:

Prohibition on tillage-based agriculture (e.g., grain/hay crops) within a portion of the field side edge of riparian zones.

Sediment and Erosion Control for Surface Water Protection

Enrollees would be required to implement management practices to prevent and minimize soil erosion and discharge of sediment to surface waters. Additionally, within 10 years of the date of adoption of the Scott and Shasta Order, Enrollees would be required to implement and maintain the following minimum management practices on all Hydrologically Connected Appurtenant Agricultural Roads: a) Ditches are drained frequently by functional ditch relief culverts and/or rolling dips. b) Outflow from ditch relief culverts does not directly discharge to streams. c) Ditches and road surfaces drainage do not discharge (through culverts and/or rolling dips) onto active or potential landslides and/or into gullies. d) Fine sediment contributions from roads, cutbanks, and ditches are minimized by utilizing road surface shaping (outsloping, insloping, or crowning), rolling dips, ditch relief culverts, water bars, and other measures to disperse road surface runoff and reduce or eliminate sediment delivery to the surface waters. The reasonably foreseeable management practices with the greatest potential for environmental impacts (i.e., those involving ground disturbance during construction/installation) include the following:

Runoff management features: This includes vegetated riparian buffers, filter strips, contour farming, vegetated treatment areas, and grassed swales. Construction/installation of these features may include light disking, use of a “no till” or grass drill for seeding the proposed vegetated area, soil amendments, and associated transport of materials and equipment. Minor excavation and off-haul of soils may be required for construction of swales. Maintenance of runoff management features may include general vegetation management (e.g., mowing, weeding, etc.).

Retention/Detention basins: This includes basins constructed from an embankment or excavation to capture and retain/detain stormwater runoff. Construction of basins requires use of heavy equipment, such as dozers, hydraulic excavators, trenchers, dump trucks, scrapers, etc. Engineered fill material may need to be imported to the site for construction of the embankment and/or excavated material may need to be hauled off from the site and disposed of in a legal manner. Maintenance activities may include periodic inspections of the basin, removal of accumulated sediment, removal of debris/trash, replacement of damaged parts, and vegetation management.

Stormproofing Roads: This includes earthwork construction of rolling dips, critical dips, and outsloping to disconnect road hydrology and reduce the potential for sediment erosion and delivery to surface water.

Irrigation, Pesticide, and Nutrient Management for Groundwater Protection

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Enrollees would be required to implement irrigation and nutrient management practices to prevent and minimize discharges of pesticides and nitrates to groundwater. General agricultural management practices implemented in other regional irrigated lands water quality orders offer a good indication of the reasonably foreseeable types of irrigation and nitrogen efficiency practices that may be implemented under the Scott and Shasta Order. These could include, but are not limited to, nutrient application at agronomic rates, application timing based on precipitation forecasts, soil testing, irrigation water testing, and use of cover crops. Commercial Agricultural Operations with areas where livestock are temporarily held in concentration and/or apply nitrogen as fertilizer would be required to prepare and implement an Irrigation and Nitrogen Management Plan (INMP) that budgets all sources of nitrogen applied and removed during the growing season and harvest for each parcel. INMP reporting drives adaptive management of irrigation and nutrient practices on the farm level by identifying statistical outliers of nitrogen application versus removal. Commercial Agricultural Operations designated as statistical outliers would be required to obtain nitrogen management training or work with a nitrogen management planning specialist for certification of their next INMP.

Monitoring and Reporting Requirements

Commercial Agricultural Operations would be required to submit property-specific water quality assessments that identify existing discharges, potential discharges, riparian conditions, critical instream habitat areas, cold water resources, irrigation efficiency measures, and infrastructure that aids in water quality management.

Enrollees would be required either individually or through membership in a Grower Coalition to implement the Monitoring and Reporting Program commensurate with the risk to water quality from the Agricultural Operation. The Monitoring and Reporting Program is expected to consist of: (1) riparian conditions monitoring; (2) irrigation practice monitoring; (3) tailwater discharge monitoring; (4) receiving surface water and groundwater monitoring; (5) Drinking Water Well monitoring; (6) annual compliance reporting and (7) water quality trend monitoring reporting every five years.

Surface water quality monitoring may include: (1) Receiving surface water monitoring to determine whether surface waters downstream of Commercial Agricultural Operations meet applicable water quality objectives and detect and track any trends in degradation or improvement; (2) an Adaptive Management Program implemented in response to receiving surface water monitoring, that includes tailwater discharge monitoring as a compliance option to demonstrate practices implemented are not causing or contributing to downstream exceedances in receiving waters.

Groundwater monitoring may include: (1) drinking water well monitoring to identify drinking water wells with nitrate concentrations that exceed the Maximum Contaminant Level for nitrate, identify wells with California Department of Pesticide Regulation 6800(a) listed pesticide concentrations over the human health reference level, and notify any well users; and (2) groundwater trend monitoring to determine current water quality conditions of groundwater relevant to Agricultural Operations in the Scott and

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Shasta, and to develop long-term groundwater quality information to evaluate regional effects of Agricultural Operations.

Commercial Agricultural Operations would be required to annually report relevant management practices relating to pesticide, sediment, and erosion control, riparian area management, irrigation, tailwater, and nutrient management. Water quality monitoring results would be reported annually and evaluated every five years for trends. Management practice and water quality monitoring reporting would be used to evaluate the impact of Commercial Agricultural Operation on water quality conditions and inform regulatory decisions over time.

V. SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS

This Initial Study identifies potential environmental impacts of physical changes resulting from implementation of foreseeable management practices implemented in response to the Scott and Shasta Order that, over time, would result in reduced soil erosion, sedimentation, heat loads from irrigation tailwater, stream temperature increases from depletion of surface waters, oxygen-consuming materials, nutrient and pesticide discharges, and a reduction in the suppression of shade producing vegetation alongside watercourses. The Scott and Shasta Order is expected to result in increases in the use of management practices.

Implementation of management practices could potentially result in impacts from construction activities (grading/excavation, vegetation removal, stockpiling soils, and mobilizing heavy equipment). The Riparian Zone prohibition on tillage-based agriculture (e.g., grain/hay crops) within a portion of the field-side edge of riparian zones is expected to result in the conversion of four or more percent of Important Farmland in the Scott River and Shasta River watersheds to another type of agriculture or non-agriculture use (e.g., riparian vegetation and/or non-crop vegetative buffer). This estimate is based on Regional Water Board staff preliminary GIS analysis. Irrigation management requirements could potentially result in impacts from changes in timing, rate, and volume of groundwater extraction and surface water diversion. These requirements may result in a net reduction in the application of irrigation water to Important Farmland. A reduction in applied irrigation water to Important Farmland may result in the conversion from higher water use agriculture to lower water use agriculture and/or a fallowing of Important Farmland.

Based on existing available information and evidence provided in this Initial Study, compliance with the Scott and Shasta Order would result in “Less Than Significant” or “No Impact” in the following CEQA topic areas:

- Aesthetics
- Air Quality
- Biological Resources
- Energy
- Geology and Soils

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- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

Based on existing available information and evidence provided in this Initial Study, compliance with the Scott and Shasta Order would result in “Less Than Significant with Mitigation” in the following CEQA topic areas:

- Cultural Resources
- Tribal Cultural Resources

Based on existing available information and evidence provided in this Initial Study, compliance with the Scott and Shasta Order would result in “Potentially Significant Impact” in the following CEQA topic areas:

- Agriculture and Forestry Resources

VI. ENVIRONMENTAL SETTING

Located within Siskiyou County, the Scott River watershed (813 square miles) and the Shasta River watershed (795 square miles) are major tributaries to the Klamath River. The Shasta River watershed shares divides with the Scott River to the west, Butte Creek to the east, and the Trinity and Sacramento Rivers to the south. The Scott River watershed shares divides with the Shasta River to the east, the Trinity River to the south, and the Salmon River to the west.

A. Shasta River Watershed

The Shasta River Watershed is located in central Siskiyou County and is bounded by Mount Shasta to the south, the Klamath Mountains to the west, and the Cascade Range to the east. Within the watershed, the Shasta River Valley trends northward and is drained by the Shasta River, a tributary to the Klamath River. The Shasta River watershed consists of a north dipping and topographically rough valley floor surrounded by mountain terrain. Topography ranges in elevation from just over 2,000 feet above mean sea level (amsl) near the confluence with the Klamath River to over 14,100 ft amsl near the volcanic peak of Mount Shasta. The Shasta River flows northerly across

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the Shasta Valley starting above Lake Shastina which is impounded by Dwinnell Dam. Primary tributaries to the Shasta River are Parks Creek, Big Springs Creek, Willow Creek, Little Shasta River, and Yreka Creek.

The Shasta Valley Groundwater Basin, a broad northward dipping valley covered with relatively young deposits (alluvium, landslide deposits, and volcanic flows/debris), occupies over 40 percent of the watershed and contains the majority of water-bearing geologic formations, or aquifers. The groundwater system consists of a mixture of alluvial and volcanic formations, with the latter consisting of aquifer features ranging from water-laden lava tubes to water- and –sediment filled pockets within the cracks and crevices in the volcanic deposits. Much of the complexity and unique juxtaposition of markedly differing geologic formations result in a multitude of springs or diffuse wetlands where groundwater more easily discharges to the surface than into less-conductive aquifer materials or where groundwater elevations are close to or exceed ground level. The discharge levels of the springs can vary over many orders of magnitude from one spring to the next and can also significantly vary seasonally at the same spring as well as year-to-year averages. The largest spring complexes, such as the Big Springs complex, contribute a significant quantity of water to the surface water features in the watershed.

The Shasta River watershed generally has a mixture of warm-summer Mediterranean and high desert environment climates with distinctive seasons of cool, wet winters and warm, dry summers. The orographic effect of the mountains to the west and south sides of the watershed creates a rain shadow in its eastern areas. The mountains forming the south and westerly boundaries of the watershed historically receive greater annual precipitation (30–70 inches) in comparison to the east side of the watershed (12–15 inches). The rainy season, which generally begins in October and lasts through April, accounts for about 80 percent of total annual rainfall.

Approximately 16,000 people live in the Shasta River watershed and its incorporated cities of Yreka, Weed, and Montague. The majority of the land within the Shasta River Watershed is under private ownership with the remaining area managed by the California Department of Fish and Wildlife (CDFW), United States Bureau of Land Management (BLM), and the United States Forest Service (USFS). The dominant land use in the Shasta Valley groundwater basin is irrigated agriculture with pasture, grain, and hay comprising the primary crops (over 50,000 acres). Much of the watershed surrounding the groundwater basin is a mixture of private (mostly timber) and USFS land. Two large conservation properties, owned and managed by California Department of Fish and Wildlife cover the northern and central portions of the groundwater basin. The Shasta River Watershed includes over 21,000 acres of Important Farmland (Prime, Unique, and Farmland of Statewide Importance), over 230,000 acres of Farmland of

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Local Importance¹², and around 100,000 acres of Grazing Land¹³.

Agricultural water demands are met with direct diversion of surface water from the Shasta River and its tributaries, diversion of surface water stored in reservoirs (principally Lake Shastina), pumping from groundwater supplies, and re-use of applied irrigation water. Several irrigation districts supply surface water and groundwater for agricultural uses (Big Springs Irrigation District, Grenada Irrigation District, Montague Water Conservation District, and Shasta Water Association). Water is delivered to users in these districts via canals, diversion facilities, pumps, and storage infrastructure. The Shasta River is fully appropriated from May 1 through October 31. In the 1920s, surface waters of the Shasta River were subject to a statutory adjudication and on December 30, 1932, the Superior Court of California issued its judgment and decree that quantifies the amount and priority date of each surface water right on the river. Agricultural water diversions in the Shasta Valley were under state watermaster service by the Department of Water Resources until 2012. The Scott Valley and Shasta Valley Watermaster District (SSWD) was created through AB1580 and on December 22, 2011, a Siskiyou County Superior Court Order appointed the SSWD as Deputy Watermaster in the Scott Valley, Shasta Valley and Willow Creek Service Areas effective February 1, 2012.

Lake Shastina (impounded behind Dwinnell Dam constructed in 1928) is the largest water storage structure within the watershed, with a current capacity of 50,000 ac-ft. The largest water storage and delivery systems are maintained by irrigation districts or private water users, which operate independently in accordance with the watermaster service requirements. Major diversion dams and smaller dams or weirs (aka impoundments) are located below Dwinnell Dam, along with numerous diversions on tributaries including Big Springs Creek, Little Shasta River, and Parks Creek. Several diversions and return channels exist largely for agricultural purposes that primarily operate during the irrigation season (typically April 1- September 30). Many of these structures are within the Montague Water Conservation District, which contains approximately 60 miles of canals and laterals. There are approximately 1,825 domestic groundwater wells and 30 public/industrial groundwater wells within the Shasta Valley groundwater basin, with 170 wells for undetermined uses such as irrigation, stock watering, domestic supply and other uses. The irrigation methods used in the Shasta Valley groundwater basin predominately include flood irrigation with increasing use of wheel-line and center-pivot.

The Shasta River is fed by glacial melting and precipitation runoff from Mount Shasta that is delivered to the river by groundwater flows and springs. Flows in the lower

¹² Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

¹³ Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

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Shasta River (i.e., downstream of Dwinnell Dam) are composed of releases from Lake Shastina, tributary creeks (e.g., Parks Creek, Willow Creek, Little Shasta River), multiple discrete groundwater springs (e.g., Big Springs, Little Springs, Alcove Springs, Clear Spring, Kettle Spring, Bridge Field Spring, Black Meadow Spring), and additional diffuse groundwater springs. The lower Shasta River has a spring-dominated hydrograph that is primarily sourced from Big Springs Creek (which is supplied by multiple groundwater springs in the Big Springs Complex vicinity). Spring-fed baseflows from Big Springs Creek outside the irrigation season (i.e., October to April) are five times those of the lower Shasta River upstream of the Big Springs Creek confluence (which includes Parks Creek). During irrigation season (i.e., April to October), Big Springs Creek baseflows are reduced by approximately 35 percent from temporally variable irrigation diversion and unquantified groundwater pumping. The majority of baseflows during irrigation season in the lower Shasta River originate from the Big Springs Complex. Following cessation of the irrigation season, instream flows downstream of the Big Springs Creek confluence quickly rebound to spring-fed baseflow conditions.

The Shasta River Watershed was added to the Clean Water Act (CWA) Section 303(d) list in 1992 due to low dissolved oxygen and in 1994 due to elevated water temperatures. Low dissolved oxygen and elevated water temperatures have impaired many designated beneficial uses of the Shasta River and its tributaries. Several of the primary beneficial uses impaired are those uses associated with the cold-water salmonid fishery. Salmonid populations in the Shasta River watershed have declined significantly from historic levels and coho salmon are listed as threatened under the state and federal Endangered Species Acts. Low dissolved oxygen and elevated water temperatures have resulted in the non-attainment of water quality objectives for dissolved oxygen and water temperature. The Action Plan for the Shasta River Temperature and Dissolved Oxygen Total Maximum Daily Loads, hereinafter the Shasta River TMDL Action Plan, was adopted by the North Coast Water Board on June 28, 2006, (Resolution No. R1-2006-0052) and amended into the Water Quality Control Plan for the North Coast Region (Basin Plan) on January 26, 2007, following approval by the United States Environmental Protection Agency.

The Shasta River TMDL Action Plan describes the implementation actions necessary to achieve the Dissolved Oxygen and Temperature TMDLs and attain water quality standards in the Shasta River watershed. The temperature source analysis in the Temperature TMDL identifies the sources (or factors) that affect the temperature of the Shasta River watershed. Five primary factors have been identified as affecting stream temperatures in the Shasta River watershed. Human activities have affected, or have a potential to affect, each of these factors. The factors include:

- Reduced stream shade resulting from agricultural practices including grazing and livestock activities;
- Tailwater return flows;
- Flow modification and diversion;

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- Spring inflow; and
- Lake Shastina and minor channel impoundments.

The Shasta River dissolved oxygen source analysis in the Dissolved Oxygen TMDL identifies the primary processes affecting dissolved oxygen concentrations in the Shasta River watershed are photosynthesis and respiration of aquatic plants, nitrogenous deoxygenation (termed nitrogenous biochemical oxygen demand or NBOD), and sediment oxygen demand. The following anthropogenic sources or factors, in no specific order, adversely affect dissolved oxygen conditions in the Shasta River:

- Tailwater return flows;
- City of Yreka nonpoint and wastewater infiltration sources;
- Lake Shastina and minor impoundments;
- Agricultural practices including grazing and livestock activities that reduce riparian shade and deliver oxygen consuming materials to surface waters; and
- Flow modification and diversion.

Surface water diversions decrease the volume of water in the stream and thereby decrease a stream's capacity to assimilate heat. When water is removed from a stream the thermal mass and velocity of the water are decreased. Thermal mass refers to the ability of a body to resist changes in temperature. Basically, less water heats or cools faster than more water. Decreases in velocity increase the time required to travel a given distance and thus increase the time heating and cooling processes can act on the water. As demonstrated in the 2004 Aerial Surveys using Thermal Infrared and Color Videography of the Scott River and Shasta River Sub-Basins (TIR Report), stream warming occurs in Parks Creek and the Little Shasta River, and portions of these tributaries completely dry up, most likely due to surface water diversion. Potential thermal refugia are lost when the mouth of a tributary that has cold water sources, such as Parks Creek, dries up. Based on the 2003 Shasta River Flow and Temperature Modeling Project and the TIR Report, Regional Water Board staff identified flow as an important factor affecting temperatures of the Shasta River and its tributaries.

Among other actions relevant to Commercial Agricultural Operations intended to be covered by the Scott and Shasta Order, the Shasta River TMDL Action Plan identified the following actions to be taken by water diverters to address the dissolved oxygen and water temperature Impairments: 1) within two years (by January 26, 2009), and again within four years of EPA approval of the TMDL (by January 26, 2011), water diverters shall report in writing to the North Coast Water Board, either individually or through the Shasta Valley RCD and its Shasta Coordinated Resource Management and Planning Committee (CRMP), on the measures taken to increase the dedicated cold water instream flow in the Shasta River by 45 cubic feet per second (cfs) or alternative flow regime that achieves the same temperature reductions from May 15 to October 15; and 2) within five years of EPA approval of the TMDL (by January 26, 2012), water diverters shall provide a final report to the North Coast Water Board, either individually or through

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the Shasta Valley RCD and its CRMP, on documenting dedicated cold water instream flow in the Shasta River in relation to the 45 cfs goal or alternative flow regime that achieves the same temperature reductions from May 15 to October 15.

B. Scott River Watershed

The Scott River watershed is encircled by mountain ranges with elevations that can exceed 8,000 ft above mean sea level (amsl). The Scott River Valley Groundwater Basin is formed by the relatively narrow alluvial valley of the Scott River. Much of the mainstem Scott River in its alluvial valley and the lower reaches of tributaries have been stabilized by riprap to prevent erosion, with later bank stabilization projects conducted using bioengineering approaches. The US Army Corps of Engineers built levees and straightened the mainstem Scott for flood control in the middle of the valley in the late 1930's following catastrophic flooding. In areas where past practices have not resulted in extensive incision, general landform processes have created a wide, flat floodplain and a sinuous channel pattern where bars, islands, side and/or off-channel habitats are common. In the mid-1900s, a steam-powered mining dredge overturned the alluvial architecture of 4.25 miles of the Scott River (above river mile 51.5) in search of gold near Callahan. Prior to the mining operation, the streambed was comprised of layers of sediment with the lightest, least porous material on top and there was ample water year-round. Now, Scott River flows go subsurface in the summer and during the rainy months, the river segment is unnaturally shallow and the riverbank is practically denuded of vegetation because native plants cannot take root in the rock piles left by the mining machine. The gradient of the Scott River through Scott Valley averages less than a 0.1% slope, typical of a broad, alluvial valley. Some of the larger tributary streams are Etna Creek, French Creek, Kidder Creek, South Fork Scott, East Fork Scott and Shackleford Creek.

Within the Scott River Valley Groundwater Basin, the Scott River flows south to north until it turns westward near Fort Jones. The Scott River flows northwest out of the groundwater basin, traveling around the Scott Bar Mountains through a steep canyon to join the Klamath River. The Scott Bar, Marble, Salmon, and Scott Mountains bound the Watershed to the north, west, southwest, and south, respectively, while hills and ridges east of the Scott River Valley divide the Scott and Shasta River watersheds. These ranges exert a strong orographic effect on incoming storms, which allows the higher elevation mountains, along the west and south side of the Scott River watershed, to receive 60 to 80 inches of precipitation annually. In contrast, the rain-shadow effect that the west-side mountains create reduces the amount of annual precipitation to 12 to 15 inches on the eastside of the watershed. Elevation of the Scott River Valley ranges from 3130 feet at Callahan in the southern end, to 2747 feet at Ft. Jones near the valley center, to 2620 feet at the north end. The mouth of the Scott River below Scott Bar is at 1600 feet.

The Scott River Watershed experiences distinct seasons of a Mediterranean type. Predominant weather systems are from the northwest with diminishing levels of precipitation as systems spread southeast. Air temperatures in Fort Jones range from a

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mean of 69.7 F in the summer to a mean of 32.9 F in the winter. The Scott River is an inland drainage with hot dry summers. Summer temperatures commonly exceed 100 F during a four-week period including later July and early August. Average annual precipitation for the entire Scott River watershed, including high and low elevation areas, is 36 inches. Fort Jones, located at the northern end of Scott Valley, has averaged 21.8 inches since records began in 1936. In Fort Jones, rainfall has ranged from 10.1 inches to 35.07 inches, showing the wide variation that can occur. Most of the precipitation in the Scott River watershed falls on the west side, with snow prevailing during the winter above the 5,500 foot-level. Snowfall is an important component of total precipitation.

Approximately 8,000 people live in the Scott River Valley Groundwater Basin and its two towns of Fort Jones and Etna. The alluvial portion of Scott River Valley from Callhan to the lower end encompasses nearly 60,000 acres, which represents 11.5 percent of the watershed. Land use is primarily agricultural (35,000 irrigated acres, more than 50 percent of the land area of Scott River Valley groundwater basin) and dominated by field crops, including alfalfa and other hay crops, and livestock ranching. Approximately 25,000 acres of agricultural land in the Scott River watershed is considered Important Farmland for CEQA purposes.

While irrigated acreage has not significantly changed in the Scott River Valley since the late 1950s, crop types have transitioned with decreasing amounts of small grains and increasing alfalfa through the 1990s. In the past two decades, the center pivot method has been applied for irrigation, a change from the traditionally used and less efficient wheel-line irrigation method. Primary irrigation methods used in the Scott River Valley are flood, wheel-line, and center-pivot. One area of the Scott River Valley known as the "Discharge Zone" also uses sub-irrigation, or direct uptake of water from the aquifer, as groundwater levels are at or near the land surface. Low elevation spray application (LESA) and Low energy precision application (LEPA) systems on center pivots, which further reduce spray evaporation (consumptive water use), have become more common in the past 10 years.

All surface water rights upstream of the Scott River USGS gaging station (no. 11519500, approximately 10 miles downstream from Fort Jones) are adjudicated according to one of three decrees: the Shackleford Creek Decree (1950), the French Creek Decree (1958), and the Scott River Decree (1980). The decrees identify: 1) the area where such water may be used; 2) the priority of each water right as it relates to other water rights on the same source; 3) the purpose for which the water is used (e.g., irrigation, municipal, domestic, stock-water); and 4) the diversion season. The Scott River Decree also specifies the amount of water each user is entitled to divert from surface streams or to pump from the interconnected groundwater supplies near the river. All previous riparian claims prior to 1914 and appropriative water rights were included in each of the decrees within the Scott River watershed. According to hydrologic analyses by USGS, the total allotment of water under the three decrees is greater than the average monthly flow of the Scott River from June through December, based on 64 years of record. The Scott Valley and Shasta Valley Watermaster District

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(SSWD) was created through AB1580 and on December 22, 2011, a Siskiyou County Superior Court Order appointed the SSWD as Deputy Watermaster in the Scott Valley, Shasta Valley and Willow Creek Service Areas effective February 1, 2012. The SSWD responsible for ensuring decreed water rights in French and Wildcat Creeks are managed so they do not conflict with or cause harm to another decreed right holder. Surface water rights outside of French and Wildcat creeks are not currently served by a watermaster. The Scott Valley Irrigation District (SVID) diverts an allocated amount of water from the Scott River and controls distribution to the 25 landowners served by SVID. SVID delivers water to landowners via an irrigation ditch that spans 14 miles between the cities of Fort Jones and Etna. Water is diverted from the Scott River and transferred to landowners on a rotation schedule. Farmers Ditch Company provides water to 1,028 acres of farmland adjacent to the Scott River.

Groundwater pumping in the Scott River Valley Groundwater Basin has several potential effects on water quality and stream habitat.

1. Dewatered Channel. This is the most severe impact related to drawdown of the Scott Valley groundwater basin. In dry years the water table is lower than the bottom of the river channel and consequently streamflow percolates into the groundwater basin to the point that there is no continuous flow. The Scott River went dry for long stretches in 1924, 1977, 1991, 1994, 2001, 2002, 2004, 2007, 2014, 2018, 2020, 2021, and 2022. Pumping groundwater can contribute to drawdown of the groundwater basin. However, the Scott River would likely go dry in severe droughts, even without pumping in part from surface water diversions. Channel dewatering can also be affected by channel aggradation as a result of increased sediment loads.

2. Temperature Impacts. In normal water years the Scott River is a gaining system, groundwater flows to the stream. Groundwater flow to the Scott River is relatively cold (approximately 58F) and has a cooling effect on the stream temperatures. Temperature modeling results, confirmed by forward-looking infrared radar flights, indicate that the amount of groundwater flowing into the Scott River has a profound effect on stream temperature.

3. Migration Impacts. Depletion of interconnected surface water from groundwater pumping also affects the ability of adult salmonids to access reaches of the river and tributaries they use for spawning during the fall of dry years. Adult chinook salmon often begin their migration prior to the beginning of the rainy season and before the end of the irrigation season. In dry years, river flows do not rebound even after irrigation ceases. During those dry years, there are insufficient flows to allow the fish to pass some stretches of the river in the canyon downstream of Scott Valley. Fall flows are limiting factor affecting salmonids in the Scott River watershed. Hydrologic modeling in support of the Scott River Valley Groundwater Sustainability Plan estimated average streamflow depletion of 43 to 65 cfs for the September through October period from 1991 to 2018 due to groundwater pumping.

4. Riparian Impacts. Rapid lowering of the Scott Valley water table may interrupt the

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natural succession of riparian tree species and hinder the success of riparian planting projects. Basically, the issue is whether trees can grow roots fast enough to keep up with the drop in water table elevation. Riparian shade is critical for maintenance of natural stream temperatures. A North Coast Water Board staff simulation on the effects of riparian vegetation on stream temperatures indicates that riparian vegetation has great potential for reducing the temperature of the Scott River.

Aquatic habitats within the Scott River Watershed are known to support one special-status species, coho salmon, and six CDFW species of special concern: Chinook salmon; steelhead; river lamprey; Klamath River lamprey; Pacific lamprey; and Miller Lake lamprey.

The Scott River Watershed was added to the Section 303(d) list in 1992 due to elevated sediment levels, in 1998 due to elevated water temperatures, and in 2012 due to observed biostimulatory conditions between Youngs Dam and Boulder Creek, tributary to the Scott River. Excessive sediment loads, elevated water temperatures, and biostimulatory conditions have impaired many designated beneficial uses of the Scott River and its tributaries. Several of the primary beneficial uses impaired are those uses associated with the cold-water salmonid fishery. Salmonid populations in the Scott River watershed have declined significantly from historic levels and coho salmon are listed as threatened under the state and federal Endangered Species Acts. Excessive sediment loads and elevated water temperatures have resulted in the non-attainment of water quality objectives for sediment, suspended material, settleable material, and water temperature. The Action Plan for the Scott River Sediment and Temperature Total Maximum Daily Loads, hereinafter the Scott River TMDL Action Plan or Action Plan, was adopted by the North Coast Water Board on December 7, 2005, and amended into the Basin Plan on September 8, 2006, following approval by the United States Environmental Protection Agency. The Scott TMDL Action Plan describes the implementation actions necessary to achieve the Sediment and Temperature TMDLs and attain water quality standards in the Scott River watershed.

This Initial Study provides a description of existing conditions relative to each CEQA topic area in the Environmental Checklist in the “background” discussion at the beginning of each environmental topic within Section D, Evaluation of Potential Environmental Impacts below.

VII. BASELINE CONDITIONS

This environmental analysis considers potential environmental impacts of implementing the Scott and Shasta Order. It considers actions that may be taken to comply with the Scott and Shasta Order, beyond those actions that have already been implemented voluntarily and through compliance with the Scott and Shasta Waivers.

The baseline conditions for the purpose of this environmental analysis include:

1. Existing Commercial Agricultural Operations.

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2. Existing physical conditions, including management practices that are already implemented through voluntary state and federal conservation programs.
3. Existing physical conditions as a result of existing permits, WDRs, and waivers of WDRs issued by the North Coast Water Board or the State Water Resources Control Board.

Existing Regulatory Framework

Discharges and controllable water quality factors from Commercial Agricultural Operations in the Project Area have been regulated by the Scott and Shasta Waivers (Waivers of Waste Discharge Requirements) beginning in 2006, with subsequent revisions in 2012 and 2018 (Order R1-2018-0018 and Order R1-2018-0019 for the Scott and Shasta Waivers, respectively), and renewals in 2023. These regulatory orders waived the requirement to file a Report of Waste Discharge (ROWD) and obtain WDRs, pursuant to Water Code section 13269, for discharges addressed in the Scott River and Shasta River TMDL Action Plans, for dischargers who choose to participate in the on-going collaborative programs including the implementation, as applicable, of the recommended measures described in the TMDL Action Plans.

In the Scott River watershed, 24 ranches have been assessed for compliance with applicable conditions, representing approximately 31% of the stream frontage in the watershed adjacent to agricultural activities. Of these 24 ranches, 9 Grazing and Riparian Management Plans have been required and are now being implemented to address documented water quality concerns.

In the Shasta, 15 Ranches have been assessed for compliance, including approximately 22 miles of the Shasta River mainstem frontage, the entire Parks Creek and Big Springs Creek frontage, and approximately 1.3 miles of the Little Shasta River. 13 ranches have been required to submit and now operate under Ranch Management and Monitoring Plans, or the equivalent as determined by Regional Water Board staff,

Existing Voluntary Water Quality Management

Prior to the adoption of the TMDLs, Commercial Agricultural Operators, in coordination with watershed partners, voluntarily implemented management practices including riparian fencing, off-channel stockwater systems, tailwater detention and recovery systems, riparian planting, and instream restoration projects focused on salmonid habitat improvements. These practices and projects have been supported by both the investment of individual landowners as well as agency funded grants and contracts. Additionally, a group of landowners in the upper Shasta River, below Lake Shastina and above Julien Creek, entered into a voluntary Safe Harbor Agreement with NOAA NMFS beginning in 2021. These agreements include commitments by the landowners to implement specific actions on their properties to support and improve salmonid habitat in exchange for coverage of incidental take of listed species under routine ranch management practices. The Upper Shasta Safe Harbor Agreement was remanded by a federal judge for insufficient environmental impact assessment and is currently undergoing further environmental assessment in response to this court action. To the

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extent that management practices were implemented prior to initiating development of the Scott and Shasta Order, they are considered to be part of the baseline physical conditions.

In addition to the regulatory work conducted under the Scott and Shasta Waivers, the North Coast Water Board cultivated voluntary grant-funded projects that total 6 million dollars since the adoption of the Scott River TMDLs for sediment and temperature to support TMDL related work in the watershed. These projects have resulted in the following benefits to water quality:

4. Approximately 25 acres of riparian plantings;
5. 17.8 miles of riparian fencing;
6. 2,200 feet of bioengineered bank restoration;
7. Various geomorphic assessments;
8. Hydrologic disconnection of 53 rural road treatment sites,
9. Reach-scale restoration planning; and
10. Development of the Scott Valley Integrated Hydrologic Model, which is used by the Siskiyou County Groundwater Sustainability Agency to develop and implement the Scott Valley Basin Groundwater Sustainability Plan and is under active development guided by the State Water Resources Control Board to understand groundwater and surface water dynamics under drought conditions.

In the Shasta River Watershed, the North Coast Water Board cultivated voluntary grant-funded projects that total approximately 6 million dollars since the adoption of the Shasta River TMDLs for dissolved oxygen and temperature to support TMDL-related work in the watershed. This funding has resulted in the removal of one channel-spanning dam on the mainstem Shasta, installation of 12.3 miles of riparian fencing, 21 off-channel stockwater systems, 1.4 miles of riparian plantings, two projects improving irrigation diversions on cold-water springs that resulted in an increase of spring water left instream, permanently stopped 10 cfs of tailwater from entering the Shasta River by funding the implementation of various best management practices on private land, and an updated assessment of current tailwater discharge conditions in the lower Shasta River. Continuous water quality monitoring in the Shasta River includes 12 dissolved oxygen stations, 32 temperature stations, and four meteorological stations measuring atmospheric conditions within the riparian zone.

VIII. AGENCY DETERMINATION

Depending on how Enrollees choose to respond to requirements of the Scott and Shasta Order, mitigation measures will be required of Enrollees to avoid, minimize, and reduce potential impacts on the environment. However, it is expected that

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implementation of certain requirements of the Scott and Shasta Order may have a significant impact on certain environmental resource areas and, therefore, an Environmental Impact Report (EIR) will be prepared for the project.

IX. PUBLIC PARTICIPATION AND REVIEW

In order for the public and regulatory agencies to have an opportunity to submit oral comments on the scope of the EIR, a scoping meeting will be held during the 30-day scoping period. The purpose of a scoping meeting is to seek input from public agencies and members of the public on the range of project actions, alternatives, reasonably foreseeable methods of compliance, significant impacts to be analyzed, cumulative impacts, if any, and mitigation measures that will reduce impacts to a less than significant level as part of the development of the Scott and Shasta Order; and to eliminate from detailed study any issues found not to be important.

Scoping may also assist in resolving concerns of affected federal, state, and local agencies, the proponent of the action, and other interested persons. Early public involvement assists North Coast Water Board staff in refining the scope of the Project and determining the range of environmental information and potential impacts the Project might have on the various categories of environmental resources such as tribal cultural resources and agriculture.

Regional Water Board staff plan to host one hybrid scoping meeting on February 26, 2025. The meeting will include a presentation on the administrative draft Scott and Shasta Order and potential adverse environmental impacts associated with implementation of the Scott and Shasta Order. Agencies and the public will have the opportunity to provide oral comments during the CEQA scoping meeting and/or by submitting written comments any time during the 30-day scoping period. See the Notice of Preparation (NOP) for meeting details.

Following the scoping period, North Coast Water Board staff will begin developing a Draft EIR to include further analysis of potential direct and indirect impacts of the Scott and Shasta Order related to reasonably foreseeable management practices that Agricultural Operations may implement to comply with the Scott and Shasta Order. CEQA Guidelines Section 15123(b)(3) requires identification of “issues to be resolved,” which in this case includes the North Coast Water Board making a choice among project alternatives and whether and how to mitigate significant impacts of actions taken to comply with the Scott and Shasta Order.

The purpose of the alternatives analysis in an EIR is to describe a range of reasonable alternatives to the project that could feasibly attain the objective of the project, and to evaluate the comparative merits of the alternatives (CEQA Guidelines, §15126.6, subd. (a)). Additionally, CEQA Guidelines section 15126.6, subdivision (b) requires consideration of alternatives that could avoid or substantially lessen any significant adverse environmental effects of the Project, including alternatives that may be more costly or could otherwise impede the Project’s objectives, and CEQA Guidelines section

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15126.6, subdivision (e) requires consideration of the No Project Alternative.

The Project is the North Coast Water Board's discretionary action to adopt the Scott and Shasta Order for the protection of water quality associated with Agricultural Operations and achievement of TMDLs. The North Coast Water Board will prepare a Draft EIR, which includes a properly noticed public review period of a least 30-days. Following the close of the comment period, staff will prepare responses to comments received on the Draft EIR in preparation of the Final EIR. The North Coast Water Board will review the Final EIR before certifying it as meeting the requirements of CEQA during a properly noticed public hearing. Once the EIR is certified, it will be considered by the North Coast Water Board along with other important information, which will likely be presented at the time it considers adoption of the Scott and Shasta Order.

X. INITIAL STUDY

A. PROJECT DESCRIPTION AND BACKGROUND

| | |
|---|---|
| Project title: | General Waste Discharge Requirements for Specific Agricultural Operations in the Scott River and Shasta River Watersheds |
| Lead agency name & address: | California Regional Water Quality Control Board North Coast Region 5550 Skylane Blvd. Suite A Santa Rosa, CA 95403 |
| Contact person: | Elias Scott, Senior Environmental Scientist (707) 576-2610 elias.scott@waterboards.ca.gov |
| Project location: | Scott River and Shasta River Watersheds |
| Description of project: | See Sections I through V above. |
| Setting and surrounding land uses: | See Section V. above. |

Other public agencies whose approval is required:

No other public agency approvals are required for the Scott and Shasta Order.

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

The North Coast Water Board contacted six (6) tribes on the current Native American Heritage Commission Tribal Consultation (NAHC) List on December 16, 2024.

B. ENVIRONMENTAL RESOURCES POTENTIALLY IMPACTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions
- Hazards/Hazardous Materials
- Hydrology/Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems
- Wildfire
- Mandatory Findings of Significance

C. LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A

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MITIGATED NEGATIVE DECLARATION will be prepared.

- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signed,

  Digitally signed by
Valerie Quinto
Date: 2025.01.31
08:42:50 -08'00'

Valerie Quinto
Executive Officer
North Coast Regional Water Quality Control Board

D. EVALUATION OF POTENTIAL ENVIRONMENTAL IMPACTS

Various management practices are expected to be implemented by Commercial Agricultural Operations to comply with the Scott and Shasta Order. Anticipated compliance actions that implicate possible environmental effects are summarized below. Due to actions taken to comply with the Scott and Shasta Waiver, and voluntary efforts of some Commercial Agricultural Operations, various management practices are already being implemented and are part of the existing baseline setting. CEQA requires review of environmental impacts that may result from implementation of management practices that may have potentially significant adverse effects on the environment.

The Environmental Checklist and discussion that follows is based on sample questions provided in the CEQA Guidelines, which focus on various individual concerns within 20 different broad environmental categories, such as air quality, cultural resources, land use, and traffic (and arranged in alphabetical order). The Guidelines also provide specific direction and guidance for preparing responses to the Environmental Checklist. Each question in the Checklist essentially requires a “yes” or “no” reply as to whether or not the project will have a potentially significant environmental impact of a certain type and following the Checklist for each major environmental heading are citations, information and/or discussion that supports that determination.

The Checklist provides, in addition to a clear “yes” reply and a clear “no” reply, two possible “in-between” replies, including one that is equivalent to “yes, but the Lead Agency has made changes to the project to mitigate the impact”, and another “no” reply that requires a greater degree of discussion, supported by citations and analysis of existing conditions, threshold(s) of significance used and project effects than required for a simple “no” reply. Each possible answer to the questions in the Checklist, and the different types of discussion required, are discussed below:

Potentially Significant Impact. Checked if a discussion of the existing setting (including relevant regulations or policies pertaining to the subject) and project characteristics with regard to the environmental topic demonstrates, based on substantial evidence, supporting information, previously prepared and adopted environmental documents, and specific criteria or thresholds used to assess significance, that the project will have a potentially significant impact of the type described in the question.

Less Than Significant with Mitigation. Checked if the discussion of existing conditions and specific project characteristics, also adequately supported with citations of relevant research or documents, determine that the project clearly will or is likely to have particular physical impacts that will exceed the given threshold or criteria by which significance is determined, but that with the incorporation of clearly defined mitigation measures into the project such impacts will be avoided or reduced to less-than-significant levels.

Less Than Significant Impact. Checked if a more detailed discussion of existing

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conditions and specific project features, also citing relevant information, reports or studies, demonstrates that, while some effects may be discernible with regard to the individual environmental topic of the question, the effect would not exceed a threshold of significance which has been established by the Lead or a Responsible Agency. The discussion may note that due to the evidence that a given impact would not occur or would be less than significant, no mitigation measures are required.

No Impact. Checked if brief statements (one or two sentences) or cited reference materials (maps, reports or studies) clearly show that the type of impact could not be reasonably expected to occur due to the specific characteristics of the project or its location (e.g., the project falls outside the nearest fault rupture zone, or is several hundred feet from a 100-year flood zone, and relevant citations are provided). The referenced sources or information may also show that the impact simply does not apply to projects like the one involved. A response to the question may also be "No Impact" with a brief explanation that the basis of adequately supported project-specific factors or general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a basic screening of the specific project).

Actions to comply with the Scott and Shasta Order would result in a multitude of environmental benefits, including reducing pesticide, nutrient, and sediment inputs to surface waters; reducing stream temperature impacts from loss of riparian shade, depletion of interconnected surface water, and surface water diversions; improving water quality; improving channel stability; improving fish habitat; and enhancing riparian habitat. In some cases, however, it is possible that the adoption of the Scott and Shasta Order could lead to potentially significant impacts that will be evaluated in the EIR.

Project Alternatives A reasonable range of potentially feasible project alternatives, in addition to the no project alternative, will be developed and evaluated in the EIR. The North Coast Water Board will consider comments of responsible and trustee agencies, and the public provided during the scoping period in the development of project alternatives.

1. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:

| | | | | |
|--------------------|--------------------------------|---------------------------------------|------------------------------|-----------|
| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--------------------|--------------------------------|---------------------------------------|------------------------------|-----------|

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| | | | | |
|--|--|--|---|--|
| a) Have a substantial adverse effect on a scenic vista? | | | X | |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | X | |
| c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | | X | |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | X | |

Background

Commercial Agricultural Operations in the Project Area that would be subject to the Scott and Shasta Order are located in a rural agricultural setting. These lands are visible from public roads and neighboring properties and may also be partially visible from public open space areas. Commercial Agricultural Operations are conducted on parcels ranging from 100 to 15,000 acres. Commercial Agricultural Operations may include equipment sheds, corrals, field roads, fuel storage, water tanks, and pesticide mixing areas.

The Project Area is a rural agricultural region with scenic vistas, including a dramatic mountain ranges, forested hills, scrub and grass lands, agricultural lands along with the

Scott and Shasta Rivers. Dozens of miles of local roads cross through the Project Area in addition to several miles of interstate and state highways.

Discussion of Impacts

a) Would the project have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The Scott River and Shasta River Watersheds are situated in a scenic area of north central California with expansive views of agricultural lands, mountain ranges, scrub/grass lands, and forested hills. There are abundant scenic vistas at various vantage points in the Watersheds. Implementation of management practices in response to the Scott and Shasta Order are expected to be small in scale (planting of vegetative buffers, expanded riparian zones, constructing irrigation tailwater controls, and road drainage improvements) with no large building construction anticipated. Changes to aesthetic qualities of the Scott and Shasta Watersheds that could result in response to the Scott and Shasta Order are expected to be limited to minor alterations to vegetation and topography that are low in profile (i.e., located near the ground surface) and will therefore blend into the existing landscape.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. The Scott and Shasta Watersheds contain expansive forests and scenic rock formations in addition to well-established agricultural operations. Portions of the Volcanic Legacy Scenic Byway (designated State Scenic Highway) are located in the project area. The types of management practices that are expected to be implemented in response to the Scott and Shasta Order would not affect these features. Reasonably foreseeable management practices anticipated to be implemented in response to the Scott and Shasta Order are intended to preserve and enhance riparian areas, including trees, enhance vegetated buffers, and to prevent or minimize erosion of both of soil and rock. Some Commercial Agricultural Operations are adjacent to a designated State Scenic Highway; however, reasonably foreseeable management practices would typically be small in scale and designed to enhance and protect water resources.

A management practice that requires land disturbance, such as the construction of a tailwater control basin is expected to include minor surface soil excavation or grading during construction which would be temporary in nature and would not result in permanent damage to scenic resources.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. As described above, Commercial Agricultural Operations subject to the Scott and Shasta Order are located in a rural agricultural setting. The visual character of the area is generally open, typified by field crops, scrub/grasslands, mountain ranges, and forested hillsides. Implementation of management practices could result in small scale, temporary alteration of ground cover vegetation or topography that would not be highly visible and would not degrade or change the overall visual character of the rural agricultural setting or the surrounding viewshed areas. Therefore, the impacts to scenic resources would be less than significant.

d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The project would not require Commercial Agricultural Operations subject to the Scott and Shasta Order to install any lighting or structures that could create light or glare and impair day or night-time views. Therefore, the impacts related to creating a new source of substantial light or glare are less than significant.

2. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the CalFIRE regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

| | | | | |
|--------------------|--------------------------------|---------------------------------------|------------------------------|-----------|
| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--------------------|--------------------------------|---------------------------------------|------------------------------|-----------|

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| | | | | |
|--|---|--|--|---|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | X | | | |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | X | | | |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? | | | | X |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | | | | X |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | X | | | |

Background

The California State Department of Conservation produces maps of counties with Important Farmlands which are agricultural lands that based on their soil characteristics are especially well suited for agricultural production. Based on the Farmland Mapping and Monitoring Program Regional Water Board staff estimated that approximately six

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(6) and five (5) percent of the Scott River and Shasta River Watersheds, respectively, are mapped as Important Farmland.

Commercial Agricultural Operations subject to the Scott and Shasta Order conducted on Important Farmland are described as follows: in the Scott River Watershed, they are concentrated within the alluvial valley of the mainstem Scott River and the alluvial portions of its major tributaries and consist of hay/grain crops, livestock production, and irrigated pasture; in the Shasta River Watershed, they are concentrated along major surface water bodies (Parks Creek, Shasta River, Big Springs Creek, and Little Shasta River) and consist of hay/grain crops, raising livestock, and irrigated pasture.

The Scott and Shasta Order is expected to result in the implementation of management practices to comply with Riparian Zone and Irrigation Management requirements. Riparian Zone requirements include conditions and/or prohibitions on grazing, tillage, and disturbing vegetation. Irrigation Management requirements include conditions and/or prohibitions on tailwater discharges and implementation of management practices associated with extractions of surface water and groundwater interconnected with surface water. Riparian Zone and Irrigation Management requirements are intended to prevent or minimize heat loads to surface waters in addition to discharges of sediment, nutrients, and pesticides. Irrigation Management requirements related to management practices associated with groundwater extractions and surface water diversions are intended to prevent or minimize controllable water quality factors such as depletion of cold water necessary to implement the temperature water quality objective.

Implementation of the Scott and Shasta Order is consistent with the current Siskiyou County General Plan Conservation Element which includes several objectives related to Agriculture (Preserve and protect the prime and productive land and the agricultural economy of Siskiyou County) and Wildlife Habitat (Preserve and maintain stream, lakes, and forest open space as a means of providing natural habitat for species of wildlife) and includes recommendations to maintain all species of fish and wildlife for their intrinsic and ecological values. Relevant recommendations for Agriculture in the Conservation Element include "Prime agricultural land, wherever possible, should be separated and protected from other uses and only those uses related to agriculture should be located on prime agricultural lands." Relevant recommendations for Wildlife Habitat in the Conservation Element include "Present land uses which result in siltation or pollution of inland waters should be carefully monitored, and if necessary corrected to assure clean and productive habitat."

For almost the last 100 years, certain diversions of surface water in the Scott and Shasta River watersheds (and some groundwater in the Scott River Watershed) have been subject to formal regulatory restrictions. More recently, both watersheds are implementing locally controlled groundwater sustainability plans, which consider groundwater pumping and interconnected surface waters. In 2021, 2022, and 2023, the State Water Resources Control Board adopted emergency regulations authorizing curtailments of water diversions where flows are insufficient to protect fish.

Discussion of Impacts

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Potentially Significant Impact(s). Riparian Zone requirements of the Scott and Shasta Order may cause conversion of lands mapped as Prime Farmland, Unique Farmland or Farmland of Statewide Importance to a different agricultural use or to a non-agricultural use. If the land converted to a non-agricultural use is enrolled in a Williamson Act it may conflict with the Act's purpose to conserve agriculturally productive land. Prevailing case law states that as long as 50 percent or more of the land under a Williamson Act contract is in agricultural use, the remainder can be used for open space. While it is unlikely that Riparian Zone requirements would result in more than 50 percent of a specific agricultural parcel enrolled in Williamson Act contract being converted to riparian habitat uses, this possibility cannot be entirely ruled out. These potential conversions would only affect a relatively narrow band of land on either side of watercourses where compliance measures to prevent or minimize elevated stream temperatures and loss of riparian vegetation could take agricultural land out of production and convert it to a different agricultural use or a non-agricultural use. Some Commercial Agricultural Operations subject to the Scott and Shasta Order have, as a condition of coverage under the Scott and Shasta Waivers or through voluntary initiatives, already converted Important Farmland to riparian vegetation or changed the agricultural use to one that is compatible with natural succession of riparian vegetation. In response to compliance with Riparian Zone requirements, the footprint of riparian vegetation may expand, and vegetative buffers may be planted. Increases in riparian vegetation would have beneficial impacts to water quality by filtering pollutants, providing shade, and lowering stream temperatures.

Irrigation Management requirements of the Scott and Shasta Order to implement management practices associated with extractions of surface water and groundwater interconnected with surface water may result in changes in timing, rate, and volume of surface water and groundwater diversions which could impact agricultural production of certain Commercial Agricultural Operations. This Initial Study does not analyze the potential indirect conversion of Important Farmland to a different agricultural use or a non-agricultural use as a result of changes to agricultural production in the Scott River and Shasta River Watersheds from compliance with Irrigation Management requirements.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. Implementation of management practices would not conflict with existing zoning for, or cause rezoning of forest land (as Defined in Public Resources Code section 12220(g)) or timberland (as defined by Public Resources Code section 4526).

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. Implementation of management practices would not result in the loss of forest land or conversion of forest land to non-forest use because Agricultural Operations are typically located on lands which are zoned for agriculture. Some Commercial Agricultural Operations may graze animals on timberlands; however, reasonably foreseeable management practices are not expected to prevent growing of timber. If Commercial Agricultural Operations in timber production zones or forested lands implement management practices that require conversion of timberland, that action would trigger local county land use regulations and California Department of Forestry and Fire Protection timber harvest regulations under the Forest Practice Act and associated planning and permitting processes by those agencies. Requirements of the Scott and Shasta Order would not cause conversion of forest lands. Therefore, no impacts are anticipated.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | X |
| b) Result in a cumulatively considerable net increase of any criteria pollutant for which | | | | X |

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| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | | | | |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | | X |
| d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | | | | X |

Background

According to the California Air Resources Board (Air Board), the Project Area is in the Northeast Plateau Air Basin and is regulated by the Siskiyou County Air Pollution Control District. “No Impact” determinations in this section are based on evaluation of reasonably foreseeable management practices implemented in response to the Scott and Shasta Order which may generate particulates and other air pollutants from construction equipment exhaust and land disturbance. Construction of these management practices are expected to disturb relatively small areas of land (a fraction of a percent of the approximately 1,600 square mile Project Area) and will be very limited in duration (several days) such as the development of vegetative buffers, grassy swales, sediment basins, and road drainage improvements. Although Agricultural Operations subject to the Scott and Shasta Order are typically located in Agriculture Zoning Districts, some are adjacent to schools and single-family residential areas. These impacts are not expected to be significant relative to baseline conditions and not expected to result in violation of air quality standards. Conformity requirements do not apply as Siskiyou County is designated as attainment or is unclassified for all current National Air Quality Standards.

4. BIOLOGICAL RESOURCES

| Would the Project: | Less Than Significant with Mitigation | Less Than Significant Impact Mitigation | No Impact Significant Impact | No Impact |
|--|---------------------------------------|---|------------------------------|-----------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | | | | X |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service? | | | | X |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X |

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| Would the Project: | Less Than Significant with Mitigation | Less Than Significant Impact Mitigation | No Impact Significant Impact | No Impact |
|--|---------------------------------------|---|------------------------------|-----------|
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | | | | X |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | X |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | | | | X |

Background

The Scott and Shasta Order is developed specifically to protect beneficial uses relied upon by aquatic resources in the watersheds, including fish, wildlife, and rare and endangered species, which are threatened by or have been adversely affected by discharges from Agricultural Operations. Reasonably foreseeable management land disturbing practices implemented in response to the Scott and Shasta Order are not expected to occur within watercourses, riparian areas, or unfarmed wetlands. The North Coast Water Board designs its water quality programs to protect beneficial uses associated with the Region’s biological resources and Riparian Zone. Requirements of the Scott and Shasta Order include conditions and prohibitions and/or within and adjacent to watercourse and wetlands. According to U.S. Fish and Wildlife, other than for the Northern Spotted Owl and Greater Sandhill Crane (grazing lands only), no critical habitat for threatened and endangered species is located on the agricultural lands of the Scott and Shasta watersheds. The Scott and Shasta watersheds are important

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steelhead- and salmon-producing streams in the Klamath River Basin and support numerous fisheries including the culturally and commercially significant Upper Klamath Trinity fall-run Chinook Salmon evolutionarily significant unit (ESU), the culturally significant KMP steelhead Distinct Population Segment (DPS), and the culturally significant Southern Oregon/Northern California Coast (SONCC) coho salmon ESU. The SONCC coho salmon is listed as a threatened species under both the federal and state ESAs and is identified as being at high and moderate risk of extinction in the Shasta River and Scott River, respectively. For a more detailed discussion, refer to the January 2024, State Water Resource Control Board Finding of Emergency and Informative Digest for Scott River and Shasta River Watersheds Proposed Emergency Regulation¹⁴. Agricultural Operations subject to the Scott and Shasta Order are adjacent to and/or drain to these steelhead and salmon producing waterbodies. No Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans are located in the Project Area.

5. CULTURAL RESOURCES

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | | | | X |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | | X | | |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries? | | X | | |

Background

Over the millennia, native peoples have occupied the Project Area and archaeological

¹⁴https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/scott_shasta_rivers/docs/2024/ssd-digest-01122024.pdf

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investigations have confirmed over 10,000 years of human presence in the Middle Klamath Basin (from Scott River to the former site of Iron Gate Dam). Mammal remains document their use as a food source for native people approximately 7,500 years before the present (BP). The presence of milling slabs, mortars, and mullers on the landscape dating back to approximately 6,000 BP, provides evidence for use of bulbs and seeds for subsistence. Use of fish, as a food source, began about 2,600 years BP. The Scott and Shasta watersheds are within the ethnographic territory of the Shasta Indians, who are one of four northern California Hokan-speaking groups collectively termed Shastan peoples. The Karuk Tribe lived along the Klamath River and also made their way over the Marble and Salmon mountains into the Scott Valley area. Traditional beliefs indicate that these groups have occupied the Project Area for time immemorial. During the spring and summer, Shastan people established temporary hunting and gathering camps in the foothills and mountains to make use of seasonally available resources in those ecological zones. Shastan people relied on a subsistence pattern emphasizing gathering, hunting, and fishing, and use of a variety of plant and animal resources as they became seasonally available. Karuk people hunted fish and other aquatic resources and using harpoons, nets, and hooks and facilities such as weirs, dams, and fishing platforms. Karuk also constructed canoes from hollowed out logs for fishing and transportation along the Klamath River and its tributaries. Transportation along rivers and streams was essential to Karuk ceremonial activity.

The first European exploration of Siskiyou County and the Shasta basin was in the late 1820s, when fur trappers from the Hudson's Bay Company entered the area in search of pelts. These explorers were soon followed by cattle drivers, bringing cattle from the Sacramento Valley to the Oregon settlements. Most notable was the contact with Thomas McKay in 1836 and his company of trappers who worked the rich beaver streams of the Scott Valley. Scott Valley was named for John Scott, a prospector who found gold at Scott Bar in 1850 and, soon after, an influx of people started coming into Siskiyou County. With the exception of small military missions, these were the only European explorers to the area until the 1849 gold rush, which established the first permanent settlers in the basin and soon there were over 2,000 miners working in the Yreka area. Siskiyou County was founded on March 22, 1852, from parts of Shasta and Klamath Counties, and named after the Siskiyou Mountain range. With the increased population came an increased need for food, supplies, and lumber. Many ranchers, farmers, and businesspeople followed the gold rush settling in the area. By the early 1900s, farming, ranching, and timber harvest were the dominant land uses within the Project Area.

CEQA §15064.5 considers historic resources significant if they are eligible for, or are listed in, the California Register of Historical Resources. Historic resources must meet one of the following criteria to be eligible:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

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- It is associated with the lives of persons important to local, California, or national history.
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values.
- It has yielded, or has the potential to yield, information important to the pre-history or history of the local area, California, or the nation.

Discussion of Impacts

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact with Mitigation. Reasonably foreseeable management practices implemented to comply with the Scott and Shasta Order could involve minor grading and construction activities. All of these minor grading and construction activities are expected to fall within the existing, developed agricultural lands. It is, therefore, unlikely that most management practices would cause a substantial adverse change in the significance of a historical or archaeological resource pursuant to section 15064.5. Although there always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources, impacts to cultural resources would be relatively rare because most management practices involve the construction of small features that would be sited within previously disturbed areas, such as existing unpaved roads and fields, and within previously disturbed depths. On relatively few occasions, management practices may require excavation or grading in areas or to depths not previously disturbed, raising the possibility of impacting cultural resources buried at greater depths with the potential to alter or destroy historical, archaeological, or paleontological resources or human remains.

For management practices that involve modifications to previously undisturbed soils (i.e., below the levels of current agricultural practices, or in areas that have not previously been cultivated or developed) or a structure that may qualify as a historical resource, mitigation measures such as retaining an archeologist to perform a records search and potentially a pedestrian survey will be included in the Scott and Shasta Order. Cultural resources are identified, relocating or redesigning the management practice will be required to avoid impacts to the resources.

VI. ENERGY

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| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | | X |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | | X |

Background

This section evaluates the potential energy-related impacts of implementing the Scott and Shasta Order. The analysis considers both direct and indirect energy consumption associated with implementation of reasonably foreseeable management practices. Current energy use in the project area by Agricultural Operations primarily consists of electricity and fossil fuels for various operations, include but not are not limited to herding livestock, water pumping, field preparation, crop maintenance, and harvesting activities.

Discussion of Impacts

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact. Implementation of the Scott and Shasta Order is not expected to significantly increase energy consumption. While some reasonably foreseeable management practices may require initial energy inputs for implementation (e.g., changes in tillage practices or construction of sediment basin), they are generally designed to improve overall resource efficiency, including energy use. Improved land management practices (nutrient management and erosion control) can often lead to reduced fuel consumption for farm equipment and decreased reliance on energy-intensive inputs.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

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No Impact. Requirements of the Scott and Shasta Order align with state and local goals for energy efficiency in the agricultural sector. By promoting more efficient land management practices, the Scott and Shasta Order supports broader energy conservation objectives.

6. GEOLOGY AND SOILS

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | X |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | | X |
| ii) Strong seismic ground shaking? | | | | X |
| iii) Seismic-related ground failure, including liquefaction? | | | | X |
| iv) Landslides? | | | | X |

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| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| b) Result in substantial soil erosion or the loss of topsoil? | | | | X |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | | | X |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | | | | X |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? | | | | X |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | X | |

Background

The Project includes implementation of management practices selected by Commercial Agricultural Operations to prevent and minimize impacts to water quality. Management practices involving land disturbance are expected to include construction of vegetative

filter strips, grassy swales, and possibly sediment basins in addition to drainage improvements on field roads. No structures for human habitation are expected to be constructed and management practices are expected to reduce erosion and sediment discharges to surface waters from baseline conditions.

The implementation of most management practices would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. A search of the GBIF (the Global Biodiversity Information Facility, an international network and data infrastructure funded by the world's governments) did not return any palaeontologic records for the project area. Unique geologic features located with the project area include springs, mountain peaks, bluffs, and caves which are typically not associated with Commercial Agricultural Operations subject to the Scott and Shasta Order.

7. GREENHOUSE GAS EMISSIONS

| Would the Project | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | X | |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | | X |

Background

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs)¹⁵. The major greenhouse gases of concern include the following:

- Carbon dioxide (CO₂) -- Carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by

¹⁵ <http://www.epa.gov/climatechange/ghgemissions/gases.html>

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plants as part of the biological carbon cycle.

- Methane (CH₄) -- Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.
- Nitrous oxide (N₂O) -- Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.
- Fluorinated gases -- Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are synthetic, powerful greenhouse gases that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for stratospheric ozone-depleting substances (e.g., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent greenhouse gases, they are sometimes referred to as High Global Warming Potential gases ("High GWP gases").

A statewide GHG inventory conducted by the California Air Board indicates that of the total GHG emissions in California in 2019, the categories of GHG sources rank as follows by percent contribution: transportation (49 percent); industrial processes, including landfills and wastewater treatment (22 percent); commercial and residential fuel uses (14 percent); electricity generation (5 percent) agriculture and forestry (8 percent); and electricity imports (5 percent)¹⁶.

Net GHG emissions in the state increased from 1990 to 2004 by about 12%. The source categories contributing most significantly to the increase in emissions came from electricity generation (19% increase above 1990 contributions from this source category), transportation (21% increase), agriculture and forestry (39% increase) and an increase in unspecified emission sources (1161% increase). These increases were balanced by decreases in other source categories, including decreased emissions from commercial and residential fuel uses (13% decrease) and industrial fuel uses (7% decrease). The Global Warming Solutions Act of 2006 (AB 32) calls for the reduction by 2020 of GHG emissions to California's 1990 levels.

In 2006, California passed the California Global Warming Solutions Act of 2006, which requires the California Air Resources Board (CARB) to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide greenhouse gas (GHG) emissions are reduced to 1990 levels by 2020 (representing an approximate 25 percent reduction in emissions). In May 2014, CARB approved the First Update to the Climate Change Scoping Plan (CARB, 2014), which builds upon the initial Scoping Plan with new strategies and recommendations. The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals, highlights the latest climate change science and provides direction on how to

¹⁶ <https://ww2.arb.ca.gov/ghg-inventory-data>

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achieve long-term emission reduction goal described in Executive Order S-3-05. The nine early action measures have been documented to reduce California's GHG emissions with an estimated reduction of 13.16 percent from 1990 emissions in the year 2018. As a result of these programs' implementations, California has met its goal to reach 1990 emissions levels by 2020 and had done so by 2016, four years before its proposed target year.¹⁷

State law requires local agencies to analyze the environmental impact of GHG emissions under CEQA. The Natural Resources Agency adopted the CEQA Guidelines Amendments in 2009. Siskiyou County Air Pollution Control District North Coast Unified AQMD does not appear to have adopted Rule 111 (Federal Permitting Requirements for Sources of Greenhouse Gases) into the District rules, to establish a threshold above which New Source Review (NSR) and federal Title V permitting applies, and to establish federally enforceable limits on potential to emit greenhouse gases for stationary sources. These plans address stationary sources that would result in long-term, operation increases in GHG emissions.

Discussion of Impacts

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Adoption of the Scott and Shasta Order itself will not cause a direct impact to greenhouse gases (GHGs). Implementation of reasonably foreseeable management practices above baseline conditions are expected to slightly increase greenhouse gas emissions relative to baseline conditions from heavy equipment used to construct management practices; however, these impacts are expected to be minor and temporary.

Increases in riparian vegetation as a result of Riparian Zone and Irrigation Management requirements are expected to counteract some of the expected increase in GHGs over baseline conditions as it results in an increase in woody biomass sequestering carbon from the atmosphere.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The Scott and Shasta Order will be consistent with the State Water Board Resolution No. 2008-0030 which directs Water Board staff to "require...climate change considerations, in all future policies, guidelines, and regulatory actions."

¹⁷ Drotman, C., Huff, R., Le, C., *A Look at CARB's AB32 GHG Programs from Early Action to Today*, July 2021

8. HAZARDS AND HAZARDOUS MATERIALS

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | X | |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | | | X | |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | X | |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | X |

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| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | | | | X |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires? | | | | X |

Background

A CEQA analysis includes evaluation of the Project impacts with respect to the use of hazardous substances, proximity to hazardous waste facilities, proximity to airports, likelihood of interfering with emergency response, and potential to expose people to significant wildfire risk.

Routine operations at Agricultural Operations involve the storage and use of hazardous materials such as agricultural chemicals and petroleum products. Agricultural Operations contain facilities to store and mix agricultural chemicals such as pesticides, fungicides, herbicides, and fertilizers. These chemicals are a potential source of pollution to surface and groundwater if not properly stored, applied, and managed. The production, use, disposal, and management of registered agricultural chemicals used at Agricultural Operations are regulated by County Agricultural Commissioners and California Department of Food and Agriculture (CDFA) and Hazardous Materials used at Agricultural Operations covered by multiple state and federal laws including Resource

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Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is the primary federal regulation overseeing the production and use of beneficial poisons. Hazardous materials business plans (HMBP) are enforced by local county fire and emergency response divisions. California Department of Toxic Substances Control (DTSC) regulates hazardous waste sites that are not within federal jurisdiction.

The Scott and Shasta Order would not require additional environmental protective measures dealing with hazardous materials and wastes beyond those already being required and enforced under current state or federal laws.

Discussion of Impacts

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant. Implementation of certain management practices which require the use of heavy equipment are expected to involve the transport and use of materials that would qualify as hazardous pursuant to the California Health and Safety Code section 25501(o). These materials include gasoline and diesel to fuel equipment, and hydraulic fluid associated with equipment operations and machinery. Fuels and lubricant quantities used to implement certain management practices would be small in quantity and their application would be limited to the operation of construction-related equipment and vehicles. These types of hazardous materials are currently used at all Agricultural Operations to power farm equipment such as trucks and tractors.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact. Implementation of management practices are not expected to result in the emission or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, nor are they expected to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5. Again, there is the possibility that hazardous materials (e.g., oil, gasoline) may be present during implementation of management practices which require the use of heavy

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equipment, but potential risks of exposure would be small, especially with proper handling and storage procedures. All risks of exposure would be short-term and would be eliminated with the completion of construction activities.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

g) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. There are two airports located in the Project Area, the Siskiyou County Airport and the Scott Valley Airport which are surrounded by Commercial Agricultural Operations some of which are expected to be subject to the Scott and Shasta Order. Actions taken by Commercial Agricultural Operations in response to the Scott and Shasta Order are not expected to expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Commercial Agricultural Operations located within alluvial valleys and/or along major watercourses (typically hay/grain crops) are typically surrounded by moderate to very high fire hazard severity hazard zones. Commercial Agricultural Operations located within upland areas are typically located within moderate to very high fire hazard severity hazard zones.

9. HYDROLOGY AND WATER QUALITY

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Violate any water quality standards or waste discharge requirements? | | | | X |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project | | | X | |

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| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| may impede sustainable groundwater management of the basin? | | | | |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would: | | | X | |
| i) result in substantial erosion or siltation on- or off-site; | | | X | |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite; | | | X | |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | | | X | |
| iv) impede or redirect flood flows? | | | X | |

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| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | | X |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | | X |

Background

The State Water Board and the North Coast Water Boards are the primary agencies with responsibility for the protection of water quality pursuant to the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) as codified in Water Code Division 7. The Legislature declared that the activities and factors that may affect the quality of waters of the state shall be regulated to attain the highest water quality that is reasonable, considering all demands being made on it (California Water Code section 13000). Water Code section 13242 requires that a program of implementation for achieving objectives include the following:

- 1) A description of actions necessary for achieving WQOs, including recommendations for appropriate action by any entity, public or private;
- 2) A time schedule for actions to be taken; and
- 3) Surveillance to be undertaken to determine compliance with objectives.

California Water Code (CWC) section 13260(a)(1) requires that any person discharging waste or proposing to discharge waste within the North Coast Water Board’s jurisdiction, other than to a community sewer system, that could affect the quality of waters of the state, file a ROWD with the North Coast Water Board, unless the North Coast Water Board waives such requirement pursuant to CWC section 13269. The North Coast Water Board may, at its discretion, issue WDRs pursuant to CWC section 13263(a).

CWC section 13263 (i) authorizes the North Coast Water Board to prescribe general WDRs for a category of discharges if:

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- the discharges are produced by the same or similar operations,
- the discharges involve the same or similar types of waste,
- the discharges require the same or similar treatment standards,
- the discharges are more appropriately regulated under general WDRs than individual WDRs, and
- the general WDRs implement relevant water quality control plans and take into consideration, among other things, the beneficial uses of water to be protected, the water quality objectives reasonably required for that purpose, and the need to prevent nuisance.

The State Water Board's 2004 Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy) states that all non-point source discharges that can affect water quality must be regulated by either WDRs, waivers of WDRs, or prohibitions.

The Basin Plan is the North Coast Water Board's master water quality control planning document. It designates beneficial uses and WQOs for waters of the state, including surface waters and groundwater. The Region's TMDLs and associated implementation plans to achieve WQOs are also part of the Basin Plan. Pursuant to the Basin Plan, and Board plans and policies, (including State Water Board Resolution No. 88-63), and consistent with the CWA, the existing and potential beneficial uses of waters in the North Coast Region include:

- Municipal and Domestic Supply (MUN)
- Agricultural Supply (AGR)
- Industrial Service Supply (IND)
- Industrial Process Supply (PRO)
- Groundwater Recharge (GWR)
- Freshwater Replenishment (FRSH)
- Navigation (NAV)
- Hydropower Generation (POW)
- Water Contact Recreation (REC-1)
- Non-Contact Water Recreation (REC-2)
- Commercial and Sport Fishing (COMM)
- Cold Freshwater Habitat (COLD)
- Warm Freshwater Habitat (WARM)
- Wildlife Habitat (WILD)
- Preservation of Areas of Special Biological Significance (ASBS)
- Preservation of Areas of Special Rare, Threatened, or Endangered Species (RARE)
- Marine Habitat (MAR)
- Migration of Aquatic Organisms (MIGR)
- Spawning, Reproduction, and/or Early Development (SPWN)

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- Shellfish Harvesting (SHELL)
- Estuarine Habitat (EST)
- Aquaculture (AQUA)
- Native American Culture (CUL)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Wetland Habitat (WET)
- Water Quality Enhancement (WQE)
- Subsistence Fishing (FISH)
- Inland Saline Water Habitat (SAL)

Surface Waters

The surface water quality issues of most concern in the Scott River Watershed are impairments from elevated water temperatures, excess sediment, and biostimulatory conditions and in the Shasta River Watershed are impairments from elevated water temperature and low dissolved oxygen. Both watersheds are on the Clean Water Act section 303(d) list of impaired waters for the aforementioned pollutants and have U.S. EPA approved TMDLs for the temperature, dissolved oxygen, and sediment impairments.

The North Coast Water Board adopted the Action Plan for the Scott River Sediment and Temperature Total Maximum Daily Loads (Scott River TMDL Action Plan) on December 7, 2005, and amended it into the Basin Plan. The Action Plan describes the implementation actions necessary to achieve the Sediment and Temperature TMDLs and attain water quality standards in the Scott River watershed. The Scott River TMDL Action Plan assigns specific actions for the North Coast Water Board and Dischargers. The implementation actions are designed to encourage and build upon on-going, proactive restoration and enhancement efforts in the watershed. Beginning in 2006,

The Action Plan for the Shasta River Temperature and Dissolved Oxygen Total Maximum Daily Loads (Shasta River TMDL Action Plan) was adopted by the North Coast Water Board on June 28, 2006, (Resolution No. R1-2006-0052) and amended into the Basin Plan. The Shasta River TMDL Action Plan describes the implementation actions necessary to achieve the Temperature and Dissolved Oxygen TMDLs and attain water quality standards in the Shasta River watershed. The action plan sets forth specific implementation actions required of the North Coast Water Board and Dischargers to achieve these standards

Groundwaters

The groundwater quality issue of most concern within the Project Area is the potential for elevated levels of nutrients, salts, and pesticides associated with agriculture. On April 15, 2021, the North Coast Water Board adopted Resolution R1-2021-0006 Groundwater Basin Evaluation and Prioritization Results Supporting Salt and Nutrient Management Planning as required by the State Water Resource Control Board

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Recycled Water Policy. In adopting the Resolution, the North Coast Water Board did the following:

- 1) accepted a process for prioritizing and evaluating groundwater basins;
- 2) accepted priority basins¹⁸ as having a relatively high threat from salts and nutrients;
- 3) acknowledged that the priority status of groundwater basins may change and the list of priority basins will be updated a minimum of every five years as required by the Recycled Water Policy;
- 4) acknowledged that the Recycled Water Policy grants the authority to the North Coast Water Board Executive Officer to determine priority groundwater basins for salt and nutrient management planning and to update the list of priority basins; and
- 5) directed staff to proceed with developing a non-regulatory Policy Statement for Groundwater Protection which outlines a range of strategies to protect high groundwater quality and improve degraded groundwater quality within the region and to present the Policy Statement for Board consideration within the shortest time practicable.

Resolution R1-2021-0006 identified the Scott River Valley Groundwater Basin as a Priority 2 basin for salt and nutrient management planning. Priority 1 and 2 Basins exhibit a relatively high threat from salts and nutrients and thus would benefit from salt and nutrient management planning. Existing and potential beneficial uses applicable to groundwater in the Scott River and Shasta River Watersheds include, Municipal and Domestic Water Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), Industrial Process Supply (PRO), Native American Culture (CUL), Freshwater Replenishment to Surface Waters (FRSH), and Aquaculture (AQUA). The Basin Plan also establishes water quality objectives for the protection of these beneficial uses.

Discussion of Impacts

a) Would the project violate any water quality standards or waste discharge requirements?

No Impact. By requiring Commercial Agricultural Operations to implement compliance measures to preserve and maintain shade, prevent and minimize sediment, pesticide

¹⁸ Priority Basins: Santa Rosa Plain, Smith River Plain, Scott River Valley, Mad River Lowland, Eureka Plain, Eel River Valley, Anderson Valley, Fort Bragg Terrace Area, Ukiah Valley, Sanel Valley, Alexander Area, Cloverdale Area, Healdsburg Area, Rincon Valley, Wilson Grove Formation Highlands, Lower Russian River Valley, Fort Ross Terrace Deposits

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and nutrient discharges, and conditions/prohibitions related to water diversions increasing stream temperatures, the Scott and Shasta Order will have an overall beneficial impact on water quality in the Project Area. Compliance with the Scott and Shasta Order will not violate any water quality standards or waste discharge requirements.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would: i) result in substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or offsite; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows?

Less than Significant. Management practices to prevent and minimize the discharge of sediment, nutrients, and pesticides would not reduce groundwater recharge (e.g., interception ditches, vegetative buffers, allowing natural succession of riparian shade, sediment basins, grassy swales). Some management practices such as contour farming, sediment basins, and grassy swales have the potential to cause minor changes to drainage patterns, but not at levels expected to exceed capacity of existing stormwater drainage system on county roads. Irrigation Management conditions/prohibitions may result in decreases in flood irrigation and applied irrigation water, but are not expected to significantly affect groundwater recharge. In the Scott River watershed, Commercial Agricultural Operations that are likely to implement management practices to control tailwater discharges are generally located in areas where groundwater elevations are near the ground surface and groundwater recharge from current irrigation practices is minimal. In the Shasta River Watershed, the areas that may receive groundwater recharge from flood irrigation are likely implementing management practices to control tailwater discharges and are generally limited in size. Groundwater recharge from current irrigation practices is, therefore, minimal.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact. Requirements of the Scott and Shasta Order will be designed to reduce the discharge of pollutants.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. Requirements of the Scott and Shasta Order further the goals of the Basin

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Plan. Groundwater Sustainability Plans for the Scott Valley and Shasta Valley groundwater basins include projects and management actions to reverse the impacts of water diversions on streamflow depletion and, therefore, support the purpose and intent of the Scott and Shasta Order related to the attainment of the water quality objective for temperature.

10. LAND USE AND PLANNING

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Physically divide an established community? | | | | X |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |

Background

It is not the intention of the Project to interfere with or supersede any land use plan, policy, or regulation of another agency. Any project implemented under this proposed program should be designed in a manner consistent with other applicable land use plans, policies, or regulations.

The Scott and Shasta Order would apply to Commercial Agricultural Operations within the Project Area. Siskiyou County General Plan policies relevant to Commercial Agricultural Operations and water quality are summarized, below, in Table 2.

Table 2. Siskiyou County Conservation and Land Use General Plan Policies and Recommendations

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| POLICY | PROJECT COMPLIANCE |
|---|--|
| <p>Policy 36.1 Only agricultural Use are permitted on prime agricultural land.</p> | <p>The Scott and Shasta Order does not require a conversion of prime agricultural to non-agricultural use such as commercial or residential development. It may result in the conversion of a relatively minor amount of prime agricultural land to riparian vegetation, which may be used for compatible agriculture such as grazing.</p> |
| <p>Policies I.1 and I.4 Protect the physical environment, which now means that we must return it to its natural state insofar as possible and practical. Prevent pollution of water, air, and land.</p> | <p>The Scott and Shasta Order implements plans and policies designed to protect and restore water quality for all beneficial uses.</p> |
| <p>Policy H. Watershed and Water Recharge Levels. Recommendations 2. Continue to assure the high quality of water within the county with management programs for agricultural waters and emphasizing programs which stop intrusion of agricultural waste into the water supply. 3. Every precaution must be maintained to eliminate the danger of any pollution to the streams and lake as well as recharge areas through human and industrial and agricultural runoff.</p> | <p>The Scott and Shasta Order will regulate Commercial Agricultural Operations to prevent and minimize the discharge of wastes to surface waters and groundwaters including pesticides, nutrients, sediment, and heat loads.</p> |

Discussion of Impacts

- a) Would the project physically divide an established community?**
- b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

No Impact. The Scott and Shasta Order is not a land use regulation and new Commercial Agricultural Operations are not approved by it. The Scott and Shasta Order

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requires that Commercial Agricultural Operations implement management practices to reduce nonpoint source pollutants. Reasonably foreseeable management practices are not expected to include the construction of large permanent structures or other features that could divide a community, nor would they physically divide an established community. None of the reasonably foreseeable management practices identified would physically divide an established community.

The primary goal of the Scott and Shasta Order is the protection and restoration of water quality and beneficial uses of water in the Project Area. It is unlikely that compliance with the Scott and Shasta Order would conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, any specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Depending on management practices selected by Commercial Agricultural Operators, direct or indirect impacts to existing fish or wildlife habitat are not expected to occur and, if they do, they are expected to be minor and temporary. No Habitat Conservation Plans (HCP) or Natural Community Conservation Plans (NCCP) are presently located with the Project Area.

11. MINERAL RESOURCES

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | | | X |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | | | | X |

Background

The Scott and Shasta Order is not expected to apply to aggregate or hard rock mining

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operations which are generally not collocated with Commercial Agricultural Operations expected to comply with the Scott and Shasta Order. The California Surface Mining and Reclamation Act of 1975 (SMARA) required identification of mineral resources in California. The California Department of Conservation is the state agency responsible for implementing and enforcing SMARA regulations and preparing SMARA maps of significant mineral resources in each county. SMARA maps do not exist for Siskiyou County.

Discussion of Impacts

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. Compliance with the Scott and Shasta Order may include minor earthmoving during grading for implementation of certain management practices (e.g., sediment basin, grassed swale, or contour farming). These projects would be relatively small in scale and would not result in the loss of availability of a known mineral resource or physically preclude future mining activities from occurring. None of the reasonably foreseeable management practices are expected to result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state or the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

12. NOISE

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | X | |

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| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| b) Generation of excessive groundborne vibration or groundborne noise levels? | | | X | |
| c) For a project located within-the vicinity of a private airstrip or-an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | | | | X |

Background

The Project Area is substantially rural, with a limited number of small communities; the largest being Yreka.

Commercial Agricultural Operations subject to the Scott and Shasta Order are located in a rural agricultural setting where the main noise sources are from agricultural activities and nearby public roads and highways. Furthermore, Commercial Agricultural Operations are typically located away from schools, hospitals, and other sensitive land uses. Residential uses in or adjacent to agriculturally zoning districts are very low density, consisting typically of only a few residences or small neighborhoods.

Adoption of the Scott and Shasta Order may result in an increase in implementation of projects that could involve minor grading and construction (e.g., planting vegetated buffers and construction of detention basins) that may result in local, temporary, construction-related noise emissions above ambient noise levels. Increased noise levels would be limited to the immediate area of grading operation and construction site. Increased noise levels would be limited to the immediate area of grading and construction operations and would not expose sensitive receptors to harmful levels of noise, which are likely to be located substantial distances from an Commercial Agricultural Operation. Reasonably foreseeable management practices implemented to comply with the Scott and Shasta Order are not expected to result in any on-going new noise sources.

The Siskiyou County Code includes a Right-To-Farm Ordinance, which states that no agricultural activity, operation or facility or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards and with all chapters of this code, as established and followed by similar agricultural operations, shall be or become a nuisance, public or private, pursuant to this code after the same has been in operation for more than three (3) years, if it was not a nuisance when it began.

Discussion of Impacts

a) Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b) Would the project generate excessive groundborne vibration or groundborne noise levels?

c) For projects located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Less Than Significant. The Scott and Shasta Order could involve earthmoving and construction activities by Commercial Agricultural Operations. Construction would generally be small in scale, short-term in duration, and could temporarily generate noise above ambient levels. Increased noise levels would likely be associated with heavy equipment operation associated with construction of certain management practices.

For example, noise levels from activities such as road construction and/or maintenance would not exceed the existing levels and the loudest activities from other construction actions can be planned during peak daily noise. There is no adopted Noise Ordinance for Siskiyou County; thus, limits on noise are not regulated by Siskiyou County Municipal Code. Nonetheless, construction activities that may result from compliance with the Scott and Shasta Order would not result in substantial noise, and the impacts would be less than significant.

The Scott and Shasta Order would not cause any permanent increase in ambient noise levels, including aircraft noise. An insignificant quantity of reasonably foreseeable management practices would be located within an airport land use plan or within two miles of a public airport or public use airport. The use of heavy equipment for the construction and installation of certain management practices could result in temporary increases in existing noise levels, but the noise associated with heavy equipment use is not any louder than noises that would typically occur within the vicinity of a private airstrip. Therefore, it would not expose people living within an area subject to an airport land use plan to excessive noise and thus, no impact would occur.

13. POPULATION AND HOUSING

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | | | | X |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | | | | X |

Background

Implementation of the Scott and Shasta Order would occur in areas where the dominant land use is agriculture. Commercial Agricultural Operations typically contain structures including processing and equipment sheds, fencing, wells, roads, and stream crossings.

Discussion of Impacts

a) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. Actions to implement the Scott and Shasta Order would not affect the population of the Project Area. None of the reasonably foreseeable Management practices are expected to induce substantial population growth in the Project Area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). None of the reasonably foreseeable management practices are expected to displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. None of the reasonably foreseeable management practices would displace substantial

numbers of people, necessitating the construction of replacement housing elsewhere.

14. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--------------------------|--------------------------------|---------------------------------------|------------------------------|-----------|
| Fire protection? | | | X | |
| Police protection? | | | | X |
| Schools? | | | | X |
| Parks? | | | | X |
| Other public facilities? | | | | X |

Background

This section characterizes existing and proposed public services in the Project Area and evaluates changes that may result from actions to comply with the Scott and Shasta Order. Public services include services that address community needs are usually provided by local or regional government, although they may be provided through private contracts. Public services include fire and emergency response, police protection, airports, schools, libraries, and parks.

The unincorporated area of the Project Area is served by the several fire districts (Scott Valley Fire Protection District, Gazelle Fire Department, CALFIRE, Weed Volunteer Fire Department, Montague Fire Protection District, Grenada Fire Protection District, Yreka Volunteer Fire District, Mount Shasta Visits Volunteer Fire Protection Company, and South Yreka Fire Protection District) with many stations. The Project Area is served by the Scott Valley Unified School District, and Yreka Union High School District Siskiyou

Union High School District serving over 5,000 students. The Siskiyou County Sheriff, California Highway Patrol, and Yreka Police Department provide law enforcement in the Project Area.

Discussion of Impacts

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: i) Fire protection?

Less Than Significant. Logically, the increase in riparian vegetation increases the fuel loads for wildfires. While fuel loads do not cause fires, the increasing mass available can increase the severity of a fire and could impact the demand on fire protection services. In general, agricultural lands tend to function as fire breaks and fire crews use these lands to their advantage to ensure that they can stop the spread of the fire or stop the front of the fire from coming through. However, many Commercial Agricultural Operations have voluntarily implemented riparian setbacks resulting in expanded riparian shade and vegetated buffers thus the expansion of riparian vegetation is expected to be limited. Therefore, the potential impacts to fire protection public services are less than significant.

ii) Police protection; iii) Schools; iv) Parks; v) Other public services?

No Impact. The Scott and Shasta Order would not result in adverse impacts on police services or on schools and parks since the Scott and Shasta Order is not growth inducing nor does it involve construction of substantial new government facilities or the need for physically altered government facilities. While the Scott and Shasta Order includes provisions that may result in temporary and minor construction activity, these activities are not expected to affect roads used for public safety or fire protection service vehicles. Therefore, the Scott and Shasta Order would not result in changes to roadway networks on private property that would affect service routes, response times, or other performance objectives for any public services. The Scott and Shasta Order does not involve new or physically altered government facilities. Because the proposed project does not involve these elements, therefore, the appropriate finding is no impact.

15. RECREATION

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | | | | X |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | | | | X |

Background

The North Coast Water Board implements water quality protection programs designed to result in water quality suitable for full contact water recreation such as swimming and surfing (REC-1), as well as non-contact water recreation (REC-2). Other beneficial uses potentially relevant to recreational uses include Navigation (NAV), Commercial and Sport Fishing (COMM), and Shellfish Harvesting (SHELL). As a predominantly rural region, the Project Area recreational opportunities in addition to water-related activities, including hunting, camping, hiking, horseback riding, bike riding, and bird watching.

The County of Siskiyou, City of Yreka, United States Forest Service, and private parties support, own, and/or operate parks and recreational facilities in the Project Area. These facilities provide a variety of outdoor recreational, educational, and sporting opportunities for local residents and visitors around the world.

Discussion of Impacts

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration

of the facility would occur or be accelerated?

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. Reasonably foreseeable management practices implemented in response to the Scott and Shasta Order would occur on Commercial Agricultural Operations and are not expected effect on existing neighborhood and regional parks or other recreational facilities. Therefore, no impacts would occur.

16. TRANSPORTATION

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | | | | X |
| b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? | | | | X |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | X |
| e) Result in inadequate emergency access? | | | | X |

Background

The Project Area is serviced by District 2 of the California Department of Transportation

(CalTrans). Highway 3 (Scott Valley) and Interstate 5 (Shasta Valley) are the major north-south highway corridors in the Project Area. Highway 5 is the main north-south highway on the west coast of the United States, consisting of four lane segments, vulnerable to traffic delays during snowstorms and when road work is undertaken. Highway 3 is a two-lane State Highway in Scott Valley. City, County and private roads serve the urban and rural areas and are generally two-lane roads.

The Scott and Shasta Order contains specific requirements to improve private roads serving Commercial Agricultural Operations; however, improvements would occur on roads under the control of private landowners and operators and would not affect public roads or maintenance easements.

Discussion of Impacts

a) Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

b) Would the project conflict with an applicable congestion management program, including but not limited to, level of service standards and travel demand measures and other standards established by the county congestion management agency for designated roads or highways?

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

d) Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e) Would the project result in inadequate emergency access?

f) Would the project conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact. The Scott and Shasta Order may result in temporary and minor increases in truck traffic. Where implementation of reasonably foreseeable management practices requires soil disturbance, minor short-term additional vehicular traffic could increase on roads serving Commercial Agricultural Operations. Construction may require importing construction materials such as gravel, pipe, or compost and would require the use of trucks. Minor construction-related truck traffic is likely to be limited in number and duration, be in rural settings, and would likely not occur during peak traffic periods. Any increase in traffic would be minor, temporary and would be limited to local areas in the vicinity of individual projects and would not create substantial traffic increases on existing street systems. Construction activities have the potential to increase traffic

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volumes or reduce speeds on public roads. However, no road design or construction hazards would occur or result in roads that are incompatible with Commercial Agricultural Operations.

The project does not involve installation of hazardous design features and will not affect emergency access or parking capacity. The Scott and Shasta Order would not result in increased air travel or otherwise affect air travel. The project will not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Because the project does not involve these elements, the appropriate finding is no impact.

17. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k) | | X | | |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a | | X | | |

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| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|-----------------------------------|--------------------------------|---------------------------------------|------------------------------|-----------|
| California Native American tribe. | | | | |

Background

The history of Native American peoples in the Project Area has been traced back over 10,000 years. The area north of Mount Shasta and west into Scott Valley was the territory of the Shasta Indians. The Karuk Tribe lived along the Klamath River and also made their way over the Marble and Salmon mountains into the Scott Valley area. The Modocs lived east of Mount Shasta and up into Butte Valley and the Klamath Basin. The Wintu people lived south of Mount Shasta. The Achomawi and Klamath native peoples also had historical territory within what is now Siskiyou County.

Four tribes (Klamath Karuk, Modoc, Shasta) – originally occupied the Scott Valley, Shasta Valley, and Klamath River region. Located in Scott Valley, the Quartz Valley Indian Reservation (QVIR), is a federally recognized tribe representing people of Klamath, Karuk and Shasta ancestry was originally chartered as a result of the Indian Reorganization Act of June 18, 1934, or Wheeler-Howard Act. That federal legislation established it as a sovereign, self-governing, federally recognized American Indian Tribe. The QVIR adopted its constitution and by-laws on June 15, 1939. Its original membership was drawn from Shasta and Karuk cultural groups. The QVIR lost its federal status on January 20, 1967, as a result of the California Rancheria Termination Act of 1958. Federal recognition was restored on December 22, 1983, through the US Federal Court decision Tillie Hardwick, et al. v. United States of America, et al. (Case #C-79-1710-SW).

Prior to termination, the QVIR totaled 605 acres, all of which were distributed among Tribal members at the time of termination. Most of that land was subsequently sold or lost through the legal process during the termination period. At the time of that first Hardwick decision, 129.64 acres of land were restored to the Tribal trust. Today, the reservation consists of approximately 210 acres, comprised mostly of trust land with some fee parcels. It is in a sub-valley of agricultural Scott Valley (ranching, farming, logging/forestry, recreation), about 10 miles from Fort Jones and 12 miles from Etna.

Discussion

Tribal cultural resources are known to exist in the Project Area. Many of the reasonably

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foreseeable management practices that could be implemented under the Project would have little to no potential to impact Tribal Cultural Resource (TCRs). For example, practices such as applying less fertilizer, applying pesticides per labeling directions, and other similar practices would not impact TCRs. These activities would take place within existing agricultural lands and would not substantially change any landscape, site, or place that could have tribal cultural significance. Likewise, many of the monitoring and reporting activities that could occur under the Project (e.g., surface water monitoring, pedestrian, and vehicle trips to monitoring sites, groundwater sampling and analysis via existing wells) would have no potential to substantially affect TCRs.

While Project activities would have limited to no potential to substantially affect sites, features, places, or cultural landscapes that could be TCRs, certain activities could potentially affect buried objects or materials that could be TCRs.

Construction/installation of reasonably foreseeable management practices that involve ground disturbance (e.g., sediment basins and vegetated filter strips) could potentially uncover buried TCRs. However, while most activities would occur within existing agricultural areas that have been subject to prior disturbance, it is possible that certain management practices could be constructed/installed in areas adjacent to existing agricultural areas that have not been subject to prior disturbance. Facilities such as sediment basins could be installed on the periphery of agricultural lands to receive runoff and could be placed in undisturbed areas. Additionally, certain management practices, although located within existing agricultural areas, could be installed to depths below the prior disturbance limits (e.g., excavation for construction of a sediment basin could disturb soil to five feet deep, whereas routine disturbance from tilling and other activities typically only reaches up to two-three feet deep). These types of activities could potentially impact TCRs if they were present within the proposed disturbance area and proper protocols were not followed.

Where management practices involve modifications to previously undisturbed soils (i.e., below the levels of current agricultural practices, or in areas that have not previously been cultivated or developed), mitigation measures such as retaining an archeologist to perform a records search and potentially a pedestrian survey will be included in the Scott and Shasta Order. If cultural resources are identified, relocating or redesigning the management practice will be required to avoid the resources and are expected to reduce impacts to less than significant.

18. UTILITIES AND SERVICE SYSTEMS

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects? | | | | X |
| b) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | | X |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | | | | X |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | | | | X |
| e) Comply with federal, state, and local statutes and regulations | | | | X |

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|-------------------------|--------------------------------|---------------------------------------|------------------------------|-----------|
| related to solid waste? | | | | |

Background

Wastewater services in Shasta Valley are provided by the City of Yreka, City of Montague, and Lake Shastina Community Service District and in Scott Valley by the cities of Etna and Fort Jones and by individual sewage disposal systems elsewhere. Domestic water is supplied by several municipal water suppliers to the urban and rural residential area with private domestic wells or surface water diversions elsewhere. Agricultural water is supplied by several irrigation districts along with private agricultural wells and surface water diversions. No active landfills are located within the Project Area. The Project Area is served by public services including fire and police protection, schools, parks, and other public facilities (refer to discussion in Section N above).

Discussion of Impacts

- a) **Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?**
- b) **Does the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**
- c) **Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?**
- d) **Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**
- e) **Does the project comply with federal, state, and local statutes and regulations related to solid waste?**

No Impact. The Scott and Shasta Order does not include relocation or construction of

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new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Reasonably foreseeable management practices would not include construction of new or expanded municipal stormwater drainage facilities or other drainage system affecting any non-agricultural activities. Changes to agricultural practices on Commercial Agricultural Operations would reduce erosion, sedimentation, peak runoff, and flooding, all beneficial environmental effects.

The Scott and Shasta Order would not increase population or provide employment; therefore, it would not require an ongoing water supply. It would also not require ongoing wastewater treatment services and would not substantially affect municipal solid waste generation or landfill capacities; therefore, no impacts would occur.

The use of vegetative buffers and grassed swales may require additional irrigation water but may also result in reduced evaporation from soil surfaces, resulting in no or little net change in irrigation water needs.

None of the reasonably foreseeable management practices implemented in response to the Scott and Shasta Order are likely to generate a significant source of solid waste. Implementation of temporary erosion and sediment controls following construction of sediment basins or grassed swales will be very minimal and could therefore be served by an existing landfill. The reasonably foreseeable management practices implemented by Commercial Agricultural Operations are not expected to result in any significant changes in the generation of solid waste and therefore should not affect compliance with federal, state, or local statutes and regulations related to solid waste. Therefore, the appropriate finding is no impact.

19. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | | | | X |

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| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
| b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | | | | X |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | | | | X |
| d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | | | | X |

Background

This section evaluates the potential wildfire-related impacts of implementing the Scott and Shasta Order. The analysis considers both direct and indirect wildfire risks associated with implementation and compliance measures. characterized by a mix of river valleys, grass/scrubs lands, and forested mountains. The Project Area climate is generally hot and dry in the summer, with significant rainfall at higher elevations and outside the rain shadows particularly in winter months. However, climate change has increased wildfire risks even in historically low-risk areas. Key features relevant to wildfire risk in the Project Area include agricultural lands, surface waters, existing riparian corridors, rural communities interspersed with wildland-urban interface (WUI) zones, and seasonal variations in precipitation, with drier conditions typically occurring

from June to September.

Discussion of Impacts

a) Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The Scott and Shasta Order does not include requirements which are expected to impact public roads and therefore emergency access.

b) Would the Project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. While the Scott and Shasta Order includes requirements to allow natural succession of riparian vegetation and vegetated buffers in Streamside Areas, it allows for vegetation management in Streamside Areas consistent with State and Local fire-safe requirements. Furthermore, riparian vegetation adjacent to streams and wetland areas usually has a higher moisture content than surrounding vegetation and it is speculative that allowing natural succession of riparian vegetation would substantially increase wildfire risk.

c) Would the Project Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The Scott and Shasta Order does not require new infrastructure that would exacerbate fire risk. Existing access routes will be maintained, and the Scott and Shasta Order allows for necessary vegetation management.

d) Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. Scott and Shasta Order Streamside Area requirements related to riparian vegetation and buffers are expected to improve soil stability and reduce erosion risks. The ability to manage vegetation for fuel reduction further mitigates potential post-fire risks.

20. MANDATORY FINDINGS OF SIGNIFICANCE

| Would the Project: | Potentially Significant Impact | Less Than Significant with Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-----------|
| <p>a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | | | X | |
| <p>b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p> | | | X | |
| <p>c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</p> | | X | | |

Background

The Scott and Shasta Order would regulate discharges from Commercial Agricultural Operations. Scott and Shasta Order requirements and implementation of reasonably foreseeable management practices are not expected to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. Other actions within Siskiyou County that may, together with the Scott and Shasta Order, affect the environment, are listed below.

- Siskiyou County General Plan Conservation Plan Policies

Adoption of the Scott and Shasta Order would not result in the relaxation of water quality standards and would reduce nonpoint source pollutant discharge from Commercial Agricultural Operations (existing conditions).

Discussion of Impacts

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant. Reasonably foreseeable management practices implemented in response to the Scott and Shasta Order are expected to improve water quality from the current baseline in the watershed.

Reasonably foreseeable management practices that require work in State or Federal waters would undergo consultation with federal, state, and local agencies. Specific mitigation measures would be applied by the agencies to avoid impacts to rare, threatened, or endangered species. See Section I for more discussion of potential impacts to fish and wildlife.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant. Cumulative impacts, defined in section 15355 of the CEQA Guidelines, refer to two or more individual effects, that when considered together, are considerable or that increase other environmental impacts. Cumulative impact

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assessment must consider not only the impacts of the Scott and Shasta Order but also the impacts from other regulatory, municipal, and private projects, which have occurred in the past, are presently occurring, and may occur in the future, in the Project area during the period of implementation.

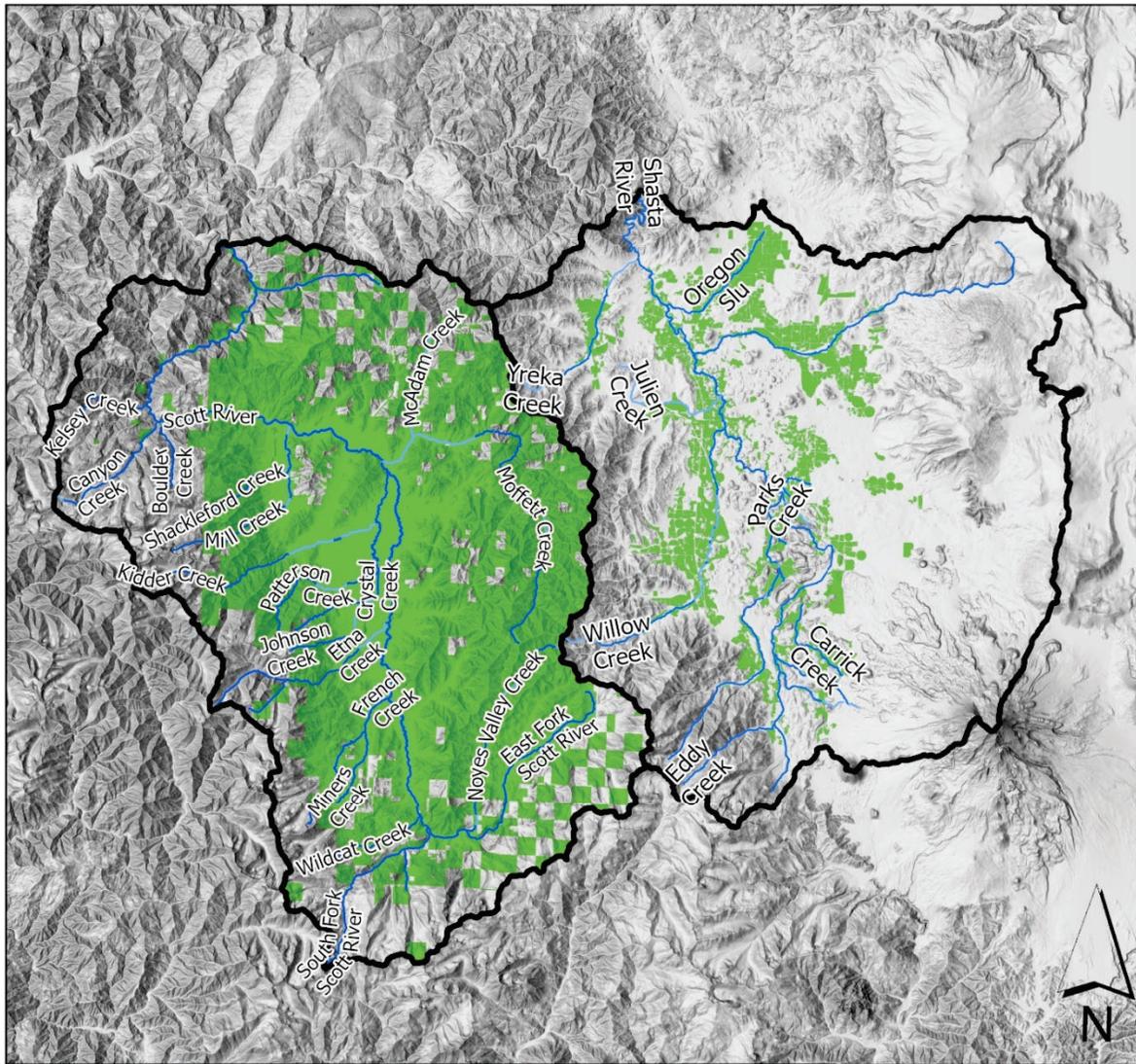
Reasonably foreseeable management practices which do not involve soil disturbance are not likely to have cumulative impacts on the environment. Impacts associated with implementation reasonably foreseeable management practices involving soil disturbance will be small scale, temporary, and will not have significant adverse effects on the environment.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

Less Than Significant with Mitigation. As described in previous sections, the Scott and Shasta Order is designed to improve long term water quality by providing a regulatory program designed to protect and restore water quality and the beneficial uses of water in the Project Area. Based on the analysis provided in this Initial Study there are potential impacts that could adversely affect humans associated with soil disturbances that may adversely affect cultural resources. However, implementing mitigation measures to reduce impacts to cultural resources will likely prevent these potential impacts to less than significant. Also, it is unlikely that all Commercial Agricultural Operations will simultaneously implement management practices that result in the use of heavy equipment through the implementation of reasonably foreseeable management practices and therefore generate levels of emissions, dust, or particulate matter above baseline levels that cause a significant adverse effect to nearby receptors. For cultural resources, if ground disturbing activities occur within previously undisturbed soils or uncover previously undiscovered or documented resources, implementing mitigation measures including cultural resources investigations and proper notifications to the California Historical Resources Information System will likely reduce the level of impact to less than significant.

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FIGURE 1



0 5 10 20 30 40 Miles

Scott and Shasta WDR
 Project Area

Legend

- Scott Coverage Area
- Shasta Coverage Area



0 25 50 100 150 200 Miles

REFERENCES

California Air Resources Board (CARB). 2014. First Update to the Climate Change Scoping Plan, Building on the Framework Pursuant to AB 32 The California Global Warming Solutions Act of 2006.

California Department of Conservation. California Important Farmland Dataset, Accessed December 11, 2024.

California Department of Fish and Wildlife. Scott River Watershed-wide Permitting Program Final EIR, 2009.

California Department of Fish and Wildlife.
<https://wildlife.ca.gov/Conservation/Planning/Banking/Approved-Banks#r1>.
Accessed December 13, 2024.

California Department of Fish and Wildlife. Shasta and Scott River Pilot Program for Coho Salmon Recovery: with recommendations relating to Agriculture and Agricultural Water Use, 2003.

California Regional Water Quality Control Board, North Coast Region. Staff Report for the Action Plan for the Scott River Watershed Sediment and Temperature Total Maximum Daily Loads, 2005.

California Regional Water Quality Control Board, North Coast Region Resolution No. R1- 2005-0113 Amending the Water Quality Control Plan for the North Coast Region to Include the Introductory Basin Plan Language Describing Total Maximum Daily Loads and the Action Plan for The Scott River Watershed Sediment and Water Temperature Total Maximum Daily Loads, 2005.

California Regional Water Quality Control Board, North Coast Region Resolution No. R1- 2006- 0052 Amending the Water Quality Control Plan for the North Coast Region to Include the Action Plan for The Shasta River Watershed, a Major Tributary to the Klamath River, Temperature and Dissolved Oxygen Total Maximum Daily Loads, 2006.

California Regional Water Quality Control Board, North Coast Region Order No. R1- 2006-0052, Conditional Waiver for Discharges Related to Specific Land Management Activities in the Shasta River Watershed North Coast Region, 2006.

California Regional Water Quality Control Board, North Coast Region. Staff Report for the Action Plan for the Shasta River Watershed Temperature and Dissolved Oxygen Total Maximum Daily Loads, 2006.

California Regional Water Quality Control Board North Coast Region ORDER NO. R1- 2006-0081 Conditional Waiver for Discharges Related to Specific Land

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- Management Activities in the Scott River Watershed North Coast Region, 2006.
- California Regional Water Quality Control Board, North Coast Region. Staff Report – Work Plan to Control Excess Sediment in Sediment impaired Watersheds, 2008.
- California Regional Water Quality Control Board North Coast Region ORDER No. R1-2011-0063 Short Term Renewal of ORDER No. R1-2006-0081 Conditional Waiver for Discharges Related to Specific Land Management Activities in the Scott River Watershed North Coast Region, 2011.
- California Regional Water Quality Control Board North Coast Region Order No. R1-2012-0083 Shasta River TMDL Conditional Waiver of Waste Discharge Requirements, 2012.
- California Regional Water Quality Control Board North Coast Region Order No. R1-2012-0084 Scott River TMDL Conditional Waiver of Waste Discharge Requirements, 2012.
- California Regional Water Quality Control Board North Coast Region, ORDER No. R1-2012-0008 Short Term Renewal of Order No. R1-2006-0052 Conditional Waiver for Discharges Related to Specific Land Management Activities in the Shasta River Watershed North Coast Region, 2012.
- California Regional Water Quality Control Board North Coast Region Order No. R1-2012-0070 Short Term Renewal of Order No. R1-2006-0052 For Conditional Waiver for Discharges Related to Specific Land Management Activities in The Shasta River Watershed North Coast Region, 2012.
- California Regional Water Quality Control Board, North Coast Region. Staff Report Supporting the Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plan to Address Temperature Impairment in the Mattole River Watershed, Action Plan to Address Temperature Impairment in the Navarro River Watershed, and Action Plan to Address Temperature Impairment in the Eel River Watershed, 2014.
- California Regional Water Quality Control Board, North Coast Region. North Coast Basin Water Quality Control Plan, 2018.
- California Regional Water Quality Control Board North Coast Region Order No. R1-2018-0018 Scott River TMDL Conditional Waiver of Waste Discharge Requirements, 2018.
- California Regional Water Quality Control Board North Coast Region Order No. R1-2018-0019 Shasta River TMDL Conditional Waiver of Waste Discharge Requirements, 2018.
- California Regional Water Quality Control Board, North Coast Region. Final Staff Report

CEQA Initial Study
Scott River and Shasta River Watersheds
GWDRs for Commercial Agricultural Operations

for North Coast Hydrologic Region Salt and Nutrient Management Planning
Groundwater Basin Evaluation and Prioritization, 2021.

Deas, M., A. Abbott, and A. Bale. 2003. Shasta River Flow and Temperature Modeling
Project. Watercourse Engineering, Inc. 119 pp. +appendix

Department of Water Resources. Shasta Valley, Siskiyou County Groundwater Data
Needs Assessment, 2011.

National Oceanic and Atmospheric Administration - National Marine Fisheries Service.
Finding of No Significant Impact (FONSI) Shasta River Template Safe Harbor
Agreement Klamath River Basin, California, 2020.

Siskiyou County General Plan, 1973 and revised 1997.

Siskiyou County, Siskiyou County, California Local Hazard Mitigation Plan, 2024.

Siskiyou County Flood Control & Water Conservation District. Scott Valley Groundwater
Sustainability Plan, 2021.

Siskiyou County Flood Control & Water Conservation District. Shasta Valley
Groundwater Sustainability Plan, 2021.

State of California, Public Resources Code 21000–21177.

State of California, California Code of Regulations, Title 14, Division 6, Chapter 3,
Sections 15000–15387, California Environmental Quality Act (CEQA) Guidelines,
2024.

State Water Resources Control Board. Policy for Implementation and Enforcement of
the Nonpoint Source Pollution Control Program, May 20, 2004. Sacramento,
California: California Environmental Protection Agency, State Water Resources
Control Board, 2004.

State Water Resources Control Board, Shasta River Watershed Characterization and
Model Study Plan (Draft), 2018.

State Water Resources Control Board, Final EIR Lower Klamath Project License
Surrender, 2020.

State Water Resources Control Board, Scott River and Shasta River Watersheds
Emergency Regulation webpage.
https://www.waterboards.ca.gov/drought/scott_shasta_rivers/ Accessed
December 14, 2024.

University of California, Davis, Groundwater Cooperative Extension Program. Scott
Valley Community Groundwater Study Plan Final Report, 2008.

CEQA Initial Study
Scott River and Shasta River Watersheds
GWDRs for Commercial Agricultural Operations

Watershed Sciences, LLC. 2004 Aerial Surveys using Thermal Infrared and Color Videography: Scott River and Shasta River Sub-Basins. Prepared for the North Coast Regional Water Quality Control Board and University of California Davis. February 26, 2004. 39 pp. + appendix.

Winthrop, Robert, Winthrop Associates. Survival and Adaptation Among the Shasta Indians, 1986.