California Environmental Quality Act (CEQA)

INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

for

GENERAL WASTE DISCHARGE REQUIREMENTS FOR DAIRIES

PREPARED BY:

California Regional Water Quality Control Board
North Coast Region
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SUMMARY

This summary provides a synopsis of the Initial Study and proposed Mitigated Negative Declaration (IS/MND), which have been prepared pursuant to the California Environmental Quality Act of 1970 (CEQA) and State CEQA Guidelines. The Lead Agency for the project, as defined by CEQA, is the California Regional Water Quality Control Board, North Coast Region (Regional Water Board).

Project Description

The proposed project consists of the North Coast Regional Water Quality Control Board adopting and implementing General Waste Discharge Requirements Order R1-2019-0001 (GWDR) for the management of process water, manure, and other organic materials at dairies including the application of such materials to land. The GWDR also covers the discharge of wastes and water quality impacts from owned or leased dairy cattle grazing lands and dairy croplands that have the potential to discharge wastes to surface water and groundwater.

The GWDR includes new requirements for nutrient management, protection of riparian areas, grazing management, and water quality monitoring. Existing dairy facilities are eligible for coverage under the GWDR. This includes existing cow dairies currently covered by Waiver R1-2012-0003 and GWDR Order R1-2012-0002, and existing goat, sheep, and water buffalo dairies in the region. However, the scope of coverage in the GWDR also extends to the following dairy types not currently operating:

1. Former dairies that, although currently inactive, request to reopen at some point in the future; and
2. New or expanded dairy facilities.

The inclusion of new, expanding, and the reopening of inactive dairies in the GWDR require additional CEQA analysis and thus are the focus of this Initial Study and Mitigated Negative Declaration (IS/MND).

This project is consistent with the State Water Resources Control Board's 2004 Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy) which requires that all sources of nonpoint source pollution be regulated through Waste Discharge Requirements (WDRs), through waivers of WDRs, or through prohibitions.

Project Objectives

The objectives of the proposed project are to establish a GWDR for dairies, including any future potential new dairies, expanded dairies, and the reopening of inactive dairies, to adequately:
• Facilitate a streamlined, fair, and consistent approach to regulating and permitting dairy operations;
• Improve and protect water quality;
• Benefit, enhance, restore and protect biological resources, including fish, wildlife, and rare and endangered species;
• Control and reduce sedimentation in surface waters and improve soil conservation;
• Control and reduce adverse groundwater impacts;
• Promote sustainable agriculture and grazing;
• Trap bacteria and other pathogens that cause waterborne illnesses; and
• Monitor water quality trends and changes within dairy watersheds.

Agency Determination

Existing, new, expanding, and reopening of inactive dairies may potentially have a significant effect on the environment. However, potential effects are mitigated by the strict eligibility criteria, discharge prohibitions, waste discharge specifications, monitoring and reporting requirements, and other provisions of the GWDR, such that no significant effects will occur. Prior to enrollment in the GWDR, new, expanding, or inactive dairies must demonstrate compliance with CEQA and this IS/MND.

New dairies will likely be subject to a project-specific CEQA analysis by a county, city, or state agency for evaluation and approval of grading, building construction, and other environmental impacts. Expanding or reopening inactive dairies may include activities that require project-specific CEQA analysis, depending upon the need for grading, construction, or any other environmental impacts that may be caused by operation of the expanded or reopening of the inactive dairy. As such, the conclusions and development of mitigation measures by local land use authorities and other public agencies as they relate to potential environmental impacts for new, expanding or reopening dairies may be different than those determined in this GWDR and its analysis of potential environmental impacts. Therefore, future lead agencies should base their findings on the site-specific information developed for the project.

Existing dairy facilities have up to two (2) years to complete all the required management plans, while operators of new, expanding, or reopening inactive dairy facilities must complete these plans prior to start-up. In addition, these newer operators must implement pond liner requirements for existing, replaced, or reconstructed retention ponds, which are more protective of groundwater quality than those for existing facility retention ponds.

Public Participation and Review

A public workshop was held on November 14, 2018, at the North Coast Regional Water Quality Control Board office in Santa Rosa, to present the draft
documents, answer questions, and obtain input from potentially regulated dairy producers, local agencies, nearby residents, and other interested parties.

The 30-day public comment period for the proposed GWDR begins on November 1, 2018. Comment letters must be received by 5:00 p.m. on December 3, 2018. The proposed GWDR, including this draft environmental document, will be available online beginning November 1, 2018 at: https://www.waterboards.ca.gov/northcoast/public_notices/
A. PROJECT DESCRIPTION AND BACKGROUND

1. Project title: Adoption and Implementation of General Waste Discharge Requirements for Dairies including Existing, New, Expanding, and the Reopening of Inactive Dairies

2. Lead agency name & address: California Regional Water Quality Control Board North Coast Region 5550 Skylane Blvd. Suite A Santa Rosa, CA 95403

3. Contact person & phone number: Cherie Blatt, Water Resources Control Engineer (707) 576-2755 Cherie.Blatt@waterboards.ca.gov

4. Project location: North Coast Region

5. Project sponsor's name & address: California Regional Water Quality Control Board North Coast Region 5550 Skylane Blvd., Suite A, Santa Rosa, CA 95403

6. Description of project:

The proposed project consists of the Regional Water Board establishing a GWDR for the management of process water, manure, and other organic materials at dairies, including the application of such materials to land.

The proposed GWDR will rescind and replace:

- National Pollutant Discharge Elimination System (NPDES) for Concentrated Animal Feeding Operations Within the North Coast Region, Order No. R1-2012-0001 (expired March 31, 2017);

- General Waste Discharge Requirements for Existing Cow Dairies in the North Coast Region, Order No. R1-2012-0002;

- Order No. R1-2016-0045 which is the renewal of the expired Conditional Waiver of Waste Discharge Requirements for Existing Cow Dairies in the North Coast Region, Order No. R1-2012-0003; and

The GWDR may be used to regulate currently operating dairies within the North Coast Region (the Region), as well as a small subset of facilities including any potential new dairies, expanding dairies, and dairies that may reopen within the footprint of an inactive dairy operation. Although several cow dairies throughout the region have closed since 2012 and the total number of cows regulated has decreased, there has been recent public inquiry and interest in starting specialized dairy operations with smaller and more diverse herds, in former, now shuttered dairy facilities.

The GWDR addresses the following:

1. Increased concerns about the collection and management of waste and its impacts to surface and groundwater; and
2. The need for an efficient approach toward regulating any potential new dairies, expanding dairies, or reopening dairies that are fully constructed but not operating.

The GWDR contains conditions, requirements, and new criteria for facility planning, management, and monitoring for those facilities previously regulated by the Waiver R1-2012-0003 and GWDR R1-2012-0002.

Only a few new dairies are expected to request to open in the region. A limited number of dairies may request to expand their herd size. Due to the number of inactive dairies in the region, it is likely that some operators may request to reopen as either dairies of similar size to the original operation, or as smaller, more specialized operations. The existing infrastructure of dairies that request to expand, and the reopening of inactive dairies, may include utilizing existing milking parlors, loafing barns, corrals, travel lanes and creek crossings, covered feed storage areas, and retention ponds for solid and liquid waste management. Operators may be required to replace, reconstruct, or make improvements to their waste management systems and/or general facility to ensure proper function and compliance with GWDR provisions to control sediment, pathogen, and nutrient discharges to surface and groundwater.

To be eligible for GWDR coverage, those seeking to build a new dairy, expand an existing dairy, or start-up a dairy operation utilizing an inactive facility, must comply with the following conditions:

- Prior to start-up, owner/operators must develop site-specific management plans applicable to each operation, in accordance with technical standards outlined in the GWDR. Such plans include a Water Quality Plan, which includes a Riparian Management Plan, and a Nutrient Management Plan for lands where manure products are applied;
- Prior to start-up, manure ponds must comply with Natural Resources Conservation Service (NRCS) Waste Storage Facility Code 313 including a maximum specific discharge (unit seepage rate) of \(1 \times 10^{-6}\) cm/sec. Such ponds may not be used until the Discharger submits a report verifying that the liner meets this requirement. Dairies proposing minimal expansion of herd size may request to be excused from this requirement in their application letter/Notice of Intent for the Executive Officer’s
consideration. Existing operations must not include more animals than the existing infrastructure is designed to accommodate. The GWDR does not authorize expansions of facilities beyond maximum capacity of existing or proposed facilities. Facilities expanding herd size above what the existing infrastructure is designed to accommodate must demonstrate compliance with this Initial Study/Mitigated Negative Declaration. Any dairy proposal that does not meet the specifications of the GWDR and analyzed under this IS/MND must apply for an individual Waste Discharge Requirements.

In addition to eligibility requirements, the dairies will be subject to all provisions of the GWDR. In general, these provisions require:

- That discharges of waste from dairies shall not cause surface water or groundwater to be further degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance. The GWDR also requires monitoring of surface water and groundwater to demonstrate protection of surface water and groundwater;

- Daily management and monitoring of waste management facilities and implementation of site-specific pollution prevention practices that result in the “best practicable treatment or control” of discharges; and

- All Dischargers to prepare and implement management plans for the facility’s production areas, retention ponds, land application areas, and grazing lands, in accordance to specified technical standards.

7. **Setting and surrounding land uses:**

North Coast land uses include a mix of residential, commercial, industrial, municipal, agricultural, and open space. The proposed project, adoption, and implementation of the GWDR for dairies, would potentially affect dairies located throughout the North Coast. However, the focus of the environmental checklist analysis is on potential environmental impacts from new dairy operations, expanding dairy operations, and those that reopen within the footprint of an inactive dairy facility, utilizing former infrastructure. These additional dairies are expected to be in predominantly rural areas that are dominated by agriculture.
Figure 1. Area Map of North Coast Region
8. **Other public agencies whose approval is required:**

No other public agency approvals are required.

9. **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?**

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission’s Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

The Regional Water Board satisfied its obligation to address tribal cultural resources under the notification and consultation provisions of Public Resources Code – Assembly Bill 52 (Gatto). Tribes on the State Water Resources Control Board (SWRCB) Consultation List were contacted in July 2017. One tribe replied and consultation resulted in the language in the Tribal Cultural Resources section of this document.

10. **Activities NOT covered by this Initial Study/Mitigated Negative Declaration IS/MND:**

If by the time of submittal of a Notice of Intent to the Regional Water Board, the Executive Officer decides that the proposed dairy project does not reflect the effects and mitigations described in this IS/MND, then the project will not be permitted. These projects would require revisions to comply with the GWDR and mitigation measures described in this IS/MND, or individual CEQA documentation to support the issuance of individual waste discharge requirements or an individual National Pollutant Discharge Elimination System permit.
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

[ ] Aesthetics       [ ] Agriculture and Forest Resources       [ X] Air Quality
[X] Biological Resources       [X] Cultural Resources       [X] Geology/Soils
[ ] Land Use/Planning       [ ] Mineral Resources       [ ] Noise
[ ] Population/Housing       [ ] Public Services       [ ] Recreation
[ ] Transportation/Traffic     [ X] Utilities/Service Systems     [X] Tribal Cultural Resources

[X] 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.

[X] 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 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.

Cherie Blatt, Water Resource Control Engineer
8/15/19
EVALUATION OF ENVIRONMENTAL EFFECTS

The Environmental Checklist and discussion that follows is based on sample questions provided in the CEQA Guidelines (Appendix G) which focus on various individual concerns within 16 different broad environmental categories, such as air quality, cultural resources, land use, and traffic. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved. A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

Once the lead agency has determined that a physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

"Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
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I. AESTHETICS -- Would the project:

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) Substantially degrade the existing visual character or quality of the site and its surroundings? X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?  

X

**Background:**

New, expanding, and newly reopened dairies subject to the GWDR would generally be in rural areas. These lands are visible from roads and neighboring properties and may also be partially visible from open space areas. Ranchlands tend to consist of large open, grassland areas. Trees may be present, particularly along riparian corridors. Ranch structures typically include one or more residences, barns, equipment sheds, fences, watering and feeding areas, roads, and road crossings.

**Discussion of Impacts:**

a) **Have a substantial adverse effect on a scenic vista.**

**Less than Significant Impact:** New dairies would generally be built in rural areas already utilized for farming and ranching. The expansion of existing dairies covered by this IS/MND is not expected to change the aesthetics of the area. Dairies that restart operations within an existing inactive dairy footprint would generally utilize the existing physical facilities. Minor alterations to an existing inactive dairy, in terms of repair and rehabilitation, including the installation of mechanical equipment to milk, contain, or process the milk product, are expected. In the case of expanded dairies, the only physical change to the landscape in many cases would be the addition of animals. Only one dairy in the past eight years has requested information about a permit for a new dairy. The addition of cows is expected to be limited to a small number at existing dairies or at an inactive dairy facility. Therefore, impacts to scenic vistas would be less than significant.

b) **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 expansion of existing dairies and the reopening of inactive dairies would generally involve the addition of cows and some traffic associated with farm activities. These activities will not damage the scenic resources within a state scenic highway. Permit compliance and pollution prevention actions associated with the GWDR may affect land adjacent to designated State scenic highways; however, these actions would typically be few and usually small in scale. Impacts from removal of a few trees would be minor. Such compliance actions could require the construction of new facilities, or changes to trees, rock outcroppings, or historic buildings, however, the few new dairies that could be constructed would not substantially damage scenic resources within these corridors. Therefore, the proposed project would not result in significant impacts to scenic resources.
c) Substantially degrade the existing visual character or quality of the site and its surroundings.

**Less than Significant Impact:** As described above, the GWDRs would be implemented in rural areas on dairies that are existing, new, expanding, or reopening dairies that are currently inactive. Grazing lands that are associated with the dairies are also covered by the GWDR. The visual character of the area is generally open and grassland is the dominant vegetation. The project could result in local changes in vegetation, however, management plans are required under the GWDR to avoid degradation and restore soil, vegetation, and water quality. Work may involve reconstruction of eroding roads. Implementation of waste management practices within the confined areas, nutrient management practices within the pasture lands, and grazing management practices would generally result in small scale, temporary alteration in views and would not result in the degradation or change in the visual character of ranchland. Therefore, the impacts to scenic resources would be less than significant.

d) 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 bulk of existing dairies covered by the new GWDR would not create any changes in light, glare, or views. Any potential new dairies, expanding, or reopening of inactive dairies could include new lighting on barns to accommodate milking or maintenance. These new lights could be visible across fields and potentially from the roads. However, the amount of light shed would not interfere significantly with a dark night sky or change the existing character of the night in neighborhoods. Some lighting could be blocked from neighbors and roads by vegetation and buildings. Therefore, the impacts to day or nighttime views in the area would be less than significant.
II. AGRICULTURE AND FOREST 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 California Department of Forestry and Fire Protection 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:

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)) or timberland (as defined by Public Resources Code section 4526)? X

d) Resulting 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. X

**Background:**

The GWDR calls for the implementation of waste, nutrient and grazing management practices and will result in the reduction of erosion, sedimentation, and pathogens and in the improvement of water quality and the promotion of sustainable agriculture. Implementation of the GWDR is consistent with most general plans for counties in the North Coast Region. For example, the GWDR is consistent with Sonoma County’s Policy and Goals for Reduction of Soil Erosion (Sonoma County General Plan) that encourages and supports farms and ranches seeking to implement programs that increase the sustainability of resources, conserve energy, and protect water and soil (refer to Section X, Land Use and Planning).

**Discussion of Impacts:**

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.

No Impact: The project will not result in the conversion of Prime Farmland, Unique Farmland or Farmland of Statewide Importance to non-agricultural use.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract.

No Impact: The project will not affect existing agricultural zoning or any aspect of a Williamson Act contract.

c) 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)?
Less Than Significant Impact: The ongoing operation of existing dairies will not cause re-zoning of forest land or timberland. The reopening of inactive dairies is not expected to result in any re-zoning of timberland as this is land already in agricultural use. It is possible that a small amount of timberland could be re-zoned from forest land or timberland to agriculture but that would only be in the case of a new dairy or expanding dairy proposing buildings or grazing land on previously forested areas. Such re-zoning would need to agree with county general plans and any changes considered and adopted by the county. Any significant impacts to forest land or timberland are not analyzed within the scope of this project and would require Regional Water Board staff review and consideration of future site-specific CEQA documentation and/or Individual Waste Discharge Requirements.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Less Than Significant Impact: The project would not result in any direct loss of forest land from the continued operation of existing dairies. Other new dairy projects will be reviewed by Regional Water Board staff prior to consideration for enrollment in the GWDR. Any impacts to forest land from new, expanding, or the reopening of inactive dairies covered by this Initial Study will be less than significant. Significant impacts to forest land or timberland are not in the scope of this project and would require Regional Water Board staff review and consideration of future site-specific CEQA documentation and/or Individual Waste Discharge Requirements.

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.

No Impact: The project would not result in conversion of Farmland to non-agricultural use.
III. 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:

a) Conflict with or obstruct implementation of the applicable air quality plan?
   X

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
   X

c) Result in a cumulatively considerable net increase of any criteria pollutant for which 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)?
   X

d) Expose sensitive receptors to substantial pollutant concentrations?
   X

e) Create objectionable odors affecting a substantial number of people?
   X

Background:

Air quality districts within the North Coast Regional Water Quality Control Board region include in Bay Area Air Quality Management District, Northern Sonoma County Air Pollution
Control District, Mendocino County Air Quality Management District, North Coast Unified Air Quality Management District in Humboldt/Del Norte/Trinity Counties, Siskiyou County Air Pollution Control District, and Modoc County Air Pollution Control District. The GWDR requires compliance with all local, state, and federal regulations, including the Clean Air Act and applicable state air quality standards. Specific best management practices at all dairies regulated under the GWDR are designed to prevent and minimize release of pollutants. Under the project, existing dairies will continually operate. The addition of any new, expanding, or the reopening of any inactive dairies will result in the addition of dairy animals, the operation of farm equipment, and may result in some new building construction, or reconstruction on old footprints. The number of cow dairies in the North Coast Region has been decreasing since inception of the dairy regulation program in 2012. State-wide, milk production has been decreasing over this same period. The California Air Resources Board is actively working now with the California Department of Food and Agriculture and researchers to reduce air quality impacts from dairies. In conjunction with the aging dairy operator population, many dairies within the North Coast Region and across the state close each year, thus a net loss of adverse impacts to air quality from the operation of dairies is expected. The USEPA sets limits on maximum atmospheric concentration for each acute and chronic toxic air contaminant pollution source. The State of California is required to use these limits but may also set higher standards when the California Air Resources Board determines that tighter limits would protect human health.

**Discussion of Impacts:**

a) **Conflict with or obstruct implementation of the applicable air quality plan.**

No impact: A project would conflict with or obstruct implementation of the regional air quality plans if it would be inconsistent with the growth assumptions, in terms of population, employment or regional growth in vehicle miles traveled. The growth assumptions used for the regional air quality plans are based upon the growth assumptions provided in local general plans. The opening or expansion of a few dairy facilities would have a less than significant impact on any of the growth assumptions made in the preparation of the clean air plans (no new housing is proposed as part of this permit), and would not obstruct implementation of any of the proposed control measures contained in these plans.

Implementation of water quality plans, nutrient management plans, and associated actions, as required by the GWDR, would not result in new land uses that would generate a significant increase in traffic or other operational air emissions. Temporary increases in traffic could occur at individual dairies during construction and installation of best management practices (BMPs) to comply with the requirements of the GWDR, however, these impacts are expected to be limited in numbers and types of vehicles used, miles driven, duration, and air resultant emissions.

b) **Violate any air quality standard or contribute substantially to an existing or projected air quality violation.**

Less than significant impact: Opening of a new dairy, expansion of an existing dairy, or reopening of an inactive dairy, could result in new building construction including minor alterations to existing structures or restoration or rehabilitation of deteriorated or
damaged equipment to meet current standards of public health and safely. Compliance with the provisions of the GWDR may, in certain circumstances, require the preparation and implementation of water quality plans, nutrient management plans, and practices to control and reduce sediment, pathogens, and nutrient discharges to surface and groundwater. As such, some engine emissions from the temporary operation of construction vehicles and equipment used to comply with the provisions of the GWDR would be both short-term and localized and will not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Less than significant impact: In accordance with CEQA Guidelines for any project that does not individually have significant operational air quality impacts, the determination of significant cumulative impact is based on an evaluation of the project’s consistency with the local general plan. The local general plan must also be consistent with the regional air quality plan. The project would not result in, nor authorize, new land uses, and would therefore be consistent with the regional air quality plans. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant and therefore, would result in a less than significant impact.

d) Expose sensitive receptors to substantial pollutant concentrations.

Less than significant impact: Dairy operations regulated by the GWDR are in rural areas, away from schools, hospitals, and other sensitive land uses. Residential uses in agriculturally-zoned districts are very low density, typically only a few residences on each of the parcels. Minor construction and/or earth moving undertaken to comply with the GWDR could result in increases in particulates in the air in the immediate area of grading and construction but would not expose sensitive receptors, likely to be located substantial distances from ranchlands, to substantial pollutant concentrations. The increase in vehicle use on any new, expanding, or reopening dairies are expected to comprise a non-substantial increase in pollutants. The impact on air quality from the adoption of the conditions required by this GWDR related to establishment of new, expanding, or reopening dairy operations would be less than significant.

e) Create objectionable odors affecting a substantial number of people.

Less than significant impact with mitigation: The California Air Resources Board defines public exposure to offensive odors as a potentially significant impact. In general, the types of land uses that pose potential odor problems include refineries, chemical plants, wastewater treatment plants, landfills, composting facilities, and transfer stations.

The operation and maintenance of existing dairies involves the collection and management of manure and materials contacting manure, including storm water. Each facility utilizes site-specific management measures including, but not limited to, manure solids separators, anaerobic digestion, composting, manure wastewater spray irrigation,
and/or spreading of manure solids in the fall for crop fertilization. The addition of any new, expanding, and the reopening of inactive dairies, could add odors above existing conditions. Dairy operations would not expose sensitive receptors to pollutants because dairies will implement best management practices as discussed in the GWDR. North Coast dairies are generally pasture-based meaning they do not congregate together much of the day where objectionable odors could occur. Instead, cattle are dispersed on a rotational schedule in pastures much of each day. Manure amounts would increase above baseline levels at the locations of new, expanding, and previously abandoned dairies; however, the MRP and WQP require manure to be managed to reduce objectionable odors to neighbors and passers-by. Manure piles are required to be spread on fields or hauled offsite regularly. In the winter rainy season, manure piles are required to be covered to protect air quality and reduce the potential to discharge to surface waters or groundwater.

Residential uses in agriculturally-zoned districts are generally of very low density, consisting of only a few residences on each of the parcels. In areas where rural agriculture zone transitions to denser residential zones, odors may be noticeable to more people than in typical rural areas; however, only a small number of new, expanding, and reopening of inactive dairies region-wide are expected. Given the mitigation listed in this section, the potential impact to a substantial number of people, is low. The impact of the project regarding odors is less than significant with mitigation.
IV. BIOLOGICAL RESOURCES -- Would the project:

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 Game or U.S. Fish and Wildlife Service?  

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?  

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?  

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?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

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?

Background

Watersheds throughout the region support a wide diversity of plant and animal species, including a high number of special status species and sensitive natural communities. These communities include mixed evergreen forests, oak woodlands and savanna, native and nonnative grasslands, chaparral, and riparian scrub and woodland. Some watersheds provide habitat for several aquatic species of concern, including steelhead trout (Oncorhynchus mykiss), Chinook salmon (Oncorhynchus tshawytscha), Coho salmon (Oncorhynchus kisutch) and California freshwater shrimp (Syncaris pacifica).

It is possible that any new, expanding, or reopening dairies at inactive dairy sites may be required to undertake specific projects to comply with the GWDR. These projects may involve manure retention and management, land application of nutrients, minor earthmoving and/or construction, the installation of water wells and associated water routing piping and storage (tanks), property fencing, and rehabilitation of roads and animal crossings, that could potentially affect biological resources either directly or indirectly through habitat modifications.

Discussion of Impacts:

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?

Less than significant impact: The GWDR is designed to benefit, enhance, restore and protect biological resources, including fish, wildlife, and rare and endangered species. The potential for a reopened dairy facility to impact any species identified as a candidate, sensitive, or special status species is extremely low because the land has already been
modified for dairy use, and the owners/operators will only be reconstructing and/or repairing existing facilities on the original building footprint. New or expanding dairies that are constructing buildings on a new site would need permits from county or city agencies that require inspections to avoid impacts to candidate, sensitive, or special status species.

If, however, impacts to special status species and their habitats occur within the Regional Water Board’s jurisdiction, then the dairy project may require a Clean Water Act section 401 permit from the Regional Water Board office. If impacts to special status species and their habitats occur outside the Regional Water Board’s jurisdiction (e.g., in areas with no proximity or relation to waters of the state), then impacts must be addressed through other local, state, and federal programs and permits. For example, for projects that fill Clean Water Act 404 wetlands, the Army Corps of Engineers explicitly conditions its permits to require that impacts to federally listed species be less than significant.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife.

**Less than significant impact with mitigation:** As indicated in section IV a), above, the GWDR is designed to benefit biological resources, particularly riparian habitat and other sensitive natural communities. Projects proposed for the purpose of complying with the GWDR that involve grading or construction in the riparian corridor are subject to review and/or approval by the Regional Water Board. Proposed projects that could have an adverse impact to the environment or that do not meet the conditions of the GWDR or IS/MND will be reviewed and an Environmental Impact Report and/or Individual Waste Discharge Requirements may be required.

The Regional Water Board will work with California Department of Fish and Wildlife, U.S. Fish and Wildlife Service and proponents of specific compliance projects to come up with actions that not only meet but further GWDR requirements and goals to have minimal impacts.

**Mitigation Measure IV–1:**
Landowners shall apply for permits from the Regional Water Board, USFWS, and/or CDFW for approval. These agencies will either:

1. Not approve compliance projects with significant adverse impacts on sensitive/special status species; or,
2. Require mitigation measures to reduce impacts to less-than-significant levels.

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.

**Less than significant impact with mitigation:** Significant adverse impacts on wetlands from new, expanding, or reopening of inactive dairies would not be permitted under the
GWDR. Proposed water quality plans and nutrient management plans that could have the potential to disturb wetlands would be subject to the Regional Water Board’s review and approval under Section 401 of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act. The Regional Water Board must, consistent with its Basin Plan, require mitigation measures to avoid, minimize, and mitigate impacts to less-than-significant levels. As specified in the Basin Plan, the Regional Water Board uses the USEPA Section 404(b)(1) Guidelines for dredge and fill material in determining the circumstances under which the filling of wetlands may be permitted. This policy requires that avoidance and minimization be emphasized and demonstrated prior to consideration of mitigation. Wetlands not subject to protection under Sections 404 and 401 of the CWA are still subject to regulation and protection under the CWC and impacts addressed through enrollment under separate Regional Water Board WDRs.

**Mitigation Measure IV–2:**
Landowners shall apply for all necessary permits from the Regional Water Board and/or United States Army Corps of Engineers for approval. The permits will specify conditions to reduce impact to less than significant levels, including:

1. Demonstrating that avoidance, minimization, and mitigation of impacts has occurred to the maximum extent practicable;
2. For all potential projects where wetland losses would exceed 0.1 acres, responsible parties are required to provide compensatory mitigation at a ratio that is greater than or equal to 1:1 (as determined in consultation with the Regional Water Board); and,
3. For projects where wetland losses are less than 0.1 acre, on a case by case basis, the District Engineer and/or Regional Water Board may require compensatory mitigation.

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.**

**Less than significant impact with mitigation:** Projects could be proposed to comply with the GWDR that involve minor construction or earthmoving activities (e.g., fencing, road improvements, etc.). These projects involve only minor alteration, rehabilitation, or maintenance of pre-existing facilities, mechanical equipment, or topographic features, and, for existing operations are not expected to result in significant impacts. New, expanded or the reopening of an inactive dairy operation under the GWDR provisions would not substantially interfere 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. Each application for a new dairy, expanding dairy, or the reopening of an inactive dairy will be reviewed by Regional Water Board staff for compliance with the GWDR and this IS/MND. Additional site-specific CEQA documentation may be required prior to enrollment. Any proposed buildings or structures on new sites will be subject to permitting and inspection requirements from local land use authorities.

e) **Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**
No impact: Operation of existing dairies, new, expanding, or the reopening of existing inactive dairies that implement the provisions of the GWDR would be consistent with the goals of the TMDLs to retain riparian vegetation and are not expected to conflict with any local policies or ordinances involving tree preservation.

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.

No impact. The project does not conflict with any adopted Habitat Conservation Plan, Natural Community Plan, or other approved local, regional or state habitat conservation plan.

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V. CULTURAL RESOURCES -- Would the project:

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) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

   X

d) Disturb any human remains, including those interred outside of formal cemeteries?

   X

Background:

Note that this section evaluates impacts to historical resources and archaeological resources and does not include Tribal Cultural Resources (TCR’s). TCR’s are evaluated later in Section XVIII in this IS/MND.
Existing dairies and the reopening of inactive dairies will generally not include construction or modification of the existing infrastructure thus the landscape is expected to be largely unchanged with no impact or less than significant impacts to historical, archaeological, and paleontological resources. However, new and expanding dairies could have an impact to these resources if not regulated and mitigated, therefore the section below includes mitigation for potentially significant impacts to these resources. Accidental discovery of historical, archaeological, or unique paleontological resources or sites or unique geological features at all dairies is also discussed below.

Adoption of the GWDR will not result in a material change in the scope or pace of maintenance activities. Additionally, the adoption and implementation of this project does not change the regulatory requirements, statutory authorities, or enforcement abilities of any other agency or local ordinances, which may have jurisdiction over cultural resources.

As discussed below, a cultural survey and a report including mitigation measures by a Professional Archaeologist are required for new, expanding, or the reopening of inactive dairies. Accidental discovery of historical, archaeological, or unique paleontological resources or sites or unique geological features is also discussed below.

Prior to enrollment in the GWDR, new, expanding, or inactive dairies to be reopened must demonstrate compliance with CEQA.

Therefore, the Regional Water Board finds a **less than significant impact with mitigation.**

**Discussion of Impacts:**

a) & b) Cause a substantial adverse change in the significance of a historical or archaeological resource as defined in §15064.5?

**Less than Significant Impact with Mitigation:** Implementation of the GWDR for existing dairies and the reopening of inactive dairies could involve minor grading, repair, and reconstruction generally on the same footprint. This activity would generally be small in scale and would be limited to shallow excavation such as cleaning of existing ponds, grading for minor road repair/rehabilitation, and the installation of fence posts, etc. that would be installed in areas already disturbed by recent human activity. Existing manure ponds can be used on existing dairies and inactive dairies that are scheduled to reopen, however, existing manure ponds on inactive dairies must meet NCRS Code 313 minimum seepage requirements if utilized. If the inactive dairy does not meet minimum seepage requirements, then the manure pond must be retrofitted to meet these requirements such as placement of an impermeable liner. Otherwise, the inactive dairies must obtain county or city permitting for construction of a new manure pond which includes requirements for protection of historical or archaeological resources.
Manure pond construction or reconstruction on new or expanding dairies must meet NRCS Code 313 minimum seepage requirements as discussed in the GWDR. In addition, new or expanding manure pond construction must meet the requirements for significant ground disturbances in this section and the construction must meet all county and local requirements for safety inspection and protection of cultural resources. Monitoring, inspection, and reporting on any impacts to resources from all dairies is required annually and reviewed by Regional Water Board staff.

New dairies and the expansion of existing dairies could include new grazing and crop cultivation, new buildings, the installation of irrigation lines, fence construction, and other farming activities. Under the GWDR, new, expanding, and reopening of inactive dairies have required tasks that must be performed prior to land disturbance. Prior to applying for coverage under the GWDR, new, expanding, and reopening dairies must complete the following to demonstrate compliance with CEQA, to identify whether historical resources are present on the property, and to mitigate potential adverse effects:

**Mitigation Measure V-1**

**Procedures for Checking for Historical or Archaeological Resources at New, Expanding, or Reopening Dairies**: The permittee of a new, expanding, or reopening inactive dairy shall retain a Professional Archaeologist to perform a records search at the appropriate regional information center of the California Historical Resources Information Center (CHRIS). A Professional Archaeologist is one that is qualified by the Secretary of the Interior, Register of Professional Archaeologists, or Society for California Archaeology. If the dairy property has not been subject to a prior physical cultural resources survey, one must be done. The Professional Archaeologist shall request a Sacred Lands File search from the Native American Heritage Commission, and contact local tribes, conduct a pedestrian survey of the property, record potential historical and archaeological resources on DPR forms, and write a report of their findings which shall be submitted to the appropriate regional Information Center of the CHRIS and the Regional Water Board. If the property has been the subject of a previous study, then the permittee can use the report from the previous study or the records search results to demonstrate compliance with CEQA for that portion of the property surveyed so long as the area previously studied did not identify any cultural resources. If the report or prior report finds no cultural resources, then no further action is required for that portion of the property.

If the cultural study identifies historical resources (buildings, archaeological sites, structures, or objects listed or eligible for listing on the California Register), then the Professional Archaeologist shall recommend appropriate conservation measures. Mitigation and conservation measures to consider include: avoidance of the area, fencing/installing barriers, flash grazing, soil capping, onsite burial, no new ground

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1Certain types of activities associated with dairy expansion, creation, and reopening are not fully covered by this GWDR and associated CEQA analysis (e.g., building construction, new foundations, concrete slabs/underfloors, reservoir modifications, manure pond construction, major road construction, bridges, etc.) and will likely require a separate permit and CEQA analysis by the local county or city permitting department. Dairy operators that are already implementing activities on an existing dairy that do not result in significant ground-disturbing activities can be authorized for coverage under the GWDR and CEQA IS/MND analysis. Significant ground disturbing dairy activities may include: new deep ripping, trenching, excavation, road construction, road reconstruction, or pond construction.
disturbance below the level of current ground disturbance, or other equally protective measures. Final mitigation measures are subject to approval by the Regional Water Board Executive Officer.

Provisions for the accidental discovery of historical or archaeological resources on any dairy, pursuant to Guidelines Section 15064.5(f), include an immediate evaluation of the find by a Professional Archaeologist. If the Professional Archaeologist determines that the find is an historical or unique archaeological resource, then contingency funding and time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation must be implemented.

Therefore, impacts to historical and archaeological resources would not be significant.

c). Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

**Less than Significant Impact with Mitigation:** Implementation of the GWDR for existing could involve minor grading, repair, and reconstruction. This activity would generally be small in scale, and would be limited to shallow excavation/grading for minor road repair/rehabilitation, and the installation of fence posts, etc. Significant paleontological resources are typically found in rock layers or in Pleistocene age alluvium. Dairy operations would be restricted to surface and near surface alteration of soils that have low paleontological potential. Therefore, the project would have less than significant impacts to unique paleontological resources or sites or unique geological features at existing dairy operations.

**Mitigation Measure V-2**
Implementation of the GWDR for new, expanding, or the reopening of inactive dairies could involve grading, repair and reconstruction. Development of these sites may involve site-specific approvals within the jurisdiction of local land use authorities and subject to future project-specific CEQA analysis. The conclusions of those analyses may differ from those contained in this Mitigated Negative Declaration, and future lead agencies should base their findings on site specific information developed for the project. The mitigation measure below would reduce impacts due to any activities that are found to be within the Regional Water Board’s jurisdiction and subject to GWDR conditions to a less than significant level.

If paleontological resources are discovered, a qualified professional paleontologist, meeting the Society for Vertebrate Paleontology’s definition, will be called upon to assess the find and recommend appropriate treatment. If the find is significant, it may be excavated and arrangements made to permanently house it at an institutional paleontological repository. The Regional Water Board finds, that for project impacts that are determined to be within its jurisdiction, the mitigation measures required here will reduce the impacts for new, expanding and reopening of inactive dairies to a less than significant level.

d). Disturb any human remains, including those interred outside of formal cemeteries?
Less than Significant with Mitigation: Implementation of the GWDR for new or expanding dairies could involve grading and construction and therefore could disturb human remains if present. It is unlikely that the farming of existing dairies, or reopened dairies that were inactive, would affect human remains because farming activities are mostly limited to grazing which typically result in minimal ground disturbance. However, cows have been known to unearth human remains on occasion in loose or eroding soils, therefore the following mitigation measure shall be implemented upon discovery of human remains.

Mitigation Measure V-3
Upon the discovery of any human remains at a permitted property, the permittee shall immediately comply with Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98. The following actions shall be taken immediately upon the discovery of human remains:

All activities, including livestock grazing, near the discovery shall stop immediately. The permittee shall immediately notify the county coroner. Ground disturbing activities shall not resume until the requirements of Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98, have been met. The permittee shall ensure that the human remains are treated with appropriate dignity.

Therefore, impacts to human remains would be less than significant with mitigation.
VI. GEOLOGY AND SOILS

-- Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

   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.

   ii) Strong seismic ground shaking?

   iii) Seismic-related ground failure, including liquefaction?

   iv) Landslides?

b) Result in substantial soil erosion or the loss of topsoil?

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?
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?

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?

Discussion of Impacts:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

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.

ii) Strong seismic shaking?

iii) Seismic-related ground failure?

iv) Landslides?

No impact: This project will not expose people or structures to potential substantial adverse effects. Many of the existing and inactive dairies have existed for generations, some for over a century. Strong seismic shaking, ground failure (including liquefaction), and landslides are large-scale dynamic Earth processes that are not significantly impacted by the surficial nature of dairy activities. The activities conducted under the GWDR will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, or seismic related ground failure, including liquefaction. Additionally, the activities covered under the GWDR will not expose people or structures to potential substantial adverse effects involving landslides, because existing and inactive dairies will either utilize existing stable structures or reconstruct buildings in the existing footprint. Construction at new, existing, expanding, or inactive dairy sites would require county permits, certifications, and inspections. Therefore, the Regional Water Board finds no impact.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant with mitigation: The GWDR coverage of the continued operation of existing dairies and the reopening of inactive dairies would generally not involve alterations of existing structures, facilities, mechanical equipment, or topographic features.
Specific activities involving earthmoving or construction activities to comply with requirements of the GWDR are reasonably foreseeable. Such activities would not result in substantial soil erosion or the loss of topsoil because when conducted consistent with requirements of the GWDR they would involve minor alteration of existing structures, facilities, mechanical equipment, or topographic features.

New or expanding dairies could involve construction and grading of previously vegetated areas. One of the objectives of the GWDR is to reduce erosion, not increase it, through managed grazing and maintenance of unpaved farm roads. To meet the proposed GWDR conditions, grazing areas devoid of vegetation would be managed and maintained to reduce overall soil erosion through rotational grazing and herd management. Small grading projects that would generally apply to routine maintenance would be subject to non-discretionary requirements of local agency grading ordinances. The GWDR requirement of Water Quality Plans, Riparian Management Plans, Nutrient Management Plans, surface water monitoring, Annual Reports with photos of Best Management Practices, and inspections by Regional Water Board staff ensure soil conservation. Therefore, the Regional Water Board finds the impacts will be less than significant with mitigation.

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?

**Less than significant with mitigation:** The GWDR could result in projects involving improvements to roads and creek crossings, and other projects located on unstable terrain. These projects would be designed in compliance with the GWDR to increase stability, both on-site and off-site, to reduce erosion, and sedimentation. Grading would be designed to minimize any potential for landslides, lateral spreading, subsidence, liquefaction, or collapse. The Regional Water Board finds the impacts are less than significant with mitigation.

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?

**No impact.** Grading and construction, usually minor, could occur in areas with expansive soils, but this activity would not create a substantial risk to life or property. Existing buildings at most dairies will be utilized. Any rebuilding on existing foundations or building of new structures would require site-specific CEQA documentation and county or city permitting and inspection approval.

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?

**Less than significant with mitigation:** Most dairies that will be covered by the GWDR are existing dairies currently in operation and potential reopening of a few inactive dairies. Any septic tanks or alternative water disposal systems would generally be in place at these dairies. Dairies may utilize existing septic systems previously approved by local jurisdictions. New or expanding dairies may require septic tank installation or alternative
water disposal systems. New septic systems would be subject to county or city permitting and inspection approval.

Manure waste at existing dairies or inactive dairies may be stored in existing or new manure ponds. New manure pond liners, such as for new dairies or expanding dairies, must meet NRCS guidelines as required by the GWDR. Manure is required to be applied to crops and pasture at agronomic rates per the Nutrient Management Plan. Surface water and groundwater testing is required to be submitted to the Regional Water Board regularly for evaluation. The Regional Water Board finds the impacts are less than significant with mitigation.

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VII. GREENHOUSE GAS EMISSIONS – Would the project:

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:

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. This represents an approximate 25 percent reduction in emissions.

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. Air districts in the North Coast Region have adopted CEQA thresholds for GHG emissions thereby evaluating and reducing GHG through qualified climate actions plans.

State Water Resources Control Board Resolution No. 2017-0012 states that Regional Water Boards are encouraged to identify opportunities to reduce methane emissions from dairies and concentrated animal feeding operations while achieving water quality. The Regional Water Boards have been working with the California Department of Food and Agriculture.
(CDFA) to help reduce methane emissions from dairies starting with voluntary grant projects on dairies in conjunction with CARB. A few dairies in the North Coast Region were awarded methane reduction grants in 2017. More grants will be awarded to California dairies in 2018 by CDFA under the AMMP program, Healthy Soils Initiative, and the Digester Programs: https://www.cdfa.ca.gov/oefi/. These reductions contribute to the state’s overall short-lived climate pollutant strategy under Senate Bill 1383, which aims to reduce California’s methane emissions to 40 percent below 2013 levels by 2030. The GWDR encourages dairies to make changes on dairies to reduce methane emissions and improve air quality.

More dairies are closing than opening or expanding herd sizes in California. The number of dairies and the number of cows milked on dairies has decreased since the dairy regulation program began in the North Coast Region in 2012. However, it is possible that new or expanding dairies could increase these numbers in the future. New or expanding dairies that do not meet the requirements of the GWDR or IS/MND would need to have an individual CEQA analysis and apply for an individual waste discharge requirement permit.

Research on reducing methane emissions at dairies in California is currently in progress and results will be shared with regulatory agencies to help encourage methane reductions. The CDFA website states that dry handling of manure significantly reduces methane emissions. The Regional Water Board will continue to work with CARB and CDFA to help dairies reduce methane and carbon dioxide emissions. The GWDR and annual report writing workshops for dairy operators will continue to share the latest research information including on methane and carbon reduction. The continued operation of existing dairies on the North Coast, along with any new dairies added under the GWDR, will have no adverse significant effect on the current levels of carbon dioxide and methane. Therefore, the Regional Water Board finds a less than significant impact with mitigation.

**Discussion of Impacts:**

a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

*Less than significant with mitigation.* Each year, dairies have closed in the North Coast region due to operator retirement or other interests. Since 2012, about six dairy closures have been somewhat offset by two dairies that have opened at inactive dairy facilities. GWDR coverage of future new, expanding, or reopening inactive dairies is not expected to have a significant impact on the environment. Construction-related emissions associated with implementation of future GWDR coverage could include operation of heavy equipment including that used to construct necessary erosion controls and watering facilities (e.g., ground water wells and piping). These construction-related emissions would be small, temporary in nature, and would not be concentrated in one location, and their total contribution to county-wide greenhouse gas emissions would be less than significant.

The operation of dairies at their current animal unit numbers are not expected to have a significant effect on levels of carbon dioxide and methane. New, expanding, or reopening of inactive dairy projects that do not meet the conditions of the GWDR or this IS/MND do not qualify for coverage and must prior to enrollment in this Order or issuance of individual WDRs must submit documentation to show compliance with CEQA.
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. The project would not conflict with any State, local, or county plan, policy or regulation adopted for the purpose of reducing the emissions of GHG and no impact would occur.

VIII. HAZARDS AND HAZARDOUS MATERIALS --
Would the project:

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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**

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 **X**
airport, would the project result in a safety hazard for people residing or working in the project area?

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? X

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? X

h) 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? X

Background:

Facility maintenance, retrofit, and/or improvements associated with implementing the Water Quality Plan, Riparian Management Plan, or Nutrient Management Plan (e.g., installation of fencing, off-stream watering troughs, groundwater supply wells, and conveyance piping, retention ponds, irrigation, etc.) will not involve the use or transport of any hazardous materials, aside from fuels and lubricants used for construction and/or farm equipment.

Furthermore, groundwater supply well placement, installation and construction is permitted and regulated by the local agencies. Applications are reviewed for setback distances, proximity to Hazmat sites, and proposed use.

Discussion of Impacts:

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

No impact: This project would not affect the transportation or potential release of hazardous materials, nor create a significant public safety or environmental hazard beyond any hazards currently in existence. GWDR implementation actions would not interfere with any emergency response plans or emergency evacuation plans and would not affect the potential for wildland fires.
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?

No Impact: Refer to response to Item VIII a), above.

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

No Impact: Refer to response to Item VIII a), above.

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?

No Impact: Refer to response to Item VIII a), above.

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 for people residing or working in the project area?

No Impact: Refer to response to Item VIII a), above.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact: Refer to response to Item VIII a), above.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact: Refer to response to Item VIII a), above.

h) 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: Refer to response to Item VIII a), above.
<table>
<thead>
<tr>
<th>IX. HYDROLOGY AND WATER QUALITY -- Would the project:</th>
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<tbody>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements?</td>
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<tr>
<td>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</td>
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<tr>
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<tr>
<td>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 result in substantial erosion or siltation on- or off-site?</td>
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<tr>
<td>x</td>
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<tr>
<td>d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</td>
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</table>
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?

X

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

X

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

X

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

X

j) Inundation by seiche, tsunami, or mudflow?

Discussion of Impacts:

a) Violate any water quality standards or waste discharge requirements?

Less than significant with mitigation: Continued operation of existing, new, expanding, or reopening of inactive dairies, in compliance with the regulatory provisions of the GWDR, would implement recently-adopted TMDLs and the Basin Plan, which articulate applicable water quality standards. If in compliance with the GWDR, the dairy operation would not violate water quality standards or waste discharge requirements. Specifically, owner/operators must develop site-specific management plans applicable to each operation, in accordance with technical standards outlined in the GWDR. Such plans include a Water Quality Plan for general water quality protection, a Riparian Management Plan for stream protection, and a Nutrient Management Plan for croplands and pastures where manure products are applied.
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

**Less than significant impact:** Implementation of improved water quality, riparian, or nutrient management practices may include installation of off-stream livestock groundwater supply wells, watering troughs, or installation of water distribution conveyance piping. Providing off-stream livestock water supply is an important best management practice for protecting riparian corridors from erosion and pathogen impacts resulting from animals entering surface waters.

Groundwater supply well placement, installation and construction is permitted and regulated by the local agencies. Applications are routinely reviewed for setback distances, and proposed use. Given these required county approvals, the continued use of existing dairies or addition of new, expanding, or reopening of inactive dairies would not include projects that would interfere with local groundwater recharge and supply.

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 that would result in substantial erosion or siltation on- or off-site?

**Less than significant impact with mitigation.** Specific projects involving earthmoving or construction activities to comply with GWDR requirements could affect existing drainage patterns and are reasonably foreseeable.

Specific projects to comply with GWDR requirements must comply with standard permit conditions in the U.S. Army Corps of Engineers’ Nationwide Permit Nos. 13 (Bank Stabilization) and 27 (Stream and Wetland Restoration Activities). U.S. Army Corps of Engineers’ final approval and issuance of a section 404 permit is only valid with Clean Water Act 401 certification of the proposed activity, which is issued by the Regional Water Board. Section 401 requires the Regional Water Board to certify that such projects comply with water quality standards, and as such, Section 401 certifications often include conditions that are more stringent than those imposed through the federal section 404 permit requirements.

**Mitigation Measure IX–1:** During earthmoving and construction, landowners must implement best management practices as feasible during all construction activities, including the following:

1. Use proper slope grading, temporary/permanent seeding or mulching, erosion control blankets, fiber rolls, etc. and other methods to prevent the movement of soils;
2. Enclose, cover, water twice daily or apply (non–toxic) soil binders to exposed stockpiles (dirt, sand, etc.); and,
3. Replant vegetation in disturbed areas as quickly as possible.
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less than significant impact: As stated in the previous response, this project could involve earthmoving that could affect existing drainage patterns. Furthermore, compliance with the GWDR could contribute to increases in the amount of riparian vegetation in stream channels and thus enhance habitat conditions. These actions should reduce flooding hazards.

Specific projects involving earthmoving or construction activities to comply with the GWDR would be designed to avoid and minimize the alteration of the course of a stream or river, and to reduce the rate or amount of surface runoff. Specific compliance projects involving stream or creek work would be subject to the review and/or approval of the Regional Water Board, which would require implementation of routine and standard erosion control best management practices and proper construction site management. In addition, construction projects over one acre in size would require a general construction National Pollutant Discharge Elimination System (NPDES) permit and implementation of a storm water pollution prevention plan (SWPPP). Actions undertaken to comply with the GWDR would not substantially increase impervious surfaces, or peak flow releases from dams in any part of the watershed.

Also, as noted above, specific projects to comply with GWDR requirements must comply with standard permit conditions in the U.S. Army Corps of Engineers’ Nationwide Permit Nos. 13 (Bank Stabilization) and 27 (Stream and Wetland Restoration Activities). U.S. Army Corps of Engineers’ final approval and issuance of a permit is only valid with Clean Water Act 401 certification of the proposed activity, which is made by the Regional Water Board. Section 401 requires the Regional Water Board to certify that such projects comply with water quality standards, and as such, Section 401 certifications often include conditions that are more stringent than the federal requirements.

e) 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?

Less than significant impact with mitigation: Actions undertaken to comply with the GWDR are, by design, intended to reduce erosion from upland land uses, as needed to reduce fine sediment inputs from hillslopes to channels and channel erosion. Therefore, compliance with the GWDR would not increase the rate or amount of runoff or exceed the capacity of storm water drainage system.

f) Otherwise substantially degrade water quality?

Less than significant impact with mitigation: The GWDR requires that discharges of waste from dairies shall not cause surface water or groundwater to be further degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance. Monitoring of surface water is required of all dairies subject to the GWDR. For dairies that utilize waste ponds, monitoring of groundwater is an additional requirement. Monitoring of surface water and groundwater is intended to demonstrate compliance with the GWDR.
In addition, prior to start-up, owner/operators of new, expanding, or inactive dairies must develop a site-specific management plan applicable to their operation, in accordance with technical standards outlined in the GWDR. Such plans include a Water Quality Plan for the general facility, a Riparian Management Plan for streamside areas, and a Nutrient Management Plan for lands where manure products are applied.

**g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

**No impact:** The continued operation of existing dairies, the opening of new dairies, expanding dairies, or the reopening of inactive dairies, along with the implementation of the GWDR provisions, would not require the construction of new housing. Such housing placement would be permitted separately by the counties or cities. The Regional Water Board staff will review any new building plans. If proposed for floodplain areas then mitigation would be required to reduce or eliminate adverse impacts to water quality for compliance with the GWDR. Projects that do not meet the requirements of the GWDR must develop new CEQA document and apply for individual WDRs.

**h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?**

**Less than significant impact with mitigation:** Continued operation of existing dairies are unlikely to result in new impacts to impede or redirect flood flows due to educational outreach, Regional Water Board inspections, and monitoring requirements since 2012 permit coverage (R1-2012-0002 and R1-2012-0003). New dairies, expanding dairies, or the reopening of inactive dairy sites would be proposed to Regional Water Board staff for review and consideration for GWDR coverage. New proposed projects that would result in the construction of new structures that could impede or redirect flood flows within a 100-year flood hazard zone would need to be designed to be mitigated to less than significant impacts. New projects proposed that could have a significant impact to impede or redirect flood flows that are not addressed by the GWDR or the scope of this IS/MND need to show compliance with CEQA prior to enrollment in the GWDR or issuance of individual WDRs.

**i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

**Less than significant impact with mitigation:** Existing dairies account for all dairies that will be covered by the GWDR at the time of adoption. Most dairies do not have levees or dams above inhabited areas therefore, no exposure risk is expected. The construction or modification of dams or levee structures are not required by the GWDR thus no impact to humans from flooding because of these structures would occur. Some dairies have berms around manure ponds or below fresh water reservoirs. Inspection and monitoring is required under the GWDR to check for cracks and unsafe conditions. Also, above-ground manure ponds are required to have at least two feet of freeboard under the GWDR requirements.

New, expanding, or reopening of inactive dairies could include levees or dams, although it is unlikely. Any new levees or dams would be subject to county or city permitting and may include Clean Water Act section 401 or 404 permits including from the Army Corps
of Engineers. Any existing levees or dams, such as those to hold creek or spring water in a reservoir that could be used at one of these newly enrolled dairies, may have a risk of failure. Mitigation has been added to the GWDR and the Monitoring and Reporting Program for certified professional inspection of any existing functioning dams or levees prior to GWDR enrollment. The certified professional that inspects the levee or dam must recommend regular inspections and maintenance in an official report to ensure the safety of the structure. This report must be submitted as part of the enrollment package to the Regional Water Board for review and consideration. In addition, the condition and maintenance of the levee or dam must be inspected and reported in the dairy Annual Report each November 30 by the dairy operator. Any leakage or failure of parts or walls that could adversely affect the performance of the levee or dam must be repaired immediately and reported on in the Annual Reports. Therefore, there will be a less than significant impact with mitigation.

j) Inundation by seiche, tsunami, or mudflow?

Less than significant impact with mitigation: Dairy land in coastal plain areas may be subject to tsunami inundation, in addition to flooding during severe storm events. This particularly applies to the Eel River, Eureka Plain, and Smith River Hydrologic Units. As stated above, existing dairies account for all dairies that will be covered by the GWDR at the time of adoption. No change from baseline conditions will occur as a result of adoption of the Order for those dairies located within tsunami hazards zones. Prior to development, any new dairies will be subject to all applicable state and local laws and permits, including the Coast Act. Please see IX. h) above for discussion of this item with regard to the risk of mudflows. Inundation by seiche would not occur due to the small size of reservoirs that have levees or dams.
X. LAND USE AND PLANNING - Would the project:

a) Physically divide an established community?  

b) 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, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?  

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Background:

Existing, new, expanding, and reopening of existing dairies are generally located on areas zoned for agriculture throughout the Region. Local zoning ordinances generally stipulate requirements for agricultural land uses, including livestock production and grazing. Land use for each dairy type must be approved by all applicable local programs or must comply with all policies prior to permitting. The GWDR does not preclude the need for dischargers to obtain permits which may be required by other local, state, and federal government agencies.

Discussion of Impacts:

a) Physically divide an established community?

No impact. The project would be located on agriculture lands in rural areas and would not change land use or alter an established community. Therefore, it would not physically divide an established community.
b) 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, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

**No Impact.** The project would not affect land use designations or uses and therefore would not conflict with any zoning ordinances.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

**No impact.** The project would not conflict with any Habitat Conservation Plans or natural community plans.

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**XI. MINERAL RESOURCES** -- Would the project:

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?  

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?  

**Background:**

The California Surface Mining and Reclamation Act of 1975 (SMARA) required identification of mineral resources in California. SMARA maps identify and classify mineral resources as to their relative value for extraction.
Discussion of Impacts:

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?

No impact: Compliance actions driven by the GWDR may include earthmoving activities that range from grading pastures on existing dairies, to excavation for building foundations on new dairies. Earth moving activities may also be required for groundwater supply well and conveyance pipe installation and construction such as fence installation and improvement of livestock crossings. These actions would be localized and relatively small in scale and would not result in the loss of availability or physically preclude future mining activities from occurring.

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?

No Impact: Refer to response to Item XI (a), above.
<table>
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<th>XII. NOISE -- Would the project result in:</th>
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<tbody>
<tr>
<td>a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
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<tr>
<td>b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
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<tr>
<td>c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
</tr>
<tr>
<td>d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
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<tr>
<td>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 expose people residing or working in the project area to excessive noise levels?</td>
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</tbody>
</table>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

**Background:**

Existing, expanding, and the reopening of inactive dairies will generally be located in rural areas and tend to consist of large, open, grassland areas. These land uses are generally located away from schools, hospitals, and other sensitive land uses. Residential uses in agricultural zoning districts are generally very low density; typically, only a few residences on each of the large grazing land parcels. The addition of minor maintenance and/or construction activity undertaken to comply with the GWDR, or the use of typical farm equipment/machinery, could result in temporary increases in ambient noise levels in the immediate area; but, would not expose sensitive receptors, likely to be located substantial distances from ranchlands and from harmful levels of noise.

The construction of new dairies could elevate noise levels; however, these projects must comply with local and regional general plans. Permits from local and regional agencies would also limit noise levels to regulated levels including time of operation in sensitive areas. Therefore, less than significant impacts are expected.

**Discussion of Impacts:**

a) **Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Less than Significant Impact:** The project could involve general maintenance, earthmoving and construction related to compliance projects and/or daily activities, generally small in scale, but could temporarily generate noise. The construction of any new dairy may generate noise in addition to noise from ongoing farming activities once the dairy is established. Any new noise impacts must be in compliance with local and county regional plans and site-specific permitting would be reviewed as part of the local permitting process. Any facility operating under the GWDR would have to be consistent with any site-specific CEQA documentation developed for a site and local agency noise standards.

b) **Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

**Less than Significant Impact:** The project could involve earthmoving and construction. Construction at existing dairies would generally be small in scale, and in rural areas where the potential for exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels is less than significant. Any proposed facility,
especially new dairies enrolled under the GWDR, would be required to comply with their respective county standards to keep noise levels to less than significant levels. Therefore, compliance actions or daily activities driven by the GWDR will not result in substantial noise, and its impacts would be less than significant.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

**Less than Significant Impact:** Existing dairies and their associated noise levels are the current condition and continued operation is not expected to lead to any new ambient noise level impacts. The addition of more cows at expanding dairies are not expected to increase noise levels significantly. The addition of a new dairy or the reopening of a previously closed dairy may add temporary noise levels in the surrounding rural area, including during construction, maintenance, and during crop planting or harvesting, such as in spring or fall. Noise levels from the project would be less than significant.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

**Less than Significant Impact:** See XII.c) above.

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 expose people residing or working in the project area to excessive noise levels?

**Less than Significant Impact:** The project would not cause any permanent increase in ambient noise levels, including aircraft noise. Therefore, it would not expose people living within and area subject to an airport land use plan to excessive noise and thus, any noise impacts would be less than significant.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

**Less Than Significant Impact:** The project would not cause any permanent increase in ambient noise levels, including aircraft noise. Therefore, it would not expose people living near a private strip to excessive noise and thus, the noise impacts would be less than significant.
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<th>Potential Impact</th>
<th>Less Than Significant Impact</th>
<th>Less Than Significant Impact with Mitigation</th>
<th>No Impact</th>
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XIII. POPULATION AND HOUSING -- Would the project:

a) 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)?

X

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

X

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

X

Background

The operation of existing dairies, expansion of dairies, reopening of inactive dairies or addition of any new dairies, will take place in areas where the dominant land use is rural/agricultural. Ranch structures typically include one or more residences, barns, equipment sheds, fences, watering and feeding areas, roads, and road crossings.

Discussion of Impacts

a) 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)?

Less than Significant Impact: The project will not significantly affect population growth in the Region. It will not induce growth through such means as constructing new housing or businesses, or by extending roads or infrastructure. The project will not displace any existing housing or any people that would need replacement housing. The construction or
operation of any new, expanded, or inactive dairies could increase the population of people on a site to work the farm. This is not expected to induce substantial population growth in the area. The construction of new or expanded facilities will likely be subject to permitting actions by local land use agencies and subject to a site-specific CEQA analysis that would examine potential population impacts.

b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

   **No impact:** The project could add some housing for farm workers but displacement of substantial numbers of existing housing would not occur.

c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

   **No impact:** The project will not substantially displace any existing housing or adversely affect any people that would need replacement housing.

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**XIV. PUBLIC SERVICES**

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 public services:

- **Fire protection?**
  - X

- **Police protection?**
  - X

- **Schools?**
  - X
**Background:**

Public services for existing dairies are already established. A small number of dairies may expand or open at an inactive dairy facility, and new dairy facilities may be built. A small number of employees may be needed to work at, and service, each dairy.

**Discussion of Impacts:**

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

**Less Than Significant Impact:** The small number of employees needed to work on new, expanding, or reopened dairies, is not expected to adversely impact government facilities or cause environmental impacts. Compliance with the GWDR by future regulated dairies could result in a limited number of additional people on the property, but not more than the current public services could accommodate. The project will not result in adverse impact on fire protection or police services or on schools and parks since this project is not substantially growth-inducing, nor does it involve the construction of substantial new government facilities or the need for physically-altered government facilities. The project would not affect service ratios, response times, or other performance objectives for any public services. Increase in public services due to the project will result in a less than significant impact.
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? X

Background:
The California Department of Parks and Recreation, local park and/open space districts, municipalities, and other private parties own and operate numerous park and recreational facilities in the counties. These facilities provide a variety of outdoor recreational, educational, and sporting opportunities for local residents, Bay Area residents, and visitors from around the world. The ranchlands surrounding these parks and the many vineyards are an integral part of the rural agricultural and open space experience.

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?

No Impact: The project would only affect dairies and associated pasture/crop land that are existing, new, expanding, or reopening. No impacts to parks or other recreational facilities would occur due to the low number of workers associated with the dairies. The project would have no effect on existing neighborhood and regional parks or other recreational facilities, therefore no impacts would occur.

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: Refer to response to Item XV a), above.
XVI. TRANSPORTATION/TRAFFIC -- Would the project:

a) Exceed the capacity of the existing circulation system, based on applicable measures of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b) 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) Result in a change in air traffic patterns, including either an increase in traffic
levels or a change in location that result in substantial safety risks?

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

e) Result in inadequate emergency access?

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Background:

Compliance with the GWDR at existing, new, expanding, and reopening of dairies at inactive dairy facilities could potentially affect areas currently zoned for agriculture throughout the Region. Existing dairies are the current condition, the addition of any new, expanding, or inactive dairies to the dairy program for coverage by the GWDR are not likely to significantly impact the existing traffic circulation systems, add to congestion, affect air traffic patterns, substantial hazards, emergency access, or alternative transportation.

Discussion of Impacts:

a) Exceed the capacity of the existing circulation system, based on applicable measures of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

No Impact: The project could result in minor or temporary construction that would require the use of heavy equipment and trucks to construct new dairy buildings, move soil, grade fields, logs, or other materials needed for road, and/or stream crossings. Any increase in traffic would be temporary and would be limited to local areas near individual projects and would not create substantial traffic in relation to the existing load and capacity of existing street systems.
b) 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?

No Impact: See response to Item XVI a), above. Levels of service would not change substantially.

c) 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?

No impact: The proposed project would not result in increased air travel or otherwise affect air travel.

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

No impact: Although private roads may require erosion control treatment, the project does not include construction of new public roads that could create hazards. Any new public roads or road segments would require county or city design approval for safety. The project would not substantially increase transportation hazards due to a design feature.

e) Result in inadequate emergency access?

No Impact: The project could result in construction or grading and erosion control actions on unpaved roads that are not typically used for emergency access. Therefore, the project would not result in inadequate emergency access and no impacts would occur.

f) Result in inadequate parking capacity?

No Impact: Because the project would be located on private ranches, it would not affect parking demand or supply, and no impacts would occur.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No impact. Because the project would not generate substantial ongoing motor vehicle trips, it would not conflict with adopted policies, plans, or programs supporting alternative transportation.
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**a) XVII. UTILITIES AND SERVICE SYSTEMS -**

Would the project: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

*X*

**b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

*X*

**c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

*X*

**d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

*X*

**e) 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*

**f) Be served by a landfill with sufficient permitted**
capacity to accommodate the project’s solid waste disposal needs?

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Discussion of Impacts:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less than Significant with Mitigation: The measures required by the GWDR are designed to implement water quality requirements contained in the North Coast Water Board’s Basin Plan. The Basin Plan provides the basis for wastewater treatment requirements that are designed to protect and improve water quality and the environment in the North Coast Region; The GWDR requires measures consistent with Basin Plan requirements and implementation of those measures will reduce impacts to less than significant with mitigation.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact: The project does not include changes to public water or wastewater treatment facilities so no impacts would occur. Onsite retention ponds, when needed such as for cow dairies, are designed to contain manure and feed waste. Retention ponds on existing dairies are the current condition and must meet requirements in CCR title 27 regulations. In addition to title 27 requirements, any new or expanded retention ponds must meet the maximum seepage requirements in the GWDR for protection of water quality and the environment. The project would not include construction of new or expanded stormwater drainage facilities that would cause adverse environmental effects. Infiltration of clean stormwater to feed the groundwater table will be encouraged and monitored in the GWDR.

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact: Existing stormwater drainage facilities on dairies is the current condition. Some of these dairies may have deficient stormwater drainage facilities thereby requiring construction of projects such as curb and gutter, lining with impermeable materials, routing of stormwater/manure mixtures to manure ponds under the GWDR. These are small local projects that will not impact the public utilities and service systems. The project would not include construction of new or expanded stormwater drainage facilities that would cause adverse environmental effects. Infiltration of clean stormwater to feed the groundwater table will be encouraged and monitored in the GWDR.
d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

**Less Than Significant Impact:** Existing dairies are the current condition and continued operation is not expected to have new impacts to water supplies. Most dairies obtain their water from onsite groundwater wells or springs. Some obtain recycled water for irrigation. A few collect rainwater in a catchment for most of their water use. A few more buy water from a city treatment system. The GWDR encourages water conservation. Water conservation planning is required in several sections of the GWDR and MRP. New, expanding, or reopening inactive dairies are required to submit a Water Quality Plan, including information on water use by the time of permit application. The Regional Water Board will consider the size of the dairy, location, quantity of water use calculation, and origin of water, when considering the dairy for enrollment. Projects that do not comply with the GWDR and/or that may have a significant adverse impact without mitigation will not be enrolled and must apply for an individual WDR.

e) **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?**

**Less Than Significant Impact:** Existing dairies generally do not utilize wastewater treatment providers. The farms are in rural areas and thus comply with county septic regulations for bathrooms in the dairy buildings. Manure collection and distribution of fields is usually performed within the farm system and does not impact wastewater treatment providers. A few farms sell manure or compost to outside parties for crops. Any new, expanding, or reopened inactive dairies would do the same. Dairy restrooms may hook up to local wastewater treatment facilities but this would not involve animal manure treatment.

f) **Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?**

**Less Than Significant Impact.** Existing dairies are the current condition and operations in compliance with the GWDR and not expected to lead to any increase in solid waste disposal. In addition, County/City municipalities are generally increasing the amount of waste recycled. New, expanding, or reopening of inactive dairies are expected to recycle much of their waste and thus are not expected to have an adverse impact on landfill capacities. The project would not substantially affect municipal solid waste generation or landfill capacities and no impacts would occur.

g) **Comply with federal, state, and local statutes and regulations related to solid waste?**

**Less Than Significant Impact.** See responses to Items XVII d) above.
XVIII. 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:

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), or

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

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subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

**Background:**

In 2017, the Regional Water Board sent announcements regarding this project to northern California coast tribes on the State Water Resources Control Board’s tribal consultation list per Assembly Bill 52 (Public Resources Code section 21080.3 et seq.). One tribe responded and consultation took place in 2017 and 2018. Regional Water Board representatives reviewed and considered tribal cultural resources (TCR) protection language contained in prior Regional Water Board orders, local ordinances, and State Water Board orders including SWRCB Order WQ 2017-0023-DWQ for Cannabis Cultivation. A SWRCB archaeologist was also consulted. This section presents a process to assess impacts to TCRs from existing, new, expanding, and the reopening of inactive dairies.

a) & b). To identify and protect TCRs at all dairies including existing, new, expanding, and reopening of inactive dairies, the discharger must comply with appropriate mitigation measures described below. Any information regarding TCRs and tribal consultation must comply with all applicable laws related to confidentiality and public disclosure of the information.

1. **Procedures for TCR Evaluation at New, Expanding, or Reopening Dairies:**

   Prior to GWDR enrollment of any new, expanding, or inactive dairies to be reopened, the dairy project must demonstrate compliance with the IS/MND (GWDR Attachment E). The Permittee’s designated Professional Archaeologist or the Regional Water Board shall perform a records search of Native American archaeological resources at the appropriate regional information center of the California Historical Resources Information System (CHRIS). The results must be documented as discussed in the IS/MND and in the GWDR. The requirement to perform a CHRIS records search may be satisfied by using the results of a previous CHRIS records search completed for the specific parcel or parcels where the new, expanding, or inactive dairy activities are proposed to occur.

   The Permittee shall promptly retain a Professional Archaeologist to evaluate the CHRIS positive result if the site has not previously been evaluated and specific mitigation measures developed, to recommend appropriate measures to avoid damaging effects

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²Certain types of activities associated with dairy expansion, creation, and reopening will likely require a separate permit and CEQA analysis by the State, local county, or city permitting department.

³A Professional Archaeologist is one that is qualified by the Secretary of the Interior, Register of Professional Archaeologists, or Society for California Archaeology.
to a TCR. If Native American archaeological sites or artifacts are identified in a CHRIS positive result, then the Permittee or their designated Professional Archaeologist shall contact the culturally affiliated California Native American tribes of the CHRIS positive result. In the case of a new, expanded, or reopened inactive dairy where the Regional Water Board must conduct additional CEQA analysis, the Regional Water Board may consult with the local California Native American tribe prior to circulation of CEQA documents in accordance with AB 52 requirements.4

If the property has not been subject to a prior physical cultural resources survey, then one must be done. The Professional Archaeologist shall
A. Request a Sacred Lands Inventory for the project area from the Native American Heritage Commission;
B. Contact the local tribes about the project to inquire about TCRs in the project area;
C. Conduct a pedestrian survey of the property;
D. Record potential historical and archaeological resources on DPR forms; and
E. Write a report of their findings which shall be submitted to the appropriate regional Information Center of the CHRIS and the Regional Water Board.

If the property has been the subject of a previous survey, the permittee can use the report from the previous survey or the records search results of the dairy parcel to demonstrate compliance with CEQA for that portion of the property surveyed so long as the area previously surveyed did not identify any TCRs. If the report or prior report finds no TCRs, then no further action is required for that portion of the property.

If the archaeologist’s pedestrian survey and research reveals a TCR or a Sacred Lands inventory positive result, then the Professional Archaeologist, and/or the Regional Water Board shall develop appropriate mitigation and conservation measures in consultation with the affected California Native American tribe. If the affected tribe has no comments within 14 days of a request for comments on proposed mitigation and conservation measures, then the Permittee shall add the final conservation measures recommended by their archaeologist to the applicable CEQA document for the new, expanding, or reopening of the inactive dairy project. If the affected tribe submits comments within 14 days of a request for comments, then the Permittee shall carefully consider any comments or mitigation measure recommendations submitted by the culturally affiliated California Native American tribes with the goal of conserving TCRs with appropriate dignity. Mitigation and conservation measures to consider include: avoidance of the area, fencing with flash grazing, soil capping, onsite burial, or other equally protective measures (see Mitigation Measures to Protect TCR Sites on Dairies in Section 4 below). The Permittee shall provide a copy of the final mitigation and conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission and to the Regional Water Board Executive Officer. Final mitigation measures are subject to approval by the Regional Water Board Executive Officer.

New dairies will likely be subject to a project-specific CEQA analysis by a county, city, or state agency for evaluation and approval of grading, building construction, and other environmental impacts. Expanding or reopening inactive dairies may include activities

4 See generally PRC §§ 21080.3.1, 21080.3.2, 21082.3, 21084.2.
that require project-specific CEQA analysis, depending upon the need for grading, construction, or any other environmental impacts that may be caused by operation of the expanded or reopening of the inactive dairy. As such, the conclusions and development of mitigation measures by local land use authorities and other public agencies as they relate to potential environmental impacts for new, expanding or reopening dairies may be different than those determined in this GWDR and its analysis of potential environmental impacts. Therefore, future lead agencies should base their findings on the site-specific information developed for the project.

The Permittee shall notify the Regional Water Board Executive Officer prior to applicable CEQA document circulation if they receive a CHRIS positive result or Sacred Lands Inventory positive result.

Prior to enrollment in the GWDR, new, expanding or inactive dairies to be reopened must demonstrate compliance with CEQA and, if necessary, submit any project level CEQA analysis and associated mitigation measures to the Regional Water Board. In some instances, the Permittee may be required to apply for an individual permit.

2. Procedures for Discovery During Significant Ground Disturbing Activities on All Dairies:
   If any suspected archaeological materials or indicators\(^5\) are uncovered or discovered during significant ground disturbing dairy activities that are regulated under this GWDR, then those significant ground disturbing dairy activities shall immediately cease within 50 feet of the find (100-foot diameter circle). Examples of significant ground disturbing dairy activities may include: new deep ripping, trenching, excavation, road construction, road reconstruction, or pond construction.\(^6\) As soon as practicable following discovery, the Permittee shall consult a Professional Archaeologist to document and assess if the find is a historical resource pursuant to PRC section 5024.1(c) or a unique archaeological resource pursuant to PRC section 21083.2(g).

   If the Professional Archaeologist determines that the find is not a Native American archaeological site, then the dairy operator may continue dairy operations at that site in compliance with all applicable laws and regulations related to archaeological discoveries as advised in writing by the Professional Archaeologist and approved by the Regional Water Board.

   If the Professional Archaeologist determines that the find is a Native American archaeological site, then the Permittee or their designated Professional Archaeologist shall notify the Native American Heritage Commission within seven days of the discovery and request a list of any California Native American tribes that

\(^{5}\) Archaeological materials or indicators may include, but are not limited to: arrowheads and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars, and pestles) and locally darkened midden soils containing some of the previously listed items plus fragments of bone, fire affected stones, shellfish, or other dietary refuse.

\(^{6}\) Ongoing dairy activities that are not significant ground disturbing activities will generally include grazing, fertilizing, irrigation, and other similar activities.
are potentially culturally affiliated with the discovery. The Permittee or their designated Professional Archaeologist shall notify any potentially culturally affiliated California Native American tribes of the discovery within 48 hours of receiving the list from the Native American Heritage Commission. The Professional Archaeologist shall develop proposed mitigation measures, which may include those listed in Mitigation Measures to protect TCR Sites on Dairies (Section 4 below) as necessary. The proposed mitigation measures shall be submitted to the culturally affiliated California Native American tribes. If the affiliated tribe has no comments on proposed mitigations measures within 14 days of a request for comments, the Permittee shall implement the final mitigation measures recommended by their archaeologist. A copy of the proposed mitigation measures shall be submitted to the Regional Water Board and the affiliated tribe prior to implementation.

If the affiliated tribe submits comments within 14 days of a request for comments, then the Permittee will carefully consider any comments and mitigation measure recommendations submitted by the tribe with the goal of conserving TCRs with appropriate dignity. The Permittee shall provide a copy of the final proposed mitigation measures to the culturally affiliated California Native American tribes identified by the Native American Heritage Commission and to the Regional Water Board Executive Officer. If the tribe and the landowner cannot reach an agreement, the Regional Water Board Executive Officer shall require mitigation measures such as from the list in Section 4 below. Upon tribe/landowner agreement or Executive Officer approval, dairy activities can resume within the affected zone.

Previously documented areas with archaeological material or indicators that have an archaeologist report with mitigation measures that continue to prevent significant impacts, are exempt from this section provided the Permittee avoids any significant adverse impacts to TCRs. If mitigation measures to protect the archaeological site are unclear or undocumented, then the Permittee must consult a Professional Archaeologist as described above. The Permittee must send a copy of the archaeology reports to the Regional Water Board and the affected tribe with a statement of protection measures for review of CEQA compliance.

Nothing in the Order should be construed as the Regional Water Board granting the authority to any third-party access to private land.

3. See Mitigation Measure V-3 in Section V. d. above for treatment of human remains.

Direct and indirect impacts to TCRs could occur from dairy operations. Direct impacts from cattle to TCR sites may include significant ground disturbance activities especially around wet areas such as troughs, streams, and springs. Impacts can occur in areas where animals congregate and habitually walk through, including stream crossings and steep banks. Cattle wallowing can also cause subsurface impacts. Direct impacts can also occur from dairy operations such as excavation for retention ponds, trenching for irrigation lines or conduit, grading roads that go through TCR sites, and deep tilling of
fields. Indirect impacts can occur from overgrazing and the loss of vegetation that holds the soil intact. Areas of high traffic and corrals where vegetation is denuded may also experience erosion.

The following are examples of mitigation measures that, if feasible for a given site, may be used to minimize and avoid significant adverse impacts to TCRs sites:

A. Avoidance of the site;
B. Confidentiality of the location of the site;
C. Fence off or cap-in-place areas of very high sensitivity such as burial and cemetery sites;
D. Identify equipment travel routes around sensitive TCR sites;
E. Heavily used wet areas, such as troughs, can be paved or moved from sensitive areas to areas that are not sensitive or are less sensitive;
F. Conduct frequent walk-throughs of the sensitive TCR sites to assess pasture conditions;
G. Restrict grazing in TCR sites to seasonally dry times of the year;
H. Implement more frequent pasture rotation in the sensitive areas to lessen impacts from grazing;
I. Use aboveground irrigation lines or route irrigation lines around TCR sites;
J. Restrict new impacts at highly disturbed areas;
K. Provide workers training (develop brochures) about potential TCR resources in the area;
L. Protect the cultural character and integrity of the resource; and
M. Other effective mitigation measures that reduce impacts to TCR sites to a less than significant level.

Note that not all mitigation measures will apply to individual dairies. Appropriate selection of the mitigation measures above as tailored to a project's individual impacts will reduce impacts to a less than significant level.

Previously documented areas, with archaeological material or indicators that have an archaeologist report and are employing mitigations that continue to prevent significant impacts, are exempt from this section provided the Permittee continues to avoid any significant adverse impacts to TCR sites. If mitigation measures to protect the site are unclear or undocumented, then the dairy Permittee must consult a Professional Archaeologist as described in Section 2 above.

The Regional Water Board finds is that with implementation of these required mitigation measures, impacts will be less than significant.
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE --

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?

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)?

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

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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 impact with mitigation: Although it appears that relatively few new, expanded, and inactive dairies may reopen in the near future, there is an increased risk for animal wastes to enter surface and ground water. To be eligible for GWDR coverage, those seeking to open one of these dairy types must comply with the following conditions:

- Prior to start-up, dairy owner/operators must develop site-specific management plans applicable to each operation, in accordance with technical standards outlined in the GWDR. Such plans include a Water Quality Plan for the entire operation and a Nutrient Management Plan for lands where manure products are applied.

- Prior to start-up, manure retention ponds at new and inactive dairy operations must comply with Natural Resources Conservation Service (NRCS) Waste Storage Facility Code 313 including a maximum specific discharge (unit seepage rate) of $1 \times 10^{-6}$ cm/sec. Such ponds may not be used until the Discharger submits a report verifying that the liner meets this requirement.

- Operations must not include more dairy animals than the infrastructure is designed to accommodate. New, expanding, or reopening of inactive dairy facilities must demonstrate compliance with CEQA, including any site-specific CEQA documentation prepared by local land use authorities prior to applying for GWDR coverage.

In addition to eligibility requirements for new, expanding, and reopened dairies that had been inactive, all dairies will be subject to the provisions of the GWDR. In general, these provisions require:

- That discharges of waste from dairies shall not cause surface water or groundwater to be further degraded, to exceed water quality objectives, unreasonably affect beneficial uses, or cause a condition of pollution or nuisance. The GWDR also requires monitoring of surface water and groundwater to demonstrate protection of surface water and groundwater;

- Daily management and monitoring of waste management facilities and implementation of site-specific pollution prevention practices that result in the “best practicable treatment or control” of discharges; and

- All Dischargers to prepare and implement management plans for the facility’s production areas, retention ponds, land application areas and grazing lands, in accordance to specified technical standards.

An improvement in water quality is expected due to the additional protections in the GWDR. The enrollment of goat, sheep, and water buffalo dairies not previously
covered by the 2012 Dairy, will result in education of the owners/operators, construction of best management plans, water quality planning, and surface water and groundwater monitoring of these facilities.

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 impact: Refer to response to Item XVIII a), above.

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

No impact: The project would not cause any substantial adverse effects to human beings, either directly or indirectly. The GWDR is intended to benefit human beings through implementation of actions designed to protect surface and groundwater, enhance fish populations, and contribute to a reduction in property damage in and/or nearby to stream channels in the Region. The GWDR will not have a substantial adverse impact to: farmland or zoning, air quality plans, geology, hazardous materials, land use planning, mineral resources, biological plans/policies; cause a housing displacement, or impact transportation/traffic.
E. REFERENCES, PERSONS CONTACTED, AND REPORT PREPARERS

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California Department of Food and Agriculture and United States Department of Agriculture, Office of Environmental Farming & Innovation website: https://www.cdfa.ca.gov/oefi/.

California Health and Safety Code

California Public Resources Code


**Persons Contacted:**

**Author:**
Cherie Blatt, Water Resource Control Engineer, North Coast Regional Water Quality Control Board

Att E Initial Study Dairy GWDR