I. Introduction

At the direction of the North Coast Regional Water Quality Control Board (Regional Water Board), staff is developing a proposed amendment to the *Water Quality Control Plan for the North Coast Region* (Basin Plan) that would provide exception criteria to the point source waste discharge prohibitions (point source prohibitions) contained in the Basin Plan. The proposed amendment entitled, "*Amendment to the Point Source Measures in Section 4 of the Water Quality Control Plan for the North Coast Region to Revise the Action Plan for Storm Water Discharges and Include a New Action Plan for Low Threat Discharges to Provide Exception Criteria to the Waste Discharge Prohibitions*" (proposed Amendment), would apply only to permitted discharges from specific types of activities where there is a minimal potential (or low threat) for adverse impacts to water quality to occur from the discharge. The proposed Amendment sets specific criteria for permitting low threat discharges.

The purpose of this proposed Amendment is to address the conflict between conditions in existing regional and statewide point source discharge permits that allow year-round low threat discharges and the existing prohibitions in the Basin Plan which do not. Some regional and statewide permits allow year-round point source discharges while the Basin Plan limits point source surface water discharges to the period of October 1 through May 14 in some waterbodies in the North Coast Region and prohibits all point source surface water discharges in others. Where the discharge period is limited to October 1 through May 14, the discharge during this period is limited to less than one-percent of the receiving stream's flow (one- percent prohibition).

As part of the Region's ongoing basin planning program, the Regional Water Board has consistently directed staff to investigate alternatives to address the conflict between the regional and statewide permits and the Basin Plan prohibitions. Resolving this conflict has been ranked as a high priority by the Regional Water Board during adoption of a number of Triennial Review Priority Lists (3rd of 30 in 2004, 4th of 29 in 2007).

To address this conflict, staff recommend that the Regional Water Board consider the proposed Amendment, which would provide criteria under which exceptions to the point source prohibitions would be permitted. The proposed Amendment consists of:

- A new "Action Plan for Low Threat Discharges" (Low Threat Action Plan):

  The proposed Low Threat Action Plan would apply to certain point source categories of planned, short-term discharges from definable projects where the discharge is controlled to eliminate or reduce pollutants and minimize volume and discharge rates through the implementation of best management practices (BMPs). The proposed Low Threat Action Plan

would also allow for exceptions to the one-percent prohibition for low threat discharges if a discharge meets the Basin Plan criteria for exceptions to the one-percent prohibition (Basin Plan pages 4-1.00 to 4-2.00, Item 5). These criteria include, in part, that the treatment facility is reliable, the discharge is limited to rates and constituents which protect the beneficial uses of water, and that alternatives to the discharge were analyzed. In addition, the proposed Low Threat Action Plan provides the framework for permitting these low threat discharges and granting exceptions to the point source prohibitions; and

- Revisions to the existing Action Plan for Storm Water Discharges (Storm Water Action Plan):

  The proposed revisions to the Storm Water Action Plan would apply to discharges of storm water and certain categories of low threat non-storm water flows that are incidental to urban activities (hereinafter referred to as non-storm water flows) from permitted storm water collection systems and would identify the conditions that must be met in order to prevent or preclude these discharges from being subject to the point source prohibitions. A key condition of the revised Storm Water Action Plan is the requirement for implementation of an approved BMP program by the regulated storm water entity that focuses on the elimination or reduction of pollutants in storm water and non-storm water flows and minimization of volume and discharge rate of non-storm water flows. As used in this report, BMPs are compliance methods designed, implemented and maintained to eliminate or reduce pollutants and reduce the volume or rate of discharge. A combination of structural (engineered features), non-structural (e.g., operation and maintenance practices) and managerial methods (e.g., policies and procedures) are typically utilized to attain this goal.

Under the proposed Amendment, the exception to the point source prohibitions would apply only to discharges that meet all the following requirements:

- Are of low threat to water quality;
- Are covered under a point source discharge permit (either Waste Discharge Requirements (WDRs) or a National Pollutant Discharge Elimination System (NPDES) permit);
- Are from point sources (non-point source discharges are not subject to the prohibitions).

Generally, a discharge is considered to be of “low threat” to water quality when it meets all the following criteria, although the first two criteria are not always applicable to all storm water conveyance system discharges:

- Short-term and/or periodic in nature.

- Minimized volume, discharge rate and pollutant load to the greatest extent possible by use of BMPs and other disposal alternatives to protect beneficial uses.
- Meets all water quality objectives.
- The discharge does not cause adverse effects on the beneficial uses of the receiving water or cause nuisance conditions.

Under this proposed Amendment types of discharges that may be eligible for consideration as a low threat, include but are not limited to, the discharge categories identified in the Table 1. It is important to note that some discharges from the activities identified below may not qualify as a low threat discharge if water quality objectives are not met due to site specific conditions. For example, groundwater that contains high levels of naturally occurring metals would not be eligible for consideration as low threat under the proposed Amendment.

Table 1. Types of Discharges Eligible for Consideration as Low Threat

Low Threat Action Plan (Planned projects):
Construction dewatering
Installation, development, test pumping, maintenance, and purging of water supply or geothermal wells
Hydrostatic testing, maintenance, repair, and disinfection of potable water supply vessels, pipelines, tanks, reservoirs, etc.
Hydrostatic testing of newly constructed pipelines, tanks, reservoirs, etc. used for purposes other than potable water supply (e.g., gas, oil, reclaimed water, etc.)
Dredge spoils dewatering
Other similar types of point source discharges that pose a low threat to water quality, yet technically must be regulated under an NPDES permit
Storm Water Action Plan (Storm water and non-storm water flows incidental to urban activities):
Storm water runoff
Recycled or potable irrigation runoff that is incidental[1]
Releases from potable drinking water supply and distribution systems during or after emergency repairs
Drain discharges from foundations, footings, and crawl spaces
Air conditioning condensate
Dechlorinated/debrominated swimming and landscape pool discharges
Non-commercial car washing by residents
Sidewalk rinsing[2]
Emergency fire fighting flows
Fire hydrant testing or flushing

[1] Defined under Master Water Recycler Permits as "runoff that is unintentional (e.g. accidental breakage of sprinkler head) and not associated with negligence on the part of the permittee"
[2] This refers to low volume, high pressure sidewalk rinsing.

As identified in Table 1, the Regional Water Board has recognized that in addition to properly handled storm water runoff, there are two distinctly different types of low threat discharges: planned projects and non-storm water flows. These are further described in the following sections.

Planned Projects

One type of low threat discharge originates from planned projects. Currently, there are regional and statewide permits that apply to some types of projects that usually result in low threat discharges, such as Order No. 93-61, "General NPDES Permit/Waste Discharge Requirements for Discharges of Groundwater to Surface Water Related to Construction and Subsurface Seepage Dewatering Activities in the North Coast Region", and Order No. 2006-0008-DWQ, "Statewide General NPDES Permit for Discharges from Utility Vaults". Projects that would seek coverage under these permits may also be eligible for exemption from the point source and one-percent prohibitions if they meet the additional criteria set forth in the *Draft Action Plan for Low Threat Point Source Discharges*, set out in Appendix A of this Staff Report. These additional criteria include:

1. The discharge shall not adversely affect the beneficial uses of the receiving water, either individually or cumulatively.

2. The discharge shall comply with all applicable water quality objectives.

3. Best practicable treatment or control of the discharge shall be implemented to assure that pollution and nuisance will not occur, and the highest water quality consistent with maximum benefit to the people of the State will be maintained.

4. The discharge is necessary because no feasible alternative to the discharge (reclamation, evaporation, infiltration, discharge to a sanitary sewer system, etc.) is available.

5. The discharge is limited to that increment of wastewater that remains after implementation of all reasonable alternatives for reclamation or disposal.

6. The discharge is regulated by NPDES Permit/Waste Discharge Requirements.

Each potential discharger must submit an application (Notice of Intent (NOI) or Report of Waste Discharge (ROWD)) for permit coverage that includes the following information that is necessary in order for Regional Water Board staff to evaluate whether a proposed discharge qualifies as a low threat discharge and for the Basin Plan exception:

- Evaluation of alternatives to discharging to surface waters and demonstration that any discharge to surface waters is limited to that increment of discharge that remains after reasonable alternatives for reclamation, sewer disposal, or land disposal have been exhausted;
- Characterization of the proposed discharge, including a demonstration that the discharge will not contain pollutants or constituents at concentrations that exceed Basin Plan water quality objectives, California Toxic Rule objectives, or any other standard or objective promulgated to protect water quality and beneficial uses;
- Description of the flow rates, volume and duration of discharge, including a demonstration that the discharge of waste will be limited to rates, volume and constituent levels that protect the beneficial uses of the receiving water;
- Demonstration that the discharge complies with State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality Waters in California" and the federal regulations addressing antidegradation;
- A pre-project characterization of the receiving water, including a description of channel characteristics (e.g., width, depth, substrate, presence or absence of water at time of proposed discharge, approximate creek flow rate, etc.), bank characteristics (e.g., slope, presence or absence of vegetation, vegetation type and density, signs of bank instability), and identifiable instream beneficial uses (e.g., identify presence of aquatic life, including aquatic insects and fish and any rare, threatened or endangered species; water contact recreation), and photographs showing representative features of the receiving water;
- Development and implementation of a management plan that includes the suite of BMPs that will be used to protect the receiving water from any adverse impacts of the discharge as well as the inspection, maintenance and reporting schedule.

The Regional Water Board is also proposing modifications to Regional Water Board Order 93-61, "General NPDES Permit for Discharges of Groundwater to Surface Water Related to Construction and Subsurface Seepage Dewatering Activities in the North Coast Region" (General Permit) to cover a broader range of low threat discharges than are currently covered under the General Permit. The proposed revisions to the General Permit will address construction and subsurface seepage dewatering activities and other categories of discharges that could be determined to be low threat (see Table 1, above), and which are now permitted under an individual NPDES permit as no other coverage currently exists. Many of the other regional water boards do not have similar point source prohibitions and have already adopted general permits to specifically address categories of low threat discharges. The proposed revisions to the General Permit will require submittal of a Notice of Intent (NOI) containing the information summarized in the bulleted paragraphs above, and a requirement that copies of

the NOI be submitted to the appropriate regional office(s) of the California Department of Fish and Game and other agencies as required by the Regional Water Board, as well as to adjacent property owners.

Non-Storm Water Flows

The second type of low threat discharge addressed by the proposed Amendment relates to non-storm water flows. Non-storm water discharges such as those identified in Table 1 fall into two categories: (1) intentional discharges that are planned, routine and occur as one time events or on an ongoing basis, and (2) incidental discharges that are unanticipated, accidental, and infrequent. Examples of intentional low-threat non-storm water discharge categories, include, but are not limited to, uncontaminated discharges from foundation, footing and crawl space drains, residential swimming pool draining, maintenance of water storage tanks, air-conditioning condensate, and residential car washing. Examples of incidental low-threat non-storm water discharge categories include, but are not limited to, accidental discharges from potable water sources due to unexpected line breaks, incidental runoff of potable or recycled water from landscape irrigation due to an unexpected break in irrigation line or sprinkler head, and flows from emergency fire-fighting activities.

A discharge of non-storm water is considered to be from a “point source” when the discharge flows into a storm water collection system covered by an NPDES permit, and is consequently discharged to surface water. Although non-storm water flows, such as those identified in Table 1, may be covered under regional or statewide NPDES storm water permits, such discharges currently are inconsistent with the point source prohibitions contained in the Basin Plan. In addition, non-storm water discharges are more difficult to predict and plan for than the low threat discharges proposed for coverage under the Low Threat Action Plan. Some of the discharge categories that would be covered under the Storm Water Action Plan, such as incidental runoff of reclaimed or potable water, are unplanned, accidental, and unintentional events. Other discharge categories, such as sidewalk rinsing, or discharges from drains for foundations, footings, and crawl spaces, although intentional, are difficult to plan for because the activities that lead to discharge are (1) spontaneous and/or sporadic, (2) generally low volume and numerous, thus difficult to capture individually under a permit, and (3) already addressed in various individual and general storm water NPDES permits.

The proposed revision to the *Action Plan for Storm Water Discharges* is set forth in Appendix B of this Staff Report. The proposed revisions include criteria that must be met in order for non-storm water flows from permitted storm water collection systems to receive an exception to the point source prohibitions.

These proposed criteria include:

- Requiring that the discharge and the activities that affect the discharge, such as irrigation practices, are managed in conformance with the provisions of the applicable NPDES permit;
- Requiring that the discharge does not individually or cumulatively cause adverse affects on the beneficial uses of the receiving water; and
- Requiring implementation of an approved management program by the permitted entity to prevent or minimize non-storm water discharges into surface waters that includes implementation of appropriate BMPs, outreach and education, inspections, monitoring, and enforcement.

In addition to the above requirements, non-storm water discharges will not be provided an exception to the point source prohibition if the discharge event is caused by negligent maintenance or poor design of infrastructure or failure to oversee the activity that resulted in the discharge. No exception will be provided if there is a feasible alternative to the discharge, such as retention of the runoff, or if the permit holder and/or potable/recycled water user does not have a management plan that identifies BMPs to prevent and minimize runoff incidents.

II. Existing Regulatory Framework

The following section describes the applicable regulatory framework as is currently in use in the North Coast Region.

Basin Plan

The regional water boards are charged with protection of the quality of the groundwater and surface waters of the State within their regions. Basin plans provide, in part, the foundation for the regulatory activities of the regional water boards. The Basin Plan for the North Coast Region, Section 4 - Implementation Plans, pages 4-1.00 through 4-2.00, contains prohibitions that apply to point source discharges to North Coast waterbodies (e.g., inland surface waters, bays and estuaries), for specific periods of time.

See Appendix C of this report for the complete Basin Plan point source prohibition(s) language and a brief history of the North Coast Region's point source prohibitions.

Year-round point source prohibitions apply to all North Coast watersheds with the exception of the Mad, Eel, and Russian Rivers and the lower Lost River system. Seasonal point source discharges are prohibited in the Mad, Eel, and Russian River watersheds from the period of May 15 to September 30 of each year. In these watersheds point source discharges can be allowed from October 1 to May 14, in cases where the Regional Water Board issues a NPDES permit that

ensures that the discharge of waste will not adversely impact water quality and beneficial uses (Basin Plan page 4-1.00 to 4-2.00). The Basin Plan also includes a discharge flow rate limitation for the Mad, Eel, and Russian Rivers, requiring that waste discharge flow must be no greater than one percent of the receiving stream's flow, although the Regional Water Board may consider exceptions for cause to this waste discharge rate limitation.

The point source and one-percent prohibitions are intended to protect water quality and beneficial uses of the waterbodies in the North Coast Region, but they currently do not contain the flexibility to permit the discharge of water considered to be a low threat to water quality during the stated discharge prohibition periods. These point source prohibitions arguably apply even to the discharge of water that met water quality objectives and may not pose a threat to water quality, such as uncontaminated groundwater from construction sites. This is because almost all water has some small amount of pollutants, and would be considered the discharge of a waste under the Porter-Cologne Water Quality Act.[3] Pollutants that are most common in low threat discharges are sediment, elevated temperature, and chlorine.

Prohibiting all low threat discharges is problematic because often no practical alternatives to the discharge are available, and because some activities that result in low threat discharges are vital to community development activities, such as construction and provision of reliable water supply (e.g., well development, and pipeline maintenance and repair). The prevalence of these community development activities, indicate that these discharges are occurring even with the prohibition in place. The Basin Plan allows for the possibility of providing exceptions to the point source discharge prohibitions. Section 4 states "... point source waste discharges, except as stipulated by the Thermal Plan, the Ocean Plan, and *the action plans and policies contained in the Point Source Measures section of this Water Quality Control Plan* (emphasis added) are prohibited …". A higher degree of water quality protection can be achieved by acknowledging that these low threat discharges exist and providing a regulatory program that allows the discharges to occur under prescribed conditions. The proposed criteria that the discharge would have to meet to be eligible for consideration as low threat are contained in the proposed Amendment.

Existing Permits

A primary way the regional water boards protect water quality is through the issuance of NPDES permits that are in compliance with the Basin Plan requirements. NPDES permits, authorized by the Clean Water Act, control water

[3] California Water Code section 13050(d) defines "waste" as including "sewage and any and all other substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal."

pollution by regulating point sources (e.g., outfalls from discrete conveyances such as pipes or man-made ditches) that discharge pollutants into waters of the United States.

Regional Water Board staff currently use several permitting approaches for addressing low threat point source discharges; however, when these discharges take place during the discharge prohibition season, such permitting is arguably inconsistent with the Basin Plan. The following paragraphs identify the four main approaches used by Regional Water Board staff for permitting low threat discharges and how these approaches are applied to discharges that occur during the point source prohibition season. Problems with the current permitting approaches are also identified.

1. Order No. 93-61, General NPDES Permit/Waste Discharge Requirements for Discharges of Groundwater to Surface Water Related to Construction and Subsurface Seepage Dewatering Activities in the North Coast Region.

The Regional Water Board receives frequent requests for planned low threat discharges in relation to well development, construction dewatering, and municipal water supply pipeline and reservoir maintenance projects. Regional Water Board staff work with project proponents to identify discharge alternatives that do not result in a discharge to surface waters (e.g., discharge to land or to a sanitary sewer). When there are no such alternatives, Regional Water Board staff typically enroll the discharger under Order No. 93-61. However, Regional Water Board staff is aware that some of these types of discharges occur without permit coverage, in part due to the lack of a clear program for addressing low threat discharges. These discharges may reach surface water by various means, including, but not limited to, discharge directly to the surface water by way of a hose or pipe, discharge to a storm water collection system that discharges to the surface water, or by flowing over the land surface thence to the surface water (overland flow).

Order No. 93-61 requires submittal of a Report of Waste Discharge (ROWD) accompanied by a feasibility study of reuse of the water and, if reuse is not feasible, a description of alternatives for disposal other than to surface waters. This Order is currently issued for discharges of groundwater from construction trenches and vaults and well development and rehabilitation; and discharges of potable water from flushing of new and existing water lines, reservoirs and water tank maintenance projects. These kinds of projects often need to be done during summer and early fall because these are the prime construction seasons.

Order No. 93-61 has limited applicability for addressing many of the low threat discharges that are encountered in the North Coast Region for two reasons: (1) its focus is construction and subsurface seepage dewatering, and (2) it does

not override the Basin Plan discharge prohibitions. Nonetheless, for the lack of a broader low threat discharge general permit, the Order has been used to permit more than just construction dewatering. Historically, Order No. 93-61 has been used to permit low threat discharges in both the allowable discharge period and the discharge prohibition period, but Regional Water Board staff has recently stopped this approach due to the inconsistency and replaced it with the practice identified in the following paragraph.

Regional Water Board staff recently modified its approach to handling requests from potential dischargers for low threat discharges during the point source prohibition period in order to be consistent with the point source prohibitions. Under the new approach, Regional Water Board staff respond to these requests with an email or letter stating that the Regional Water Board is unable to permit such a discharge because it is a violation of the Basin Plan. The email or letter recommends that the project be redesigned to eliminate the need to discharge to surface waters or postponed to an allowable discharge period, if that option is possible. The email or letter further states that if the project must occur during the discharge prohibition period, Regional Water Board staff will not recommend initiation of an enforcement action, provided that the project 1) is conducted with BMPs that protect water quality, 2) does not result in pollution or nuisance as defined in Water Code section 13050, and 3) is discharged under the provisions of an existing municipal storm water permit.

2. Municipal, Construction and Industrial General or Individual Storm Water Permits

Many storm water discharges to surface waters from municipal, construction, and industrial sources in the Region are permitted under general storm water permits adopted by the State Water Resources Control Board including:

- The Phase II municipal storm water general permit (Order No. 2003-0005-DWQ) generally applies to municipalities with populations greater than 10,000 but less than 100,000, high population densities, high growth potential, or a significant contribution of pollutants to surface waters.

- Order No. 99-08-DWQ, the construction storm water general permit, applies to construction sites larger than one acre.

- Order No. 2003-0007-DWQ for discharges of storm water associated with small linear underground/overhead construction projects (LUPs). This permit covers construction activities associated with small LUPs that result in land disturbances greater than one acre, but less than five acres.

- Order No. 99-06-DWQ, NPDES Permit for Storm Water Discharges From the State of California, Department of Transportation (Caltrans) Properties, Facilities, and Activities. This permit is intended to cover all municipal storm water activities by Caltrans in California. The current permit covers all Caltrans construction activities that require a permit under the federal regulations. When this Order is revised in the near future, it will require Caltrans to comply with the construction storm water general permit for construction storm water activities.

- Order No. 97-03-DWQ, NPDES Permit for Discharges of Storm Water Associated with Industrial Activities, Excluding Construction Activities. This permit covers specific categories of industrial discharges identified in this general permit.

The regional water boards have the authorization to adopt individual storm water permits as well. This Region currently has one individual storm water permit; a Phase I municipal storm water permit (Order No. R1-2008 - 0106) for the City of Santa Rosa, Sonoma County, and Sonoma County Water Agency's municipal storm water systems.

The statewide general storm water permits require each discharger to submit a NOI to comply with the terms of the general permit. Individual permits are initiated with the submittal of a ROWD. The general and individual permits require dischargers to develop and implement a Storm Water Pollution Prevention Plan, specifying BMPs that will prevent pollutants from contacting storm water, eliminate or reduce non-storm water discharges to storm water sewer systems and waters of the State, and to perform inspections and maintenance of BMPs. The storm water permits authorize the discharge of certain types of non-storm water discharges to regulated storm drain systems even during the summer months and other periods when there is no precipitation, provided that the non-storm water discharges are controlled with BMPs.

Non-storm water discharges are those discharges from storm water systems that reach a watercourse through the storm water collection system, but are not composed of storm water, particularly when they occur during the summertime. These discharges are considered point source discharges because they reach the surface water via a pipeline, conveyance ditch, or other discrete point, and, as such, are technically in violation of the point source prohibitions even though the impact of the discharge may be relatively minor. This results in a conflict between the State Water Board general storm water permits and the Basin Plan point source prohibitions. Allowable non-storm water discharges specified in the general storm water permits include, but are not limited to, water line flushing, landscape irrigation, discharges from potable water sources,

uncontaminated pumped groundwater, and de-chlorinated swimming pool discharges. These and other categories of discharge are authorized by the storm water permits, provided that BMPs are utilized and the discharge does not contain significant sources of pollutants.

There are currently hundreds of permitted non-storm water discharges in the North Coast Region. Many of the storm water conveyance systems that are covered under storm water permits receive occasional discharges that are in violation of the Basin Plan point source prohibitions. Storm water permits require the permittee to minimize these non-storm water discharges through inspections, education and outreach and other BMP programs. Staff currently use their enforcement discretion in addressing these violations. However this approach does not address permittees concern that they could be vulnerable to third party citizen lawsuits as authorized under the Clean Water Act because the discharge is still a technical violation of the Basin Plan.

3. Order No. 2006-0008-DWQ, Statewide General NPDES Permit for Discharges From Utility Vaults and Underground Structures to Surface Waters.

   This statewide general permit covers short-term and intermittent discharges from the de-watering of utility vaults and underground structures to surface waters, provided that such discharges do not cause, have the reasonable potential to cause, or contribute to an instream excursion above any applicable State or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water. The permit requires the discharger to submit (1) an NOI, (2) a pollution prevention plan identifying BMPs designed to prevent or control the discharge of pollutants, and (3) certification that there is no pollutant concentration in the discharge that has reasonable potential to cause or contribute to an excursion above any applicable federal water quality criterion or cause acute or chronic toxicity to the receiving water. This permit allows year-round discharges for permittees who are covered under the permit, which is inconsistent with the Basin Plan point source prohibitions.

4. Master Water Recycler Permits

Master water recycler permits are adopted for municipal wastewater treatment facilities that recycle properly treated effluent for various uses, including, but not limited to, agricultural and urban irrigation, toilet flushing, dust control, industrial cooling water, and fire-fighting activities. The Regional Water Board currently addresses incidental runoff of recycled water in several master water recycler permits. In the North Coast Region, recycled water is currently used primarily for agricultural and urban landscape irrigation with some limited uses for toilet flushing and dust control.

Master water recyclers are required to implement BMPs to minimize the potential for accidental discharges of recycled water to storm drains and surface waters. Master water recycler permits define "incidental runoff" as "runoff that is unintentional (e.g., accidental breakage of a sprinkler head) and not associated with negligence on the part of the permittee". These incidents are typically low volume, accidental, not due to a pattern of neglect or lack of oversight, and promptly addressed. Water leaving a reuse area due to poor facility design, excessive application, or failure to maintain infrastructure is not considered incidental. The permit language requires the permittees to identify and implement measures to minimize the possibility for incidental runoff and to report incidental runoff incidents in quarterly recycled water monitoring reports. Under these permits incidental runoff is considered a permit violation, which is consistent with the point source prohibitions. The permit language states that an enforcement action will be considered in those situations where the runoff event(s) is/are not incidental such as when there is/are: inadequate response by the permittee to runoff incidents; repeated runoff incidents that were within the permittee's control; exceedence of water quality objectives; incidents that create a condition of pollution or nuisance; and discharges that reach surface water in violation of the individual permits.

This manner of regulating incidental runoff has been viewed by recycled water permittees and some staff at the regional water boards as not being supportive of the State Legislature's objective of promoting the use of recycled water in order to supplement existing surface and ground water supplies to help meet water needs (California Water Code §§13510-13512.). It is generally recognized that even with the diligent implementation of BMPs, incidental runoff events may occur on occasion. Staff has been informed that treating incidental runoff as a permit violation discourages the use of recycled water because of the potential liability associated with incidental runoff during the discharge prohibition season. For example, some municipalities within the North Coast Region have

indicated that they are hesitant to pursue or expand water reuse (recycling) projects because it is technically a violation of the point source prohibitions for irrigation water (both potable and recycled) to discharge into a regulated storm drain and reach surface waters during the discharge prohibition season. These municipalities are concerned that such activities could result in liability under the Clean Water Act, unless the Basin Plan is amended to provide exceptions to the Basin Plan point source prohibitions.

The Regional Water Board recognizes that incidental runoff of potable or recycled water, and other potential low threat discharges, can have unintended water quality impacts. Both recycled water and potable water can contain pollutants of concern. Potable water typically contains chlorine and can contain other pollutants, such as anthropogenic or naturally occurring metals (e.g. arsenic) that are at concentrations that satisfy drinking water standards, but are still higher than aquatic life criteria in the California Toxics Rule[4]. Recycled water could contain any number of unidentified pollutants such as pharmaceutical and personal care products and also contains pollutants such as nutrients and salts that could cause problems, especially in low flow streams. Both recycled water and potable water, when applied to land, can carry pollutants off the land such as sediment, nutrients, pathogens, or pesticides. Incidental runoff may also impact water quality in regard to temperature, dissolved oxygen, pH, conductivity, or turbidity (sediment). Under the terms of the proposed Amendment, urban incidental runoff of recycled or potable water would be considered low threat, and thus would not be subject to the Basin Plan's point source prohibitions provided that: (1) the discharge and the activities which affect the discharge are managed in conformance with the provisions of an NPDES/WDR permit; (2) the discharge does not individually or cumulatively cause adverse effects on the beneficial uses of the receiving water; and (3) the discharge is subject to a program to eliminate or minimize discharge of pollutants into the storm water system, including implementation of a best management program.

[4] 65 Federal Register 31682-31719 (May 18, 2000), adding Section 131.38 to title 40 of the Code of Federal Regulations.

III. Overview of the Proposed Amendment to the Basin Plan to Address Low Threat Discharges

The proposed Amendment would provide exception criteria to the point source and one-percent prohibitions contained in the Basin Plan for low threat discharges. The proposed Amendment would not alter or remove the discharge prohibition section of the Basin Plan. The proposed Amendment would instead, provide a protective, yet streamlined procedure for regulating low threat point source discharges by (1) adding a new *Action Plan for Low Threat Discharges* and (2) adding language to the existing Basin Plan *Action Plan for Storm Water Discharges* to address low threat non-storm water flows incidental to urban activities to regulated storm water collection systems. This approach of providing exceptions to the discharge prohibitions already exists in the Basin Plan in the *Interim Action Plan for Cleanup of Groundwaters Polluted with Petroleum Products and Halogenated Volatile Hydrocarbons* (page 4-7.00 to 4-8.00).

The proposed Amendment would apply to:

- All waterbodies in the Region where the Basin Plan point source prohibitions apply;
- All waterbodies in the Region where the Basin Plan one-percent prohibition applies;
- All low threat point source discharges to surface waters where the discharge is permitted under an NPDES/WDR permit.

The proposed Amendment addresses two distinctly different types of low threat discharges, as described in the following paragraphs:

(1) Intentional discharges that are planned, short-term discharges from definable projects where the discharge is controlled to eliminate or reduce pollutants and minimize discharge volume and rate, (covered by the Low Threat Action Plan); and

(2) Incidental discharges that are unanticipated, accidental, and/or infrequent (covered under the Storm Water Action Plan).

Both Action Plans require that several conditions be met before an exception to the point source prohibitions would be given or applied.

- First, the discharge must pose no more than a low threat to water quality.

- Second, the discharge must be covered under an existing individual or general NPDES/WDR permit. Permit options were discussed in greater detail in Section II, and include the statewide general municipal, construction or industrial storm water permits, individual storm water permits, and Regional Water Board or State Water Board permits designed to address low threat discharges.

- Third, the discharge to surface waters must be minimized or avoided. This requires assessing alternatives to surface water discharge and/or implementing BMPs that eliminate or minimize discharges to surface waters.

- Fourth, the discharger must develop a management plan and implement BMPs that remove pollutants (where applicable) and minimize the volume and duration of the discharge.

- Fifth, the discharge must not individually or cumulatively cause adverse effects to the beneficial uses of the receiving water or cause nuisance conditions.

The proposed Low Threat Action Plan would apply to certain categories of planned, short-term discharges from definable projects that implement BMPs to minimize pollutants and discharge volume and flow rate. The Low Threat Action Plan provides criteria for permitting these low threat discharges and providing exceptions to the point source prohibitions. The criteria designate categories of discharges that could be considered low threat, establish specific conditions and requirements that a discharger must meet in order to obtain an exception, and contain all of the criteria currently set out in the Basin Plan for granting an exception to the one-percent flow limitation. Exceptions to the point source and one-percent prohibitions would be authorized by the Regional Water Board Executive Officer on a case-by-case basis for dischargers who apply for and meet the requirements of the exception criteria specified in the Low Threat Action Plan and/or apply for coverage under the revised general permit.

The proposed modifications to the Storm Water Action Plan would apply to certain categories of low threat non-storm water flows that are incidental to urban activities from permitted storm water collection systems. The Action Plan also identifies the conditions that must be met in order for these discharges to be exempt from the point source prohibitions. Exceptions to the point source prohibitions for non-storm water flows would not require direct action by Regional Water Board staff or the Regional Water Board, rather the exception would be granted automatically through the provisions of an existing permit provided that the discharge meets the specific criteria identified in the Storm Water Action Plan, including:

- The discharge and the activities which affect the discharge are managed in conformance with the provisions of an applicable NPDES permit (e.g., a storm water permit or a master water recycler permit issued to a municipality or district) which covers non-storm water discharges from entities within the jurisdiction of the municipality or district;

- The discharge does not cause adverse effects to the beneficial uses of the receiving water or cause nuisance conditions; and

- The discharge is subject to an approved management program implemented by the permittee that requires the implementation of BMPs designed to eliminate, minimize, and where applicable mitigate, non-storm water discharges into surface waters.

Some larger planned projects may propose to discharge directly to a storm drain system that has permit coverage under a municipal storm water permit. The discharged wastewater would reach surface waters via the municipal storm drain system. Regional Water Board staff would use discretion as to whether to require coverage under an individual or a Regional or Statewide low threat permit, or whether to allow the discharge if the discharger receives approval from the storm water permittee. If a municipal storm water permittee provides a written plan demonstrating that the municipality has a program in place for overseeing low threat discharges, and if the program is as stringent as the criteria required by the Low Threat Action Plan, these larger projects could be allowed under the municipal storm water program (under the provisions of the Storm Water Action Plan). However, Regional Water Board staff anticipate that many larger planned projects proposing to discharge directly to a storm drain would be required to either apply for coverage under a general regional or statewide NPDES permit or obtain an individual NPDES permit, and seek an exemption from the point source discharge prohibition pursuant to the Low Threat Action Plan. This is because either the storm drain system to which the project proposes to discharge is not permitted under the storm water program or because a municipal storm water permittee does not have an adequate program for overseeing these larger low threat projects. For example, a discharge to a municipal storm drain system from a well development project with high volume, albeit relatively short term flows, typically would not be able to discharge directly to a storm drain. On the other hand seasonal dewatering of residential foundations and crawl spaces (low volume relative long time frame) to a storm drain system are often allowed in municipal storm water permits if the municipality has a written plan approved by the Regional Water Board that sets forth a plan to eliminate or minimize such discharges, including the implementation of BMPs, outreach and education, inspections, monitoring, reporting and enforcement provisions.

Although the proposed Amendment applies to a broadly defined set of low threat discharge categories, there are limits on what may be considered low threat. The proposed Amendment would not apply to:

- On-going high volume discharges. Discharges that fall into this category would require individual permit coverage.

- Non-storm water discharges to storm collection systems that result from negligence, poor facility or infrastructure design, and/or failure to implement reasonable BMPs.

- Storm water discharges that are not in compliance with the applicable storm water permit (e.g., that result from failure to implement reasonable BMPs).

- Discharges that cause acute or chronic toxicity to aquatic life in the receiving waters;

- Discharges from groundwater cleanup projects, including sites polluted by industrial activity, underground leaking tanks, and farming practices. Discharges of highly treated groundwater to surface water following extraction and cleanup of groundwater polluted with petroleum hydrocarbons and volatile organic compounds should apply for coverage under Order No. R1-2006-0048, which the Basin Plan already exempts from the point source prohibitions.

- Discharges of groundwater which has been polluted by industrial activity, underground leaking tanks, or farming practices, even if the project and/or proponent has no connection with the contamination;

- Discharges that contain chemical pollutants or physical or biological properties that may adversely impact beneficial uses and/or exceed any applicable water quality standard. Chemical pollutants of concern include, but are not limited to industrial chemicals, chlorinated hydrocarbons, or organic wastes, herbicides, pesticides, oil and grease, bacteria, radioactivity, and salinity. Biological properties of concern include, but are not limited to bacteria, algae, or undesirable aquatic organisms (e.g., mosquito larvae). Physical properties of concern, include, but are not limited to temperature, dissolved oxygen, pH, conductivity, and altered sediment loads (e.g. turbidity and bottom deposits).

- Discharges that are insufficiently characterized and thereby preclude a determination as to suitability for coverage under a low threat permit.

- Discharges to Areas of Special Biological Significance or other sensitive natural communities.

- Discharges to the ocean. These discharges are not subject to the point source discharge prohibitions contained in the Basin Plan.

- Discharges that would create nuisance conditions such as vector problems or localized flooding.

- Discharges from industrial facilities that are subject to Effluent Limitations Guidelines promulgated by the USEPA pursuant to CWA section 304 (b), which limits the discharge of pollutants from these facilities.

- Discharges that could have a significant impact on biological or cultural resources, aesthetics, or air quality;

- Discharges that could significantly alter the existing drainage pattern of the discharge site or surrounding area or result in downstream erosion.

- Discharges that would adversely affect a listed endangered, or threatened, species or their critical habitat.

- Discharges that would 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 Service.

- Discharges that do not consist solely of low threat wastewater, such as a low threat discharge that mixes with other wastewater (e.g., domestic wastewater, or industrial process wastewater) prior to contacting receiving water.

Exceptions to the point source prohibitions would not be granted to proposed discharges that fit any of the above descriptions.

Permit Revisions Related to the Proposed Amendment

Regional Water Board Order No. 93-61, “General NPDES Permit for Discharges of Groundwater to Surface Water Related to Construction and Subsurface Seepage Dewatering Activities in the North Coast Region” is being updated by Regional Water Board permitting staff concurrently with this proposed Amendment. It is important that the Regional Water Board have an up-to-date general permit to use for low threat discharges in order to implement the Low Threat Action Plan. The revised Order will apply to a broader range of low threat discharges than Order No. 93-61 and will require the submittal of a Notice of Intent (NOI) that includes information that is necessary for staff to determine if there are alternatives to the surface water discharge, and if not, if the proposed discharge is low threat, ensure that the receiving water can accommodate the discharge, and ensure that appropriate BMPs and treatment are implemented to protect the receiving water.

Information that must be submitted in an NOI includes, but is not limited to:

- A characterization of the discharge and receiving water,
- Certification that no pollutants will be discharged at levels that exceed water quality objectives,
- An evaluation of feasible alternatives to the discharge, and
- A description of treatment measures and BMPs that will remove pollutants and minimize the rate and duration of the discharge.

The revised low threat general permit will require implementation of BMPs for pollutant removal and monitoring of the discharge to document compliance with the low-threat general permit.

The proposed Low Threat Action Plan and revised Storm Water Action Plan contain general language requiring the implementation of BMPs. As defined earlier in this Staff Report, BMPs are methods designed, implemented and maintained to eliminate or reduce pollutants and reduce the volume or rate of discharge. A combination of structural (engineered features), non-structural (e.g., operation and maintenance practices) and managerial methods (e.g., policies and procedures) are typically utilized to attain this goal.

The identification and implementation of best management practices is an essential part of the implementation of the proposed Amendment. However, the overarching method utilized to protect water quality is to avoid a discharge either by finding an alternative to discharging altogether or secondly, by discharging to land (e.g. infiltration areas at the lowest elevation of large urban irrigation areas, if possible). In cases where these two options are not feasible, minimizing the impact to surface water would include implementation of a BMP program.

The specific details of the BMP program would be described in an NOI, a Report of Waste Discharge, or a pollution prevention plan required pursuant to a storm water NPDES permit. Municipal storm water permittees are required to develop and implement approved management programs that address potential non-storm water flows to the regulated storm drain system through education and outreach, structural controls, inspections and enforcement through which the permittee clearly communicates practices that are necessary to protect water quality.

If a low-threat discharge is deemed necessary, the BMP program must eliminate or reduce pollutants and minimize the volume and rate of discharge. Measures that will address the volume and/or rate of discharge include, but are not limited

to, utilization of alternate disposal methods (e.g., discharging to a sanitary sewer, irrigation or infiltration of the water if sufficient land area is available) in combination with surface water discharge and/or utilization of on-site storage tanks to provide detention time to reduce the rate of discharge. A number of different types of discharges and some examples of BMPs are presented in the environmental analysis presented in Appendix D of this report.

The proposed Amendment will increase the Regional Water Board's effectiveness in overseeing the categories of discharge addressed by the proposed Amendment in several ways:

1. The proposed Amendment will provide a clear regulatory approach for addressing low threat discharges. The criteria and requirements would be clearly identified in the Basin Plan and promoted by Regional Water Board staff, thus more discharges would be included under the Regional Water Board's permitting program and permittees would know fully what is expected of them.

2. The proposed Amendment would provide a higher level of water quality protection. BMPs would be required for, and implemented on, a larger number of discharges, which would improve the quality of water that is discharged. With proper management, low threat discharges, including non-storm water flows to permitted storm drain collection systems, are not expected to pose a threat to, or to adversely affect, the quality of receiving waters. This regulatory approach will require the avoidance of discharge if possible and minimization of the volume and rate of discharge when a discharge is authorized. This is a crucial element of this low threat discharge program.

3. The proposed Amendment will provide a structure that allows for a more complete evaluation by Regional Water Board staff of potential impacts from the discharge by providing an opportunity to influence the timing of proposed discharges, thus further reducing the potential for cumulative impacts. Because Regional Water Board staff will now have knowledge of the low threat discharges, their oversight could also prevent multiple discharges occurring too close together in time and/or location, which may currently be occurring because of the lack of regulatory oversight.

With the proposed Amendment, the Regional Water Board can begin to limit the negative effects that may currently be occurring from many types of discharges that could be considered low threat if they were implementing proper BMPs. For example, non-storm water discharges from irrigation sites would be minimized by requiring the municipality to have procedures in place for overseeing the irrigation operation and a maintenance program for the irrigation infrastructure. In addition, collection systems could be installed at irrigation sites to capture

runoff as an operational practice. Implementation of BMPs would be required to accompany planned discharges. Such BMPs would include practices such as directing all or a portion of the discharge to a sanitary sewer or irrigation disposal site, removal of sediment in discharges from well development projects, removal of chlorine in discharges of potable water, and minimizing the volume and/or duration of the discharge. Decreasing the rate of discharge can also increase the potential for infiltration of the water on the land, thus reducing the amount of discharge that reaches surface waters. When dischargers are made aware of the need for these measures, they generally find innovative ways to achieve the goals of reducing pollutants and minimizing the volume, duration, and/or rate of the discharge. The proposed Amendment would, therefore, provide improved water quality protection over what is occurring in the absence of the proposed Amendment, because many of these discharges are currently occurring without proper BMPs in place or regulatory oversight. In addition, the proposed Amendment would address a difficult situation confronting many municipalities in the Region, where the point source prohibitions put impractical limitations on many necessary and vital community activities.

IV. Compliance with State and Federal Antidegradation Policies

As set forth above in this draft Staff Report and in the environmental analysis included in Appendix D, it is Regional Water Board staff's position that the proposed Amendment will have an overall beneficial impact on water quality by providing a clear regulatory approach for addressing low threat discharges, many of which currently occur within the Region in violation of the Basin Plan point source prohibitions, without permit coverage, and often without implementation of BMPs or oversight. There are often no practical alternatives to these discharges and they often are an integral part of many essential community activities, such as construction, well development, irrigation and firefighting. Instead of attempting to abolish all such discharges because they violate the point source prohibitions, the proposed Amendment provides an exemption from the point source prohibitions if the proposed discharges meet the specific criteria set out in the proposed Amendment. The criteria ensure that the discharge does not adversely affect beneficial uses of water by requiring that all applicable water quality objectives are achieved. This can be achieved in a number of ways including finding alternatives disposal methods to surface water discharge and/or by implementing an appropriate suite of BMPs.

One may argue that because the Regional Water Board will continue to allow these discharges, as opposed to tightening enforcement of the point source prohibitions, there could be an overall increase in the volume and mass of the discharges. Staff, however, does not concur with this argument. The proposed Amendment, along with the implementing permits, will require the establishment of a program that is intended to result in the overall decrease in low threat discharges across the North Coast Region. This will be achieved in part by

establishing local public outreach and education programs, by requiring an analysis of alternative discharge methods before permitting discharge to surface water and by the application and maintenance of the appropriate suite of BMPs.

However, out of an abundance of caution, Regional Water Board staff has concluded that an analysis of the State and federal anti-degradation requirements would be included as part of the environmental analysis of the proposed Amendment.

Under the federal anti-degradation policy, existing instream water uses and the level of water quality necessary to protect existing uses must be maintained and protected. Where, however, the quality of the water exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and out of the water, that quality must be maintained and protected unless the State finds, after ensuring public participation, that:

1. Such activity is necessary to accommodate important economic or social development in the area in which the waters are located,
2. Water quality is adequate to protect existing beneficial uses fully, and
3. The highest statutory and regulatory requirements for all new and existing point source discharges and all cost-effective and reasonable best management practices for non point source control are achieved. (40 CFR 131.12.)

The federal policy also requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16 (Resolution), actually prior to the adoption of the federal policy. The Resolution incorporates the federal antidegradation policy and requires that existing quality of waters be maintained unless degradation is justified based on specific findings.

The California's antidegradation policy is also included in the North Coast Basin Plan as a General Objective (Basin Plan pages 3-2.00 to 3-3.00).

The state antidegradation Policy applies to both groundwater and surface waters whose quality meets or exceeds (are better than) water quality objectives. The state policy establishes several conditions that must be met before the quality of high quality waters may be lowered by waste discharges.

The state must determine that lowering the quality of high quality waters:

- Will be consistent with the maximum benefit to the people of the state;
- Will not unreasonably affect present and anticipated beneficial uses of such water; and

- Will not result in water quality less than that prescribed in state policies (e.g., water quality objectives).

In addition, before any degradation of water quality is permitted, it must be shown that the discharge will be required to meet waste discharge requirements that result in best practicable treatment or control of the discharge necessary to assure that:

- Pollution or nuisance will not occur;
- The highest water quality consistent with maximum benefit to the people of the State is maintained.

All low threat discharges are required to be covered under a point source discharge permit (either WDRs or NPDES), and issues of anti-degradation will be considered when issuing, reissuing, amending or revising a permit if there is the potential for water quality degradation. This means that anti-degradation will be considered as part of the Regional Water Board's adoption of a general NPDES permit for low threat discharges and during the adoption of the municipal separate storm water system for the City of Santa Rosa, the County of Sonoma, and the Sonoma County Water Agency. Nonetheless, as part of the adoption of the proposed Amendment, Regional Water Board staff has considered compliance with the federal and state anti-degradation policies.

As a requirement of the general permit, the low threat discharges that would be exempted from the discharge prohibitions will not exceed Basin Plan water quality objectives, the California Toxics Rule objectives, or any other standard or objective promulgated to protect water quality and beneficial uses. A low threat discharge that meets water quality objectives would not be expected to adversely affect the present or future beneficial use of surface waters, nor will it result in water quality less than that prescribed in the Basin Plan.

The potentially small reduction in water quality cumulatively caused by these low threat discharges is necessary to accommodate important economic or social development in the North Coast Region, and any such change in water quality is consistent with the maximum benefit to the people. All of the potentially low threat discharges identified in Table 1 are associated with activities vital to communities. Construction dewatering, well development, pipeline and reservoir maintenance, irrigation, and fire fighting are all activities that may produce discharges that have been identified as having a potentially low threat on water quality, and serve important economic and social interests. Regional Water Board staff believes, on balance any potentially small increase in water quality degradation is offset by the benefit these activities provide in ensuring safe and viable communities services such as fire suppression and the development and maintenance of safe water supplies. In addition, even if it was physically possible to keep all such discharges out of surface waters during the point source prohibition period, the cost of doing so would greatly exceed any water

quality benefit that would result. Furthermore, this proposed Amendment does not alter or remove the point source prohibitions, which the Regional Water Board recognizes as important in protecting the Region's water quality and beneficial uses. The exception provided by the proposed Amendment is true to the original intent of the point source prohibitions. As described in Appendix C, the point source prohibitions were originally intended to limit discharges from municipal wastewater treatment facilities. Providing exceptions from the point source prohibitions for discharges other than municipal waste is also consistent with the language of the Implementation Plans section of the Basin Plan, which explicitly provides for such exceptions to be made, and is also consistent with amendments that have previously been made to the Basin Plan, including the *Interim Action Plan for Cleanup of Groundwaters Polluted with Petroleum Products and Halogenated Volatile Hydrocarbons*, which allows discharges to be made year-round with no discharge flow limitations.

In order to be provided an exemption from the Basin Plan point source prohibitions, each permittee will be required to implement BMPs and treatment, as necessary, to ensure that the discharge will not adversely affect beneficial uses of the receiving water and will comply with all applicable beneficial uses and water quality objectives. Appendix D has identified reasonably foreseeable means of compliance with the proposed Amendment, particularly BMPs and treatment that may be implemented for various types of potentially low threat discharges. These will include structural BMPs and treatment, such as settling basins and silt fences, and also non-structural BMPs, such as dechlorination/pH adjustment, and discharging to land or the sanitary sewer system. The implementation of these measures will ensure that any low threat discharge exempted from the point source prohibitions under this proposed amendment will not cause pollution or nuisance, and result in the highest water quality consistent with the goals served by this proposed Amendment.

V. Compliance with the California Environmental Quality Act

This Draft Staff Report is part of the Substitute Environmental Document (SED) prepared for the proposed Amendment, which also includes the attached appendices. Appendix D analyzes the environmental impacts that may occur from implementing the proposed Amendment, including the potential environmental impacts associated with the reasonably foreseeable methods of complying with the proposed Amendment. It also identifies mitigation measures that will be incorporated to reduce impacts to levels of insignificance, and considers alternatives to the proposed Amendment, in accordance with the requirements of California Environmental Quality Act (CEQA). The SED will be considered by the Regional Water Board when the Regional Water Board considers adoption of the proposed Amendment. Approval of the SED is separate from approval of the proposed Amendment. Approval of the SED refers to the process of: (1) addressing comments, (2) confirming that the Regional

Water Board considered the information in the SED, and (3) affirming that the SED reflects independent judgment and analysis by the Regional Water Board. (14 Cal. Code Regs., §15090.)