
North Coast Regional Water Quality Control Board

October 6, 2021

Certified No. 7016 0750 0001 0048 6474

CalTrans District 1
Attn: Mr. Matthew Brady
1656 Union Street
Eureka, CA 95501
Matt.Brady@dot.ca.gov

Dear Mr. Brady:

Subject: Notice of Violation of Statewide Stormwater Permit Order 2012-0011-DWQ

Files: Caltrans MS4 District 1 (SMARTS Permittee Id.); CIWQS PIN CW-810249
(ECM Primary Indexing Number)

You are hereby notified that California Department of Transportation, District 1 (Caltrans District 1) is in violation of California State Water Resources Control Board Order No. 2012-0011-DWQ¹ (Caltrans Statewide Stormwater Permit).

I. **Background**

The Caltrans Statewide Stormwater Permit regulates discharges from Caltrans District 1's Municipal Separate Storm Sewer System (MS4) to federal and state waters.

Caltrans Statewide Stormwater Permit provision E.2.e.2.d (Page 38) requires Caltrans to develop and utilize a watershed-based database to track and inventory treatment BMPs² and their maintenance within its jurisdiction. On March 1, 2021, the North Coast Regional Water Quality Control Board (Regional Water Board) sent a letter to Caltrans District 1 Director requesting a copy of the District 1 treatment BMP inventory pursuant to Caltrans Statewide Stormwater Permit Provision E.2.e.2.d. Caltrans District 1 provided its treatment BMP inventory on May 6, 2021.

¹ As amended by Order WQ-2014-0006-EXEC, Order WQ-2014-0077-DWQ, ORDER WQ-2015-0036-EXEC, and Order WQ-2017-0026-EXEC

² The Caltrans Statewide Stormwater Permit uses the term "treatment BMPs" to refer to structural best management practices installed on a permanent basis to control stormwater pollutant discharges from Caltrans projects. These BMPs are also sometimes referred to as "post-construction BMPs," "permanent BMPs," and "Low Impact Development BMPs." For consistency with the Caltrans Statewide Stormwater Permit, the term "treatment BMPs" is used in this NOV.

The Caltrans Statewide Stormwater Permit requires installation of treatment BMPs on projects that create or redevelop a minimum of one acre of impervious area.³ Also, the Regional Water Board requires all projects seeking Clean Water Act section 401 water quality certification (401 certifications) install treatment BMPs where 5,000 or more square feet of impervious area are created and/or redeveloped. Regional Water Board staff reviewed its online inventory of 401 certifications⁴ to query 401 certifications issued to Caltrans District 1 between June 12, 2012, and November 20, 2015. Six 401 certifications for projects that included eleven treatment BMPs were issued to Caltrans during this time period (see Table 1 summary below). The eleven total required treatment BMPs from these six projects were compared to the treatment BMPs listed in the Caltrans-submitted treatment BMP inventory. Of the six 401 certification projects, four were fully represented in the Caltrans treatment BMP inventory and two were not. Of the eleven treatment BMPs, nine were represented in the Caltrans treatment BMP inventory and two were not.

Table 1: Treatment BMP Audit results

Project	County and Route	BMP Type	In Caltrans Inventory?
Green Point Sink	Humboldt 299	Bioswale	No
Low Gap Buttress	Humboldt 299	Traction Sand Trap	Yes
Acorn Curve	Humboldt 299	Traction Sand Trap	No
		Bioswale	Yes
Lupton Curve	Humboldt 299	Bioswale	Yes
Cedar Gap	Humboldt 299	Bioswale	Yes
Sugar Bowl Ranch	Humboldt 96	Bioswale	Yes
		Bioswale	
		Biostrip	
		Biostrip	
		Biostrip	

Additional details about the Regional Water Board’s treatment BMP inventory audit are included in the attached memorandum, *District 1 LID BMP Inventory Compliance Audit*.

II. Alleged Violations

Caltrans Statewide Stormwater Permit provision E.2.e.2. requires:

The Department shall develop and utilize a watershed-based database to track and inventory treatment BMPs and treatment BMP maintenance within its jurisdiction. At a minimum, the database shall include:

³ Order Provision 2.d.2.a, page 32

⁴ https://www.waterboards.ca.gov/northcoast/board_decisions/water_quality_certification/

- i) *Name and location of BMP;*
- ii) *Watershed, Regional Water Board and District where project is located;*
- iii) *Size and capacity;*
- iv) *Treatment BMP type and description;*
- v) *Date of installation;*
- vi) *Maintenance certifications or verifications;*
- vii) *Inspection dates and findings;*
- viii) *Compliance status;*
- ix) *Corrective actions, if any; and*
- x) *Follow-up inspections to ensure compliance.*

Electronic reports for each BMP inspected during the reporting period shall be submitted to each associated Regional Water Board in tabular form. A summary of the tracking system data shall be included in the Annual Report along with a report on maintenance activities for post construction BMPs. The tracking system database shall be made available to the State Water Board or any Regional Water Board upon request.

Caltrans District 1 violated Caltrans Statewide Stormwater Permit provision E.2.e.2. because treatment BMPs for the Green Point Sink and Acorn Curve projects (i.e., bioswale and traction sand trap) were not entered into the Caltrans District 1 tracking and inventory database.

III. Required Actions

The Green Point Sink bioswale⁵ and Acorn Curve traction sand trap⁶ shall be entered into the tracking database as required by provision E.2.e.2. , which consists of both the Caltrans District 1 “Stormwater Portal” and “Integrated Maintenance Management System”. Caltrans shall field verify that these treatment BMPs are installed and that they are well maintained and functioning as designed. If they are not installed or fully functional, then Caltrans shall submit a timeline for Regional Water Board approval to install and/or maintain the BMPs to their functional design as required by the Caltrans Statewide Stormwater Permit and the respective 401 water quality certification.

Caltrans District 1 shall verify compliance with these required actions no later than 60 days from issuance of this Notice of Violation. Please submit your response via e-mail to NorthCoast@waterboards.ca.gov and Brendan.Thompson@waterboards.ca.gov and include documentation, including at a minimum, photographs, documentation of any maintenance conducted, and documentation that the databases have been updated.

⁵ Regional Water Board records indicate the bioswale should be on State Route 299, post-mile R18.5, at approximate latitude/longitude 40.930143, -123.851904.

⁶ Regional Water Board records indicate the traction sand trap should be along State Route 299 somewhere between post-miles 19.3 and 19.8.

IV. Future Enforcement Action

The Regional Water Board is issuing a California Water Code Section 13383 Investigative Order concurrent with this Notice of Violation to obtain additional information about Caltrans District 1's processes for tracking treatment BMPs.

Please be aware that pursuant to Water Code section 13385, the Regional Water Board may take enforcement actions for violation of conditions of the Certification and Caltrans Statewide Stormwater Permit, including but not limited to assessment of civil liabilities of up to \$10,000 per violation per day, and \$10 per gallon of waste discharged in excess of the first 1,000 gallons of discharge.

The Regional Water Board will consider your response to this Notice of Violation, as well as the number of days of violation already incurred, in determining whether to seek the imposition of an administrative civil liability complaint as well as additional legal action. Therefore, it is imperative that you comply as soon as possible.

Should you have any questions regarding this matter, please contact Brendan Thompson of my staff at (707) 407-0036, or via email at Brendan.Thompson@waterboards.ca.gov.

Sincerely,

Charles Reed, P.E.
Supervising Water Resource Control Engineer

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Certified - Return Receipt Required

Attachment: District 1 LID BMP Inventory Compliance Audit

North Coast Regional Water Quality Control Board

TO: - Heaven Moore, NPDES Division Senior
- File, SMARTS Final Inspection Report

FROM: Brendan Thompson
Environmental Scientist
NPDES MS4 STORMWATER

DATE: September 27, 2021

SUBJECT: DISTRICT 1 COMPLIANCE AUDIT—MS4 ORDER PROVISION E.2.e.2.d,
COMPLETENESS OF BMP INVENTORY

I. AUDIT FINDINGS

Caltrans District 1 provided a post-construction stormwater treatment Best Management Practices (BMPs)¹ inventory to the Regional Water Board on May 6, 2021. Regional Water Board staff reviewed six Caltrans District 1 projects issued Clean Water Act section 401 water quality certifications and found that treatment BMPs for two of the six projects were not fully represented in the Caltrans inventory. If treatment BMPs are not in the Caltrans inventory then their pollutant removal characteristics are not being maintained by Caltrans staff. The Regional Water Board should request Caltrans provide a description of and proposed improvements of their current process for entering LID BMPs into their LID BMP inventory as well as identify all other LID BMPs missing from the Caltrans BMP inventory.

II. BACKGROUND

California State Water Resources Control Board Order No. 2012-0011-DWQ² (Caltrans Statewide Stormwater Permit) regulates discharges from the California Department of Transportation (Caltrans) municipal separate storm sewer system (MS4).

Provision E.2.e.2.d (Page 38) requires that the Department develop and utilize a watershed-based database to track and inventory treatment post-construction BMPs and their maintenance within its jurisdiction. North Coast Regional Water Quality Control Board (Regional Water Board) staff received a copy of Caltrans District 1's LID BMP inventory on May 6, 2021.

¹ Post-construction stormwater treatment BMPs, also known as Low Impact Development (LID) BMPs, are referred to as "LID BMPs" in this document.

² As amended by Order WQ-2014-0006-EXEC, Order WQ-2014-0077-DWQ, ORDER WQ-2015-0036-EXEC, and Order WQ-2017-0026-EXEC

The Caltrans Statewide Stormwater Permit requires installation of LID BMPs on projects that create or redevelop a minimum of 1 acre of impervious area. Also, the Regional Water Board requires all projects seeking Clean Water Act section 401 water quality certification (401 certifications) install LID BMPs where 5,000 or more square feet of impervious area are created and/or redeveloped.

III. AUDIT PURPOSE AND OBJECTIVE

Operators of MS4s, including Caltrans, are required by their respective MS4 stormwater permits to track and ensure maintenance of LID BMPs installed in their jurisdictions. These requirements are intended to ensure that LID BMPs are in-place, functioning, well maintained, and continue to function as designed over time to reduce pollutant discharge to receiving waters.

The Regional Water Board reviewed LID BMPs required through Clean Water Act section 401 water quality certifications to determine whether this representative subset of Caltrans LID BMPs were in the Caltrans District 1 BMP inventory.

IV. AUDIT PROCESS

Regional Water Board staff used its online inventory of 401 certifications³ to query 401 certifications issued to Caltrans District 1 between June 12, 2012, and November 20, 2015. 401 certifications issued in this time period include sufficient LID BMP information in both the permits and electronic project file to provide staff LID BMP type, treatment area, and location. Additionally, because these projects have completed project construction and the BMPs should be in the Caltrans inventory.

The 401 certifications and project files were reviewed to populate a spreadsheet inventorying the LID BMPs required on these projects. This 401 certification LID BMP inventory was then compared to Caltrans's submitted LID BMP inventory.

V. AUDIT RESULTS

Audit results are summarized below in Table 1.

Table 1: Audit results

Project	County and Route	BMP Type	In Caltrans Inventory?
Green Point Sink	Humboldt 299	Bioswale	No
Low Gap Buttress	Humboldt 299	Traction Sand Trap	Yes
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Sugar Bowl Ranch	Humboldt 96	Bioswale	Yes
		Bioswale	
		Biostrip	
		Biostrip	
		Biostrip	

³ https://www.waterboards.ca.gov/northcoast/board_decisions/water_quality_certification/

Of the six 401 certification projects, four were fully represented in the Caltrans BMP inventory and two were not (67% of the projects were fully represented in the inventory). Of the eleven LID BMPs, nine were represented in the Caltrans BMP inventory and two were not (80% were in the inventory).

VI. DISCUSSION

The Statewide Stormwater Permit requires “a watershed-based database to track and inventory LID BMPs and LID BMPs maintenance within its jurisdiction.” This requirement helps ensure that Caltrans maintains LID BMPs remain in place and maintained to control pollutant discharges from impervious surfaces. If any LID BMP is missing from the Caltrans LID BMP inventory, then that is a significant problem because it means the BMP is either not in place, or if it is, its functionality is likely not being preserved. Additionally, failure to track and maintain LID BMPs is a violation of the Caltrans Statewide Stormwater Permit and 401 certifications requiring LID BMPs.

In advance of the Regional Water Board’s request for the Caltrans BMP inventory, I mentioned to Caltrans District 1 staff that we would be reviewing the submitted inventory to determine whether it included LID BMPs required by 401 certifications. Caltrans District 1 staff later informed me that prior to submittal of the LID BMP inventory, Caltrans staff were instructed to review Caltrans projects with 401 certifications and LID BMPs and to ensure that those BMPs were represented in the inventory prior to submittal to the Regional Water Board. According to a conversation I had with Caltrans staff, several BMPs in 401 certifications were added to the inventory as a result of this exercise.

This audit was also performed for Districts 2 and 4, which both had significantly more LID BMPs missing from their LID BMP inventories than District 1. District 1 may have had more LID BMPs missing from the inventory had they not known of the Regional Water Board’s intentions and performed the abovementioned exercise prior to the LID BMP inventory submittal. While we applaud Caltrans staff for taking the time to improve their inventory, it betrays the reality that many LID BMPs failed to find their way into the Caltrans LID BMP inventory through Caltrans District 1’s regular processes.

It is concerning that two of the LID BMPs reviewed are missing from the Caltrans BMP inventory and that additional BMPs were added to the inventory only recently as a result of the Regional Water Board’s request. Caltrans stated that they have a process for relaying newly constructed LID BMPs into its BMP inventory, including its Integrated Maintenance Management System (IMMS)⁴. A thorough investigation of the process and its shortcomings is required so that the process may be modified and rendered “failsafe” to prevent future LID BMP omissions. Additionally, although this Audit only uncovered two BMPs that are not in the Caltrans LID BMP inventory, the number of projects and reviewed was a rather small sample size, suggesting that there are more LID BMPs yet to be identified that are not in the Caltrans District 1 LID BMP inventory.

⁴ Caltrans uses two databases to maintain its LID BMP inventory; the Stormwater Portal and IMMS. The Stormwater Portal is used by Caltrans as a stormwater program management resource and IMMS is used by maintenance staff to track Caltrans assets requiring ongoing upkeep.

VII. RECOMMENDATIONS AND NEXT STEPS

Based upon the results of this Audit, I recommend the following for management's consideration:

1. At least two required LID BMPs are missing from the LID BMP inventory, which is a violation of the Caltrans Statewide Stormwater Permit. Management should consider whether a Notice of Violation is appropriate.
2. The Regional Water Board should consider issuing a California Water Code section 13383 Investigative Order to Caltrans District 1 that includes:
 - a. A description of District 1's process for relaying LID BMPs into its Stormwater Portal and IMMS as it existed in March 2021 when the Regional Water Board requested a copy of the Caltrans District 1 LID BMP inventory;
 - b. An explanation for why the Acorn Curve and Green Point Sink LID BMPs are not in the BMP treatment inventory;
 - c. For LID BMPs that were added to the District 1 LID BMP inventory only after the Regional Water Board requested it, an explanation for why those LID BMPs were not in the BMP treatment inventory;
 - d. Based upon the findings produced from the above inquiries, a proposal for procedural modifications to ensure that future LID BMPs are transmitted into the District 1 LID BMP inventory and a timeline for implementation of the proposed modifications, subject to the approval of the Regional Water Board Executive Officer; and
 - e. A proposal and implementation timeline to:
 - I. Identify all LID BMPs installed since 2005, including those required by 401 certifications;
 - II. Identify all LID BMPs that are not in IMMS;
 - III. Add those BMPs identified in 2.e.II into IMMS;
 - IV. Conduct inspections of all BMPs identified in 2.e.II and reinstall and/or maintain all BMPs as appropriate to ensure they are functioning as designed; and
 - V. For each of the above, provide reports documenting compliance.