California Environmental Quality Act
(CEQA)

INITIAL STUDY

and Mitigated Negative Declaration

for

Waiver of Waste Discharge Requirements and General Water Quality Certification for County Road Management and Activities Conducted Under the Five Counties Salmonid Conservation Program in the Counties of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity in the North Coast Region

March 14, 2013

California Regional Water Quality Control Board, North Coast Region

5550 Skylane Blvd.
Santa Rosa, CA 95403

Prepared By:
California Regional Water Quality Control Board, North Coast Region

Contact:
Maggie Robinson, (707) 576-2292
mrobinson@waterboards.ca.gov

CEQA ENVIRONMENTAL CHECKLIST

PROJECT DESCRIPTION AND BACKGROUND

1. **Project Title:**
   Waiver of Waste Discharge Requirements and General Water Quality Certification for County Road Management and Activities Conducted Under the Five Counties Salmonid Conservation Program in the Counties of Del Norte, Humboldt, Mendocino, Siskiyou, Trinity in the North Coast Region

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

3. **Preparer and phone number:**
   Maggie Robinson, (707) 576-2292

4. **Project location**:
   Siskiyou, Trinity, Del Norte, Humboldt, and Mendocino County, excepting those portions of Mendocino County that drain to the Russian River.

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

6. **Brief Description of Project:**
   The project is the issuance of a Waiver of Waste Discharge Requirements and general water quality certification for county road management and activities conducted under the Five Counties Salmonid Conservation Program (5C Program) in the counties of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity in the North Coast Region (the 5C Counties). The 5C Counties are responsible for conducting routine and emergency repair and maintenance of county roads and related facilities, including bridges and road maintenance yards, and snow and ice removal. These activities have the potential to discharge wastes that affect waters of the state. In addition, 5C Counties are responsible for discharges of waste from legacy sediment sites associated with their road networks. Legacy sediment sites are existing sites that are 1) actively discharging or have the potential to discharge sediment in violation of water quality requirements; 2) are caused or affected by human activity; and 3) may feasibly and reasonably respond to erosion control/management measures. The 5C Program provides an efficient and organized structure for preventing and mitigating water quality impacts from county road activities, and also implements important restoration projects in a large portion of the North Coast Region. Activities that are covered are:

a) Road maintenance, including grading practices (shoulder blading and rebuilding, erosion repair, ditch shaping and cleaning, channel maintenance), road surfacing and dust abatement (road surface repair, dust abatement, water drafting, low water crossing maintenance), vegetation management (mowing and cutting of vegetation, invasive weed abatement, tree removal), and winterizing roads.

b) Culvert maintenance, including culvert cleaning, culvert improvement and repair, culvert sizing, culvert replacement, ditch relief culvert location selection and installation, and temporary stream diversions during in-stream projects.

c) Soil disposal, including site selection for spoil disposal, disposal site maintenance, disposal site closure, and stockpile maintenance.

d) Maintenance yard management, including facility housekeeping practices, building and grounds maintenance, vehicle and equipment maintenance (vehicle fueling, vehicle and equipment maintenance and repair, pressure washing of vehicles and equipment, and care and feeding of oil/water separators), and material use and storage (waste minimization, handling and disposal; used oil recycling; storage of hazardous materials; outdoor storage of raw materials; outdoor loading/unloading of materials; above ground tank leak and spill control; safer alternative products).

e) Bridge maintenance, including bridge vegetation management, and bridge drift removal (bridge painting and cleaning are not included in this activity.

f) Emergency maintenance, including slide and settlement repair, and accident cleanup.

g) Snow and ice removal, including sanding, de-icing, and anti-icing chemicals.

h) Treatment of legacy sites, including upgrading of stream crossings, road outsloping and rolling dip installation where safe and suitable, installing ditch relief culverts and overside drains, removing berms, armoring unstable areas, reshaping cutbanks, and rocking native-surfaced roads.

Most of the potential impacts from the above-listed activities are associated with erosion and sediment delivery and/or changes to riparian systems that may reduce shade and affect water temperatures, and chemical discharges from maintenance yards and snow and ice removal. Activities and associated discharges do not include those that take place within the channel and/or on the banks of a watercourse containing fish and/or that supplies water for a domestic water source.

The Waiver of waste discharge requirements contains conditions that rely on the implementation of the 5C Program. The primary components include: 1) prevention and minimization of water quality impacts from county road maintenance activities through implementation of the *Water Quality and Stream Habitat Protection Manual for County Road Maintenance in Northwestern California* (5C Roads Manual); 2) inventory, prioritization, and scheduling for remediation of sediment delivery sites using the Direct Inventory of Roads and Treatments (DIRT) methodology; and 3) monitoring and reporting requirements, including adaptive management to ensure that lessons learned are translated into modified practices. The 5C Waiver streamlines the application process for projects conducted as part of the 5C Program by providing CEQA analysis for all projects eligible for coverage and a simplified application procedure for coverage under a general 401 Certification that is included as part of the Waiver

Five Counties Salmonid Conservation Program Description

The 5C Counties encompass 17,555 square miles, within which are approximately 4,790 miles of County roads and approximately 16,600 culverts (including ditch relief culverts).

Estimated total road miles by county are as follows:

Del Norte	501 miles
Humboldt	1207 miles
Mendocino	1018 miles
Siskiyou	1364 miles
Trinity	700 miles

The 5C Counties entered into a cooperative effort beginning in 1997 to address the listing of coho salmon as a threatened species under the federal Endangered Species Act (ESA). The effort resulted in the development of the 5C Program, committed to a long-term, systematic, prioritization-based restoration to improve water quality and salmonid habitat. An important element of the 5C program is long term reduction of sediment discharges from county roads to watercourses utilized by salmonids and to restore salmonid habitat connectivity.

The 5C Roads Manual was developed in 2002 as an implementation tool for the 5C Program. The overall goals of the 5C Roads Manual include: prevent and minimize delivery of sediment and chemicals to streams, protect aquatic and riparian habitat, and restore hydrologic connectivity where feasible. The ten principles for treating county roads, as listed in the 5C Roads Manual, reiterate the need to prevent erosion and sediment delivery to streams, and to protect streamside vegetation, recognizing the value of shade canopy to cool stream temperatures.

The 5C Roads Manual covers best management practices (BMPs) for the routine and emergency repair and maintenance of county roads and related facilities, such as bridges and county road maintenance yards, including the replacement of existing structures with different types of structures. Road maintenance includes actions taken to prevent erosion and/or the deterioration of a roadway, such as the

cutbank, road surface, fillslope, and all drainage structures. These actions may include road surface grading, rocking, or paving; culvert clearing, repair, or replacements; bridge repair and painting; inboard ditch clearing and hydrologic disconnection; cutbank slope failure and landslide repair. The 5C Roads Manual includes management measures for activities to protect the traveling public, such as snow and ice removal. The 5C Roads Manual describes categories of maintenance activities and recommended BMPs, including management of temporary and permanent soil stockpile locations, and retention of riparian vegetation near watercourses, aimed at reducing environmental degradation from sediment delivery to streams, and minimizing the potential for adverse effects.

The 5C Roads Manual includes considerations for minimizing disturbance of riparian areas and maintaining shade. Shade trees along streams and rivers are to be maintained unless they are determined to be a hazard. Any removal of trees providing shade or bank stabilization requires coordination with multiple agencies.

A major component of the 5C Program is a road inventory method known as "DIRT." The DIRT component provides a methodology to assess road related erosion sources from existing roads and drainage structures, identify road stream crossings that are barriers to fish passage, locate suitable soil spoils sites, recommend treatments of identified sediment sites, and begin to prioritize the inventoried sites by treatment immediacy and other criteria, including the erosion potential and total sediment delivery volume. Individual counties and 5C Program staff may modify initial DIRT prioritizations when developing implementation projects. Additional factors include a cost-benefit analysis of prescribed treatments, biological considerations including watershed priority and anticipated benefits to salmonid populations; and management considerations such as capital improvement schedules and funding availability. The implementation approach to DIRT recommended treatments is developed by each individual County depending on their economic and other available resources.

The 5C Roads Manual includes a training program for road crews, supervisors, engineers, and managers, and a monitoring program to evaluate and document the effectiveness of the BMPs in protecting, maintaining, and enhancing water quality and stream habitat, especially for listed species of salmonids. The manual describes selective self-monitoring of the implementation and effectiveness of BMPs with suggested methods for carrying out both types of monitoring. Recommendations are included for adaptive management every five years to evaluate and update the manual's BMPs, based upon the monitoring results. The monitoring provisions of the 5C Program also specify the development of an annual report by January of each year to summarize each county's effectiveness monitoring results.

7. **Surrounding land uses and setting:**
The five northern California counties currently participating wholly or in part in the 5C Program are Siskiyou, Trinity, Del Norte, Humboldt, and those portions of Mendocino that do not drain to the Russian River. Watersheds included in the 5-county area include the Klamath River and its major tributary, the Trinity River; Redwood Creek, Little River, Mad River, Eel River, Van Duzen River, Mattole River,

Big River, Noyo River, Gualala River, Garcia River, and the coastal rivers and creeks in Mendocino County .

The 5C area is characterized by distinct geographic and climate zones with differing rainfall patterns and temperature levels. The low Coast Ranges along the Pacific reach to over 5200 feet. The climate is moderate and foggy and with moderate temperature variations. For example, at Eureka, the average summer temperature high has not exceeded 64°F for the period of record. Inland, where the Klamath Mountains reach to over 9,000 feet, summer temperatures can exceed of 110°F in the lower-lying areas, with winter temperatures reaching below 20°F.

Precipitation in the 5C area exceeds any other part of California, and damaging floods are a fairly frequent hazard. About 35% of the state's runoff occurs in this area, which is about 15% of the land area of the state. The streams and rivers of this area are home to salmon and steelhead and other important fish species, and reservoirs support both cold- and warm-water habitats.

8. **Other public agencies whose approval is required**
County roads are maintained by County agencies such as a Department of Public Works, Department of Transportation, or Roads Department. Most County roads have existed in their present location for many years, some for over a century, and in most cases prior to the existence of CEQA.

This project does not preclude the need for persons/programs conducting road maintenance activities to obtain permits which may be required by other local, state and federal governmental agencies. Section 1602 of the California Fish and Game Code (FGC) requires any person, state or local governmental agency, or public utility to notify California Department of Fish and Wildlife (CDFW) before beginning any activity that will substantially modify a river, stream or lake. State and local agencies with approval authority over county road/5C projects covered under the Waiver may choose to rely on the Regional Water Board's CEQA analysis as responsible agencies. The US Army Corps of Engineers (ACOE) may require a Clean Water Act Section 404 permit if projects extend Below Ordinary High Water. In 2007 the National Marine Fisheries Service incorporated the 5C Roads Manual activities under incidental take coverage set forth in Limit 10 of Section 4(d) of the Federal Endangered Species Act. We are not aware of any other public agency required to approve road maintenance projects that fall under this waiver.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 3 for additional information.

☐	Aesthetics	☐	Agriculture and Forestry	☒	Air Quality

☒	Biological Resources	☒	Cultural Resources	☒	Geology/Soils
☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials	☒	Hydrology/Water Quality
☒	Land Use/Planning	☐	Mineral Resources	☒	Noise
☐	Population/Housing	☐	Public Services	☐	Recreation
☒	Transportation/Traffic	☐	Utilities/Service Systems	☒	Mandatory Findings of Significance

DISCUSSION OF POTENTIAL EFFECTS OF PROPOSED PROJECT

CEQA requires a lead agency to prepare an Initial Study to determine whether a project may have a significant effect on the environment. (Cal. Code Regs., tit. 14, § 15063, subd.(a).) A "significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. (Cal. Code Regs., tit.14, § 15382.) If the Initial Study does not show that there is substantial evidence, in light of the whole record before the agency, that a project may have a significant effect on the environment, a Negative Declaration may be prepared. If the Initial Study identifies potentially significant effects, but identifies revisions or conditions to mitigate the effects to a point where clearly no significant effects would occur, a mitigated negative declaration may be prepared. (Cal. Code Regs., tit.14, § 15070.)

CEQA ENVIRONMENTAL CHECKLIST

I. AESTHETICS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

This regulatory action is for the 5C Program which only covers existing roads, and should not result in any significant effect on aesthetics from existing facilities. There may be an improvement in aesthetics as a result of better road right-of-way maintenance. Adoption of this waiver will not result in a material change in the scope or pace of maintenance activities. New road construction is not covered by this waiver, so it largely encompasses routine maintenance of existing facilities. The proposed project would not create a new source of substantial light or glare, which would adversely affect day or nighttime views; therefore, the appropriate finding is **no impact**.

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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or 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)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a – e) It is not foreseen that this regulatory action will have a significant impact on agriculture and forest resources. Adoption of this waiver will not result in a material change in the scope or pace of maintenance activities. Because the 5C Program does not include construction of new facilities, or the replacement of existing facilities with facilities with larger footprints, there will be no additional impacts to open range, meadow, agricultural, or forest land. Therefore the appropriate finding is **no impact.**

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:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) 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 non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

a – e) Because any potential impacts to air quality are short-term and the Waiver requires compliance with all local, state, and federal regulations, including the Clean Air Act and applicable state air quality standards, activities covered by the Waiver are not expected to have a significant impact on air quality. Specific BMPs designed to prevent and minimize release of pollutants are detailed in the manual (e.g., those prescribing road surfacing). The 5C Program does not include construction of new facilities, meaning there will be no additional impacts. Adoption of this waiver will not result in a material change in the scope or pace of maintenance activities. Therefore, the appropriate finding is **less than significant impact**.

IV. BIOLOGICAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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 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?	☐	☐	☐	☒

a – d) The geographic scope of the activities covered under the Waiver will include areas that contain listed threatened or endangered salmonid species. The various road maintenance practices can have potentially significant impacts to listed threatened or endangered salmonid species within the 5C Program area. Road maintenance projects have the potential to contaminate streams with chemicals or other unnatural materials without proper management (Five Counties 2002; ODOT 1999; WashDOT 2002). Road surfacing projects have the potential to discharge asphalt concrete binder, asphalt cement, liquid asphalt, asphalt concrete, asphaltic emulsion, sealant material, Portland cement concrete, concrete rinse water, concrete grindings and cuttings, concrete waste, and diesel oil. Dust abatement work can possibly cause the discharge of dust palliatives into the stream or storm water drainage system: calcium magnesium acetate, magnesium chloride, emulsified asphalt, or lignin sulfates, among other chemicals. Water drafting for dust abatement can possibly result in the taking of fish, particularly fry-size salmonids, from the stream system due unscreened or inadequately screened diversions, reduction of flows or dewatering of streams to levels that harm fish and other aquatic life, increases in water temperatures due to over-drafting of streams, and discharges of sediment into stream systems caused by runoff from water spills at unsurfaced streamside drafting sites for water trucks. Road maintenance yards present pollution risks through the storage and use of materials that could be

harmful to aquatic life: fuel, oil, chemicals, hazardous waste, heavy metals, organic and inorganic materials, fertilizer, pesticides, solvents, and paint products. Bridge cleaning and maintenance can possibly discharge paint, metal grindings, concrete grindings, expansion joint filler, concrete mix and rinse water. Proper snow removal and ice control methods are necessary to prevent the discharge of de-icing agents, anti-icing chemicals, and sediment to watercourses.

In order to mitigate all of the potential water quality concerns and their causes, the Waiver contains conditions and requirements that include implementation of the DIRT methodology, and of the BMPs and recommended construction methods contained within the 5C Road Manual. Additionally, the Waiver requires monitoring and reporting of activities covered under this Waiver in order to document that all activities are performed in compliance with these mitigation measures. The specific BMPs designed to mitigate potential impact are as follows:

Road surfacing BMPs are addressed in Chapter 3-B-1 of the 5C Road Manual. They are:

1. Eliminate diesel and use only environmentally sensitive cleaning and releasing agents.
2. Use heat sources to heat and clean tack nozzles during operations.
3. Avoid road surface maintenance during wet weather to minimize the discharge of potential pollutants into the storm water drainage system. However, during periods of rain, road surface maintenance may be necessary.
4. Cover storm drain inlets and manholes when paving or maintaining road surfaces if runoff is anticipated.
5. Identify drain inlets and watercourses both upstream and downstream of the work site. Identify where the flow of a leak, spill or other runoff would go.
6. Protect waterways with straw bales, sandbags, filter fabric, or other diversion or filtering controls (also discussed in Appendix B-9).
7. Set-up the work area to minimize the tracking of material by vehicles and equipment in or out of the work area.
8. Always park paving machines over drip pans or absorbent materials. Keep equipment out of the riparian area.
9. A spill contingency plan and resources to contain a small to moderate spill (1-10 gallons) shall be in place. Carry adequate erosion control supplies and oil absorbent materials (diapers, kitty litter, shovels, etc.) to keep materials out of water bodies.
10. Dispose of excess material at appropriate sites, depending upon material being disposed. Keep material out of the riparian area (also discussed in Chapter 5, Spoil Disposal and Stockpiling).
11. Asphalt concrete (AC) chunks and pieces may be used in embankments when these materials are placed where they will not enter the waters of the state. Keep material out of the riparian area.
12. AC pavement grindings may be used as road shoulder backing when these materials are placed where they will not enter the water of the state. Keep material out of the riparian area.

13. Follow these best management practices for concrete mixing on site:
    a. Ensure that contractors who fuel and operate asphalt plants or cement mixing operations on site have an adequate spill plan and materials for spill containment.
    b. Mixing excess amounts of fresh concrete or cement on site should be avoided.
    c. Establish mixing plants outside of riparian corridors.
    d. Dry and wet materials should be stored away from waterways and storm drains and should be covered and contained to prevent runoff from rainfall.
    e. Ensure that contractors provide areas for truck chute cleanout with proper containment of wet concrete.
    f. Protect inlets and catchments from fresh concrete.
14. Make inspection an ongoing practice:
    a. After rainfall events, inspect drainage protection measures. In the case of an extended storm, inspect at least once per day. If the protection measures are subjected to non-stormwater flows, inspect daily.
    b. Inspect inlet protection to prevent water from backing up. If back-up occurs, the protection needs to be replaced with an alternative device.
    c. Monitor the concrete wash-out, waste storage and disposal sites and on-site procedures at least weekly.
    d. Make sure employees and contractors are following pollution control measures.

Dust abatement BMPs are addressed in Chapter 3-B-2 of the 5C Road Manual. They are:

1. Do not apply chemical dust palliatives during rain or immediately before anticipated rain to lower the risk of running off into a watercourse.
2. Apply methods and materials in a matter that is not detrimental to either water or vegetation. See Table 3-B-2.1 for selection criteria and recommended application rates
3. Use environmentally friendly dust palliatives where warranted.
4. Carry adequate spill protection materials when applying chemicals.
5. Use environmentally sensitive cleaning agents.
6. Dispose of excess materials at appropriate sites. Never dispose of materials in the riparian area or the floodplain.
7. Avoid applying excessive amounts of water onto road surface to prevent sediment runoff into ditches and the stream system.
8. When applying chemical dust palliatives, follow these site preparation practices:
    a. Blade and compact a smooth surface. Never sidecast the surface material where it could be delivered directly or indirectly into a stream.
    b. Crown or slope the surface to avoid ponding. Compact soils if needed.
    c. Pre-wet the surface uniformly with water @ 0.03-0.3 gal/sq. yd.

d. Apply the first treatment under pressure and overlap solution (6-12 in.). Apply the second treatment, before first treatment becomes ineffective at 50% application rate.
e. Allow treated area to cure 0-4 hours. Compact area after curing.
f. Reactivate chemicals in low humidity by re-wetting @ 0.1-0.2 gal/ sq. yd.

Water drafting BMPs are addressed in Chapter 3-B-3 of the 5C Roads Manual. They are:

1. Seek drafting sites at streams and pools where water is deep and flowing, as opposed to streams with low flow and small, isolated pools. Do not draft water from the stream if any of the following conditions would result:
   a. bypass flows within the stream are less than 2 cubic feet per second
   b. pool volumes at the water drafting site would be reduced by 10% or more
   c. instantaneous diversion rate exceeds 350 gallons per minute
   d. pumping rate exceeds 10% of the stream flow
   e. fish may become stranded or adequate fish screens cannot be put in place.
2. Where seasonal drafting locations on Class I and Class II streams cannot meet the above conditions, develop appropriate off-stream reservoirs or adjacent watering hole or sump, or use existing fire hydrants. The county may propose to draw down Class I and II streams below the flow and pool volume conditions stated in #1 if CDFW determines that such actions will not have an adverse impact on Class I beneficial uses downstream.
3. Draft water from Director-approved County sites. For each approved site:
   a. Describe and map the proposed water drafting location
   b. The watercourse or lake classification
   c. The general drafting location use parameters (i.e., yearly timing, estimated total volume needed, estimated total uptake rate and filling time)
   d. Recognize the effects of the pumping operations proposed, particularly during dry and critically dry years.
   e. Proposed alternatives to prevent adverse effects (e.g. reduction on hose diameter, reduction in total intake at one location, described allowances for recharge time, and alternative water drafting locations).
   f. Plans for fish screening design, installation, and maintenance.
4. Provide adequate fish screening of each surface water diversion in Class I and II waters. Follow the latest, updated "Water Drafting Specifications" by NMFS and "Guidelines for Temporary Water Drafting from Watersheds Supporting Anadromous Salmonids" by CDFW (see Appendix D). In general, these practices address the following:
   a. Design screens to prevent the entrainment or impingement of all life stages of fish or amphibians and to minimize adverse alterations to stream habitat. To be addressed are approach velocity (velocity of water through the screen openings), size of screen (proportional to diversion rate), and screen opening size (not usually larger than 3/32" in diameter). Work with County Engineer in this design or purchase NMFS / CDFW approved pre-built fish screens for temporary sites.

b. Use the screen on the pump intake whenever surface water is diverted in Class I and II waters.
c. Orient the screen face parallel to flow for best screening performance. The approach velocity shall not exceed 0.33 cubic feet per second at any point on the screen surface. Submerge the screen below the water surface, with clearance above and below of at least one screen-height.
d. Clean the screen to be free of accumulated algae, leaves or other debris which could block portions of the screen surface and increase approach velocities at any point on the screen.
e. Keep the screen in good repair.

5. Surface the road approaches to drafting sites on streams with rock or other suitable material to avoid the generation of sediment-carrying runoff due to water spills or rainfall.
6. Require water drafting operators to keep a water diversion log on the water truck which records the operator's name, date, time, location, pump rate, filling time, screen cleaning and inspection, and bypass flow from the source stream.
7. Ensure that water drafting operators and county engineer have completed training by CDFW, NMFS, or other appropriate entity, so as to be familiar with in the above requirements and practices.

In addition to the BMPs within the 5C Road Manual, CDFW shall be notified in writing pursuant to FGC 1602 prior to water drafting. All water drafting activities shall be authorized in LSA or other written approval from CDFW.

Road maintenance yard BMPs are addressed in Chapter 6, Managing the Maintenance Yard. This chapter is broken out into several sections that cover the different aspects of maintenance yard management, each containing numerous BMPs The sections cover:

1. Facility and Housekeeping Practices (Chapter 6-A);
2. Building and Grounds Maintenance (Chapter 6-B);
3. Vehicle and Equipment Maintenance (Chapter 6-C) which includes Fueling (Chapter 6-C-1), Maintenance and Repair (Chapter 6-C-2), Pressure Washing (Chapter 6-C-3), and [maintenance of] Oil/Water Separators (Chapter 6-C-4); and
4. Material Use & Storage (Chapter 6-D) which includes Waste Minimization (Chapter 6-D-1), Used Oil Recycling (Chapter 6-D-2), Storage of Hazardous Materials (Chapter 6-D-3), Outdoor Storage of Raw Materials (6-D-4), Outdoor Loading/Unloading of Materials (6-D-5), Above Ground Tank Leak & Spill Control (6-D-6), and Safer Alternative Products (6-D-7).

Bridge cleaning BMPs are addressed in Chapter 7-A-1 of the 5C Road Manual. They are:

1. Take adequate measures in maintenance activities to ensure that paint and other hazardous material do not enter waters of the State or the riparian area.

2. Keep non-hazardous materials and debris from falling from the structure into the water or the riparian area. Remove any material that falls into the water in the least destructive way possible, or leave in place if this would be less destructive to fisheries habitat, according to CDFG biologist. Coordinate with CDFG biologist for presence of listed salmonids or their redds below bridge locations.
3. Temporarily block deck drains over streams and scuppers over streams when pressure washing, sandblasting, or scraping structures, to route water off deck and into a safe collection facility. Allow no washed material to be deposited in riparian area. Stage the operation to capture and collect as much debris as possible. Transport the waste back to a Maintenance facility or approved storage site.
4. Remove large debris from bridge decks with sweeper or shovel. Scrape other material by hand before being collected or removed, prior to pressure washing.
5. Develop practices to eliminate drainage systems that drain directly to streams where physically and economically possible.
6. Collect broken or damaged treated bridge pier fender posts and bring them back to a Maintenance facility. Dispose of the posts according to approved waste disposal practices.
7. Coordinate with CDFW on the appropriate timing for performing bridge cleaning or maintenance with regard to bats and swallows. Seek and apply approved methods, such as netting and other measures, to preclude future nesting on the bridge.
8. Follow these guidelines for bridge washing:
    a) Perform during high water event or when turbidity induced by bridge cleaning is not detectable ¼ mile downstream.
    b) Use cold-water pressure washing to prevent the removal of lead-based paint.
    c) Do not use any soaps or detergents.
    d) Place a tarp containment system under the working platform and sidewalk to capture any paint chips, dirt, lead-contaminated cleaning debris, and pressure washing water.
    e) Contain and dispose of filtered wash water and all cleaning debris off site.
    f) To avoid harming swallows and bats using the bridge for habitat:
        i) Avoid washing tight areas (e.g. cracks, crevices) where bats may be present.
        ii) If bats are observed, cease washing operations.
        iii) If birds are building nests, laying eggs, or tending young, no washing will occur.
        iv) [see discussion below]
        v) If any of the above criteria cannot be met, the local CDFW office must be contacted and the individual bridge will be discussed.

The Bridge Washing BMP 8(f)(iv) is no longer considered an effective BMP by CDFW. It calls for the use of netting, which has been documented to trap and kill

birds and other wildlife depending on the method of placement, size of netting, materials used, and other factors.

Use of netting on bridges, as well as any additional specific measures for bridge maintenance shall be coordinated through a LSA or other written approval from CDFW. The 5C Counties shall comply with all written conditions in the LSA, and state laws protecting migratory birds, eggs, nests, and young (FGC 3503, 3513). Written authorization shall be obtained from CDFW prior to beginning work.

Snow and ice removal BMPs are addressed in Chapter 9-A-1 of the 5C Road Manual. They are:

1) The development of winter management and operation plans that identify critical areas, with levels of service for roads and methods for maintaining levels of service during winter weather;
2) Inspection of snow and ice control vehicles and equipment for fuel and oil leaks prior to using (also discussed in Chapter 6-C, Maintenance Yard: Vehicle & Equipment Maintenance);
3) Where possible, avoid blowing or pushing ice, snow, abrasives, or other debris into watercourses, the storm water drainage system, or where a storm water drainage system inlet can be blocked;
4) Stop sidecast sweeping within 50 feet of structures over water, where possible;
5) Cleaning of inlets prior to first rain as feasible (also discussed in Chapter 3-D, Winterizing Roads); and
6) Modifying blade angles or blower hoppers in sensitive areas.

The 5C program is in large part designed to improve habitat and fish passage for endangered salmonid species, and has been issued a 4(d) exemption under the federal ESA (16 U.S.C §§ 1531-1544). Biological resources will benefit from the project, through reducing maintenance related impacts to riparian areas, wetlands, and other natural communities; improvements in fish passage by improving watercourse crossing design; and reduction of pollutant discharges by implementing the BMPs outlined within the 5C Road Manual. By initiating the DIRT road inventory-and-prioritize methodology, following the recommended construction methods, and implementing the BMPs, biological resources will benefit through avoidance of habitat reduction, fish passage will improve, and pollutant discharges will be reduced. Therefore, the appropriate finding is **less than significant impact with mitigation**.

e – f) The Order contains a specific provision stating that this project does not preclude the need for those counties conducting road maintenance activities to obtain permits which may be required by other local, state and federal governmental agencies. The 5C Road Manual specifically outlines additional permits that may be needed for each of the activities discussed in the Manual. Therefore, the appropriate finding is **no impact.**

V. CULTURAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

a – d) This program regulates the activities conducted under the 5C Program on existing roads within in the North Coast Region. No substantial adverse change should occur to the number or location of historical, archaeological, or geologic resources. Many roads in our region have existed for generations, some for over a century, are still in use, and have become part of the fabric of the landscape of the North Coast Region. Because the 5C Program does not include construction of new facilities there will be no additional impacts. Adoption of this waiver 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 which may have jurisdiction over cultural resources. Therefore, the appropriate finding is **no impact**.

VI. GEOLOGY AND SOILS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

a i-iv) This project will not expose people or structures to potential substantial adverse effects. Many of the roads within the 5C Counties 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 activities covered under the 5C Program. The activities conducted under the Waiver 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 Waiver will not expose people or structures to potential

substantial adverse effects involving landslides, because there are no structures located in areas that can be affected by the project. Therefore the appropriate finding is **no impact**.

b – c) The geographic scope of the activities covered under the Waiver will include areas that are highly susceptible to soil erosion and shallow landslides due to the presence of steep slopes, high rainfall rates, and/or underlying geology. When roads are hydrologically connected , the concentrated flow of water can generate sediment if it crosses on unprotected soils, develops gullies, or cuts into stream banks. It can also trigger landslides from oversaturated conditions, especially on fill-slopes.

A major focus of the 5C Program is to ensure proper road drainage and surface stability, which reduces soil erosion and can reduce or prevent large-scale slope and fill failures. Some projects to implement proper road drainage have the potential to generate sediment from short-term construction activities. Disconnecting roads from streams involves limiting the concentration of surface discharge and using permeable soils on the natural ground and road fill slopes to infiltrate runoff and convert it to subsurface flow before it can reach a stream. Remedial measures to correct existing and potential county road erosion include (but are not limited to): replacing undersized culverts, creating critical dips at stream crossings, outsloping the road surface, adding more ditch relief culverts to insloped roads, rocking or paving the road surface, reconnecting the road drainage as much as possible to the natural drainage patterns, revegetating cutbanks and fillslopes, and repairing 'shotgun' culverts.

In order to mitigate the potential adverse impacts from projects to implement proper road drainage, the 5C Road Manual contains specific BMPs that are designed to prevent or minimize sediment erosion or loss of topsoil. These BMPs are described in Chapters 3, 4, 5, 10 and Appendix B of the 5C Road Manual and are summarized below:

- Road grading practices such as roadway and shoulder blading and rebuilding, slope grading, and sidecast construction will be done to fit grading to the surrounding terrain.
- Vegetative ground cover will be retained to the greatest extent feasible.
- Grading operations will be timed to minimize soil exposure in the rainy season.
- Length and steepness of slopes will be minimized.
- Erosion control will be enhanced by vegetating, seeding, and mulching; use of geotextile fabrics, erosion control blankets, silt mats, and coir log/rolls.
- Runoff will be directed away from disturbed areas.
- Runoff velocities will be kept low by using energy dissipating control measures.
- Trapping sediment will be trapped on site using erosion and sediment control measures.
- Inventories to identify, prioritize, and treat existing sediment sources.

- Inspecting and maintaining erosion control measures regularly.

As a result of the incorporation of the BMPs outlined above, the potential for the Project to result in increased soil erosion, loss of topsoil, or landslides is less than significant. Nor is there any reasonably foreseeable potential for the Project to result in lateral spreading, subsidence, liquefaction, or collapse. Therefore the appropriate finding is **less than significant with mitigation.**

d – e) The Waiver covers neither activities such as building construction that is subject to the Uniform Building Code, nor activities involving the use of septic tanks or alternative wastewater disposal systems. Because the project does not involve these elements the appropriate finding is **no impact.**

VII. GREENHOUSE GAS EMISSIONS: Would the project:

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

Road and construction equipment produces CO_2, which is a greenhouse gas. However, the proposed 5C Program will have no significant effect on levels of CO_2, because the 5C Program does not include construction of new facilities. There will be no additional impacts because the project will not result in a material change in the scope or pace of maintenance activities. Therefore, the appropriate finding is **less than significant impact**.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
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?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
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?	☐	☒	☐	☐
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒

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?	☐	☐	☐	☒

a – d) Road repair and maintenance can involve the transport and use of materials that would qualify as hazardous pursuant to the California Health and Safety Code section 25501(o). These materials include gasoline and diesel to fuel equipment, hydraulic fluid associated with equipment operations and machinery, asphalt and oils for road surfacing, and surface stabilizers (e.g. lignin) for running surfaces on unimproved roads. Maintenance yards house fuel, oil (machine, hydraulic, crankcase), chemicals (acids, solvents & degreasers, corrosives, antifreeze), hazardous waste, heavy metals, nutrients, fertilizer, pesticides, herbicides, paint products, and sediments. Maintenance yard activities have the potential to discharge these materials to storm water drain systems or watercourses. Some BMPs specifically target proper storage of these types of materials. Dust palliatives and de-icing agents may be used in some instances but these materials properly applied according to BMPs are not considered hazardous materials.

In order to mitigate the potential adverse effects the manual is designed to prevent or minimize adverse effects (including the release of hazardous substances and pollutants) from road related activities. Specifically, Chapter 6 of the 5C Roads Manual contains BMPs for maintenance yard management, including Facility Housekeeping Practices (Chapter 6-A), Building & Grounds Maintenance (Chapter 6-B), Maintenance and Repair (Chapter 6-C-1 through 6-C-4), Materials Use and Storage (Chapter 6-D-1 through 6-D-7). It also includes measures to be taken in the event of a spill. Therefore, the appropriate finding is **less than significant with mitigation**.

The Waiver does not cover discharges of hazardous materials. In the event of an accident, Dischargers must comply with the requirements of the California Emergency Management Agency Hazardous Materials Spill reporting process. Any significant release or threatened release of a hazardous material requires immediate reporting by the responsible person to the Cal EMA State Warning Center (800) 852-7550 and the Certified Unified Program Agency (CUPA) or 911. The CUPA may designate a call to 911 as meeting the requirement to call them. Contact information for a jurisdiction's CUPA can be found at http://cersapps.calepa.ca.gov/Public/Directory/ or http://cersapps.calepa.ca.gov/Public/UPAListing.
Notifying the State Warning Center (800) 852-7550 and the CUPA or 911 constitutes compliance with the requirements of section 11004 of title 42 of the United States Code regarding verbal notification of the SERC and LEPC (California Code of Regulations, Title 19 Section 2703 (e)). Additional information regarding spill reporting may be found at

http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx

e - h) The proposed project would not result in the emission or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, nor is it located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5. The proposed project would not result in a change over current conditions related to activities near an airport or airstrip that would result in a safety hazard, nor would it interfere with an emergency evacuation or response plan. Lastly, the proposed project would not 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. Therefore, the appropriate finding is **no impact**.

IX. HYDROLOGY AND WATER QUALITY: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐
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)?	☐	☐	☐	☒
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?	☐	☒	☐	☐

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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
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?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒

Roads often alter the hydrologic pattern of natural stream networks. Their intersection of the hillslope disrupts the natural surface and subsurface flow of runoff and causes roads to become hydrologically connected. Inboard ditches capture this runoff from the hillslope, road surface, and cutslopes, and deliver it to another location, usually through a stream crossing or a cross-drain (ditch relief culvert).

Roadways are a source for materials that, when washed into watercourses, can harm water quality and aquatic life. They are also a medium for transporting substances deposited on the roadway, such as oil and grease from vehicles. In urban areas, roadway runoff is often a major source of chemical contaminants. In rural areas like the North Coast region, sediment is the primary water quality concern from roads.

Fine sediment, in particular, adversely affects salmon and steelhead habitat by filling in pools and spawning gravels. Too much fine sediment can smother eggs laid in stream gravels and reduce the quality of aquatic invertebrates available as fish food. When in suspension, fine sediment creates turbid water conditions which, when excessively high, can affect the gills and respiratory health of fish and impact aquatic invertebrates.

When roads are hydrologically connected, the concentrated flow of water can generate sediment if it crosses on unprotected soils, develops gullies, or cuts into stream banks. It can also trigger landslides from oversaturated conditions, especially on fillslopes. Disconnecting roads from streams involves limiting the concentration of surface discharge and using permeable soils on the natural ground and road fill slopes to infiltrate runoff and convert it to subsurface flow before it can reach a stream.

Poor road construction and maintenance are associated with higher erosion rates. In contrast, routine maintenance removes sediment deposited in roadside ditches from cut bank erosion and other sources and minimizes the opportunity for it to enter a watercourse. Stream crossing sites represent the majority of the potential erosion due to the volume of material that could be washed out from road failures at undersized culverts that become blocked with debris during a flood event.

Remedial measures to correct existing and potential county road erosion include (but are not limited to): replacing undersized culverts, creating critical dips at stream crossings, outsloping the road surface, adding more ditch relief culverts to insloped roads, rocking or paving the road surface, re-establishing natural drainage patterns, revegetating cutbanks and fillslopes, and repairing 'shotgun' culverts. These sediment control measures are all addressed as BMPs in the 5C Road Maintenance Manual.

a) It is anticipated that the project will result in enhanced water quality. Implementation of many manual BMPs (e.g., road outsloping, installation of rolling or critical dips, increased frequency of ditch relief culverts, erosion control measures for maintenance activities that may disturb soil, installation of sediment traps at culverts, proper storage of spoils and materials stockpiles) will reduce the amount of sediment delivery to streams from county roads. However, even as maintenance activities are being done to correct existing and potential county road erosion, these activities can potentially contaminate streams with sediment, chemicals or other unnatural materials without proper management, resulting in significant impacts (Five Counties 2002; ODOT 1999; WashDOT 2002).

In order to mitigate the potential significant impacts from maintenance practices, seven of the ten chapters and three of the appendices within the 5C Roads Manual contain BMPs specifically designed to prevent and minimize discharges of sediments, chemicals, and other materials to waters of the State during road maintenance activities.. These activities include:

- Chapter 3, Road Maintenance, including grading practices (shoulder blading and rebuilding, erosion repair, ditch shaping and cleaning, channel maintenance), road surfacing and dust abatement (road surface repair, dust abatement, water drafting, low water crossing maintenance), vegetation management (mowing and cutting of vegetation, invasive weed abatement[1], tree removal), and winterizing roads.

- Chapter 4, Culvert Maintenance, including culvert cleaning, culvert improvement and repair, culvert sizing, culvert replacement, ditch relief culvert location selection and installation, and temporary stream diversions during in-stream projects.

- Chapter 5, Disposing the Soil, which includes site selection for spoil disposal, disposal site maintenance, disposal site closure, and stockpile maintenance.

- Chapter 6, Managing the Maintenance Yard, including facility housekeeping practices, building and grounds maintenance, vehicle and equipment maintenance (vehicle fueling, vehicle and equipment maintenance and repair, pressure washing of vehicles and equipment, and care and feeding of oil/water separators), and material use and storage (waste minimization, handling and disposal; used oil recycling; storage of hazardous materials; outdoor storage of raw materials; outdoor loading/unloading of materials; above ground tank leak and spill control; safer alternative products).

- Chapter 7, Maintaining the Bridges, including bridge vegetation management, and bridge drift removal (bridge painting and cleaning are not included in this activity[2]).

- Chapter 8, Performing Emergency Work, including slide and settlement repair, and accident cleanup.[3]

- Chapter 9, Dealing With Snow and Ice, including sanding, de-icing, and anti-icing chemicals.

- Appendix B, BMP Standard Designs & Procedures, including BMP designs and procedures for culverts, erosion control, fish exclusion measures, fish ladders, streambank protection & channel improvements, water diversions, and water quality protection and sediment control.

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[1] The Waiver does not authorize discharges from pesticide or herbicide application.
[2] See Order No. R1-2003-0041 (General Waste Discharge Requirements for Discharges Associated with Transportation Structure Repainting Activities).
[3] Dischargers must also comply with the requirements of the California Emergency Management Agency Hazardous Materials Spill reporting process. Additional clean up requirements may be required depending on the type and extent of the accident.

- Appendix C, Fish Passage Guideines, containing NMFS fish passage guidelines, and CDFW culvert criteria for fish passage.

- Appendix D, Water Drafting Guidelines, containing NMFS water drafting specifications and preliminary CDFW guidelines for temporary water drafting.

Additionally, treatment of legacy sites is addressed as part of the DIRT inventory process, including upgrading of stream crossings, road outsloping and rolling dip installation where safe and suitable, installing ditch relief culverts and overside drains, removing berms, armoring unstable areas, reshaping cutbanks, and rocking native-surfaced roads.

Finally, the Waiver requires counties to implement the BMPs within the 5C Road Manual. If there are violations of the waiver, enforcement actions may be taken. Therefore, the appropriate finding is **less than significant impact with mitigation.**

b) There will be no change in water withdrawals or increased groundwater pumping resulting from this program. Therefore the appropriate finding is **no impact.**

c) Some manual BMPs call for modification of existing drainage patterns (e.g., concentrated flows) to better simulate natural dispersed runoff, minimize sediment delivery, and reduce road maintenance. These activities have the potential to result in significant impacts.

In order to mitigate the potential significant impacts from the modification of existing drainage patterns, the BMPs outlined in Chapters 3 and 4 of the 5C Road Manual, and the DIRT methodology are designed to improve road drainage and minimize the hydrologic footprint of the road system, as well as prevent and minimize impacts from road maintenance activities. Therefore the appropriate finding is **less than significant impact with mitigation.**

d - j) Implementation of BMPs would not result in flooding on or off-site nor would it expose people or structures to any kind of flooding or inundation. The BMPs include sizing new or replacement culverts to accommodate 100-year flood flows. The project will not result in new structures within the flood plain that would impede or restrict flows. The project does not involve new housing. BMPs for stream crossing sizing combined with those designed to disperse runoff will reduce peak flow concentrations, potentially reducing flooding and associated damage. The capacity of existing or planned stormwater drainage systems will not be impacted and may be improved by the project. Implementation of the manual will not create pollution in runoff and will over time reduce pollution in runoff. BMPs within the manual (e.g., snow & ice removal, maintenance yard practices, containment of lead paint during bridge maintenance, oil and fuel spill containment) will reduce or

minimize the release of pollutants. Therefore, the appropriate finding is **less than significant** and **less than significant with mitigation**.

X. LAND USE AND PLANNING: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a – c) The 5C Program will not cause any conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over 5C Program activities. The proposed project does not divide an established community or involve land use planning or policy, nor the does it alter or weaken the requirements of any habitat conservation plan or natural community conservation plan that may apply to agricultural activities. This project does not preclude the need for those counties conducting road maintenance activities to obtain permits which may be required by other local, state and federal governmental agencies. Because the project does not involve these elements, the appropriate finding is **no impact**.

XI. MINERAL RESOURCES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a – b) The proposed project does not involve mineral resources; therefore, the appropriate finding is **no impact**.

XII. NOISE: Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒

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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a – f)The proposed 5C Program does not change the exposure of people to potential adverse effects involving noise due to road maintenance or repair activities over current conditions. Noise levels due to these activities in the project area will remain the same whether or not the 5C Program is adopted and implemented. Because no change is foreseeable, the appropriate finding is **no impact**.

XIII. POPULATION AND HOUSING: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a - c) The proposed project does not involve construction of new homes or businesses. The project would also not displace people or existing housing. Because the proposed project does not involve these elements, the appropriate finding is no impact.

XIV. PUBLIC SERVICES: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 public services:	☐	☐	☐	☒
• Fire protection?	☐	☐	☐	☒
• Police protection?	☐	☐	☐	☒
• Schools?	☐	☐	☐	☒
• Parks?	☐	☐	☐	☒
• Other public facilities?	☐	☐	☐	☒

The proposed project does not involve new or physically altered government facilities. Because the proposed project does not involve these elements, the appropriate finding is **no impact**.

XV. RECREATION:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a – b) The proposed project does not involve increasing the use of recreational facilities, or require construction or expansion of recreational facilities. Because the proposed project does not involve these elements, the appropriate finding is **no impact**.

XVI. TRANSPORTATION/TRAFFIC: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and 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, or 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 results 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?	☐	☐	☐	☒

f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

a-b. The proposed project would not cause an increase in traffic or exceed a level of service due to 5C Program activities over current conditions. Traffic levels related to 5C Program operations in the project area will remain the same whether or not the 5C Program is adopted and implemented. Adoption of this waiver will not result in a material change in the scope or pace of maintenance activities. New road construction is not covered by this waiver, so it largely encompasses routine maintenance of existing facilities. Because no change is foreseeable, the appropriate finding is **no impact**.

c –f) The proposed project does not involve air traffic, installation of hazardous design features, and will not affect emergency access or parking capacity. The proposed project will not conflict with policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Because the proposed project does not involve these elements, the appropriate finding is **no impact**.

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

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

Adoption of this waiver will not result in a material change in the scope or pace of maintenance activities. New road construction is not covered by this waiver, so it largely encompasses routine maintenance of existing facilities.

a-c) The proposed project may entail the expansion or construction of stormwater drainage facilities on existing roads. Any potential impact would be beneficial because of added protection of the waters of the state from the reduction of potential pollution from concentrated stormwater runoff. Therefore, the appropriate finding is **less than significant impact**.

d) The proposed project does not change the need for water supplies due to road maintenance and/or repair. Water may be needed for dust abatement during maintenance or repair of existing roads; however, the quantity needed will remain the same whether or not the 5C Program is adopted and implemented. Applicable BMPs and limits on water-drafting shall be implemented according to written conditions included in any LSAs with CDFW, and in accordance with Appendix D. Compliance with LSA conditions is a requirement for coverage under the Waiver. For these reasons, the appropriate finding is **less than significant with mitigation.**

e) The proposed project does not require service by wastewater treatment facilities and would not affect solid waste generation or landfill capacities over current conditions. Because the proposed project does not involve these elements, the appropriate finding is **no impact**.

g. The proposed project will comply with federal, state, and local statutes and regulations related to solid waste. Therefore the appropriate finding is **no impact**.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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, substantially 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 which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☒

Road maintenance and repair activities have the potential to degrade the quality of the environment. However, conditions and criteria that are contained in the 5C Program mitigate significant adverse impacts from discharges associated with the road maintenance and repair operations to less than significant levels.

In order to mitigate potential significant impacts, the Waiver contains conditions and requirements, and requires the implementation of the 5C Road Manual's BMPs. Additionally, the Waiver requires monitoring and reporting of activities covered under this Waiver in order to document that all activities are performed in compliance with these mitigation measures.

a - b) The Regional Water Board determines that road maintenance and repair operations conducted in compliance with the 5C Program will not adversely affect the quality or the beneficial uses of the waters of the State, and will be in the public

interest pursuant to California Water Code (Water Code) section 13269. Road maintenance and repair operations could have impacts that are individually limited, but cumulatively considerable.

In order to mitigate significant cumulative adverse impacts, the 5C Program and 5C Road Manual contains conditions and criteria designed to reduce cumulative adverse impacts from discharges associated with road maintenance and repair operations to less than significant levels. The 5C Program will only apply to operations that meet all applicable eligibility criteria and that follow the Waiver conditions. Activities conducted in compliance with the conditions contained in the 5C Program will not contribute to cumulative impacts. Therefore, the appropriate finding is **less than significant with mitigation**.

c) It is unlikely that 5C Program operations could have environmental effects which may cause substantial adverse effects on human beings, either directly or indirectly. However, conditions and criteria contained in the 5C Program mitigate significant cumulative adverse impacts from discharges associated with road maintenance and repair operations to less than significant levels. The 5C Program will only apply to road maintenance and repair operations that meet all applicable eligibility criteria and that follow the waiver conditions.

The Regional Water Board determines that road maintenance and repair operations conducted in compliance with the 5C Program will not adversely affect the quality or the beneficial uses of the waters of the State and is in the public interest pursuant to Water Code section 13269. Therefore, the appropriate finding is **less than significant.**

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

Signature	Date